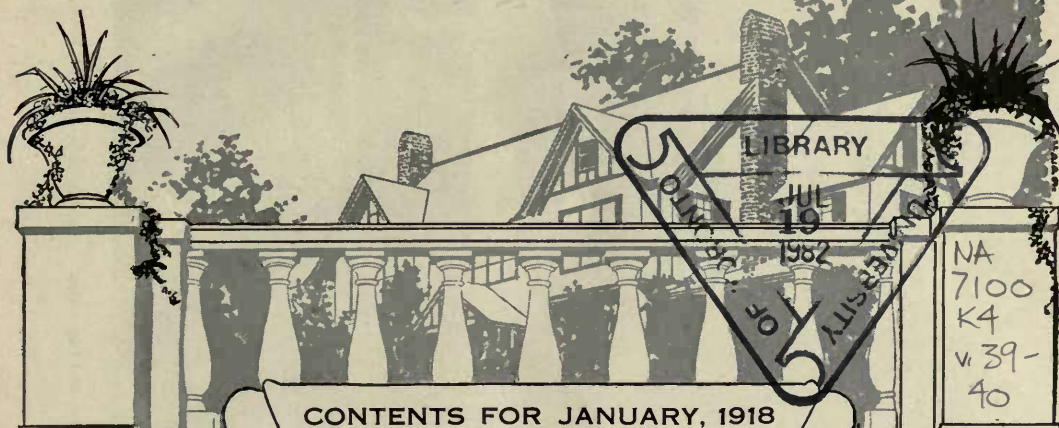


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KEITH'S MAGAZINE

ON HOME BUILDING



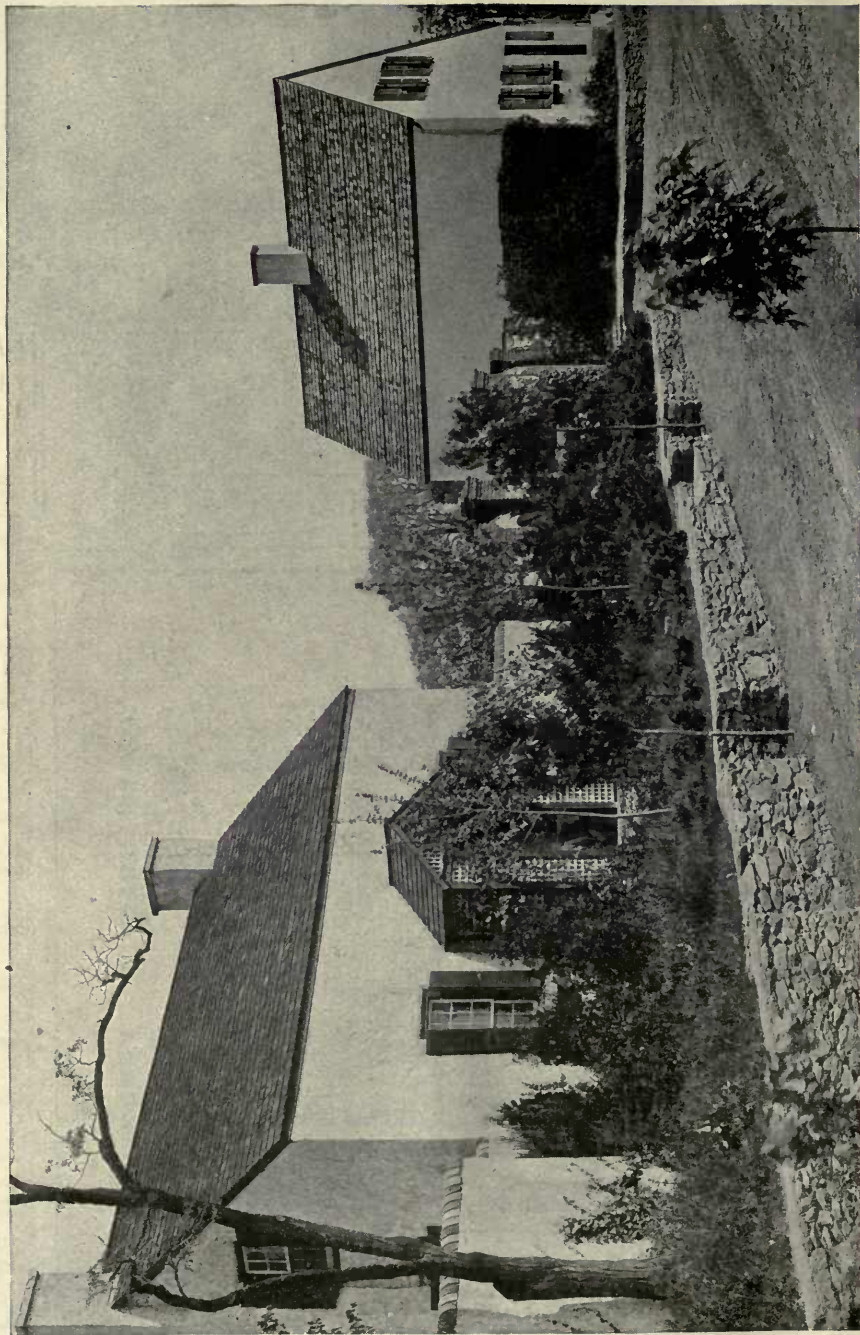
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Some small houses of the simplest type which are charming and home like.

Peabody, Wilson and Brown, Architects.

KEITH'S MAGAZINE

VOL. XXXIX

JANUARY, 1918

No. 1



The Architect's home.

Pierpont Davis, Architect.

The Small House

Margaret Craig

THE demand is ever increasing for new ideas in constructing small homes. The architecture of every nation is studied by the home-builders of today, and every national style,—particularly the French, Spanish, Italian and English have wielded an influence in present-day building.

Simplicity is a charm that belongs unalterably to the small house and is lost the moment the structure assumes any of the pretentiousness of its imposing

neighbor, or a striving for effect.

Moreover, the advance in the cost of building materials and the advance of household expenses caused by the owning of automobiles have influenced many people to choose a smaller house and an automobile instead of a larger house, in order to level expenses. Of late years, people of all tastes and various incomes occupy contentedly the small house. In fact it carries with it a lessening of care and an increase of cosiness.

The home of Mr. Pierpont Davis of Los Angeles has an unmistakable charm in its lines and well-thought-out spacing. It is also successful, as it is closely related to its environment. This is due in great part to the relation of the lines of the house to those of the picturesque trees and to the character of the gable lines which seem to sweep into the plans of the grounds.

The wall covering of the house is of broad white clapboards, while the roof, which projects very little, is dark with green shingles. Flower boxes, beneath the second story windows, are



Pierpont Davis, Architect.
The garden entrance.

planted with trailing and flowering vines that add a pretty color note.

Arched gateways on either side of the front of the house give an air of seclusion and interest to the rear which one finds is as carefully designed as the front of the house. The lower part of the gateways have the same construction as the house and give solidity and width.

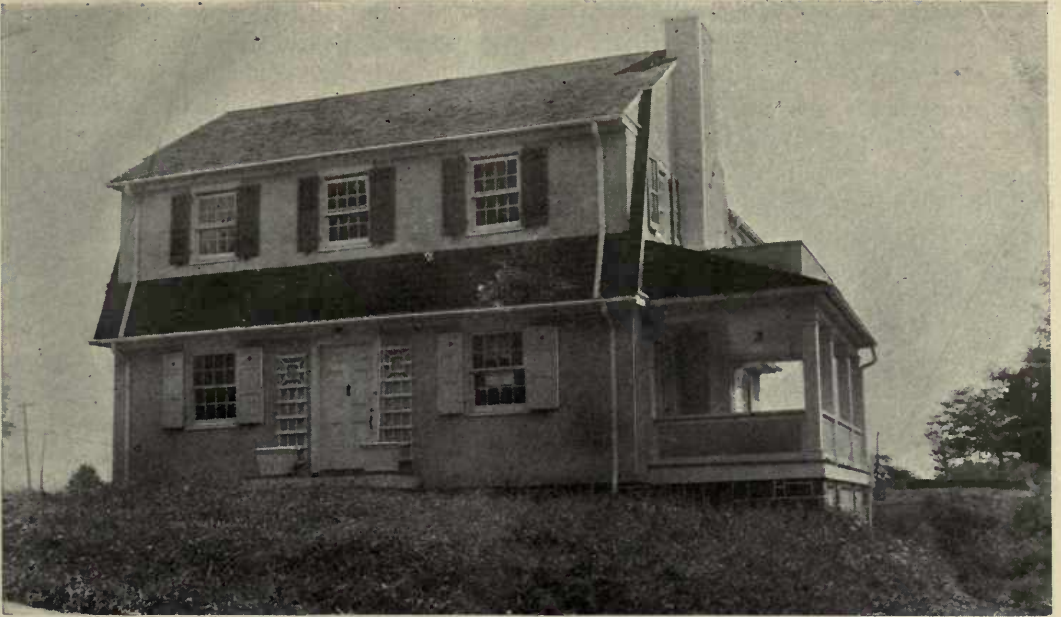
The windows are all small paned and casement. Notice can be taken of a line of dormer windows that successfully

breaks the broad roof of the wing.

The service part of the house at the extreme right of the rear is approached



Arched gateways stand at either side of the house.



A shingled overhang affords protection to the entrance.

by one of the walks that leads through a gateway. Shrubby has been planted so as to separate this part from the terrace, also at the rear, and which is used as an out of door living room.

French doors open out into this terrace from the dining room and thus incorporate the grounds more closely with the house. Attention has been given to this doorway to render it suitable to the rear of the house and yet have dignity. The employment of classic pillars, side lights and two cypress trees is effective. In addition, the three casement windows above the doorway, with flower

boxes beneath them complete the picture.

The interior of the house is carried out in an interesting manner. The walls of

the living room are of rich dark oak panels that reach to the ceiling and form a fine background to the old mahogany and handsome cretonne.

Accompanying this article are several houses that can be built with less expense, perhaps, yet which make very attractive homes and answer the needs of the average home-builder.

In these there are few broken lines and they lack the variety given by the wings but such details always add to the cost.



Specially planned for vines.

The home in the following illustration is of gray stucco with white trimmings. The dark shingled overhang above the first story lends an unusual appearance and furnishes protection to the entrance stoop. The pieces of lattice work are inexpensive and supply a decorative accent.

In observing the small houses that are especially modern and successful, it can be said there are several notable features.

can be incorporated with little expense and some healthful toil.

The last house belongs to the New England Colonial type, with a characteristic entrance and large side porch. Builders are realizing the advantage of a small and less important entrance and the value of a secluded sitting veranda, that can easily be screened. An added resemblance to the old Dutch colonial houses



A home of the New England type.

The front entrance consists of a broad door protected by a small roof or hood and either terraced or reached by a group of steps, while the living veranda of the home is placed at the rear or side of the house and opens from the living room or dining room. In this way it becomes a place of seclusion and a more intimate part of the house.

Another noticeable feature is the placing of the garden in the rear of the house, and in this way the traditional "back yard" becomes an attractive place. Paths, garden seats, pergolas and cement lined pools which add gleams of reflected color

that appear so frequently in the Atlantic coast towns is supplied by the blinds.

Careful planning in advance of building saves many a regret. After a month or so in their new homes we often hear inexperienced builders say:

"Why didn't we arrange the house so that strangers would not need to be ushered in, directly from the front door into the living room?" or "If we only had built a closet underneath the stairs so that we could tuck our wraps away without clambering up the stairs? In it we could have built a chest for drawers to hold veils and hats and rubbers!"

The Picturesque Entrance

Katherine Keene

SOMEONE has said that the hall is to the home what the preface is to a book,—only that one can skip the preface if one wants to, but must go clear through the hall. In that case the entrance must be the frontispiece, or perhaps even the front cover. In any case one can hardly get to the inside without passing it, and one enters the house under the impression given by the entrance.

It is curious how the judgment is swayed, often by the merest thread of an impression. We find what we are looking for. We see what the mind tells us, quite as much as what the sense of sight actually brings to the brain. Business people and advertising campaigns are making a scientific study in order to make



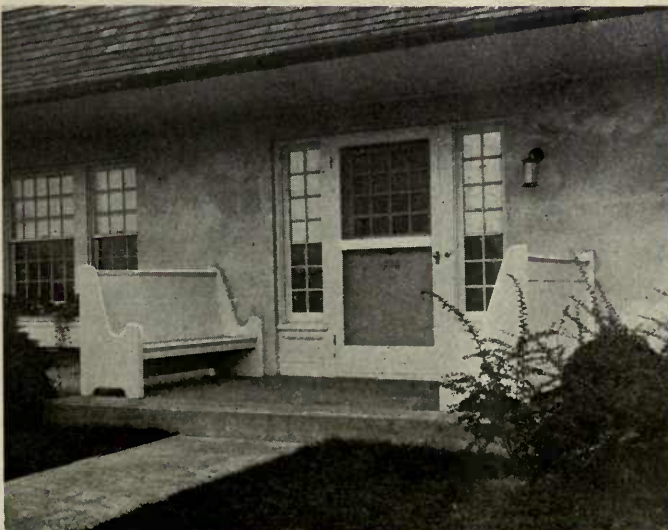
A kitchen porch.

the immediate impression which they desire and then to establish and verify that impression. Before they enter a house the guest who is a stranger has made up her mind, by the thousand and one trifles which go to make up an impression, as to the sort of a person she is to meet. Even the uniformity of the flat and apartment house does not leave a blank impression.

Personality will assert itself by selection if no freer expression is allowed to it.

A group of attractive and characteristic entrances are gathered here. Curiously enough as it might seem, the first is a rear entrance,—just a kitchen porch, but it is pleasant enough to make happy either mistress or maid.

A seat beside a hooded entrance is always inviting. It may be a very simple affair, the simpler the better as a general thing. Yet how attractive is the wooden seat



Seats besides the entrance.



Charming in its details.

against the stucco wall, under the shelter of the overhanging roof, with the added quaintness of the small paned glass in the door and sidelights. The white of the seat and wall makes an excellent background for the planting.

The Colonial type of building is in especial favor just now in the popular mind, as it has been for a hundred years with "old-fashioned people." In none of its beautiful details is Colonial more charming perhaps than in its entrance details. Two of the entrances shown might either of them be Colonial. The one with the semi-circular hood is the more typical of the Colonial period, with its many delicate mouldings and six-panelled door. The old-fashioned fan trellis seems particularly appropriate with the setting. Colonial forms for the hardware are not

a negligible feature in the effectiveness of the Colonial entrance.

The little touch of formality given by bay trees makes them a real part of many entrances, as they are in the house with the flat arched hood, and the big brick chimney beside it. This entrance is very modern in reality, even though it may be Colonial in detail. The door itself, as well as the hood over it, and the brackets are all nicely designed.

It will be noticed that the lighting has been specially designed for all of these entrances. The fixtures are placed with reference to the use, and the character of the design adapted to the place. The lights over the seats are placed at a practicable height and are interesting in design.



A touch of formality given by the bay trees.

Ready for Occupancy

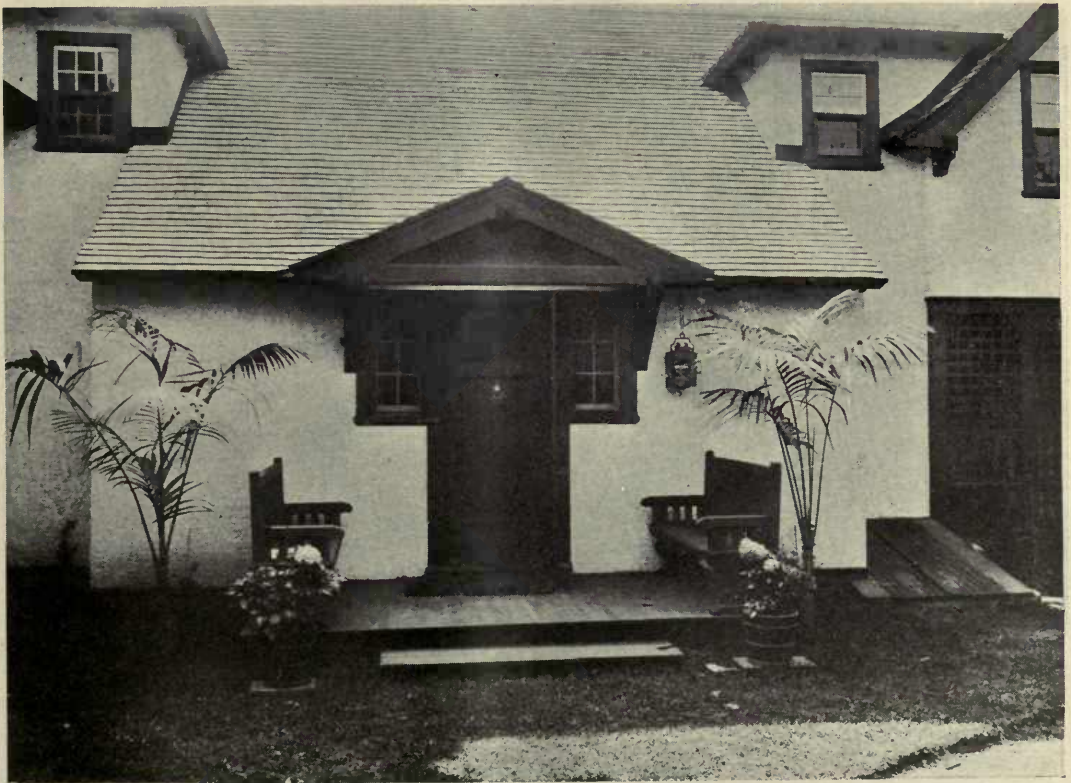
W. Livingston Larned

I

*It's READY! Come along, my dear;
The last nail driven in its place.
The last grey worker gone from here,
With smile upon his honest face.
They've laughed at us, at how we've
fussed
And puttered with our architect;
But other folks have fumed and cussed
And changed things over, I expect.*

III

*Across the portal—hand in hand
Like sweethearts, we old lovers go,
Oh! beautiful the things we've planned,
'Twas worth the waiting for, I know.
We'll love each tiny grain of sand
That glistens in our fairy cot.
And only fairies understand
The magic of the garden-plot.*



II

*I only know that here, at last
We've built our Castle-lodge in Spain.
And, with another mile stone passed,
We'll start nest-making once again.
The little place is bles't with love,
There's everything to make it bright.
Green worlds below—blue skies above,
And prayers to seal it all, to-night.*

IV

*Good-bye, you Builders of The Home;
Farewell,—Ye masons, one and all;
No mansion great, with shining dome
Might beckon, with a sweeter call.
The echoes of the busy year
Have gone with your departing tread,
And I imagine that I hear
Faint, toddling baby feet, instead.*

Dining Rooms with Charming Built-in Features

Charles Alma Byers



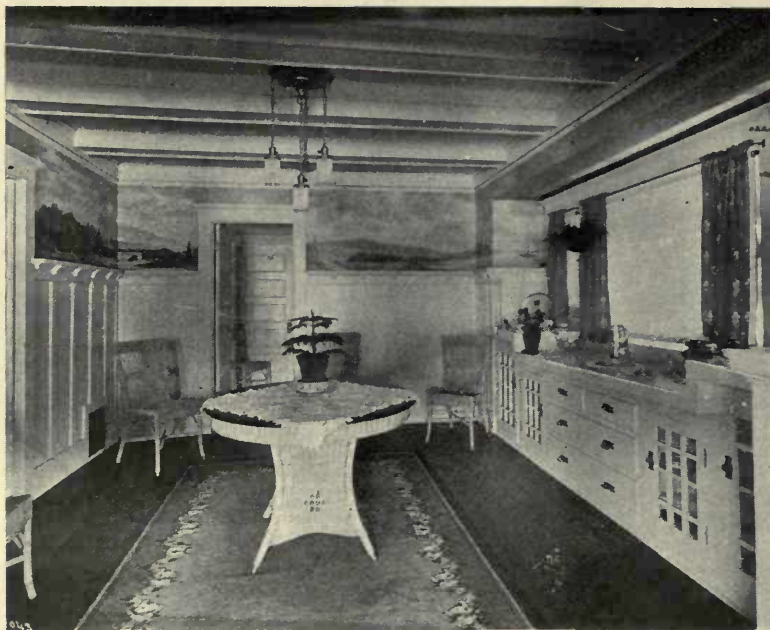
T is perhaps true that the built-in idea is sometimes overdone, or at least used too indiscriminately.

However, when rightly employed, there is much to be said in its favor. In the first place, it unquestionably is very

point in its favor where one must build and furnish economically.

For the dining room especially, a limited use of built-in features seems appropriate. The room naturally requires that it be furnished with something in the way

of china cupboards, sideboard, and so forth, and for meeting this need it is rarely indeed that the built-in idea may not be employed with the utmost satisfaction. In fact, through its use the necessary china closets and sideboard, as well as drawers for silverware and shelf cabinets for table linen, are frequently combined in a single feature, which not only means a saving in money, but also often enables an appreciable economiz-



Variation in the height of the cupboards add interest.

largely responsible for the considerable improvement that in the last few years has been made in our homes of the inexpensive class, especially in the way of endowing their interiors with greater convenience and attractiveness, as well as with a general appearance more suggestive of cosiness. The employment of the idea also makes possible, at slight additional construction cost, a quite appreciable saving in the sum to be expended for furniture, and that, too, is an important

ing of the room's floor space. And, finished to correspond with the rest of the woodwork, such a combination of features, if properly designed, is invariably quite as effective toward making the room attractive and home-like as are the factory-made pieces—at least of the cheaper grades.

The several dining rooms here shown, without exception, make use of the built-in idea, and with truly delightful results, from the standpoint of both convenience



The built-in features were designed in their relation to the windows.
Cupboards have plate glass shelves.

and attractiveness. The rooms, however, are also interesting in many other ways—in finish, decorating, furnishing, and so forth. Incidentally, it should be noted that all of them are finished with white-enameled woodwork, and are in every other respect, as well, made bright and cheerful.

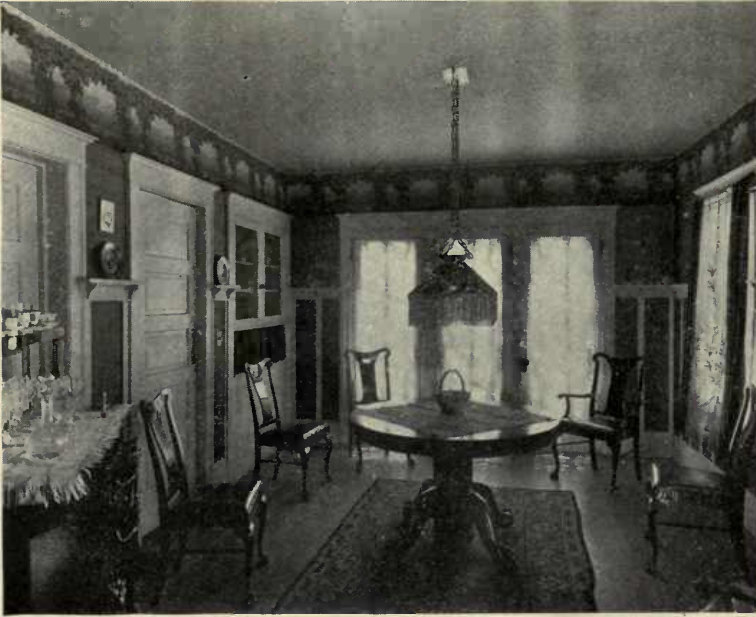
The dining room shown in the first of the illustrations possesses a particularly attractive and convenient built-in combination, which extends nearly the full length of the one outside wall. The feature, as will be observed, is constructed extremely low; and is composed of a center compartment of four drawers and two small china cup-

boards, of different heights, at either end, while the top forms a most desirable counter-shelf. The four china cupboards are closed with glass doors, interestingly paneled, and the mountings of both drawers and cabinets are of brass. With this portion of the wall extended about sixteen inches beyond the common line, the combination interferes in no way with the ordinary dimensions of the room; and the two

casement windows and the single large plate glass window above flood the interior with natural light, regulated as desired by side curtains. The walls are finished with a paneled wainscot, which, with the plate-rail, reaches to a height of



The walls are recessed to take both fireplace and buffet.



The wall is paneled to the plate rail.

about five feet, and the wall space above is decorated with a scenic frieze, while the ceiling is beamed the narrow way. The dining table and chairs are of reed, which also helps to make the room bright and cheerful.

In the next illustration is shown a dining room that contains a built-in combination extending the full length of the outside end wall. In either corner is a large china cupboard reaching to a height of five feet, with a small art-glass window above; and the center portion of the arrangement, composed of three drawers and two cabinets of shelves, forms a counter-shelf of about two feet eight inches high, above which is a large plate glass window. The doors of the china cupboards are formed of a single large pane of glass each, while heavy plate glass constitutes the inside shelves, and the knob equipment of all doors and drawers is likewise of glass. Extending around the room on line with the tops of the china cupboards is the usual plate-rail, and the wall space below is paneled, and above, including the coved ceiling, is tinted a

light chocolate shade. The room is furnished in dark oak, and supplementing the ceiling-suspended lighting fixture will be noticed a small candle-bracket at each side of the plate glass window. Incidentally, there are windows on two sides, which makes the interior especially well lighted.

The third illustration shows an almost square dining room that possesses both a built-in buffet and a fireplace. The

built-in feature, by an outward extension of the wall, is so constructed as to require practically no floor space whatever, and yet it provides a number of delightful conveniences. Above the mirror-backed counter-shelf, for instance, are two long shelves for china, protected by four square glass doors, and underneath the counter-shelf are two shelf cabinets and a total of four small drawers—all doors and drawers are fitted with glass knobs. The fireplace, which also protrudes but a few inches from the wall line, is of extremely simple design, finished with a neat wood mantel-shelf and corner pieces, while its facing and hearth are of flat-toned, dull blue tile. The walls of the rooms are finished with a paneled wainscot and plate-rail, four feet six inches high, with the space above covered with blue-figured paper. The furniture consists of simply designed mahogany table and chairs, and the lighting fixture is comprised of a center group of five rod-suspended globes.

One of the remaining dining rooms here shown, which is quite a little longer than wide, is characterized by three French

windows in one end that open into a side pergola. It also, to further help in the lighting of the interior, has a window in one of the side walls. Narrow wood strips, capped with a plate-rail, mark the lower part of the walls in panel effect. The panels are of plaster, tinted a dark gray; and above the plate-rail the walls are covered with grass-cloth paper of gray and green tones, while a border of corresponding but

deeper colors is used above the top of the window and door frames. Near one corner will be noticed a small built-in china closet, which, containing three shelves, is provided with a pair of glass doors. This feature also includes a serving shelf between this room and the kitchen. The room is furnished in mahogany, and in its whole appearance is very attractive.

Much more attention is being given to the design of furniture of the less expensive types than was ever given it before. There is no more expense involved in building furniture on beautiful lines than in the clumsy and elaborate designs so much used a few years ago. The fact that it is now not only possible but practicable for workmen to receive a proper training is making itself felt along all lines, to the great advantage of the home beautiful.

The last of the illustrations shows what is more a breakfast room than a dining room, although it might well be used reg-



Cosily furnished in reed.

ularly for the latter purpose. It is cosily furnished in reed; and the flowered cretonne drapes, with the lamp shade made from the same material, together with the similarly patterned and colored frieze, produces a very pretty color scheme. The lower part of the walls is finished in panel fashion, the panels being of unfigured olive-green paper, and there is also the usual plate-rail. The built-in buffet, containing much cupboard room and some convenient cabinets and drawers, is simply designed but a most excellent feature. For the small and inexpensive home, the room offers a number of very practical suggestions.

It is particularly worthy of note that all of these dining rooms are selected from quite inexpensive homes. That they are cosy, inviting and in every other way charming is readily apparent from the photographs, and surely it must be conceded that the use of built-in features has done much to make them so.

The New Kitchen

Edith M. Jones



THE kitchen is dreaded by some women and very often looked upon as a place of drudgery. A new interest is being shown, however, in the art of cookery. It is due to the fact that our educators have come to realize that it is just as necessary to have good cooks as good chemists and that after all there is not much difference between the chemistry of the test tube and that of the casserole. The daughter who studies food values at school and learns there some of the mysteries of human nutrition will find in her mother's kitchen another laboratory,—equally interesting and a most promising field for study.

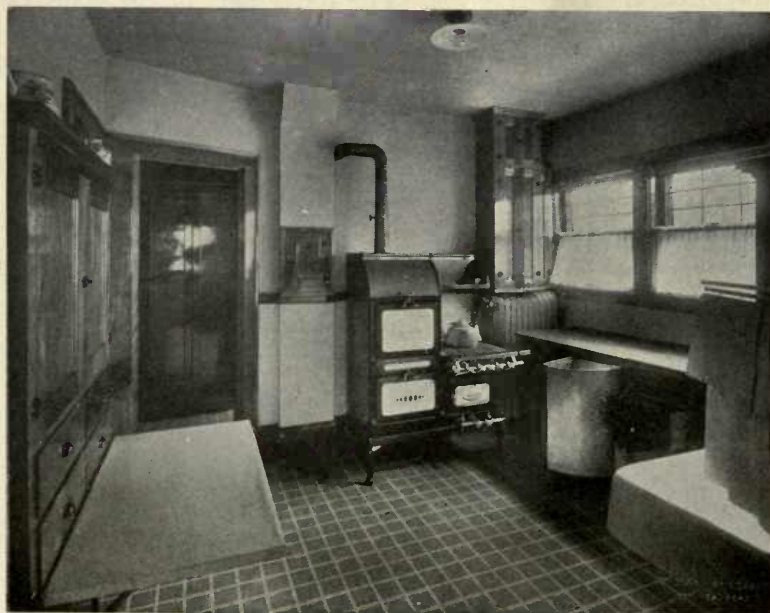
With this new interest and appreciation of the great art of cookery has come a desire for better equipped workshops, and the result is that no home is considered complete today that does not boast of a

kitchen that is not only attractive but equally efficient.

This kitchen is a model in its way. Every detail was carefully thought out by the builder, who aimed at efficiency without any added expense. At a glance one sees the simplicity of it all. The cupboards, a matter always of individual preference and convenience, are distributed about the kitchen to take care of the necessary utensils that are used for the activities carried on in the different parts of the room. For instance, the small cupboard at the right of the range stores the breakfast foods, coffee, tea, spices, etc., used at the range or in the mixing process.

The baking table under the windows is an especially attractive feature of this kitchen. In the first place it is on casters, which not only makes it convenient for cleaning but possible to use in other parts

of the room when needed. The table top is made of matched maple and is almost an ideal material for this purpose, as it is very smooth, white and easily kept clean. The large bin, holding 100 lbs. of flour, and the smaller bin, holding 50 lbs. of sugar, are made of heavy vat tin, can be easily cleaned because they are entirely separate from the wooden door and the shelf on which they set. These bins,



Showing open flour and sugar bins in the baking table.

by the way, are a vast improvement over the old fashioned kind that tip forward and can never be taken out for a good sun bath. The drawer just above the sugar bin is the bread box and is complete with a ventilated, movable, covered tin lining. The upper drawer holds the mixing utensils, such as spoons, egg beaters, etc. The extension at the end of this table toward the sink was carefully planned as a comfortable place for the maid to eat her meals or prepare the vegetables, etc., for cooking.

The cupboard above the good looking one piece sink contains cleansing materials, brushes, soap, etc., etc., which naturally gather about the sink, and the cupboard below the sink holds the scrubbing pail and brushes.

The towel rack at the right of the sink and the roller towel beneath the windows, the soap dish and soap shaker, the ample natural light and the well placed artificial light make this corner a complete unit in this carefully thought out workshop.

One little convenience which is not noticeable but nevertheless is of real value is the way the sash curtains are fastened—Many doubtless have noticed how often the sash curtains in the kitchen have to be laundered, largely because the windows are open so much and the curtains blow out. These curtain rods are fastened on the meeting rail of the lower sash and when the window goes up the curtain

goes up also, making an altogether better arrangement.

On the opposite side of the room is the tin-lined pan closet where the pots and pans are hung and the drawers below hold the roller and dish towels, the silver cleaning outfit, etc., and the let-down table below the drawers is most useful when extra work demands more table space. The




A comfortable place to sit.

cupboards nearest the rear door are for the brooms, mops, dustpan, etc., and the overhead cupboards for the utensils not in everyday use,—such as the preserving kettle, etc.

This simple yet complete kitchen is more and more satisfactory as one studies it. There is a place for everything and yet no unnecessary cupboards and drawers to keep clean and in order. It does indeed look like an orderly, well equipped workshop that any daughter might enjoy as a laboratory in which most interesting and profitable experiments might be conducted.

Converting a Musty Office into a Home

Elizabeth L. Gebhard

HE problem of how the country girl may attend High School through the winter, arises in many suburban homes as the inclement weather approaches. The difficulty not only faces the native-born country girl, but those as well who have lived in cities, but have decided for various reasons that a country home is desirable.

This is the way one woman solved the question. A newly married daughter and her husband would remain on the farm. The business of the father of the family only allowed his return home once a week. The mother and school girl might be free for six days of the week,—but how to use their freedom was the question.

The report had reached the country districts that rooms for light housekeeping were almost impossible to procure in the city where the nearest High School was situated, and these rooms often undesirable and distant from the school.

"I'll try my luck with an advertisement, anyway," the mother declared, and in return there came the offer of two rooms on the Main Street not far from the High School, which had once been a lawyer's office. Business had moved up town. The little office was stranded between the homes of a few old residents and an incoming foreign population. Could they make a home in two office rooms, where the dust of long past disciples of Blackstone and their clients still lingered?

They decided they could, and they did. Soap and water and oil did wonders. Both rooms had hardwood floors and wainscot. The landlady freshly papered the walls herself, and placed an electric

bell in the front office door. From her they also rented a china closet and wardrobe. The rest of the furnishings they brought from home,—just enough to make the snuggest, cosiest home for two, for six months.

There was a sink with running water in the rear room and above it a small closet. This would hold their dry groceries and cleansing materials. A good kitchen range which boasted a hot water tank was procured. A table covered with white oilcloth served for both a kitchen work table and also for their meals.

A bright and shining wash boiler was their refrigerator, set out of doors in suitable weather, and on the floor against the crack of the door in zero, thus serving two purposes. It was soon discovered that the upper part of the window sash was a cool place for milk and meat, and the shade was drawn over them as both a protection and a concession to orderliness. The china closet and two chairs completed the furnishing of a pleasant and comfortable kitchen and dining room combined.

A glance out of the back door revealed the acme of convenience for two women. The lawyers of long ago had possessed a board walk leading in a short ten feet to a shed and coal bin. No cellar stairs and no elevator were needed here. It was easy for mother and daughter to keep their one stove supplied with coal.

Convenient as were the working parts of the little home, the united living room and bedroom had rare charms of their own. A room fifteen by fifteen feet, with a door into the kitchen, and a door opposite into the outside world, with a win-

dow on each side flooding the little home with sunshine on a sunny day, left considerable wall space and floor space.

Four soft colored rugs gave a sense of warmth, aided by the little, brightly shining oil stove which augmented the kitchen fire when need be. "The rugs occasionally serve another purpose, also," said the home-maker. "The front door fits well, but in zero weather we lay a rug in front of it, and it is as good as a storm door."

By placing one couch lengthwise against the wall, and the second one at right angles to it, both couches being covered with bright spreads, the effect of a cosy corner was produced. The wardrobe flanked an opposite wall, and with the sewing machine nearby, the utilities

for this small household were provided.

The remainder of the furnishing consisted of a beautifully polished round table, a dainty sewing stand with drawers, on whose top a single rose in a vase often lifted the little home into the realm of the beautiful. Comfortable rockers and a high backed antique chair kept company with a writing desk by a window and a small bookcase filled with a few friendly books and encyclopedias for ready reference,—and the little home was complete.

How comfortable they were, and what a happy winter mother and daughter spent here, going home for Sunday, is a story of its own. The home-making in a musty old lawyer's office in an unfashionable part of a town was a success.

Economy for the Home



HE cost of building is undeniably higher than it has ever been before. Moreover, the increase still goes on.

Yet it does no good to deplore this condition. Certainly, what were normal pre-war prices will never return again in our time. Many believe that building costs will go still higher for the period of the war. As a fact some items of cost have not advanced in anywhere near the same ratio as general prices.

Reductions after the war are problematical. It is reasonable to believe that they will only come very slowly and be of slight amount, for there is a vast amount of prospective building that has been merely postponed and there is no corresponding accumulated supply of materials to meet it.

Many families need better homes and many who did not have money to build with before, have it now. If the cost is high, thousands have the increased means

to meet it. The need of a home and the ability to finance it should decide the matter. Future reductions of cost will not pay for the continued extra maintenance cost or deprivation of the satisfactions of the home of one's dreams.

It is well within the truth to say that if prospective home owners would give as careful attention to the economical planning and designing of houses as lately has been given to the economy of foods and other necessities, the cost of having a home would be only slightly higher than three years ago. By that is meant:

(1) Economy of actual building operations, due to having plans minutely figured out. The old custom of expecting the house contractor to be both architect and builder is wasteful in the extreme, as he has not the specialized training nor the time to draw plans as well as a home planning expert.

(2) Making every square foot of space serve some useful purpose.

(3) Making every dollar of investment show its worth in the attractiveness of design.

(4) Planning for a minimum of house-keeping work and a possible elimination of the help question. This may be counted under the head of lower upkeep cost.

(5) Neutralizing the high cost of furnishing by eliminating the need for so much of it. Moderate size rooms of a

investment. There is no need for elaborateness in the stairway. Also the cost of furnishing the same is insignificant compared with what one has to face in the average eight-room house. If one feels the need of an enclosed entrance (which isn't often the case with recessed porch) this porch may be glassed or screened in at any time.

The kitchen has a dainty breakfast cor-



Pleasing without being costly.

E. W. Stillwell, Architect.

compact, convenient arrangement will do this.

The house illustrating this article is a practical embodiment of these five vital considerations. It is the kind of a home needed and demanded by the American family of average size.

The design is pleasing and attracts attention without being costly. The first story is siding—the very cheapest of all materials. The second story is shingled.

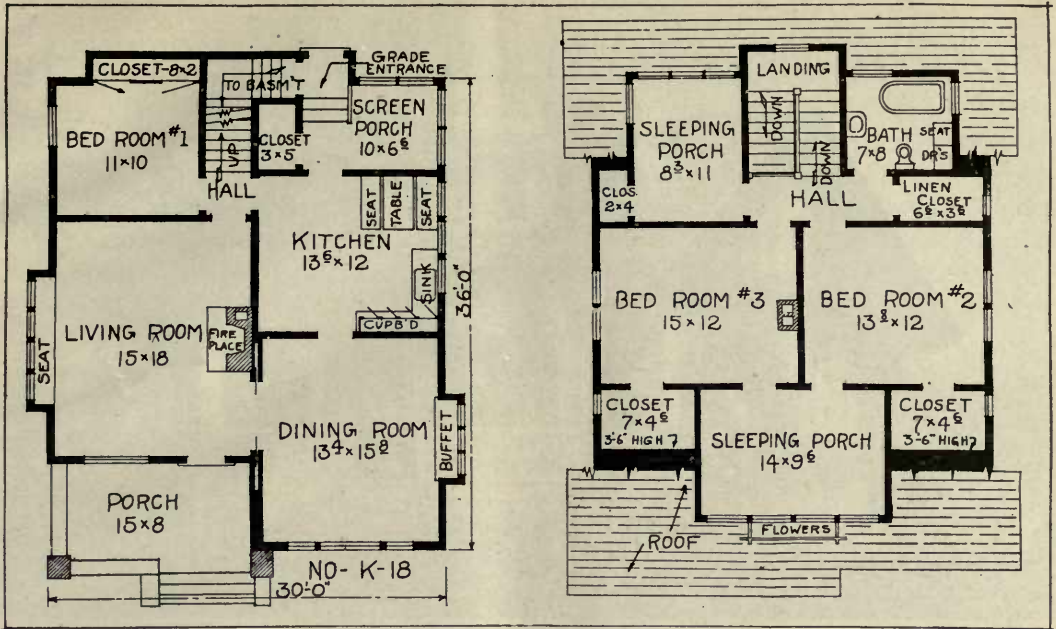
From the plans, one can imagine the attractiveness and convenience of the interior. There is no reception or large stair hall which always represents a heavy

ner to lighten the housework. The kitchen is of generous size in contrast to the frequent excessive contraction of kitchen space.

The height of the second story gives plenty of closet space under the roof slope and eight-foot ceilings in the bedrooms.

There is a full size basement with heating room, laundry room, etc.

Bearing out the five ideas advanced about economy building, in every community there can be seen houses which, even at the prices before the war, cost as much to build as this, and would cost much more at this time, but which even



at a greater cost were not so compact and convenient as this. Would not the reader and his wife prefer this house on account

of its livable, home-like qualities and undoubted economy of maintenance?

An Architect's Florida Home



HE Southland is very alluring after the long and more or less strenuous winters in the colder parts of the country and many people are making a practice of spending some of the winter months in the South or the Southwest, and are building homes for themselves which are often the last word in comfort and simplicity, and as inexpensive as is compatible with these requirements.

This simplicity of living is being carried more and more into the all-year-round home, and simplifying the whole methods of living and of entertaining. In fact, modern ideas of hospitality are changed greatly from the days when the best room and the best of everything was reserved for the chance visitor or guest in the house. Real hospitality has not

lost anything in the change. The superficial type of entertaining, while only the shell of hospitality, was very burdensome at times and was also very expensive in its requirements of larger houses and larger service, in addition to the strain which it placed on the hostess. The ideal home at the present time houses the family easily and comfortably. The floor plan of this Florida home is excellent for the all-year house of the simpler, smaller type.

The entrance, directly into the living room, is yet so near the stairs that one may enter and go upstairs without disturbing a group of people in the room. The fireplace, opposite the door, is near enough the dining room to lend it warmth on cool mornings and evenings.

Opening from the end of the living



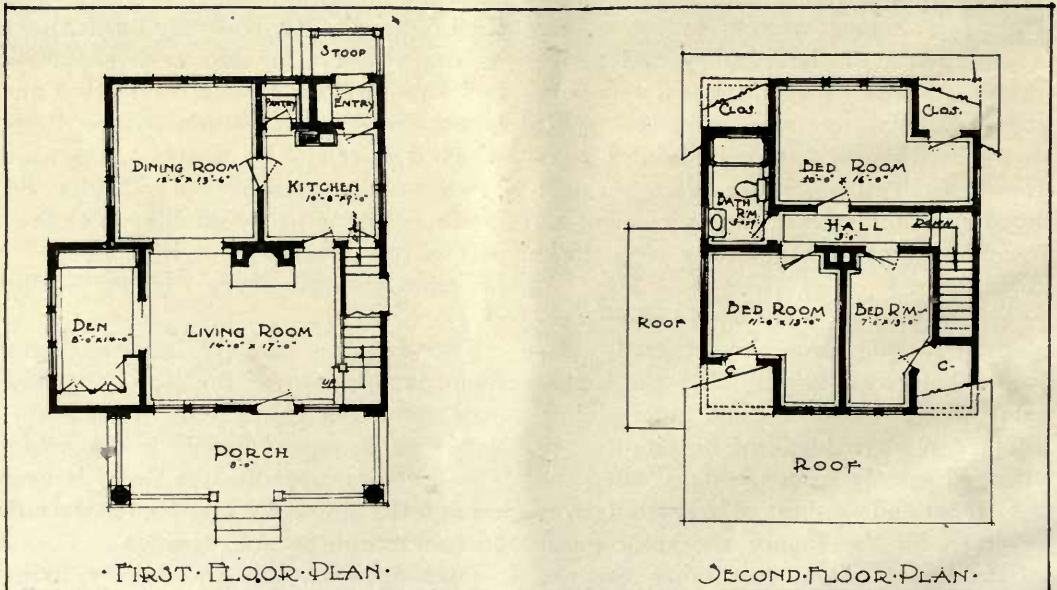
A summer home in the Southland.

G. L. Lockhart, Architect.

room is the den, which may be closed by a wide sliding door. The walls of the den are lined with bookcases and shelving, with an attractive group of windows.

The dining room has the advantage of light and air from two directions. It opens directly to the kitchen. A pantry with working shelf and cupboard opens

from the kitchen. Beside it is the rear entry with space for the refrigerator. The basement stairs are under the main stairs with a door from the basement. On the second floor are three bedrooms and a bathroom, with closets under the roof. Blossoming roses and clambering vines add a touch of beauty the year around.



Convenience for the Small House

THE small house adapted to the narrow lot and yet with rooms opening well together makes the problem of many people who have been buying a lot with their savings, and who did not seriously consider the plan for the new home when the lot was selected. In many communities only the

There is a direct connection between the living room and kitchen through the passageway where the basement stairs are placed. This gives good communication but two doors between the living room and the cooking. When a hood is built over the range and good ventilation provided, there is less danger of pervasive



A home which is compact and attractive.

J. W. Lindstrom, Architect.

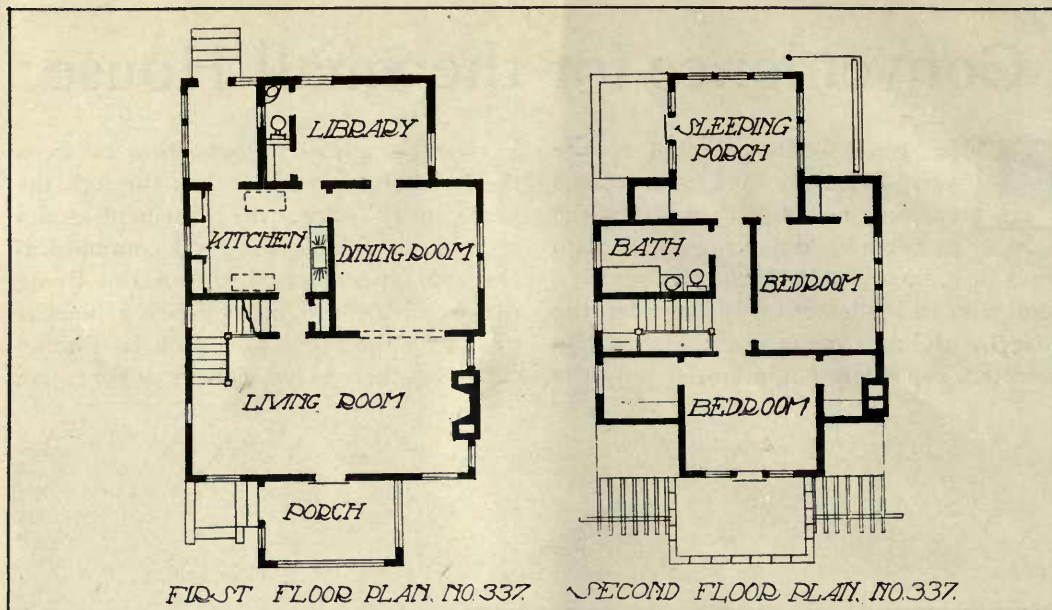
narrow lot is available at the moderate price which the home-builder feels that he ought, or is able to pay.

We show here an attractive small home, lately built, which is excellent in plan and compact in form. The entrance is through an enclosed porch into the living room.

The whole width of the house at the front is filled by the living room. It has a fireplace at one end of the room with the stairs from the opposite end in a convenient way. A wide opening connects the living room and dining room.

odors of cooking through the house, and this ventilation can usually be arranged even in a house already built.

Beyond the dining room is a very convenient room, in this instance used for a library. It is provided with a closet and has a toilet opening from it. These allow the room to be converted to many uses as the needs of the household may require. It may be used as a nursery, as a first floor bedroom, as a breakfast room if desired, or as a maid's room by closing the door to the dining room.



On the second floor are two bedrooms with a third which is also a sleeping porch. This latter has a closet and opens directly to the hall so that it may be used as an extra sleeping room, or since it connects with one of the bedrooms it may be used for sleeping with the bedroom,—closed from the weather at night, so that it makes a warm dressing room. This arrangement seems to make one of the most practical solutions of the sleeping prob-

lems for those who want to sleep with plenty of fresh air in the room without cooling the house unduly. All of the bedrooms have good closet space, and the bathroom is centrally located, and is directly over the plumbing in the kitchen and the laundry in the basement, so the plumbing is as economical as possible.

The exterior of the house is of rough-cast stucco over galvanized metal lath with trimmings of white.

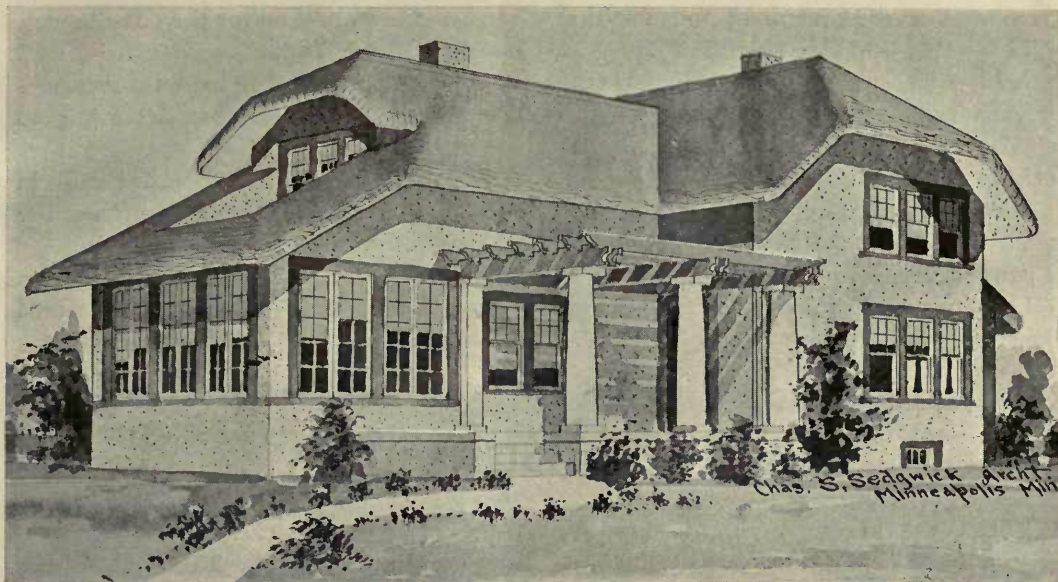
A Shingle-Thatched Bungalow



THE matter of communication of the rooms is one of the important points in the planning of the small house. Such an arrangement as will place the entrance where passage-ways are not necessary in order to reach all the rooms will give the most economical room arrangement. This is easy to do when the house has a wide street frontage, but on a narrow lot is a more difficult problem.

A very good solution is presented in this bungalow with a shingle-thatched roof. The pergola covered porch carries the entrance, in a pleasing way, beyond the living room. A closet opens from the vestibule, which is larger than just the space required for entrance. Opposite the vestibule door is the stairway, while the doors to the other rooms are easily accessible.

In front of the living room is the sun



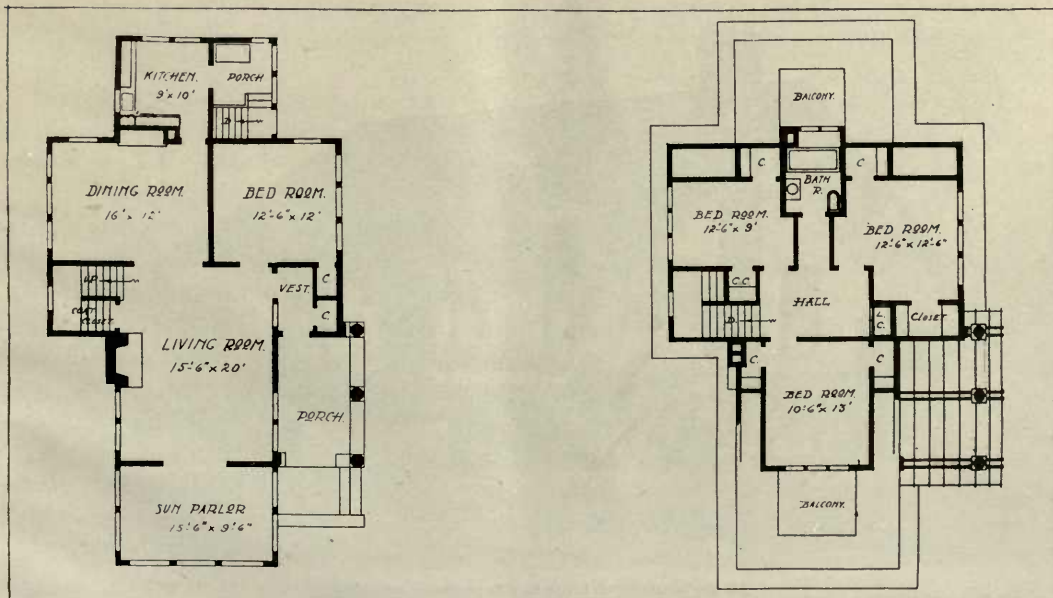
C. S. Sedgwick, Architect.

The pergola covered porch carries the entrance back in pleasing way.

parlor, glassed in with casement sash. There is a good sized fireplace in the living room. Beyond the living room is the dining room, with a wide opening between. The built-in sideboard is well placed. The kitchen has built-in cupboards. The rear porch is enclosed, with space for the refrigerator and for the base-

ment stairs, with the outside door at the grade level.

On the second floor are three good bedrooms, well fitted with closets, and a roomy hall. The linen closet opens from the hall. The group of windows in each gable end is very attractive and gives good light to the rooms. The balconies



are built into the roof in an unusual way.

The finish for the second floor is in enamel paint suited to the color scheme of each room, though they may be finished in the natural wood if that is preferred, with birch floors.

The principal living rooms are finished in hardwood with oak floors. The kitchen is painted white and enameled.

The house as shown is of frame construction with cement stucco on metal

lath. If tile were used for the outside wall instead of the frame construction, and stuccoed on the tile, it would add something like \$500 to the cost, according to the estimate.

The shingles of the roof are laid in curved and varying courses, giving the "thatch" effect. The roof is stained.

There is a full basement under the house, with the usual accommodations for heating plant, laundry, and storage.

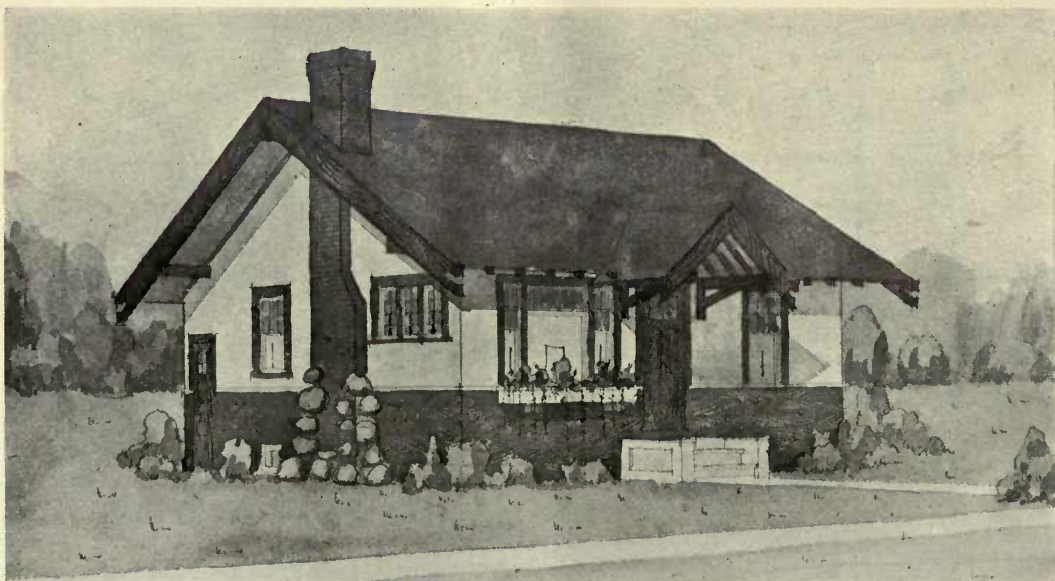
"A Tiny Bungalow"

IN the accompanying design, we have a plan of a four-room bungalow. The front door, sheltered by an overhanging hood, opens directly into the living room. In the opposite corner of the room is an attractive boulder fireplace, with a broad low shelf, supported by large projected boulders which serve as brackets.

The living room is large enough to accommodate a davenport and a piano. The coat closet opens off the center hall,

from which doors lead into a rear bedroom and a bath. The kitchen has been given careful study. The grade door serves as the rear entrance door. The range is located near the chimney, while the plumbing for the sink is in the same wall as the bathroom fixtures, making the plumbing layout very economical. High cupboards are in the end of the kitchen over the sink drain and under these is located the refrigerator.

The kitchen has a built-in drop table,



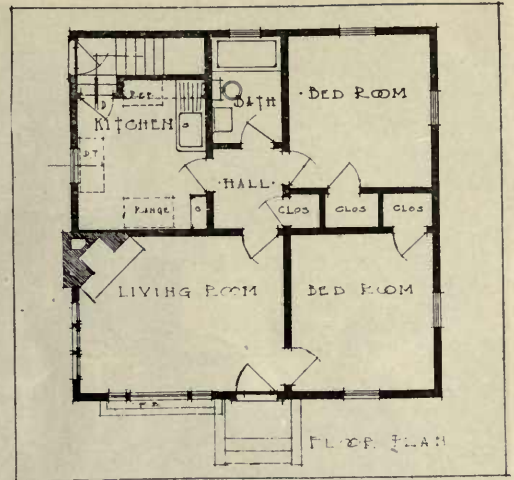
All the comforts of home in a four-room bungalow.

W. W. Purdy, Architect.

where meals might be served to a family of three. The bedrooms are ample in size with wall space for a double bed, while each has a good sized closet, plenty of light, and cross ventilation.

There is a full basement under the entire house, a laundry being provided, and a hot water or hot air heating plant might be easily installed. The remaining part of the basement is given over to fuel bin and storage for screens.

The exterior is exceedingly attractive, with its combination of materials of rough-sawed drop siding to the sill course of the regular windows, and cement plaster above. The shingled roof is stained. Intermixed with the brick chimney are a few cobble stones at the base, giving a substantial as well as an attractive look to the chimney.



The living rooms are finished in fir, stained, the other rooms in pine painted. There are maple floors throughout the house.

The Effective Small House



HE planning of the small house is always a problem because the fact that it is small does not allow of the omission of anything which is essential to the living quality of the home.

It is always interesting to study a group of floor plans of the same general type which are, or may be, amplified or restricted as special needs may require. The group of floor plans here shown have the same general arrangement for the living part of the house. The first home, while it is small, is very attractive and well planned. The living room and dining room make almost a square house plan, all very compact and convenient. The stairs are very convenient, both from the living room and the kitchen. The dining room opens well to the living room.

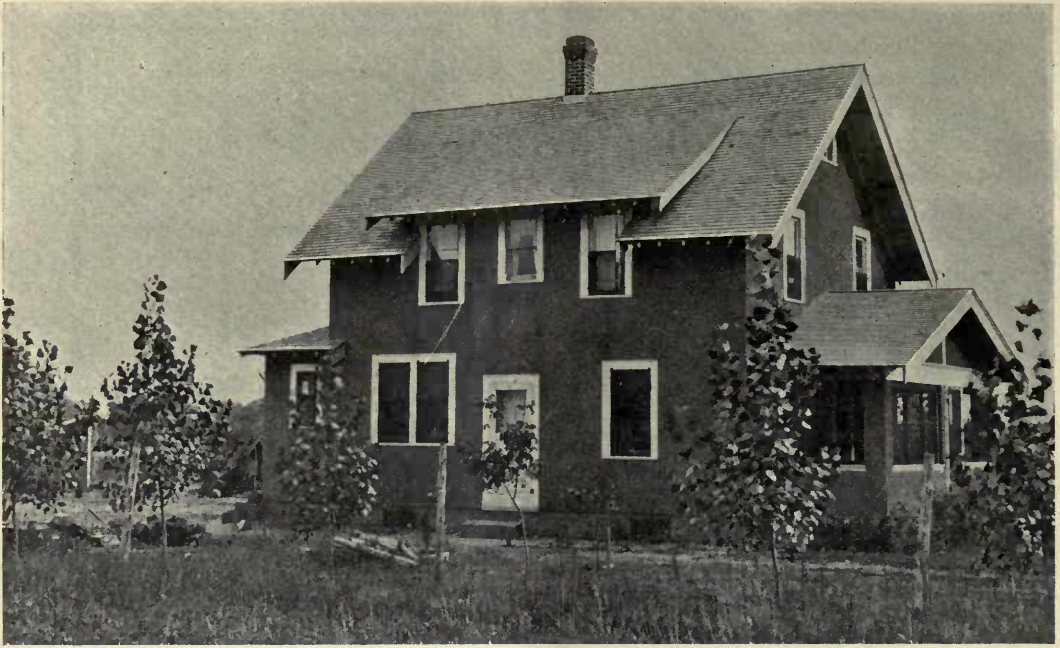
The house may be entered either from the side entrance or through the porch at

the front. The side entrance is very attractive, though it is really a kitchen entrance. A good sized pantry and a rear entry also open from the kitchen.

On the second floor are three bedrooms and a bath. The house wall is not full two stories in height, but it is raised under a dormer roof at the windows, giving full height to the chambers, with closets under the lower roof.

The second home is very tiny, smaller indeed than is often shown, and not completely built in the first place. The main room arrangement is of the same type as the first plan, but reversed, and with the bedroom and what will be made into the bath room (possibly when the city has laid the sewer) in the space which in the first plan was occupied by the dining room.

An alternate plan is given where, by extending the size of the house six feet

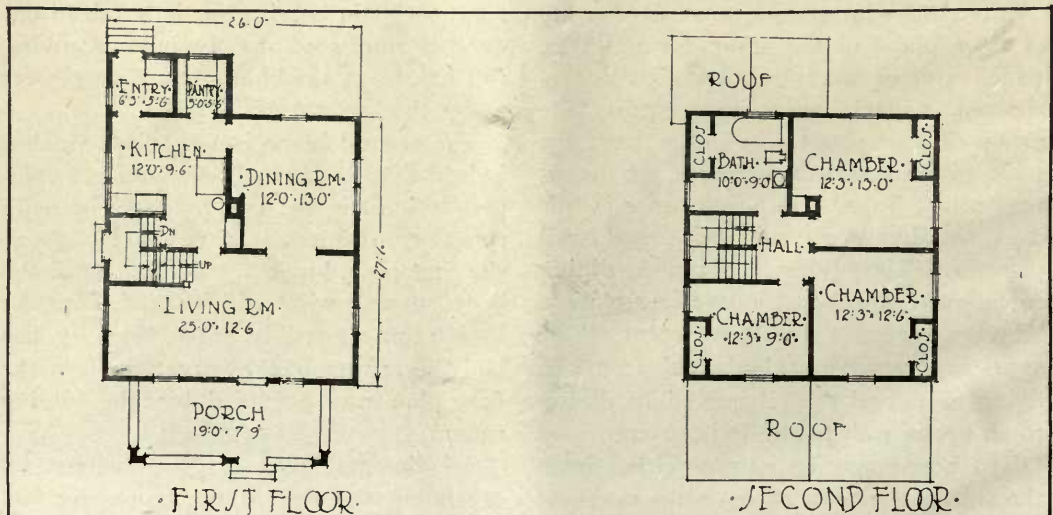


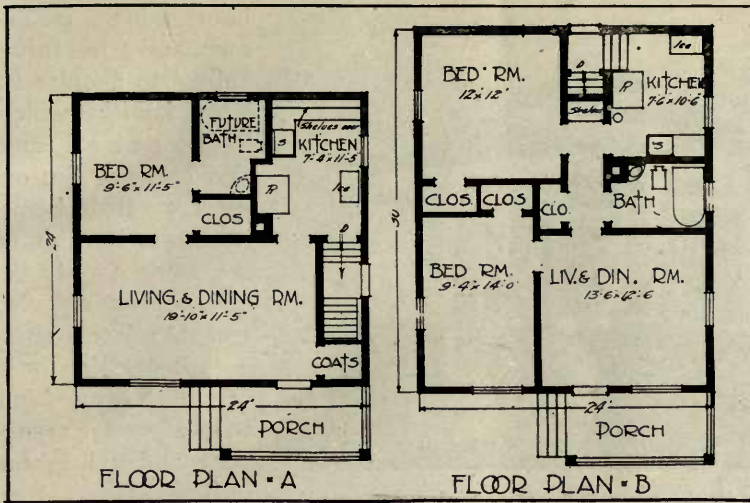
A small but attractive home.

and making the living room smaller, another 12'x12' bedroom is added, keeping the same general lines of the exterior.

Plan "A" suggests a home which the "Newlyweds" may build which can be enlarged as they increase in ambitions and in worldly wealth, by developing the plan on the lines of the first home shown, reversing the second floor plan to bring the bath room and plumbing over the kitchen.

Two other plans are given, showing even smaller homes, the first of which is only 20'x26', yet with two bedrooms. Plan "A" of this series is very "modern" in the small size of its rooms as it is shown, but it is also capable of being developed into a plan similar to the first home shown by taking out the partition making the living room extend the full width of the house, cutting out the closets





and by extending the room with a bay, placing the dining room where the bedroom is shown, and carrying out the second floor as in the first home.

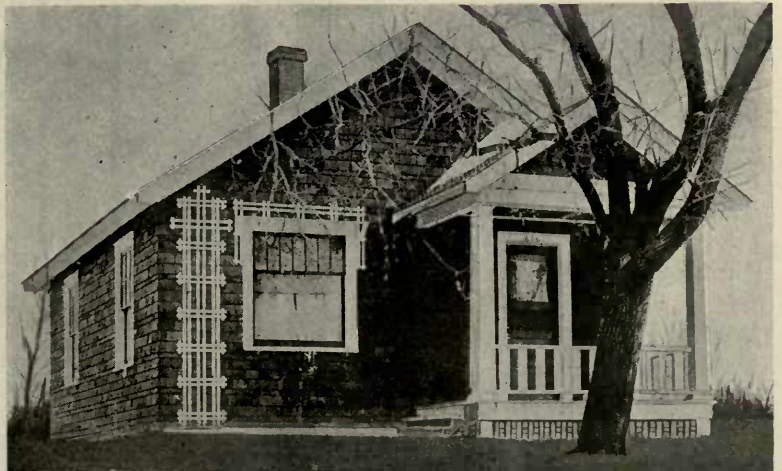
When a house is built in what might be called a temporary form, with the intention of enlarging it later, it is better to make the plans for the house in the form in which it is to finally take, making that entirely complete and satisfactory, then "revise" the plan to its more temporary form. This will often eliminate some expense and much trouble when the time for the remodeling comes. A few inches in the placing of a door or window or a chimney may almost be the turning point in the practicability of making a change in the house.

Some people claim that a home is more likely to be made entirely satisfactory when it has been remodeled than when it was first built. There are usually so many dreams which one wants embodied

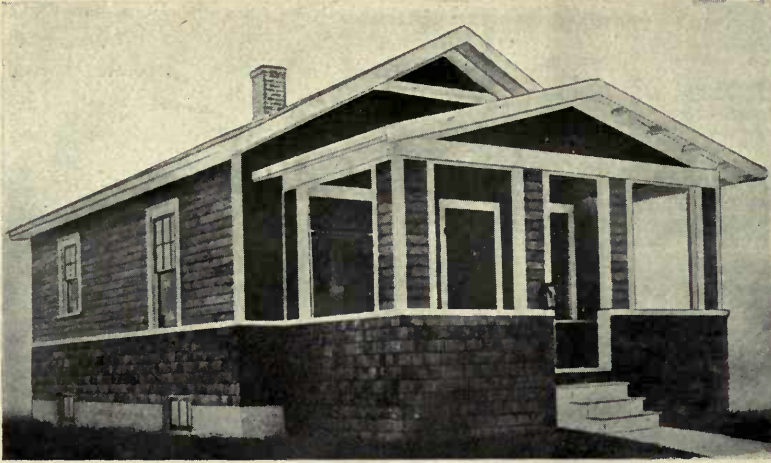
in the first building of the home that many prosaic things are overlooked. The crucial test of living in the house develops many points which one would like to have different. When the carpenters are in the house, there are always many little things which the housewife would like to have him do, no one of which is of sufficient

importance to send for him, but which add very greatly to the housekeeper's convenience.

Taking the lump sum, only, into consideration, it costs more to build a small house and then to enlarge it to the house first planned as here suggested, but on the idea of the "installment plan" it is easier for most families to pay out for the small house and prepare themselves for another effort later, than to live under the burden of a large indebtedness. At the same time, generally, it is not difficult to arrange for the complete building



Showing an exterior for which alternate plans are suggested.



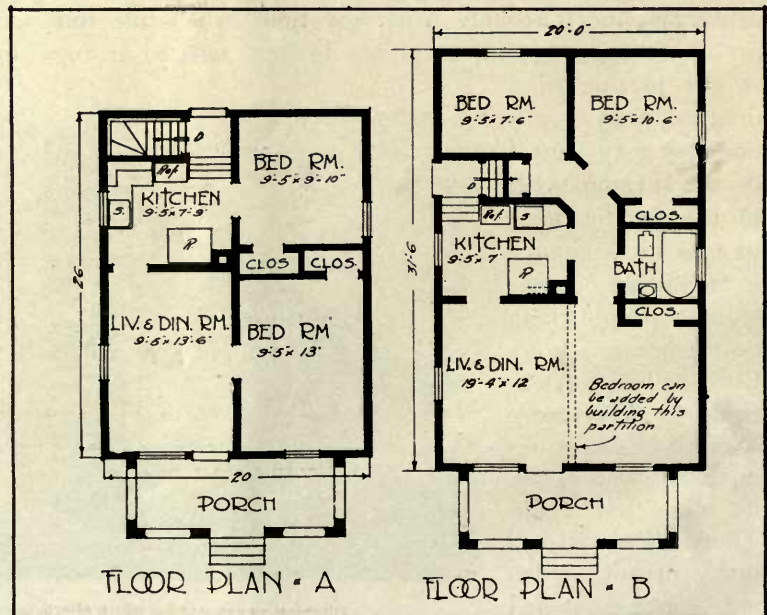
Too new for the planting to be set.

home which is his own, and a lessening ability to acquire it. The family which has worked and saved to pay out on the cozy little home can never have quite the same feeling about growing old, and they face a business depression or a crisis of any kind with a greater assurance and a brighter outlook.

of such a home as the family will wish to live in for a term of years, and most people prefer to build in this way. It is interesting to study all the possible ways of doing so important a thing as the building of a home.

With the increase of rents, which seem to be progressing at an alarming rate, home-loving people will try to find ways by which the payment of rent may become a permanent investment for them. the man growing old under the strain of business and the accumulating years does not take much pleasure in the bunches of old rent receipts which is all he has to show for all the money he has paid out for the privilege of living in some other man's house during all the years of his prosperity. With the snow in his hair and younger men making a place for themselves all about him, he feels a greater need for a

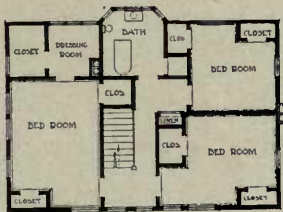
as "war time" prices always have been, but people are living well, and many people have never before had as much money to spend as they have now. Will this money be put into an automobile or into the building of a home? That is the question which many people will have to decide. Others are trying to plan a home so compactly and economically that they shall be able to build now, even with the high prices, rather than pay rent.





Clayton D. Wilson, Architect.

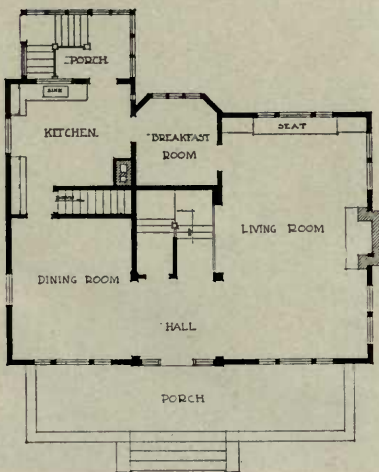
Dutch Colonial for the Home



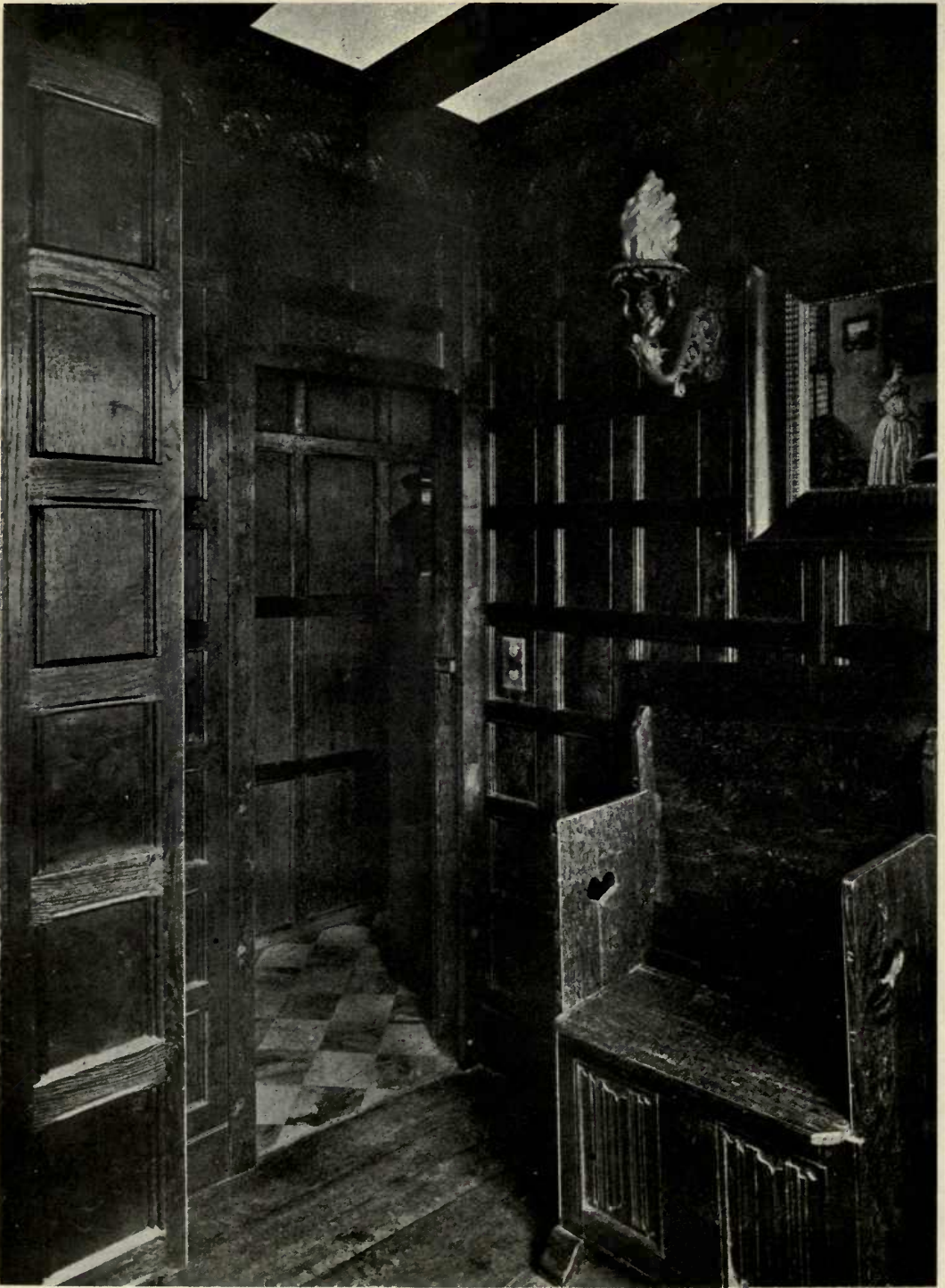
PERHAPS there is no more economical form of building than that which puts the second floor under a gambrel roof, even though more labor is required in its framing. It is a type which must be well handled in order to be entirely successful, for the parts must be carefully proportioned to each other. No type lends itself more satisfactorily to Colonial details, nor gives them a better setting.

When shingles are used for the exterior, variety may be given to the surface by the way in which

Different Ways of Laying



the shingles are laid. When they are laid alternating two inches and eight inches to the weather instead of the usual six inches, straight, a very pleasing wall is given.



Oak paneling in an old English Inn.

INSIDE THE HOUSE

Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Walls and Ceilings---Part I.

BEFORE the decoration of a room, either by plain or figured treatment, is determined, the architectural features must be taken into consideration: whether the room has a wainscot, or merely a baseboard; whether there is a wooden cornice; finally, whether the doors and windows are so constructed that certain treatments are prohibitive. The historic tradition in regard to the interior of our houses is seldom considered today. If it were we would treat our wall as an order and insist on the classic divisions. The dado, intermediate wall space, frieze, and cornice are survivals of the old idea that the interior wall must be treated with the same architectural balance and symmetry as was once accorded the exterior; in other words that the wall of a room must embody, or at least suggest, the divisions of a column with base, pedestal, shaft, capital, etc. If we were writing a history of wall decorations it would



Paneling in molded plaster, Louis XV style.

be interesting to note this development from Greek and Roman times, through its various phases down to the mid-nineteenth century, when the dado and the frieze were a part of every wall paper pattern. The Greeks and Romans used stone and marble as an interior finish. Later, stucco and wood formed the interior walls, next tapestry combined with wood, then wood paneling and finally wall paper. The paper dado was a substitute for the early base of marble and the later base of wood.

There are decorators who still make a strong plea for a more architectural treatment of walls, those who insist that there should always be a strong supporting base, that the cornice should appear to be supported, if not by columns or pilasters, which would be the ideal way, by something. The paper dado, often made to look like marble or wood, was a tremendous sham. It was darker than the paper used above and looked more solid, that was all, even

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when strips of paper suggesting wood or marble were placed vertically at the corners of the room, nothing was gained architecturally. A later taste discarded the dado, found the frieze ugly and went to the extreme of papering the side wall from baseboard to cornice with one pattern of paper and using a plain ceiling

tried to hold the room together by means of the treatment given the wall paper.

The architect of today handles wood as it was made to be used—as a structural part of the room. We are speaking now of the trim of the room, of the exposed woodwork. Possibly architects of the nineteenth century shirked their duties and threw the responsibility on the decorator, who in turn fell back on the wall-paper manufacturer.

In half-timbered houses, in houses of rough cast, where the interior trim is flat, with few or no moldings, and the furniture is designed to correspond with the style of the room, stained plaster is very satisfactory as a wall finish. Plaster in its natural state is also sometimes very effective. If stains are used, they should, we believe, be rather neutral. If deep tones



Plain walls of sand-finished plaster, exposed beams—The dining room of "Wayside"
The residence of Luther Derwent, Esq., Rockford, Ill.

in place of a figured ceiling paper.

The very modern room has a truer architectural feeling, but it is due to the architect, not the decorator, which is quite as it should be. It is not the decorator's mission to keep the walls in place, nor to prevent the ceiling of the room from looking as though it would tumble down on the heads of the occupants. The decorator was out of his field when he

are desired they should be obtained by other methods. Moss green, light brown, gray yellow—not pumpkin shades—are admirable in plaster. Very good neutral effects are obtained by burlaps and canvas, in their natural colorings, but here again a fine harmony must be obtained. We hesitate to speak of stencils, for they usually suggest to the American mind painted ceilings and friezes touched up

INSIDE THE HOUSE



Paneled dining room in a Colonial house.

Peabody, Wilson and Brown, Architects.

with gold and made to appear as if "painted by hand." A stencil treated frankly as a stencil with no attempt made to connect the units may be very decorative, but it must be well done, both as to design and color.

The neutral wall undoubtedly has its place, but so has the one of stronger tone, and this quite apart from the question of a plain or a figured surface. In a room where all the accessories have not been carefully planned, where old furniture is combined with new woodwork or vice versa, a neutral wall often becomes flat and insipid. A stronger color is needed to preserve harmony. This may be plain, two-toned or figured. Libraries and living-rooms need quiet tones, producing a restful atmosphere. If the wall is to be a background for pictures it should be

plain in effect. If it is to be a decoration in itself, it can carry a bold design and combine several colors. This does not necessarily mean a riot of color, a figured paper can be very restful, also a plain paper in a harsh tone can be very irritating. In rooms with white paint, particularly those designed on strictly Colonial lines, figured papers in old fashioned patterns will be found highly desirable. In many houses old landscape patterns have been used with satisfactory results. Emphasis should be placed on the necessity of a reserved scheme of furnishing with highly figured walls, and of the greater latitude permissible where walls are plain. Wood paneling as an interior finish has few equals in either beauty or durability. When possible, the Colonial house and the half timbered dwelling should have



at least one paneled room. And the end justifies the expense.

Plain ceilings, except in rooms where the decorative scheme necessitates a figured treatment, will be found the safest plan. Many period schemes require a decorated ceiling, but the average house is marred by them. A long established rule is that the decoration of any room should grow lighter as it ascends. In the usual room a plain ceiling lighter than the walls is recommended, of the same tone as the walls, or one closely related to it. A white ceiling is generally best where the woodwork is Colonial white. A white ceiling is also effective in a room with a darker trim, provided a wall paper is used where the background is white, or where white appears to a considerable extent in the treatment of the room. A glaring white ceiling with dark woodwork and a

strongly toned wall would be absolutely jarring. Where a neutral tone is used for the side wall it may be carried in a paler tint over the ceiling. A strong ceiling color at variance with the side walls is to be avoided, or any other treatment which calls attention to the ceiling at the expense of the rest of the room. A yellow ceiling, if not too bright, is sometimes wonderfully effective, but it must be closely related to the side wall, and yellow must be used in the furnishing in order to preserve harmony. Of this treatment more will be said later.

Most of our houses, no matter what the wall and ceiling treatment, are overfurnished, crowded with useful and useless things, often containing enough for several dwellings, and erring especially on the score of too many pictures and too much bric-a-brac.

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.



JANUARY bargains are many—not alone in all departments of interior decoration, but in the smaller articles of the house as well.

In the studio shops there are opportunities for picking up novelties carried over from Christmas, while the big stores are clearing the decks as rapidly as possible in preparation for February sales. Many imported articles which cannot be duplicated are marked at low prices. Here

are found the real bargains of the season.

The china department of one well known New York establishment shows an Italian table, a French table, an English, a Japanese, a Russian, etc., calling to mind a Fete of All Nations or, more appropriately, an Allies Bazaar. Among the Italian things are Ginori cups and saucers, plates of Raffaelli ware and various representations of the Hadrian or Pliny vase. The original of the vase, it will be remembered, is mosaic with four

INSIDE THE HOUSE

doves perched on the rim. Many have been the reproductions of this famous bit of ancient art. In our grandmother's time brooches of mosaic were sold to travelers in Rome, in which vase and birds were shown in miniature. At a later day the vase, or basin, made of yellow marble or alabaster with four adjustable little doves

in pure white composition, were as numerous in Rome as strings of glass beads in Venice. Few tourists returned without a Hadrian vase tucked away somewhere in steamer trunk or hand luggage. During the past ten years trips to Rome have been unnecessary so far as this interesting article has been

portations,—much like an old friend of Italian travel except that the birds are in brilliant color. This is not according to Hadrian, nor, it may be said, according to the idea of a white dove, but it sets forth the modern ideas of vivid color and is truly a novelty. It may be a long time before the Hadrian doves, white or otherwise, flit across the Atlantic, so it is well to give consideration to the vase, remembering that the birds may be removed at any time.

The French table holds decorated glass, Limoges china and many interesting small ornaments. The Russian display includes plates of various sizes bordered with colored enamels

and trays, ladles and spoons of lacquered wood. On the Swedish table are pieces of pure white pottery in the form of flower holders and ferneries. After the brilliant colors of Italy, France and Russia there is something refreshing about these cool, quiet Scandinavian things. Some of the articles are pierced, others show a delicate ornament in relief. Several may be grouped together to form a center piece or separated to make corner ornaments for a dinner table. Filled with feathery green they would be highly interesting for occasional use, making quite an agreeable



The well known "Peacock in the tree" wall paper, now printed in shades of gray.



An old friend in a new guise, olive green and shades of lavender.

concerned, for many shops in this country have carried it. From small representations two and a half inches in diameter to those measuring at least a foot it has been possible to select a half dozen styles. For violets or for rose leaves the smaller sizes are useful, while the larger ones filled with fruits or flowers make charming centerpieces. Gold fish are highly effective in the largest, although the fact that light is received only from the top makes the vase less desirable for this purpose than a globe of glass. On the Italian table, mentioned, are the latest im-

INSIDE THE HOUSE

change from more stereotyped schemes.

England's display fills several large tables and includes dinner sets of exceptional value marked down to very low prices. Sets of one hundred and seven pieces may be purchased for thirty-two dollars, twenty-five and twenty-seven dollars. The patterns are the kind one likes to live with—excellent in outline and very pleasing in color. Much of the ware is undecorated except for borders. Any of this china would make glad the heart of the young housekeeper and grace either a simple or an elaborate table. The wearing qualities of the standard English makes are well established. Daily contact with the dishpan seems to produce little effect and in a large sense the china wears well.

Most conspicuous is America's output and this pleases our sense of fitness. Many tables are devoted to the new and beautiful wares from our own industries. It is possible to find numerous articles in table and ornamental glass and a wide variety of decorative chinas. Breakfast and tea sets from the Lenox Pottery are

both artistic and practical. Of interest are trays of creamy white surface with narrow gold borders. An inquiry as to their composition brought forth the information that they were made of wood fibre. Strong, light in weight and of a most pleasing texture they are good to look at and make ideal trays for general house service.

It is rather early to forecast the new wall papers, but it may be safely predicted that birds and foliage will continue in popularity.

Two favorite patterns, illustrated herewith, are printed in new combinations of colors. The peacock in the tree, which has glowed with all the brilliancy of the tropics, may now be purchased in shades of gray. Plain window draperies in King's blue, mauve, flame, citron, sage or rose, are shown in combination with it. The rose tree, also with birds, presents quite a new appearance with pale yellow flowers and foliage of soft green. The long-tailed much be-feathered birds now grow a quieter plumage, though still of exotic origin.



An old Wedgewood pattern known as "the feathers", revived in modern table china.

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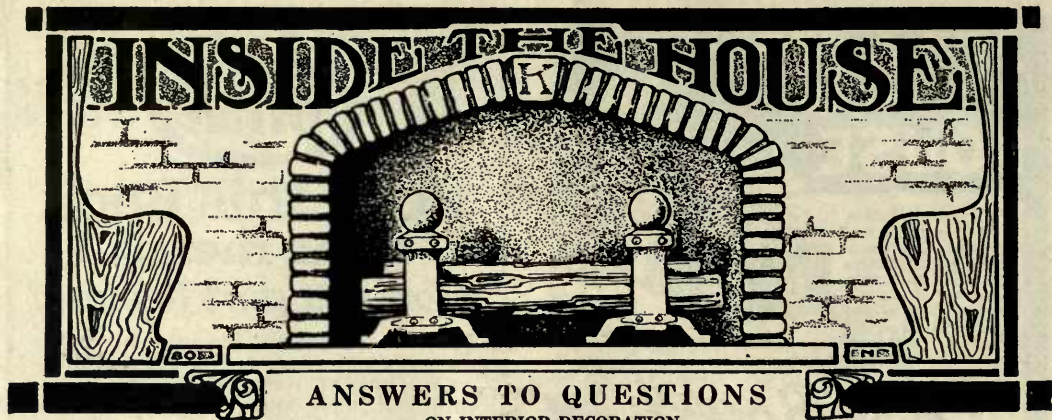
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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan.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

Doors Instead of Colonnade.

M. J. H.—We have been a subscriber to Keith's Magazine for some time, and now that we really are going to remodel our house I want your help in the finishing. I am sending the floor plan and if you have any suggestions to offer as to the rearrangement of doors and windows, etc., should be glad if you would advise us. The front wall will be brought out 4 feet longer than this drawing to enlarge the living room to 19 feet long and dining room to 17 feet long.

Would you advise having a fireplace in living room for beauty? Will have a big base-burner in dining room, and it will be sufficiently heated through the colonnade.

Where would you put the bookcases? I do not want them in colonnade if I can help it,—it seems to be such a small space. Would it be all right to have bookcases built in on each side of the north windows,—and how high should they be to make a shelf for ornaments? Also, would you put a window seat there between the bookcases, or would it be prettier without seat?

Would you advise a deep cream tint for walls throughout the house? How would you treat the woodwork in the various rooms? I want fumed oak in living room and dining room. Please advise as to color of rugs, also window curtains and shades.

Tell me which is better and cheaper to use for hardwood floors, oak or hard pine, also would you advise the colonnades between living room and dining

room, or have four doors hinged in pairs (wood, not glass)?

Ans.—We have read your letter with interest and take pleasure in sending you suggestions for your new home.

In answer to your question regarding the connecting link between living room and dining room, we would strongly advise doors rather than the colonnade. Hinged doors in pairs, glazed with small frames, and having clearly defined mouldings of wood will make decoration more simple than the mere columns which do not separate one room from another. Solid doors of wood will be in equally good taste.

Our advice is in favor of the fireplace, built for use, not ornament, and with the base-burner kept at lower pressure. Nothing quite takes the place of an open fire for coziness, cheer and beauty.

Have the book shelves by all means and an excellent place for them is either side of the window on the north wall, connected by a window seat, inviting one to sit and read. The top of the cases should be on a line with the mantel.

We like the bed room plans as they are, and think that you will have necessary space for the furniture if the pieces are not unusually large.

Fumed oak is advised for the trim of living room, dining room and entrance. If you retain the colonnades, or accept them, rather, inasmuch as the plans are in the making use the same wall tone in living room and the dining room.

Cream as a wall tint while attractive

INSIDE THE HOUSE

with white paint is almost too light for fumed oak. A tone like putty or sand is better. The ceiling should be lighter and the curtains should be of cretonne in gray tones to give life to the scheme.

Plain rugs, darker than the paper, oriental rugs in harmonious tones, or American adaptation of oriental would be suitable. Whatever the choice, the floor coverings should seem more solid than the walls. Our advice would be not to decide all the points of furnishings until the house is carried on a little farther.

Shades should be chosen to match or harmonize with the outside of the house. Curtains and upholstery should add contrast, either in figured or plain material.

Relative prices in oak and hard pine differ in different localities. Both wear well.

A Dainty Interior.

L. I. C.—I am a subscriber to your magazine and would appreciate information regarding interior decoration.

Our living room will face the south and will have two groups of windows facing south with casement windows facing east and west.

The fireplace will be in the west end.

I have mahogany furniture and want ivory woodwork with mahogany toned doors. French doors to the dining room, which room I want in blue. What colors for living room would be best?

Will buy a new rug and an upholstered davenport and chair. Which would be better, tapestry or velour?

What color brick for the fireplace would harmonize best with ivory woodwork?

My guest bed room will face west. I have an ivory Louis XVI suite for this room. What color would you suggest for rugs and draperies?

Ans.—Blue is a delightful color when well handled but too often in house decoration becomes either cold and hard or utterly insipid. Combined with ivory woodwork and mahogany furniture the correct shade is charming. A soft gray or Gobelin blue is attractive and makes a good background for furniture, etc.

In your living room many tones would be interesting with this blue. If you use a plain wall color in the dining room, a tapestry paper in blue, soft green and other blended tones would be pleasing in the living room. With such a wall velour would be a good choice for the upholstery. With a plain wall use a "tapestry" material for the upholstered furniture and figured curtains in similar tones. With the figured wall repeat the tone of the plain velour in the curtains.

For fireplace use the grayish or cream tones rather than a red.

Your guest room has a beautiful foundation in the set of Louis XVI furniture. This style is admirably adapted to a bed room when the setting is in harmony. For a color scheme for this room we suggest French gray and pink. Chintz for the windows in a stripe with a Louis XVI rose pattern would be attractive, the rugs to be plain gray with borders of pink.

A Small House.

J. F. B.—Will you please help me? I live in a very small country town and am building a very modest house, but desire to have it tastefully decorated and as I have no chance to see such things here, I will have to call upon you.

The house is only 28x30. Faces the east and has a ten-foot porch clear across the front, with porch extending across the driveway at the north end. The living room will be across the entire front, with stairway at the north end, and fireplace at the south end. The furniture is waxed oak, brown wicker and brown and green tapestry, oak library table and oak and leather davenport, a brown wicker floor lamp and mahogany piano and victrola. I have two brown pottery sconces, fitted for electricity—candle style. Also two copper sconces, 10 inches high with place for common candle.

Ans.—A small house may be made very attractive, often having a charm which many large dwellings lack.

Your living-room suggests a green, tan and yellow scheme and the suggestions given are based on such. You will



gain an effect of harmony and of spaciousness by using the same paper in both the living and the dining-room. A sample of "fabric paper" in a light tan is enclosed, also of a cream colored curtain net and of decorator's sateen in a pattern of yellow Scotch roses which, for the price, seems to me very unusual. The quality is excellent and will launder, so I am told, if care is used.

A tan, golden brown, yellow and soft green make a delightful color harmony, and are well suited to your furniture and other fitments. Do not let the scheme become sombre—a fatal tendency with too much brown.

Use the same trim in the main room—the color of your fumed oak will be a good foundation color.

With the white enamel in black stripes use a cretonne in white and black stripes with an over pattern of buds and flowers.

Gray and old rose would be charming with the mahogany. Green or blue is usually interesting with birdeye maple. American walnut is attractive with blue and green, and all schemes are pleasing with ivory.

Are you familiar with the linen rugs—made in Minnesota? The tan, brown and green shades are excellent, also the grays. All colors may be secured. Iron or copper fixtures would suit your house, of very simple design. Buff brick is a good choice for your fireplace.

Exterior Color Scheme.

V. H. L.—Please give color scheme for outside of following house described:

Brick veneer, using mottled brick (tan with black specks), stucco gables. What color for gables, trimmings, roof, etc., on outside? We think we want the bathroom and kitchen walls in smooth finish and rest in rough or sand. What do you suggest?

Ans.—Your choice for smooth finish in bathroom and kitchen and sand finish in other rooms is good. Sand finished walls when well treated are very pleasant to live with, affording an excellent background for furniture and other articles.

For the exterior we suggest the follow-

ing color scheme: With tan brick mottled with black specks we would recommend the lightest shade of tan, or deep cream color for the stucco gables, wood brown roof, and trimmings wood brown. Window casings could be dark green if you wished—but the main scheme we would keep in brown. Use window shades of soft green, and plant evergreens near the house. Until the evergreens are in flourishing condition, use bay trees in green tubs.

For the Child's Room.

L. F. E.—Please advise me concerning curtain materials for dining room, living room, two bedrooms, one to be blue, the other pink. Also material for a little girl's room, something with bunnies or figures which are dear to children. My house is in cream, the woodwork is white throughout the house. Dining and living rooms are practically one as they are separated by columns. I would be glad of any suggestion you would make.

Ans.—Your letter has been read with interest and we take pleasure in sending you samples of curtain materials for your dining room, living room, two bedrooms and a little girl's room. We were unable to find any material with "Bunnies" for the little girl's room, but will be on the lookout. Meanwhile we send you a sample of an attractive "child's" pattern.

For the bedroom in pink we send you two samples, one with dwarf pink roses on a black and white stripe which is inexpensive, the other a Tudor rose pattern at a higher figure. For the blue room we send a similar rose design in blue and white, a blue and white stripe with pale yellow and other colors. This may be cut into attractive bands to use as borders on plain goods.

In the dining room the small check in shades of yellow and white with the stiff little bouquets would be effective, used as a valance and side curtains over cream colored net. This curtain scheme could be continued in the living room or a net curtain used with a straight valance of the plain green enclosed. The samples have been chosen with the white wood-

INSIDE THE HOUSE

work and other conditions kept in mind.

It is pleasant to receive a letter from your State (New Mexico) and to feel that the readers of Keith's Magazine are not confined to any one part of our country.

In April of 1917 some interesting nursery fitments are shown in the department, made at the Helen Speer Shop, which is a place devoted entirely to play-rooms and nurseries.

Tapestry Covered Furniture.

H. P. Y.—Furniture in my living room is to be English brown mahogany and tapestry. May each tapestry piece be of different pattern providing the colors are right?

Dining room furniture is to be a Queen Anne set in black walnut. This will harmonize nicely with the brown mahogany furniture of living room and the Jacobean oak woodwork, will it not?

Please make a suggestion for the front door which leads from porch into the living room. I don't care for a shade on this door, neither do I like the idea of net curtains. Of course, the net wouldn't give the desired privacy.

Ans.—It is a pleasure to answer your letter, for your rooms as you have planned them are very attractive.

In answer to your question I would say briefly that the tapestry covering for the furniture could be of different design provided the colors blend. Queen Anne walnut will be entirely appropriate in the dining room, as will a Jacobean tone for the furniture of the den.

For the middle bedroom painted furniture would be interesting—a very deep ivory with a rather broad rendering like the old Venetian pieces. Sometimes a printed linen will offer just the right motif of birds and flowers, flower baskets urns of fruit, etc.

Queen Anne furniture for the light green bedroom would be my choice with a spirited cretonne or linen in Queen Anne pattern. Chippendale mahogany would be a good second choice with characteristic hangings.

In regard to the final question, a solid door is recommended which would not need a curtain.

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200 VIEWS



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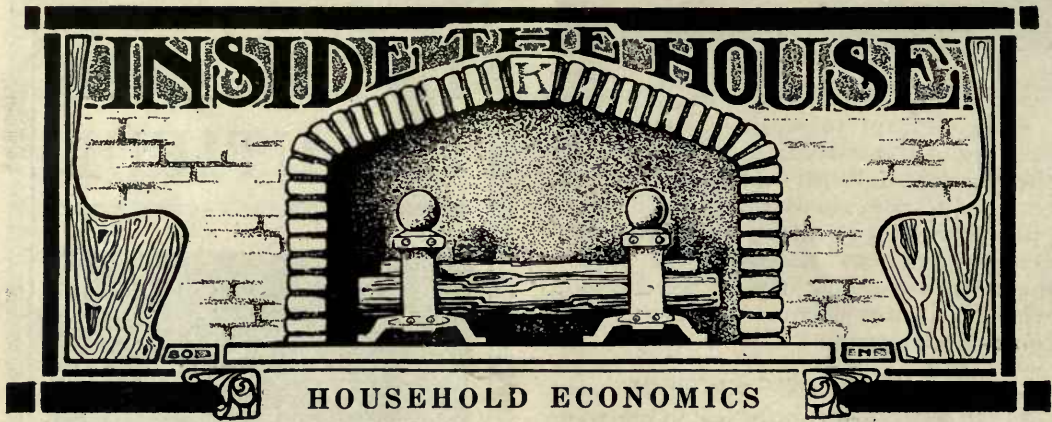
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Eat—And Win Health as Well as the War

Happy, careless, wasteful Americans! Will the necessities of the great war make us realize the enormity of our sins against home economy?

The Department of Agriculture estimates that if each of our 20,000,000 families throws away an ordinary slice of bread daily, the country's waste for twenty-four hours is 875,000 pounds of flour, or over a million one-pound loaves. At this rate we would destroy yearly 1,500,000 barrels of flour, or enough for 365,000,000 loaves of bread.

It would take the yield of 470,000 good western acres to provide for this great annual crime.

If every family empties into the garbage pail an ounce of edible meat or fat daily it means that the nation suffers a loss of 1,250,000 pounds, or 456,000,000 pounds for the year.

Many kitchens commit this daily waste. Is yours one of them?

—The Nation's Business.

THIS United States will never again be a country of heavy meat eaters. The living conditions at the present time do not warrant such a diet; health will not stand it, and the warnings which have been sounded have gone unheeded until this crisis has thrown a spotlight on food conditions.

What might be called the negative side of Food Conservation has been emphasized and some people seem to confuse conservation with thrift. It is not a matter of saving money, nor are people asked to put themselves on short rations. Instead they are asked to eat other grains instead of wheat, fish and other things instead of so much beef. Ask the stern-visaged business man, who can remember

the delicious Johnny-cake of his youth, if there is any hardship in eating corn bread several times a week. Ask the growing boy if there is any hardship in eating bran muffins, well spotted with raisins, made by the conservation rules. Ask the dyspeptic if there is any hardship in the fact that meat, and especially beef, is not offered to him twice a day and that other people are restricting themselves to the diet which his state of ill health has long required of him. Surely there is no complaint from the man who has perfect health; with this country overflowing with foodstuffs which are not under the restrictions, with a plentiful stock of vegetables, with fish not only plentiful but cheap.

INSIDE THE HOUSE

The Food Administration is trying to teach people to buy food wisely, spending their money so as to get real nutritive value in their food, and to have a well-balanced diet.

"Bread and cereals (with a reasonable amount of cheaper fats) give the most food value for the money expended." It is suggested that people should spend as much money, or more, for fruit and vegetables as for meat and fish; and also as much for milk as for meat and fish; that such a method of expenditure will give a wise, safe diet. Figure out expenditures and see how near you come to this rule.

Brains in Baking.

The Bakers' experience and experiments may give some helpful items to the housewife. One accustomed to use pastry flour may profit by this item from the Bakers' Review in which a correspondent says that it was difficult for his bakery to obtain soft winter wheat flour for cakes and pie doughs during a temporary shortage. The use of bread flour made his goods too tough. High cost of shortening prohibited the use of additional quantities. He found that 25 per cent of cornstarch added to bread flour made a satisfactory cake and pie mixture. Again, during a temporary shortage of sugar, he used corn syrup for cake in the proportion of 2 pounds of sugar to 1½ pints of corn syrup for a cake mixture calling for 3 pounds of sugar. This made a cake which kept fresh longer than that made with sugar alone. Corn syrup creams up easily with sugar and shortening, and is easily poured if kept in a warm place. For a shortage of graham flour he used sifted bran in the proportion of 1 pound of bran to 4 pounds of flour, or 1 pound of bran to 10 pounds of bread dough. This makes a good bran bread. One-half a pint of molasses made the bread sweeter and darker, and also made dough for malt bread and rolls. The following is his recipe for a tasty "emergency bread":

Mix 2 pounds of oatmeal, or rolled oats, with 2 pounds of corn flour; mix this with 4 quarts of hot water and 3 ounces of salt; let it stand a little while; then mix same with 12 to 15 pounds of

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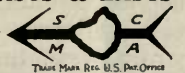
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INSIDE THE HOUSE

bread dough and work up quickly. Reduced to the housekeepers' smaller proportions, this is suggestive.

The Two Policies for Food Problems.

Mr. Hoover said, that whether we like it or not, we must deal with the food problem of war in one of two ways. There is not enough food to go around if we stick to the lavish methods of peace times. Rising prices, coupled with depreciation of money, due to issues of war bonds in every country, which make the purchasing power of money shrink, compel us to adjust the food supply to the world's appetite, either by controlling that supply in ways that lead to economy and make it suffice, or by letting wages rise as prices rise, to keep pace roughly with fluctuations. Even an amateur economist can see at a glance that food control is better than wage increase, because wage increase is a crude force operating slowly, unevenly and with great injustice and suffering to millions of workers. The wages of many workers do not rise—the professional men, clerical workers, public employees, and so forth. Russia tried the experiment of letting wages adjust themselves to the diminishing food supply, and it did not work. Russia was brought to a state bordering on anarchy by the intolerable pressure of the food situation on the ordinary peaceful citizen.

The farmer, the grain man, the miller, the baker, the packer, the grocer, the wholesaler and retailer, the traveling salesman and the canned goods broker have gone to Washington in bodies representing the best men and the best minds in their respective trades, and have conferred there, not only with the Food Administrator himself, but with leading men in their own lines who are acting as volunteers on the Food Administration. Sometimes they have gone with fear in their hearts, or resentment at the prospect of government interference in their business affairs. But there is something in Washington which quickly dissipates fear and resentment, and leads these men

to offer their unanimous support to food control measures.

Forest Foods.

The Forest Service considers forest foods of such value that a bulletin has been issued, taking up not only the well-known nuts and fruits, but even the food value of acorns, and their preparation after the Indian manner.

"Aside from the numerous edible mushrooms, roots, fruits of shrubs and smaller plants, the trees of our forests afford a large variety of edibles which are highly prized by woods connoisseurs. First in importance, of course, are our native nuts—beechnuts, butternuts, walnuts, chestnuts and chinquapins, hazel nuts, and several kinds of hickory nuts, including pecans. The kernels of all of these are not only toothsome, but highly nutritious and are used by vegetarians to replace meat. The oil of the beech nut is said to be little inferior to olive oil, while that of butternuts and walnuts was used by some of the Indians for various purposes. The Indians, it is said, also formerly mixed chestnuts with cornmeal and made a bread which was baked in corn husks, like tamales. In parts of Europe bread is made from chestnuts alone."

"It is said that Daniel Boone and some of our other early pioneers could go into the wilderness with only a rifle and a sack of salt and live in comfort on the game and other wild food which the woods afforded."

What Can Be Done With Garbage.

Garbage used to be considered largely as an expense; something to be destroyed as quickly and easily as possible. Many elements of chemical and other value find their way into the garbage pail. In New York a recovery plant of the latest type, costing three million dollars, has been built on Staten Island. This plant was more expensive to install, but much more economical in operation, and has effected an increase in the valuable products recovered by at least 25 per cent over the older plant. Among these are mentioned

INSIDE THE HOUSE

grease for 70,000,000 cakes of soap; 1,500 tons of nitrogen; 2,000 tons of phosphoric acid; 500 tons of potash. With the nitrogen, and the glycerin from soap making, there is a recovery of material yielding 3,500,000 pounds of high explosives, while the phosphoric acid and potash, as well as the nitrogen, are valuable in the making of commercial fertilizers.

The garbage is treated entirely by chemical methods, which saves many of the rich chemical elements which were formerly lost.

Garbage Saving at Army Cantonments.

Another practical demonstration of what may be done in the use of garbage is made by the War Department in the Army training camps. The garbage of thirteen of the cantonments will be sold to a contractor for feeding swine, yielding the Government an annual price of \$446,394. It is estimated that garbage waste from ten to fifteen soldiers will feed one hog, putting onto the animal one pound of weight per day. In cases where garbage can not be used for feeding, it will be treated for grease extraction and the tankage ground for stock feed or fertilizer. The custom of burning garbage will be abolished altogether.

The Passing of the Baldhead?

According to an English report, war measures are already having an effect on the physical conditions of Englishmen to their betterment.

"Five years of war bread—peace will not bring the old white bread back—will, owing to the greater mastication that its ingredients and its staleness requires, save the teeth of thousands of the younger generation. Our eyesight, as opticians already have noticed, is much better. The day strain of work, added to the brilliant street lighting, ruined the eyesight of thousands. Now the darkened streets and the shaded lighting indoors has done wonders for the eyes. Dyspepsia, too, has been killed by restricted means and greater exercise. Gardening, allotment digging, training camp drilling, and the like, have brought new health to multitudes. And as the retention of our hair is in no small degree attendant on our general health, premature baldness is arrested."



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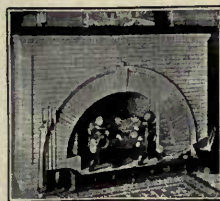
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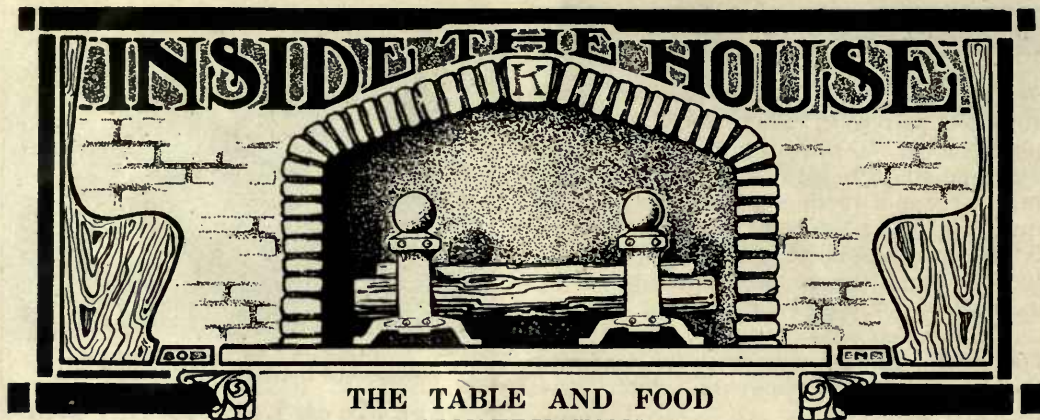
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THE TABLE AND FOOD CONSERVATION

Serve Fish

WHEN you are buying fish ask about fish from the local waters. If every thing else is as satisfactory you will probably get fish more lately caught, you will conserve transportation,—which is most important just now,—and probably the fish will be both fresher and cheaper. In addition, you may develop an interest in the local varieties which will add the spice of interest in the choice. We are accustomed to distinguish very keenly between the different cuts of beef, but generally speaking fish is just fish.

In some places frozen fish can be bought which is as good in flavor and nutriment as fresh fish, and much cheaper. Frozen fish should be used at once when it has been thawed out. But if you buy fresh fish be sure that the fish you get is fresh. You may be reasonably sure that your fish is fresh if the eyes are bright, the gills red and the flesh firm and odorless.

There are many delicious ways of serving fish in addition to the usual boiling, broiling, baking and frying. One of the most practical ways of serving fish is baked in a loaf not unlike the usual meat loaf. Salmon loaf is favored on account of the delicate pink color as well as the fine flavor, though any variety of fish may be used in this way, and either fresh fish or canned. Canned Tuna fish is finding a welcome beside canned salmon which has so long been a standard food.

Salmon Loaf.

- $\frac{1}{2}$ cup salmon, fresh or canned
- $\frac{1}{2}$ cup stale bread crumbs
- 1 beaten egg
- $\frac{1}{2}$ cup milk
- $\frac{1}{2}$ teaspoon lemon juice
- $\frac{1}{2}$ teaspoon onion juice
- Salt and pepper to taste.

Mix all the above together, put in a greased baking-dish or any greased tins or custard-cups and bake in moderate oven for about twenty minutes.

Scalloped Fish.

Two cups of cold fish (cod, haddock, whitefish, or halibut), one and one-half cups milk, one slice onion, blade of mace, bit of bay-leaf, tablespoon drippings, three tablespoons flour, one-half teaspoon salt, one-eighth teaspoon pepper, one-half cup crumbs, moisten with drippings.

Scald the milk with onion, mace and bay-leaf. Remove seasonings. Melt the drippings, add flour, salt and pepper, then gradually the milk and boil hard. Put one-half the fish in a greased baking-dish, sprinkle with salt and pepper and pour over one-half the sauce. Repeat, cover with crumbs, and bake until the crumbs are brown in a hot oven.

Fish Chowder.

A very substantial dish which yet makes a delicate appeal to the palate is fish chowder. In the rule which follows bacon was substituted, in normal times, for salt pork and fried out, or crisped if desired, in the sauce pan.

REMEMBER—That the Food Pledge which you have made, to conserve wheat, beef, fats, sugar, etc. is a serious business,—it may win or lose the war.

INSIDE THE HOUSE

- 2 lbs. fish (preferably cod or had-dock)
- 1 quart water
- $\frac{1}{4}$ pound salt pork.
- 1 small onion
- 3 potatoes
- 2 teaspoonfuls salt
- $\frac{1}{8}$ teaspoon white pepper
- 1 quart milk

Cut the fish into small pieces. Put the bones and any trimmings to boil in the water. Cut the pork into small dice and heat in a sauce pan. Slice the onion and fry in the pork fat, being careful not to brown, then skim out the onion. To the fat add the potatoes sliced, and strain over them the water in which the fish bones have been boiled. Cook for five minutes. Add the fish and seasoning and cook for 15 minutes or till the fish is done. Add the milk and serve. Crackers (pilot biscuit are the most desirable) may be added to the chowder just before serving.

Fish Pudding.

- 2 cups boiled halibut
- $\frac{1}{2}$ cup of milk
- $1\frac{1}{2}$ tablespoons drippings
- $\frac{1}{2}$ tablespoon of flour
- $1\frac{1}{2}$ teaspoons salt
- $\frac{1}{4}$ teaspoon pepper
- $\frac{1}{2}$ teaspoon onion juice
- 2 eggs

Pound the fish until it is thoroughly mashed, then rub it through a sieve; season the fish pulp with salt, pepper, and onion juice. Put the drippings into a saucepan; when melted, add the flour and cook for a few minutes; then add the milk slowly, stirring constantly until well scalded; then add the fish pulp, take from the fire, add the beaten eggs, and mix thoroughly.

Grease well a mold holding a pint or a little more; put in the mixture, pressing it well against the sides to remove any air bubbles. Cover the mold with a greased paper, and set in a pan of warm water covering one-half the mold. Place in moderate oven for thirty minutes, and do not let the water boil.

Fish Croquettes.

- 2 cups cold cooked fish
- Salt and pepper
- 1 cup croquette sauce

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INSIDE THE HOUSE

Lemon juice and onion juice

1 tablespoon chopped parsley

Mix all ingredients; add more lemon juice if needed. Shape, dip in crumbs, egg, and crumbs, fry in smoking hot deep fat or saute—in frying pan.

Sauce for Croquette Mixtures.

3 tablespoons drippings

5 tablespoons flour

1 cup fish stock or milk

Salt and pepper

Celery salt

Lemon juice

Few drops onion juice

Melt drippings; add flour, seasonings and milk. Cook until thick. This sauce is sufficient to thicken two cups of meat, for all kinds of croquettes. It may be varied by adding two egg yolks or one egg.

One cup tomato or canned tomato pulp may be substituted for the one cup milk or stock in croquette sauce.

Salt Fish Balls.

1 cup raw salt fish

1 pint potatoes

1 teaspoonful drippings

1 egg, well beaten

$\frac{1}{4}$ saltspoonful pepper

More salt, if needed.

Wash the fish, pick in half-inch pieces, and free from bones. Pare the potatoes, and cut in quarters. Put the potatoes and fish in a stew pan, and cover with boiling water. Boil twenty minutes, or till the potatoes are soft. Be careful not to let them boil long enough to become soggy. Drain off all the water; mash and beat the fish and potatoes while hot, till very light. Add the butter and pepper, and when slightly cooled add the egg and more salt, if needed. Shape in a tablespoon without smoothing much, slip them off into a pan and fry in smoking hot lard, or drippings. Fry only five at a time, as more will cool the fat. The lard should be hot enough to brown a piece of bread while you count forty. Drain on soft paper.

Fish with Green Pepper.

One and three-quarters cups cold cook-

ed fish, one cup white sauce, one-half small green pepper, one-half slice onion or flavor to taste with extract of onion, salt and pepper.

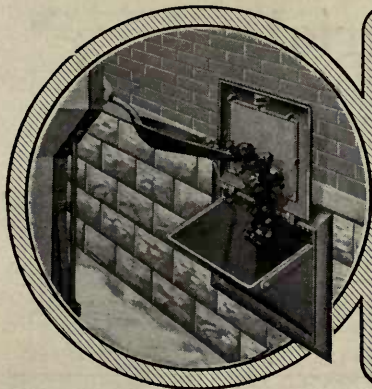
Cut a slice from stem end of pepper, remove every seed and parboil pepper fifteen minutes. Make a white sauce with one cup milk, two tablespoons butter or drippings, two tablespoons flour, bit of bay-leaf, sprig of parsley, salt and pepper to taste, scalding the milk with the parsley and bay-leaf. Cook the onion finely chopped in the butter or drippings three minutes, or flavor with onion extract to taste; add the flour when well mingled, the milk, salt and pepper; when thickened and smooth add the fish broken into flakes and the green pepper cut into narrow strips; heat thoroughly, and serve.

Fish Stuffing.

Mix one-half cup cracker crumbs, two tablespoons melted butterine, one-half teaspoon salt, one-eighth teaspoon pepper, few drops onion juice and two tablespoons hot water.

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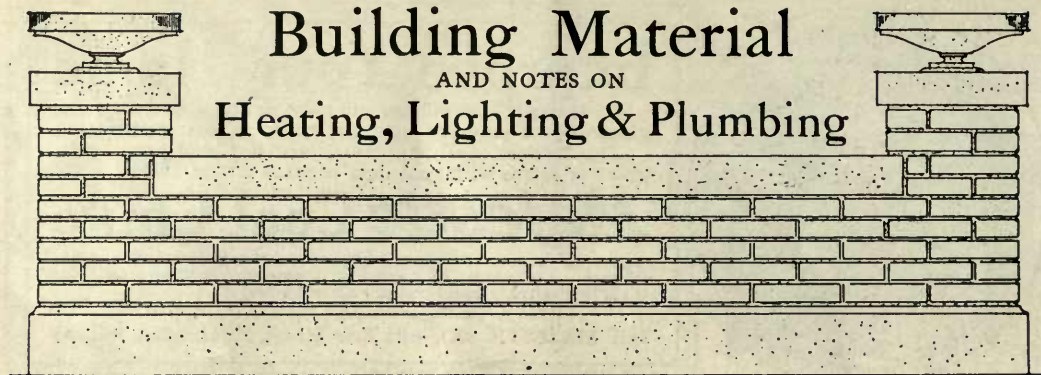
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“Zeppelins” of America

DENSE masses of black smoke, which too often are seen issuing from the great stacks, and even the smaller chimneys, have been called the Zeppelins of America with some right, as they stand for the great menace to these United States, that of waste. As a matter of fact, they stand for much more—they represent individual “rights” as against the public good, generally they show inefficiency in business management as exemplified in particular in the stoking of the boilers; they may mean labor troubles; and at the present time they are very likely to mean fuel troubles—truly an epitome of the situation in this country.

The prevalence of smoke in the atmosphere had, before the war, reached the status of a civic problem to the community. During the short, dark winter days the diffused smoke in the air drops like a pall over the city, cutting out what little sunshine and brightness might otherwise be expected.

People are only beginning to realize that this is bad for the health as well as for the spirits, and also that it is unnecessary, if a community is resolved to be rid of it. The city that lives in smoke and soot does so at its own volition, as is shown by what has been accomplished in Pittsburgh and Cincinnati. The change in the conditions in Pittsburgh has received wide notice, and in Cincinnati within the last four years an abatement of 75 per cent of the smoke from factory,

power and office buildings and locomotives is reported.

To no phase of city life, perhaps, is the smoke evil more distressing than to the building interests, to which it means not only defacement and even destruction of building materials, but the health of the individuals in the home, decrease of rentals in the smoky districts and depreciation of property values. It is costly both to the smoke maker and to the public. It is estimated that 20 per cent of coal consumption goes up the chimney as tribute to “King Smoke.” The householder who has a smoking chimney can figure it out to see what this means to him.

With the builder also lies the responsibility for the designing and building of the chimney for the greatest efficiency. There are many things which people do not know about chimneys, even those who have much dealings with them. Currents of air, heated and in motion, seem to be willful spirits and their actions are not always to be counted upon. Sometimes they seem loathe to do the expected thing.

Chimney Construction.

“The most common error made in regard to chimneys,” says Harald L. Alt in the Heating and Ventilating Magazine, “is that of not distinguishing between 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 and will require remedying.

"Heated air expands and occupies a greater volume than the outer air of a lesser temperature, so 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 lbs., 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.

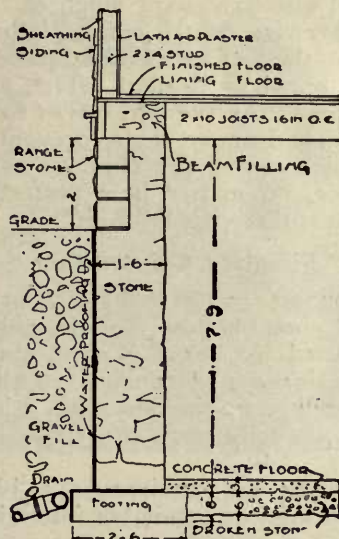
"From this basic principle all chimney action is governed and many chimney failings can be explained. For instance, the draft of a chimney is never as good in summer as in winter because the outside air is colder in the winter, the expansion of the chimney gases at the same temperature is, therefore, relatively greater and the intensity of the chimney draft is consequently increased.

"Chimneys have to overcome their own losses, these losses consisting of the friction of the gases rubbing against the sides in their upward passage. For this reason a circular-shaped flue is most desirable, the next, square, and after that oblong with the long side not more than double the length of the short side. In flues where it is necessary to exceed this proportion, two separate flues of more desirable shape can sometimes be used with advantage.

"The most efficient chimney, as far as draft is concerned, is one built perfectly straight from the bottom up, round (or nearly round) in the shape of the interior flue, and lined with tile, or with the interior surface made as smooth as possible by other means. There is no advantage in tapering the inside of a chimney to a smaller size toward the top—this only retards the flow of the gases.

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(Fig. 6)
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"A square chimney can hardly be figured as having its full area effective, a deduction of 10 per cent to 15 per cent being necessary on account of the spiral movement of the gases leaving the corners dead and inactive. With an oblong shape, the effect is worse, a deduction of 25 per cent being none too much. The use of tile flues will not only aid this slightly, owing to their rounded corners, but will also safeguard much of the fire risk otherwise due to mortar falling out between the bricks as time passes and leaving openings through which a spark might pass. As the tile serves to retain the gases and smoke, it also prevents leakage, which can spoil a chimney action at any time, no matter how perfectly the flue may otherwise be built."

Fireplace Construction.

If you are going to have a fireplace, have a good, honest one designed and constructed for burning wood and have it so designed and constructed that the smoke will go up the flue and not into the room. The following suggestions may be helpful:

Fire-brick or ordinary hard-burned common brick are suitable for lining the fireplace.

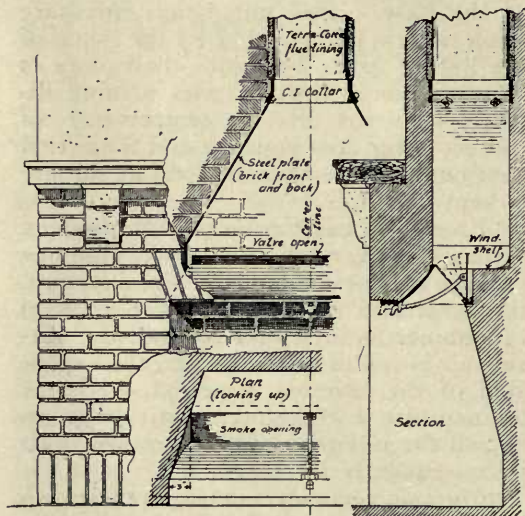
Fireplaces ordinarily should have their height less than their width and the height should not exceed $2\frac{1}{2}$ feet unless the fireplace is over four feet wide, in which case the height may be increased in proportion to the increased width of the fireplace. Fireplaces 30 inches wide or under should be not much more than 24 inches high.

The throat of the fireplace should be contracted by sloping the back of the fireplace toward the front; the actual throat opening should be several inches above the level of the arch. The wind-shelf or ledge back of the throat is important in checking down-drafts and this ledge or shelf should be six inches wide where practicable.

Above the throat of the fireplace the sides of the chamber thus formed should narrow gradually to the point where the flue proper begins. This is a very important part of the construction, as if this chamber is not properly formed and made smooth the flow of smoke and gases into the flue is retarded. In order to insure a smooth and properly shaped smoke-cham-

ber a steel form is sometimes used to insure the proper shape and absolutely smooth sides, eliminating friction to a large extent and thus increasing the power of the flue.

Terra cotta flue linings are now almost universally used, securing a smooth flue and giving additional protection against fire. The flue should always be proportioned to the size of the fireplace opening and the proper dimensions of flues are given below. These flues are based upon fireplaces having ordinary height, but where extra high fireplaces are designed flues should be enlarged in proportion. Fireplace 2 feet wide and 12 inches deep: Proper flue lining, exterior dimensions,



ELEVATION PLAN SECTIONS
A diagram of good fireplace construction.

$8\frac{1}{2}$ by $8\frac{1}{2}$ inches, or 8 inches diameter for a round flue. Fireplace 2 feet 6 inches to 3 feet 6 inches and 12 to 16 inches deep: $8\frac{1}{2}$ by 13 inches or 10-inch round flue. Fireplace 3 feet 6 inches to 4 feet wide in the opening and 16 inches deep should have a flue 13 by 13 inches, or 12-inch round flue. The following table shows this very clearly:

Width of Fireplace.	Depth of Fireplace.	Flue lining, Exterior size	Flue lining Round
2'-0"	12"	$8\frac{1}{2}$ "x $8\frac{1}{2}$ "	8"
2'-6" to 3'-6"	12"-16"	$8\frac{1}{2}$ "x13"	10"
3'-6" to 4'-0"	16"	13"x13"	12"

In estimating what the size of the flue

should be, it is safe to figure that the area of the cross section of the flue should be in the neighborhood of one-tenth the area of the fireplace opening; but where smoke chambers are used, securing smooth sides and reducing friction, the proportion can be somewhat less but never less than one-fifteenth.

Before the house is accepted and occupied, the fireplaces should be thoroughly tested. The most frequent causes of trouble are a flue that is too small or that is clogged at some point, or a badly formed smoke chamber. In building a chimney it is often necessary to offset a flue or to carry it off from its vertical line at some point, and when this is done it frequently happens that mortar is allowed to fall down the flue and this mortar will lodge at any such offset and form an obstruction; so that if trouble is manifested in the fireplace it will be well to examine the flue at such a point, although this may necessitate cutting through the walls of the chimney and flue. It also frequently happens that a brick is dropped and lodges at some point in the chimney and a weight dropped through the flue from the top of the chimney is perhaps the best way to discover such an obstruction and will often bring down the brick with it. If the trouble cannot be discovered by the contractor or the architect, then call in an expert.

If the flue bears the proper proportion to the fireplace opening and is clear and unobstructed throughout its length entirely, there will be no necessity for chimney pots or any sheet iron contraption to assist the draft. Where large flues are used, however, it is advisable to protect them by a stone slab set upon corner piers or a brick arch in order to exclude water during heavy rain storms.

Protection.

Electric lights installed at commanding points on the outside of a residence are of considerable service in keeping away burglars and marauders. The lights can be left on throughout the night, or can be connected with a switch placed near the bed of the householder, so that they can be thrown on instantly.

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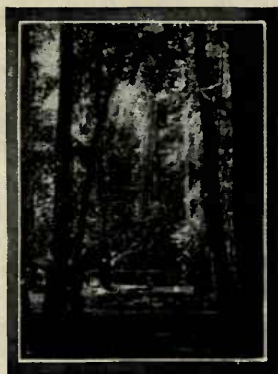
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WOODS

AND

HOW TO USE THEM




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—In Building Construction

O other building material expresses the sense of home as does wood. That peculiar aroma which gathers around the sense of home ownership seems fittingly expressed in the house built of wood. One loves the smell of new timbers and revels in the sight of the house growing to completion in the time-honored way. The basic idea of a home, to most people, is a home built of and finished in wood. When any other material is considered it must show its reason for replacing this long-fostered feeling for wood, and this feeling is changed only, to most people, as more satisfactory homes, built in other materials by the progressive reformer, make an appeal to the imagination.

In planning the home there are two points which are usually considered: Its appearance outside and in,—the livable quality, and the quality of permanence, always with the background of the possible cost limit. Either the house is built of masonry, clay products, or concrete, or it is built of wood. For the great majority of individual homes, the main construction of the house is of wood, though it may be veneered with brick, or finished in stucco.

Hardwood and Soft Wood.

The sum total of the knowledge of woods, to most people, is the difference between hard woods and soft woods, and

a more or less vague identification of the best known hardwoods, recognized by the characteristic grain of the wood.

Even these well-known terms are more or less misleading to most people. Speaking of the physical properties of wood, R. S. Kellogg, in his book on Lumber and Its Uses, which is a standard authority on lumber, from which we quote, says:

"The commercial terms, 'hardwood' and 'softwood,' do not correspond to the physical characteristics of hardness or softness, and are of little real value in this respect. As ordinarily used, the term 'softwood' is given to all trees of the family that the botanists call 'coniferous' or 'needle-leaved.' These are the pines, firs, spruces, hemlocks, cypress, larch, redwood, tamarack, cedars, etc. The term 'hardwood' is commonly applied to the species which botanists call 'broad-leaved,' represented by the oaks, maples, hickories, elms, ashes, basswood, beech, birches, walnut, etc. The slightest experience with wood shows that these terms give little indication of the physical properties of the species to which they refer.

"Some hardwoods are weaker than some soft woods; and some soft woods, notably long leaf pine, are stronger than many hardwoods.

"It appears that among the hardwoods

black locust is the strongest among them in proportion to its weight. Redwood is the strongest soft wood in proportion to its weight. In fact, redwood appears to be the strongest in proportion to its weight of any wood yet tested at the Forest Service Laboratory, with the exception of black locust. Redwood is a very soft, light, straight-grained soft wood, of great size and durability.

"Hardness is a most important property of wood, since resistance to wear is necessary for a large number of purposes. The hardwoods as a class average from two to three times as hard as the soft woods. Nevertheless, the hardest soft wood, longleaf pine (of the yellow pine group) is harder than basswood and red cherry. Their softness and ease of working make the soft woods as valuable for many purposes as are the hardwoods for other purposes."

Qualities of Wood.

The qualities of wood which are required in building a house are numerous and as a general thing no one wood will fill all the conditions, so the kind of wood selected for each use must be made with a knowledge of its properties. Many home owners leave this selection largely or entirely to the builder or contractor, taking an interest only when it comes to the interior finish of the house. The man who is not overwhelmed with his daily business often likes to make a "hobby" of the building of his own home while it is in progress and know for himself some of the more or less technical points and exercise his own judgment in the selection. To such, a tabulation of specific woods, showing special qualities of each, is instantly converted from a set of dry statistics, when he decides to build a home, into a mine of valuable information, into which he delves with the greatest pleasure. The fact that yellow pine has great strength; that the hardwoods make a beautiful interior finish to get the beauty of the grain of the wood, while the soft woods are easily worked if a painted finish is desired; that maple makes a very durable floor which is good looking at the same time; that oak makes a very beautiful and durable floor with its own distinctive qualities; all of these become matters of great interest to him.

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Strength and Weight.

The weight of wood is of interest to the builder chiefly in its relation to its strength and the fact that weight is a much more tangible quality than strength. "There is a general rule that light wood is weak and that heavy wood is strong, or that strength is proportional to the weight. There are individual exceptions to this rule, but it holds for most woods." The actual weight of the wood in pounds is not usually important. For that reason, weight is a relative matter and is usually expressed by its "specific gravity," that is, its weight in relation to that of water.

Seasoning Timber.

Wood when it is growing is full of moisture, which is naturally evaporated when the cut lumber is exposed to the air, even though it is left exposed to the weather. When it is built into a house it is subjected to heat as well as to the evaporation of the air; hence if "green lumber" is used, a great shrinkage follows during the drying process. Only thoroughly dry lumber will make a good job of construction. Shrinkage of timbers in place in the house is a very powerful force and will move everything resting on the timbers, causing cracks in the plaster surface of the walls, opening cracks at the line between floor and wall, change of level where shrinkage is greater in one place than another, and many of the troubles which develop after the house has been built for a year.

The different woods express great individuality in the manner in which they dry, and the amount of shrinkage varies with the wood. Some woods have a much greater tendency to warp and twist in the drying process. Overcoming some of these peculiarities have given some of the big problems to the kilns and factories. But that is another story which we cannot take up here. The degree of seasoning, the method of drying, the manner in which the piece is cut from the tree, all make a difference in the finished product. Quarter-sawed timber shrinks less than slash-sawed. As a class, soft woods

shrink less than hardwoods. Shrinkage is chiefly across the grain, a board or timber loses in width and thickness but practically nothing in length when it is seasoned. Among soft woods, the cedars and white pines shrink the least, long leaf pine and tamarack the most. Among hardwoods, locust, osage orange and black cherry shrink little; basswood, white oak, birch and hickory have a greater shrinkage. The hardwoods require greater care in seasoning than do soft woods, on account of their more complex structure, in order to prevent warping and checking.

Grading and Defects.

In earlier times in this country only perfect or nearly perfect lumber was used in the better grades of work, with a very large wastage. With the closer utilization of all material, and especially of wood, the poorer grades of lumber have necessarily been used more closely. Lumber is separated into grades on the basis of the defects which it contains. Defects must not be of such a character as to impair the usefulness of the piece as a whole, when it is used as constructional lumber.

In the soft woods most largely used for general building purposes, there are usually three grades of common lumber, generally known as No. 1, No. 2 and No. 3, or terms of equivalent value. No. 1 dimension boards consist of sound, strong lumber suitable for first-class all-round building purposes. The defects allowed in this grade are not of a character to impair the strength of the piece. No. 2 contains more defects, but is useful for the same general purposes in places where less strength is required. No. 3 stock is the lowest grade used for building purposes, and is generally employed for cheap, light or temporary structures. The man who expects to use much lumber or to use it economically will be well repaid if he familiarizes himself with the principal grades and kinds of lumber. He will not only be able to build better and more cheaply, but with a better knowledge of what he may expect, and he is able to avail himself of any advantages which the local market may afford.



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MINNEAPOLIS, MINN.

SPLINTERS AND SHAVINGS

The U. S. Army in the "Movie."



ANNOUNCEMENT has been made of a series of motion pictures of the American army in training, which will be shown throughout the United States.

Camp-life scenes, close-up views of the boys at work and play, athletic events, companies and regiments grouped, some individual "shots" at commanding officers, and other interesting insights into army life in the South, will be visualized on the screen.

These pictures, which will bear the seal of the War Department, will be exhibited primarily in each of those states from which come the troops, both of the state militia and the new national army, it being the intention of the War Department to give parents and friends at home a comprehensive idea of just how their boys are cared for by Uncle Sam.

Two prints from each picture will be preserved in the vaults of the War Department. Should such a record of the civil war be obtainable today it would be of countless historical value.

Use of Creosoted Wood Blocks.

The use of creosoted wood blocks, which originally began as paving material for city streets, has now spread into many other lines, according to a statement issued by the United States Forest Service. Its durability, noiselessness under heavy traffic, and its sanitary properties give this material especial value for use where heavy trucking takes place, and such flooring is found now throughout the country in factories, warehouses, machine shops, foundries, quarries and docks, and even in hotel kitchens, hospitals, laundries and slaughter houses. It is well liked by workmen because it is easy on the feet.

The new buildings of the big Dunwoody Industrial School in Minneapolis, which has been made one of the largest naval training schools in the country, has this type of floors.

Shark Leather.

We may soon all be asking for and wearing "shark" shoes if the shark leather industry develops as it promises to do. Many people are now wearing kangaroo leather in their shoes as one of the most durable of fine leathers. A corporation with shark fisheries in Alaska and in Seattle, Washington, is erecting a big plant in Florida. Sharks will be caught and their skins turned into leather. There is as much value, for leather, in an ordinary sized shark, this company states, as in an ordinary steer. There are at least ten varieties of sharks whose skins can be turned into good commercial leather. They are the blue shark, which attains a length of about 15 feet; basking shark, 18 to 45 feet; pilgrim shark, 15 to 22 feet; porpoise, about 8 feet; bone shark, from 8 to 30 feet; man-eater shark or white shark, up to 25 feet; great tiger shark, about 20 feet; hammer-head shark, about 15 feet; thresher shark, 15 to 25 feet; mackerel shark, 8 to 15 feet. Sharks are caught by line and also with seines. In Florida catching, skinning, and tanning will be an all-year-round industry. The cost of catching a shark, according to this company, is very small, as compared with that of raising a steer, while to the lay mind it seems like eliminating one of man's natural enemies.

Commercializing the Airplane.

One of the earliest commercial uses of the airplane reported was that of a progressive wall paper salesman who, last summer, called on his customers arriving in a big Curtis plane, of a type used by the Army, carrying with him two heavy trunks of samples. The report states that after attending to his business he had time to take the village authorities for a spin before going on to his customers in the next village.

A recent report from England tells of Italian morning newspapers being delivered in London at noon of the same day.

KEITH'S MAGAZINE

ON HOME BUILDING

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From "The Livable House"

Charming window groups.

Harrie T. Lindeberg, Architect.

KEITH'S MAGAZINE

VOL. XXXIX

FEBRUARY, 1918

No. 2

A House Built of Wood and Compactly Planned

Charles Alma Byers

SINCE every square foot of floor space represents a certain amount of money, the problem that confronts the builder of an inexpensive home is largely a matter of compactness. Naturally there should be no undue stinting of space, but, nevertheless, by devoting careful consideration to this phase of the problem, it is often possible to economize on expenditures very materially, without necessarily depriving the home of any of its important comforts or

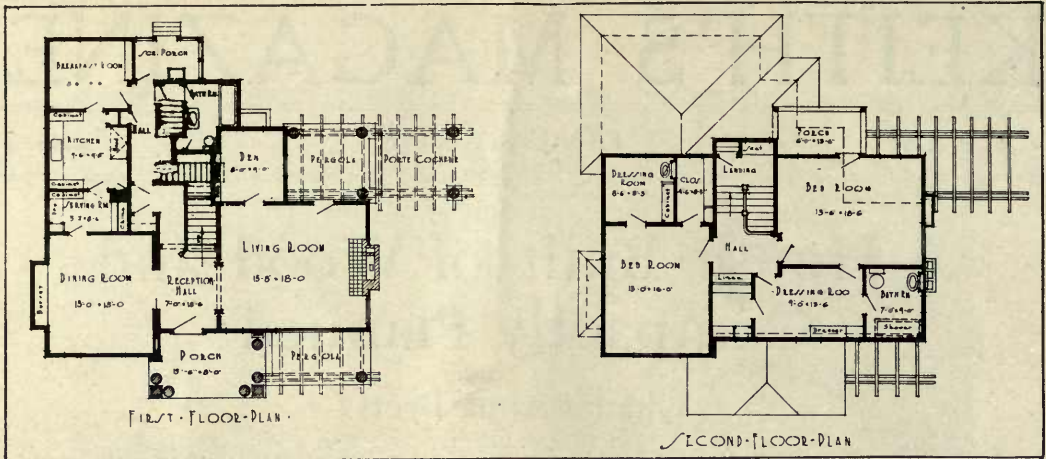
conveniences. In fact, the compactly arranged interior, if properly handled, with the rooms neither too small nor unnecessarily large, will often appear more cozy and attractive than if an extravagance of space is apparent.

And especially important in the designing of an inexpensive home is the utilization to the best possible advantage of such space as may be determined on. In other words, it is better to economize on the square-footage under the roof than on the



Attractive in details and color scheme.

H. H. Whiteley, Architect.



things that go toward making the interior convenient in its arrangement and attractive in its finish, decorating and furnishing. And as contributing very materially to the all-around charm of homes of this class, a liberal use of closets, built-in features, and so forth is a matter always worthy of consideration. Such things, be it remembered, besides constituting appreciable space-saving accessories in the small home and assisting in producing an appearance of coziness, always mean a considerable saving in the quantity of

furniture that must be purchased; and that, too, in this connection, is important. Of course these built-in features somewhat increase the cost of the house's construction, but this increase is usually much more than offset by the saving in store-purchased furniture.

In connection with the foregoing, the two-story house here shown is recommended to thoughtful scrutiny. Although by no means large in foundation dimensions—its frontage being but forty feet and its depth, exclusive of the front porch

extension, the same—this house, as will be observed, seems, and is, quite roomy. Its floor plans also show it to be especially compact and convenient in arrangement and particularly liberally provided with desirable built-in features. Moreover, representing a total cost of but approximately \$5,000, it is exceptionally well constructed, with every modern convenience



In the living room.

included, and charmingly finished and decorated. In fact, it is a very delightful home in every particular.

Seen from the exterior, the house presents a most attractive appearance from every point of view, in respect to both architectural style and color scheme. On its front is a small entrance porch, covered by an interestingly designed roof extension of its own; and from one side of this porch extends a short pergola, covered by the usual pergola beams, which are supported by plain round columns similar to some of the ones used in supporting the roof over the entrance. From one end, toward the rear, extends a *porte-cochere* for the automobile driveway, which is roofed to correspond in style with the front porch; and connecting with this *porte-cochere* is a sort of rear porch, protected overhead partly by a considerable overhang of the second story and partly by projected pergola beams. This provides direct entrance to the rear of the living room. In the rear is also a small second-floor balcony, reached from one of the bedrooms. Beneath a pair of upper-floor casement windows on the front is a nicely designed flower-box, while rose ladders screen the pergola.

The walls of the first story of the house are weatherboarded, and painted a deep buff shade, and those of the second story are of sawed shakes, painted a lighter shade of buff. The roof is shingled, with every fifth course doubled, creating a rather novel effect; and the shingles are painted a light green color. The trim-

ming, which includes the various porch and pergola columns, is done in a very light shade of cream, and the large outside chimney, at one end, is constructed of bright red brick, while the front porch and pergola and the rear pergola-porch are floored with red cement.

The front door is of glass and Philippine mahogany. It opens into a small reception hall, with a broad cased opening leading into the living room at the right and a sliding glass door giving access to



A well planned built-in buffet.

the dining room at the left. From this reception hall rises the main stairway, and through its continuation into a rear hall is provided convenient connection between other first-floor rooms. This combination hall also gives access to both a stairway to the basement and a rear stairway to the second floor, and contains both a closet for wraps and a small linen closet. The den is reached from the living room, and the door that leads from the latter to the rear pergola-porch is largely of glass. The other rooms on this floor are kitchen, serving room or pantry, breakfast room, and bathroom, besides the usual rear porch equipped with laundry tubs.

It is especially worthy of mention in this connection that the designated breakfast room was originally intended as the maid's room, and of course may be so utilized whenever desired, for it is excellently located for the purpose. Incidentally, it would also serve as either a most desirable sewing room or as a nursery.



Interesting stairway treatment.

On the second floor, as will be observed, are two large bedrooms, each with a dressing room and a roomy closet, besides a bathroom, the stairway hall, and the balcony already mentioned. The front dressing room, it may be stated, being nine by thirteen and a half feet in size, is quite large enough to serve as still another sleeping room, in an emergency.

The built-in features of this home are particularly worthy of notice. In addition to the closets already referred to, they include a combination of china closets, drawers and sideboard in the dining

room; both a linen closet and medicine case in the first-floor bathroom, besides the usual fixtures; a large book-case in the den; a neatly designed china cupboard in the so-called breakfast room; a hot-water boiler, a draught cooler, a plaster hood for the range, a great deal of cupboard space and the customary sink in the kitchen, and an especially excellent arrangement of cupboards, cabinets, and so forth in the little serving room. Referring to the second floor, each of the two large closets contains not only the usual shelves but also a built-in hat-box; the front dressing room has a built-in dresser, composed of several drawers, a deep countershelf that comprises the dressing table, and an adjustable mirror. The other dressing room has a cabinet of shelves and drawers, a medicine case and a washbowl, and the bathroom, equipped with shower and other bathroom fixtures, possesses the usual wall medicine cabinet. Then, too, the half-way landing of the main staircase is designed to include both a window seat and a cabinet of shelves.

The interior finish, while quite simple, is very attractive, and helps materially in making the rooms cozy, cheerful, and easy to keep in order. The woodwork of the living room, den, dining room and reception hall, including the staircase, is of Philippine mahogany, finished in soft brown, dull effect. The walls of the living room and den are covered with canvas, painted a solid shade of greenish-buff, and finished with a wood cove, beneath which is a stenciled border of somewhat conventional design done in buffs, browns and greens. The facing and hearth of the living-room fireplace are of dull-toned, hand-made tile, of light shades of green and brown. The reception-hall walls are papered with imitation grass-cloth of grayish cast. A paneled wainscot is used in the dining room, and the space above its plate-rail is finished the same as

in the living room, except that the stenciled border is of different design, although of corresponding colors.

The woodwork throughout the remainder of the interior is of pine and enameled. The walls of the breakfast room, finished with a plate-rail, and of the bedrooms and dressing rooms are attractively papered; those of the bathrooms and the kitchen are finished with special smooth-surfaced wall-plaster, enameled white like the woodwork, and the walls elsewhere are

tinted in effective shades. Hardwood floors prevail throughout, except in the kitchen, rear screened porch and bathrooms. Tile, including the base, is used for flooring the two bathrooms; and the tub of the first-floor room is also tiled in as are the walls of the shower.

There is a fourteen-by-sixteen-foot basement, walled and floored with concrete, underneath the center of the house, and a hot air furnace supplies the necessary heat.

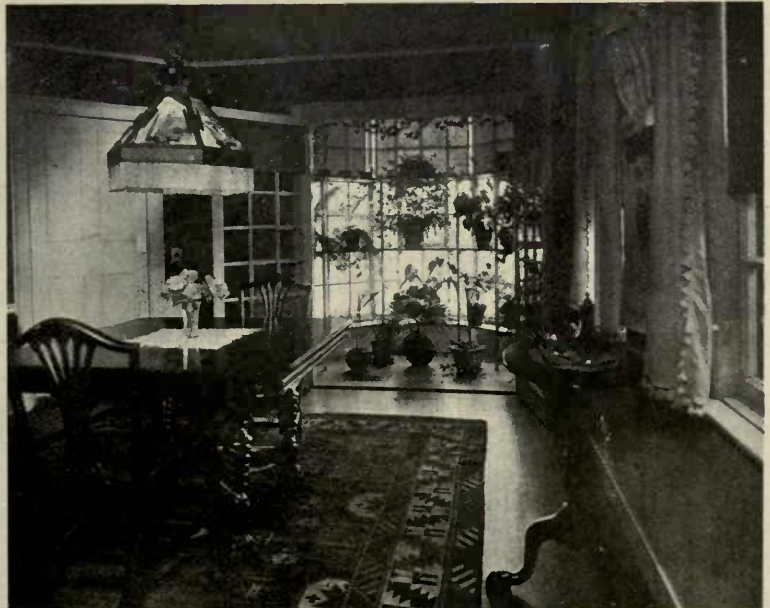
Window Groups

Anthony Woodruff

DURING the shut-in winter season, more than any other time, perhaps, are charming window groups appreciated from the inside of the house, just as during the summer and growing, blooming season are window groups most picturesque on the outside, buttressed and crowned with their fragrant bloom.

At least a little touch of growing greenery is essential to the happiness of certain people, and some provision must be made for growing things in the house. Perhaps there is no simpler and more satisfactory way in which they can be accommodated than by a projecting bay of glass, well heated and with the protection of the foundation wall against sudden changes, and provided with glass doors by which it

may be cut off from the hot dry air of the house when desired. People and growing plants do not seem to live comfortably and thrive in the same atmosphere. While the usual air of the house is proverbially too dry for the most healthful conditions for people, the humidity of the greenhouse is unbearable. When a potted plant is received as a treasured gift, it is often set



A flower bay with vines and growing things.



Window bay with an old fashioned piece of furniture.

at night in a cool place, and sprayed to recover from the ravages of the day.

When a "flower bay" is heated and may be completely closed from the room it may well be made a real conservatory with fitted "zincs" filled with earth and growing things changing with the season. As a living adjunct of the house it is often quite as satisfactory, and considerably less care, if it is simply fitted with shelves on which a few growing things may stand, with vines trained to frame the openings. This arrangement takes less light from the room as well as requiring less attention from the housekeeper.

Many people prefer window groups which are devoted to the comfort and convenience of the people in the house, and have no desire to fill such windows with flowers and ferns. This accounts in part for the great popularity of window seats, built into all possible and sometimes impossible places.

A window that is free from encumbrance, into which a group of chairs may be drawn, or an old-fashioned piece of furniture be placed and a table nearby, gives a sense of restfulness which today we do not seem able to attain easily.

A group composed of casement windows always requires special treatment as to the sash itself—its division into

many panes, leaded, or with metal bars, or with the more usual wood muntins. The hardware fittings add much to the satisfaction and the usefulness of the sash, usually being so arranged as to hold the sash firmly at any desired angle. The matter of curtaining a group of casement sash also requires special study. The simplest treatment usually is that of some kind of a sunfast material on a rod, which can be drawn over the sash to cut off the superfluous light or may be pushed to one side giving a line of color, but not obstructing the opening if the sash is only slightly opened.

The built-in seat, carefully planned for just the space which it is expected to occupy, is satisfactory and attractive.

A group which contains both windows and doors gives problems of its own. In such cases the openings are kept at the same height, which makes it impossible for either the top of the glass or the curtain fixtures to be in line at the top. Nevertheless the doors form a logical part of the group.

A latticed treatment for the walls is charming in effect for sun parlors and informal rooms where one likes to get the feeling of being outside.



A latticed treatment is charming.

The New Kitchen

Edith M. Jones

PART II.

ORGANIZATION is a wonderful thing—it is the backbone as well as the impetus of any achievement. It implies purpose and system, evolves proper housing, demands adequate supplies, avoids waste, conserves energy, fits the right person to the right place and because it is a purely mental structure lifts everything connected with it to its own standards.

Of all the organizations in the world none can be more vital or bring greater returns than the well organized home. Have you ever noticed how everything and everybody seems to dovetail into the systematically planned home and the life reflects not only freedom from confusion but much more is accomplished with always an added sense of leisure. It seems to me the housewife who is truly the mistress of her home deserves not only the name of "organizer" but "efficiency expert" as well. When every home has its well worked out organization the housing problem will be as individual as the organization. There are many such homes and many such houses today, but alas! the large majority still are homes fitted into houses instead of houses made for the homes.

The house in which this kitchen we are describing is a unit is peculiarly delightful. Every part of the house reflects the carefully worked out organization and bears the stamp of much thoughtful con-



The pantry fitted with a warm-shelf for raising bread.

sideration. There is a place for everything and many unexpected conveniences that all might have by utilizing the spaces that are too often wasted.

We described the kitchen in the last issue. This floor plan gives an idea of the entire service layout.

The maid's sitting room is really a beautiful sunny room with a few books

on open shelves, some growing plants, two or three comfortable chairs, pretty white curtains and small rugs. A closet opening off this room has a mirror and shelf with drawers for maid's aprons, thus saving many trips upstairs to prepare for service in the dining room. A door opens from this room to a small side porch so that the maid's guests can come and go without entering the workshop,—a thing, by the way, much appreciated by the maids.

The rear door of the kitchen opens into an entry way where the refrigerator is kept. The refrigerator is iced from the end. Built above the refrigerator, filling the space to the ceiling, is an additional cupboard which answers two purposes, one of extra storage and the other doing away with the miscellaneous collection of things that so often accumulates on the top of the box. The steps which lead to the grade entrance at the



The maid's sitting room.

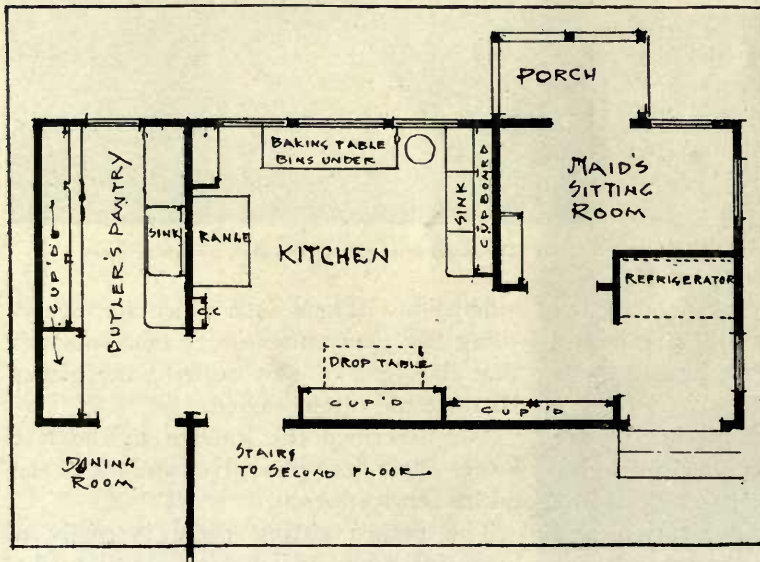
ground level meet the basement steps which lead from this same entry way.

The butler's pantry is long and narrow with the kitchen and dining room doors in closest relation. This picture shows a most carefully thought out arrangement which will doubtless appeal to many housewives. The radiator is especially planned with shelves for heating the dishes and rests beneath the perforated drainboard. This was planned especially for keeping the bread when "raising." So many women have asked me to plan some such arrangement that I am glad to show this photograph as one of the possible ways of meeting this need.

The blue and white linoleum covering the entire service wing, the white enamel side walls, and woodwork of Georgia pine complete a layout that is most satisfactory from any angle. Such planning takes time but the returns are multiplied a hundred-fold, which makes it

surely worth while.

Every man expects to get interest on his money invested. The woman who plans carefully for her work and gets such a kitchen arrangement as will facilitate the matter will gain a large percentage on her investment. Interest on money is paid in money, and interest on time is paid in time saved.



Building with Logs

THERE is a fascination in the use of logs as a building material which makes a wide appeal to those who love outdoor life. Log construction carries with it a pervading sense of the romance of the forests and the time when the "world was young." At the same time the log building of our pioneer ancestors, in its crudeness, does not at all measure up to our expectations in the matter.

A few private residences and summer homes, and more particularly the great hotels of the heavily timbered districts of the Northwest, have, in a way, set a rather difficult standard as to the possibilities of beautiful log construction. Logs used with boulders may be given wonderfully

picturesque effect. The log wall is, of course, a solid wall and generally requires some kind of special window construction, which may be given very effective treatment. The fact that such construction not only is not cheap, even though it is appropriating nature's product, but is oftentimes quite difficult and expensive, deters many people from attempting to use the logs and boulders which may lie about them and seem to be in abundance. One reason for this lies in the fact that the ordinary workman has no knowledge of woodcraft, and no love for the woods.

When the pioneers used to build with logs and boulders, time had no particular value to them, and the economic waste in lost or useless motions was unknown. A



Logs and boulders in a country home.



In the Rendezvous of El Tovar.

log or a boulder was carefully fitted into its place. Only a few logs, comparatively, are sufficiently straight and uniform in size for good log construction, and they must be selected by an experienced worker.

On the brink of the Grand Canon of Arizona, overlooking the wonderful gorge, ten miles wide at that point and a mile deep, stands El Tovar, a great hotel built and finished with logs, where all of the woodworker's art has been employed to the greatest advantage. One corner of the "Rendezvous," shown in the photograph, gives an idea of the beautiful finish which may be given to logs, peeled and oiled for a good finish. The supporting pillars of the archway are formed of more or less knotted tree trunks,

smoothed and oiled. The walls are of halved logs, peeled and laid together, stained brown and oiled. The electric light fixtures, in keeping with the interior, are formed of short logs oiled and polished and hung by iron chains from the ceiling for the central fixtures, and with a single log hung on the wall for the side lights. The fireplace of white limestone, with Indian pottery and baskets, and the rose colored draperies at the windows and openings are in delightful contrast to the rugged walls.

Quite different is the home in the woods presumably only intended for summer use. Not so carefully worked are walls of the porch for this rustic resting place in the woods, with its outlook over the lake and through the birch trees.

The interior of this lodge is of unusual interest in the use of birch logs in finishing the interior and in building the furniture. Who could fail to sleep in a bed made from slim young birches, without even the bark being marred in the working. The photo shows it spread and curtained in white—a sure cure for the most chronic case of insomnia, it would seem. Instead of the logs being exposed, the interior of this house is finished in some kind of wall board, giving a paneled effect in the sleeping rooms on the upper



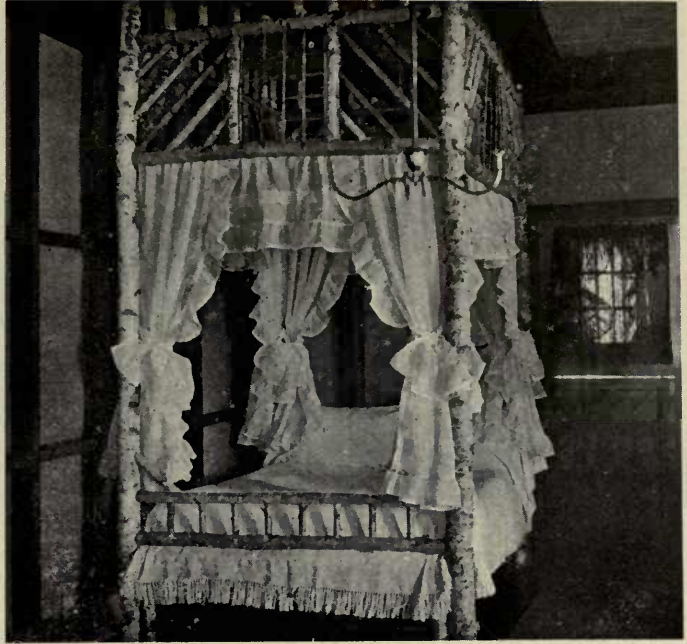
A rustic place in the woods.

floor. The main floor has panels of wall board above the four-foot wainscot, while at the seat ends are enclosed by rustic work of birch.

The writing table, fashioned of bark covered birch, presumably branches from the white birch trees of the nearby woods, is very well designed, is attractive and is certainly very useful. The "library table" is another bit of interesting design. The pedestal of the table is the base of a tree, bracketed to support the top, which is large enough to hold a goodly supply of books and magazines.

The posts, brackets and railing of the porch are also of birch in its white bark jacket. The steps to the porch are made of logs cut and smoothed for the tread of the step, but with the bark left on the upright riser of the step.

This work, and especially the "hand-made" furniture, shows the handiwork of



A "four-post" bed of birch

the man familiar with good design, handy in the use of tools, and above all with eyes to see both nature and the works of man. What finer rest could a cultured man with a creative turn of mind find than in the building of such a lodge in the woods where he can fish and shoot

(with either a camera or a gun) and get closely in touch with nature as an inspiration for his work the rest of the year. Life grows in importance in two ways: its contact with people and its contact with things, man made, or natural, but both are of vital importance. It has long been recognized that the city man needs a little time in the open spaces. It is lately coming to be recog-



Cleverly fashioned of birch.



Posts and railings of birch in its white jacket.

nized that the man in the country has equal need of contact and co-operation with many kinds of men. Having this he comes back to his own with renewed interest, and greatly augmented creative

force. His appreciation of the natural things about him may be even more vivid than that of the jaded city man who comes to the woods for a vacation and for a rest.

My War Garden

Mary R. Conover

THERE are soils that will not grow anything profitably, and war gardens in such locations are bound to fail. I have seen some expensive effort on this kind of soil during the past summer and doubtless the Boy Scouts and others who worked these plots are discouraged. An experienced farmer would not waste seed upon such ground and it would be wise for war gardeners to learn to judge soils before putting work, seeds and fertilizer upon it.

Given a normal soil, however, its capacity for producing develops as it is used. Well fertilized, you can grow, grow upon it and the soil will become more and more productive. Furthermore, your own capacity for managing and producing will develop correspondingly.

For a number of years my garden was a peace garden and yielded us a fair result, but this year, urged to produce as much as possible as a war garden, the quantity of vegetables has surprised us and the work has seemed intensely interesting. The impetus of world-wide necessity has developed some new points in gardening and some better ways of doing garden work even in this little corner of the world.

I think I see how to intensify my garden cultivation with larger results, and without overtaxing the resources of my little plot of sandy loam. I shall try this coming year.

Economy of labor, not skimping the work but making each effort count for results means more produce for the time involved. I have learned to manage my

garden work so that, aside from the preliminary plowing, harrowing and manuring in the spring, done by a man, I can accomplish planting, cultivation and gathering the vegetables for family use in addition to my housework, care of poultry, etc.

The work of cultivation this season was done with a very simple garden equipment; namely, a hoe and a rake. The exposed garden soil was gone over regularly each week after the first planting. This work has seemed easier than usual—not much harder than sweeping a room—because the soil was light and mellow and with the growth of certain of the vegetables, as potatoes, hoeing had to be discontinued when the ground was covered.

I saved some hoeing by mulching. Where one is very busy and has the material a thick mulch between the rows of vegetables keeps down weeds, conserves moisture, keeps the soil spongy and is a clean, nice covering for the ground when picking vegetables. With a light sandy loam with a sandy subsoil, such as mine, mulching is a great advantage, especially for shallow-rooted vegetables where a mere soil mulch of loosely cultivated soil encroaches too much upon the root area.

Before applying the early mulch I gave the soil two good hoeings—one week apart, then I applied the mulch over the loose surface about and between the plants and left it there until the crop was harvested. In the case of the late summer plantings of vegetables I applied the

straw between the planted rows as soon as the seed was in the ground. It quickens germination under the drier conditions of late summer.

My garden occupies a space 45x51 feet. A little over one-half of it was planted with potatoes, and a small strawberry patch, 6x15 feet. A path 2½ feet wide extending across the garden separated the potato patch from the other vegetables, which occupied an area 21x51 feet.

This was planted with cabbage, tomatoes, sweet corn, beans, onions, endive, peas, beets, spinach, turnips, squash, radishes, lettuce, brussels sprouts, etc.

It was fertilized with three small one-horse loads of poultry manure, applied before the ground was plowed.

It was distributed by being shaken over the ground through the tines of a fork.

Although the spring was somewhat unfavorable and cold the seed germinated freely. It seemed that every seed came up. I attribute this to two things; first, good, fresh seed and, second, keeping the soil mellow by stirring it regularly between the rows from the time the seeds were planted.

The garden space was utilized in this way: The earliest vegetables, beets, peas, turnips, radishes, cutting lettuce, onions, etc., were planted in rows 2½-3 feet apart, about April 1st, or a day or two later, as I could get the time. Then, since these vegetables would be off the ground earlier, I planted in between certain rows, kohlrabi, endive and brussels sprouts. When the earlier planted vege-

What My Garden Yielded.

Potatoes—1½ barrels.
Beets—⅝ bushel.
Turnips—¾ bushel.
Peas—1⅛ bushels.
Corn—4 bushels.
String Beans—2½ bushels.
Cabbage—3 bushels.
Endive—1½ bushels.
Winter Endive—1 bushel.
Lettuce—3 bushels.
Tomatoes—1 bushel.
Onions—2 pecks.
Spinach—2 bushels.
Kohl Rabi—¼ peck.
Early Cabbage—13 heads.
Crooked Neck Squash—½ bushel
Brussels Sprouts—½ peck
Leeks—(Not measured).

tables were harvested, I had a stand of the other vegetables about the same distance apart. About the middle of the summer I planted in between these, later endive, beans, later onions.

In the place of my early peas I made a second planting of string beans, and later sweet corn. A later planting of sweet corn was made where my onions had been. When the crook-necked squash were through yielding the plants were removed and a later planting of peas made—about August 1st.

I set my tomato plants as early as April 15th and had to protect them with straw every cold night. They came in bearing no earlier than plants set May 10th—the usual time of planting in this section, but they were still bearing through September. It may be that the earlier planting secured a more extensive root system, enabling them to bear for a longer period.

I did not find time to fight garden pests as relentlessly as I should have done. I would take the time another year. My cauliflower suffered from maggots at the root and died because I neglected the simple prevention, a disc of tarred paper about the base of the plant. My white Milan turnips were also somewhat worm-eaten at the root, which retarded their growth until they had passed the best state for table use. My family will not eat them unless they are very mild and early, so I put turnips, tops and all, back into the soil where they had grown and called them fertilizer. Turnips are an excellent green manure. I did not consider them wasted, but planted string beans where they had been. Personally, I would not give these turnips room in such a limited garden space, but another year I would plant more of kohlrabi or cauliflower. For those who like them, however, the white Milan turnip is much earlier than either of them.

In the case of my potatoes I planted seed saved from our winter supply,

hence they cost me much less than the price of seed potatoes last spring. The potatoes were scabby and I dusted them with sulphur before planting. I did this somewhat hurriedly and I notice the potatoes harvested are somewhat scabby. Furthermore, I presume I have inoculated my soil with potato scab. I would not use any but clean seed again. Potato bugs I hand-picked. The vines grew luxuriantly and the bugs made no serious inroads.

The potatoes were planted April 2nd and could have been used earlier than August 10th. The variety was the Green Mountain.

I have canned 54 quart jars of vegetables to augment my winter stores, without depriving ourselves for the summer table.

It is hard to put a dollars and cents valuation on a little summer garden, and especially so for a war garden. The most conservative estimate takes the price in the general wholesale market at the time my vegetables were harvested. Since I live in a farming community I could have bought the vegetables at nearly that price. In the town market six miles away or from vegetable peddlers I could not have gotten these vegetables for less than three times this estimated price which I have placed upon them. Moreover, the matter of having freshly picked vegetables has not been taken into account.

My potato patch took about half of my garden space. On account of the unusual season I give no estimate on it. My little patch of other vegetables occupied an area of 21x51 feet and produced vegetables, even at this low valuation, totalling a sum of \$16.11. Since this plot approximates one-fortieth of an acre, I have produced from this little bit of ordinary land at the rate of \$640 per acre at the lowest estimate. Truly my war garden has done its bit.

Getting Ready for the Bluebird

Adeline Thayer Thomson



It is always a joy to have the wild birds nest in the yard, but to have a pair of bluebirds take up their abode within the shadow of one's home brings always a rare happiness.

And who is there who does not love the bluebird? Why, its very name brings a thrill to the heart, a dream of spring, of bursting buds, and rollicking south winds, and the whole world atingle with fresh life and energy!

To hear the bluebird early in March trilling its first exquisite song of spring within the borders of one's very own yard is a privilege beyond the telling.

Yet it is possible to have these sky-blue songsters nesting and rearing their young on one's premises by simply providing houses to their liking and giving them protection from their great enemy—the English sparrow.

Bluebirds, like people, have their individual preferences regarding the requisites of a home and they will not move into a house, however alluring it may seem to the provider, unless certain requirements, demanded by "Bluebirdom" are covered. The bluebird is wary of new wood and chooses a weather stained house.



An old apple tree is a favorite haunt for bluebirds.

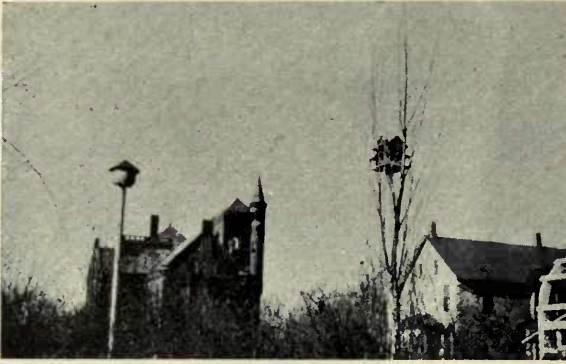


Bluebirds often choose houses that are nailed against trees.

Bluebirds prefer houses which are placed on Poles from 12 to 16 feet high, and if possible occupying an open location 12 or 15 feet from any building. The birds will choose houses, however, that are nailed against trees, and often this plan is more convenient for the property owner. In this case, the entrance to the bird house should face south or east (indeed, all bluebird houses should face one of these directions if possible), and the house placed from 12 to 16 feet from the ground.

One may buy, very reasonably, houses made especially for bluebirds, or one may make them with but little trouble.

In making a house for these birds, its style and shape make very little difference. It may be round, square, oblong, or of any preferred design. The size of the nesting space and the entrance hole, however, I have found make all the difference in the world, whether or not these birds are enticed



Bluebird house waiting for its tenant to return from the south.

into the houses provided.

Bluebirds desire a nesting space measuring about 5x9 inches. The outer dimensions of the house, therefore, should meet this requirement, though it may be of larger proportions if desired. The entrance to the house should be round, measuring only 2½ inches in diameter. A perch also is desirable, fastened securely just underneath the entrance.

Small wooden boxes are quickly converted into bluebird houses of many different styles. A new paint keg or small barrel fashioned with several compartments, and topped with an artistic roof, make very attractive bluebird houses. Only one pair of bluebirds will occupy such houses at the same time, but as these birds raise several broods in a season and seldom choose the same nest, houses of two or three compartments insure one of keeping the birds throughout the season.

A neighbor of mine was very successful in luring a pair of bluebirds to nest in her yard with a house

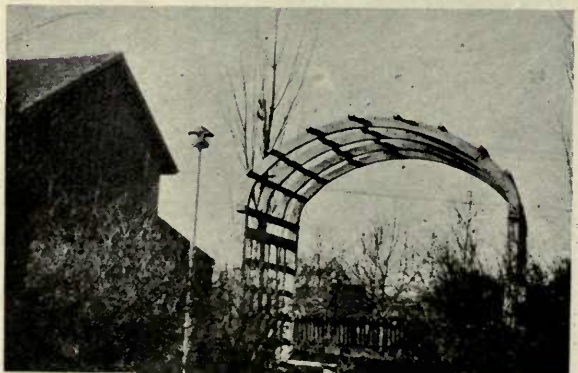
fashioned from a dead limb of a tree which a pair of Flickers had bored into, and nested in, and which she had carried in from the woods, sawed off just above and below the hollow space made by the Flickers, and mounted on a pole in her yard. The suggestion is a good one, as the house was attractive in appearance and the plan may be easily emulated by those who have access to woods.

Bluebird houses should be made now and set in place at once. Bluebirds return very early in March, so that boxes for their use should be in place to greet their eyes on their arrival.

To persuade a pair of bluebirds to nest in the home yard not only insures these exquisite birds as constant visitors for one spring, but for years to come. Yes, for when once a pair of these birds take up their abode in a given place they return with each succeeding spring, trilling anew their clear, sweet, joyous promise that the long reign of winter is over.



A bluebird house adorning a chicken yard.



Bluebirds prefer houses that are mounted on poles.

A Square House Built of Wood



HERE are two especial cost items to be considered in the building of a house: Material and labor.

There was a time, and not so very long ago, when people saved material by using more labor. Now conditions are being reversed and the simplest construc-

tion is being sought, where lumber can be used in long lengths and the cutting and fitting and extra framing is being avoided as far as possible.

work. It is built of wood and is good to look at. There is much room in the house, yet it can be built on a lot of moderate width.

On the first floor there are four rooms in the main square of the house, with the kitchen beyond which is only one story



Its simple construction permits of rapid work.

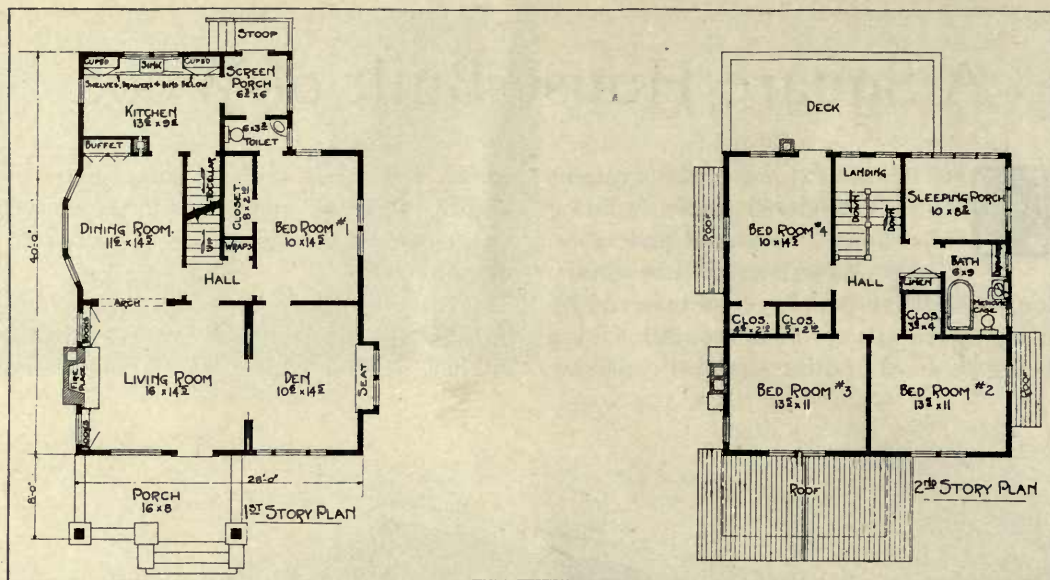
E. W. Stillwell, & Co., Architects.

tion is being sought, where lumber can be used in long lengths and the cutting and fitting and extra framing is being avoided as far as possible.

Where a good deal of house room is required and one starts out with the need of getting the most for the money, the plan of the square house can hardly be improved. The construction is simple and straightforward and permits of rapid

high. It is well proportioned and well arranged, light and airy.

The entrance from the porch is into the living room, which has a fireplace with windows on either side. Sliding doors separate the den from the living room. If a very large living room is desired, this partition may be omitted. An open arch connects the dining room. One side of the dining room is filled with a bay of



windows and a built-in buffet is beside it.

The room plan is laid out around a very inexpensive stairway arrangement, very conveniently placed.

The one bedroom downstairs is well placed with reference to the other rooms, opening from the hall and from the den. There is a closet and a toilet which also opens to the rear porch. This makes it available for "grandmother's" room. It may be used as a maids' room if desired, or in case of sickness it can be completely isolated from the rest of the house in a quarantined case.

On the second floor are four good bed-

rooms, each being a corner room with windows on two sides giving cross ventilation. Each room has a good closet. There is a linen closet in the hall by the bath room. The outside walls of one of the rooms is filled with disappearing sash, converting it into a sleeping porch.

There is a deck over the one-story part which is reached from one of the bedrooms.

The house is roofed in the simplest fashion, with no greater pitch than is necessary. Timber brackets and the extended rafter ends support the wide overhang of the eaves, and relieve the severity of the shadow lines.

Small Yet Complete

ONE thing which people must learn and which present-day prices are forcing on their attention, is that every square foot of floor surface costs practically a fixed amount, varying with the type of house. For a number of years many architects have tabulated their buildings after completion, classifying them according to expense of con-

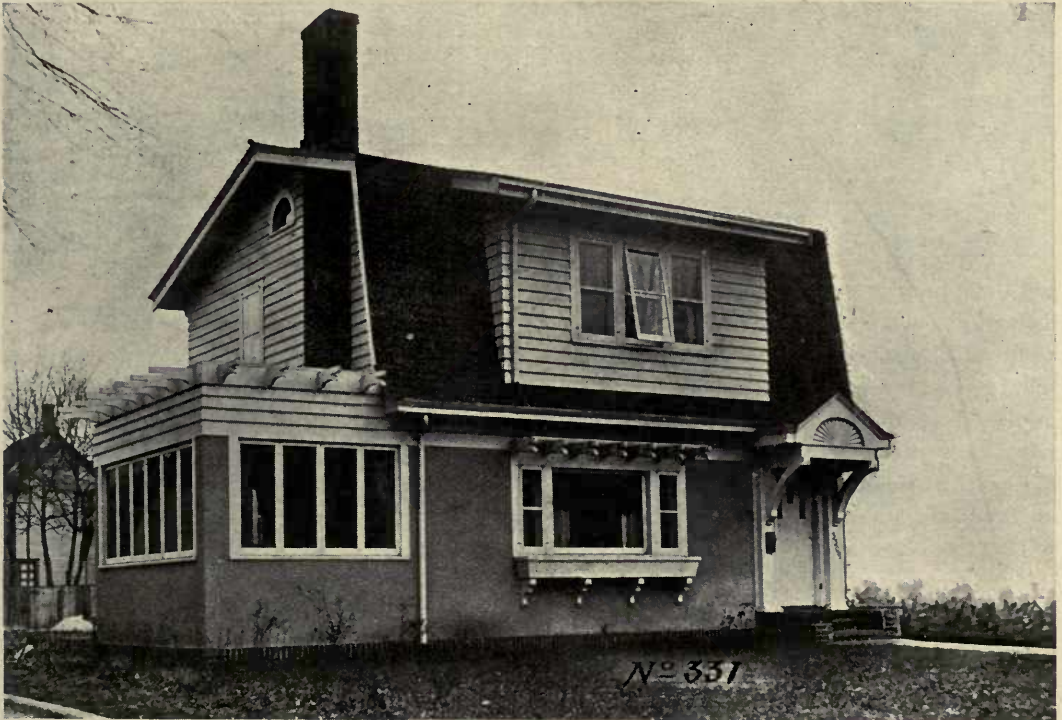
struction and of interior finish, calculating the exact cost per square foot or per cubic foot, or perhaps for both, and using these figures to help keep the preliminary sketches for new work within the limits set by the client.

It has become proverbial that the home-builder has a long list of "wants," and a short pocketbook, comparatively. To

equalize these two is the business of the architect, and it is often a very difficult job, for he wants, quite as much as his client, to make the new home a success. What he does not know is how far the limit which has been set for the cost is to hold in the last estimate; in other words, he does not know whether his client will cut out some of his "wants" or will devel-

to the second floor directly from the kitchen part of the house. Nevertheless, the stairs are conveniently and economically placed, with the basement stairs centrally placed between the kitchen and the dining room, and an outside entrance at the grade level.

The living room and sun porch connecting with it make for comfortable and



A small home that is well arranged.

J. W. Lindstrom, Architect.

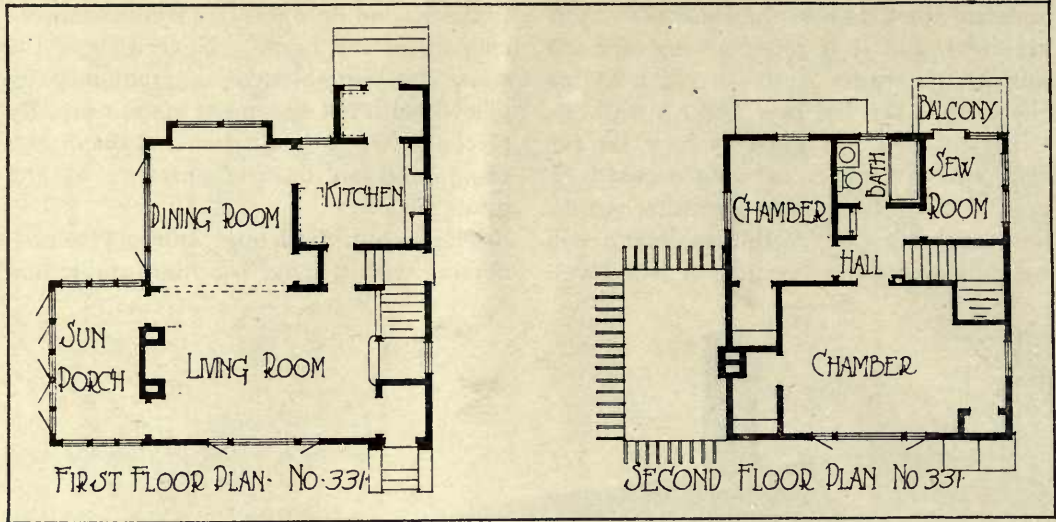
op a willingness or a possibility to pay for them, beyond the limit prescribed.

If the home builder starts with the idea of building a small home; if he knows what he really wants, he is much more likely to get it than if he has only a hazy notion that he wants something very complete and attractive.

Here are the plans for a very livable small house, where every square foot of the house gives its actual return for its cost. The only feature which would be expected in a larger house which is not found in this is the possibility of getting

attractive livable conditions, irrespective of the weather, thanks to the good fireplace.

The dining room opens to the living room with so wide an opening that the two are practically one room. Since this opening is so wide, any inconvenience during the finishing touches for dinner after the family or guests have assembled may be obviated by a light folding screen, four or five parts hinged together, which may be set about the table or in the opening and easily removed when the meal is served.



The kitchen is small but well arranged, with cupboards on each side of the window and a work shelf the full width of the room with cupboards and drawers below. There is place for the refrigerator in the enclosed rear porch, and it can be iced from the outside.

On the second floor are three rooms and a bath. The front chamber is large, with two closets under the drop of the

roof which hoods the window and entrance. The rear chamber is smaller and the sewing room may be used as a sleeping porch. A balcony opens from it. The bath room is over the plumbing in the kitchen, and laundry in the basement.

The house is very attractive, with brick at the grade level and stucco to the heads of the windows, with wide siding above that, and shingled roof.

A Home with Attached Garage



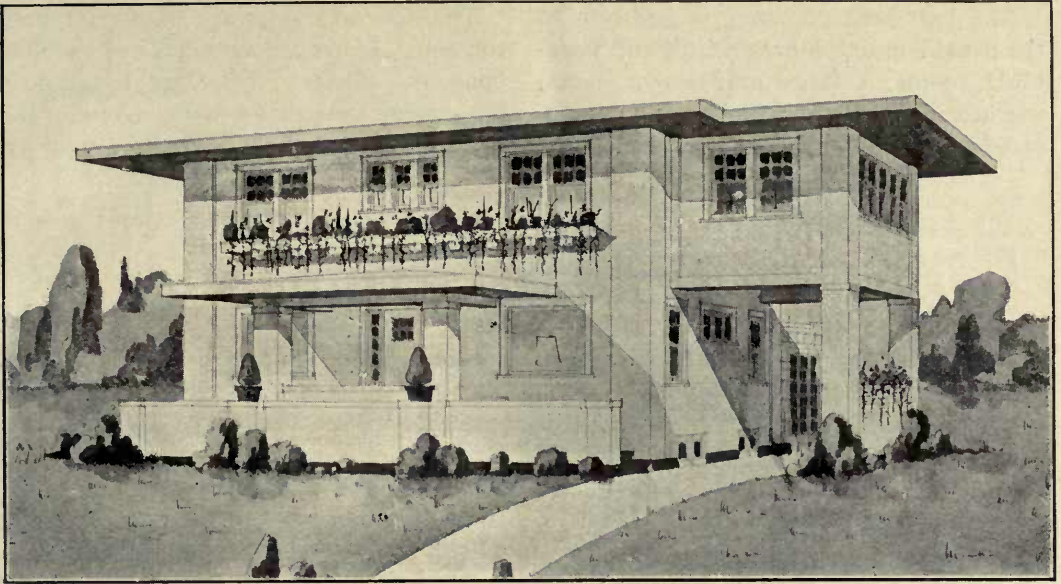
IN this design we have a home built on plain and simple lines. The exterior is shown all white and may be built either of wood or of white cement over metal lath.

This home was planned for a suburban site on the outskirts of a prosperous and growing city. The driveway comes in from the corner of a beautiful sloping lot. The occupants of the car can alight on the brick terrace which leads to the central covered porch.

The interior arrangement of the house has been carefully worked out. The long living room occupies the entire side of the house, while the entrance is into a central

hall with the dining room on the other side of the hall, all connected by wide openings. The stairs are so placed as to be accessible and convenient both from the front and the rear of the house. A lavatory opens from both the front and rear passageways. A door at the grade level of the basement stairs opens to the garage. The wall which separates the garage from the house is built of tile and the door is fireproofed, a construction required by the building ordinances of most of the larger cities, and an excellent precaution to be taken in all circumstances.

The big fireplace in the end of the living room juts into the garage, so no heat



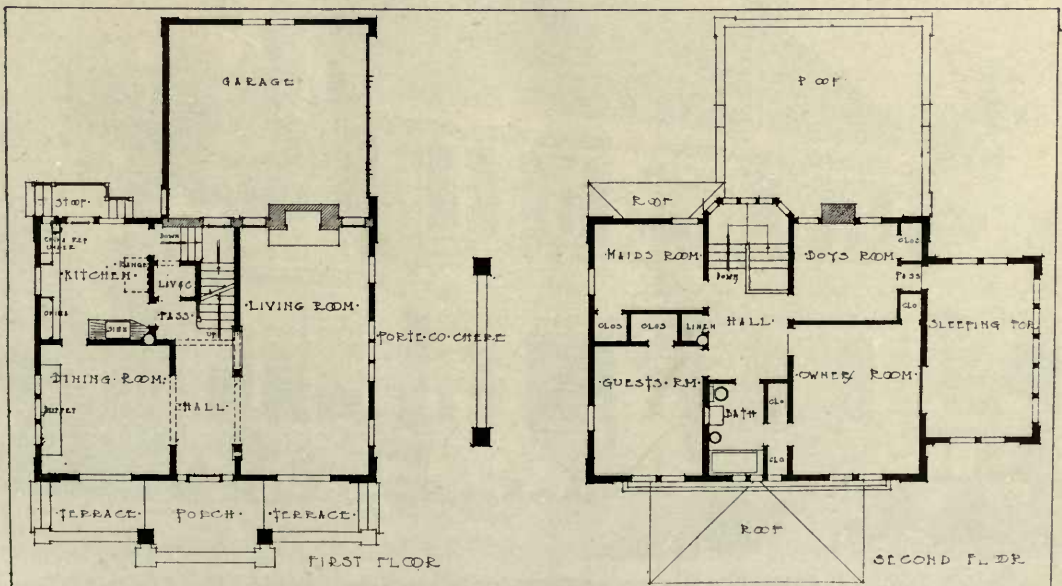
A home which may be built either of wood or of cement.

W. W. Purdy, Architect.

is wasted from the back of the fireplace, though the garage itself is heated from the main boiler by coils around the outside wall.

The dining room has an attractive buffet built under the group of windows. The kitchen connects directly with the dining room, and is well supplied with cupboards and work shelf.

On the second floor are four chambers with a sleeping porch connecting the family rooms. The owner's room is well supplied with closets and connects directly with the bath room. The hall, with its bay of windows above the garage roof, makes a very attractive feature of the stairs both from the entrance and from the second floor.



The basement contains, in addition to the usual laundry, storage, fruit and vegetable rooms, a large amusement room, the heating plant and fuel bins being located under the garage.

The floor of the garage is of reinforced concrete. It has a floor drain and concrete bumpers. Electric lights are installed in the garage as well as in the house. The garage is large enough for two cars.

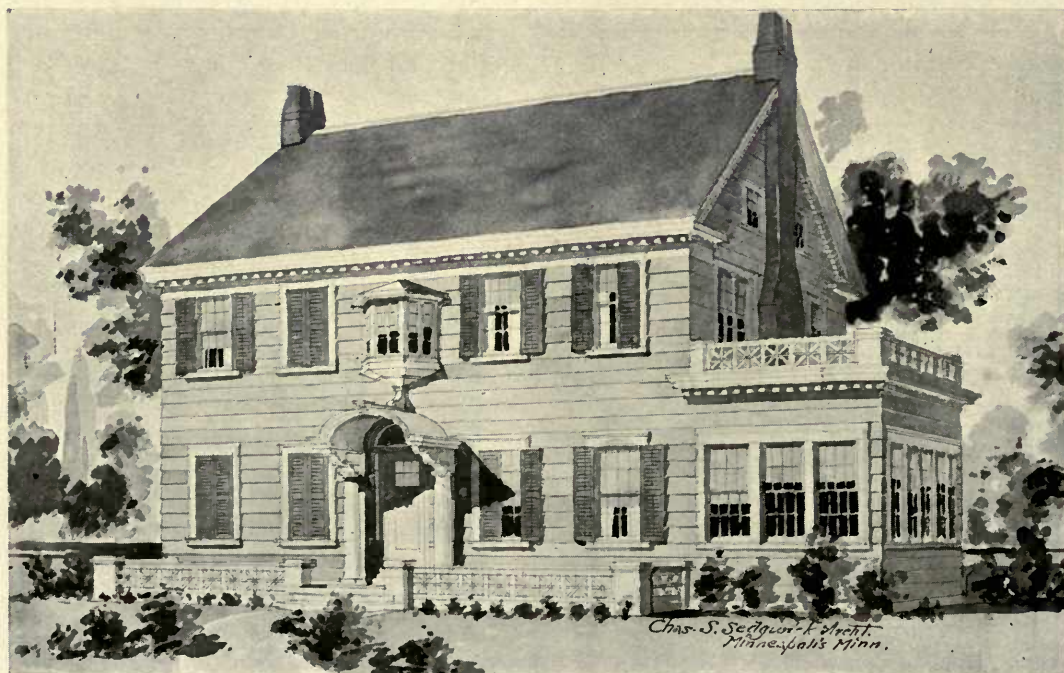
A Colonial Home

PERHAPS there is no more satisfactory type for a home than that built on Colonial lines, with a siding of wide clapboards, such as were used when nails were scarce and expensive, and white pine was abundant and cheap. The green shuttered windows and white painted woodwork give a quaint homelikeness that is very pleasing.

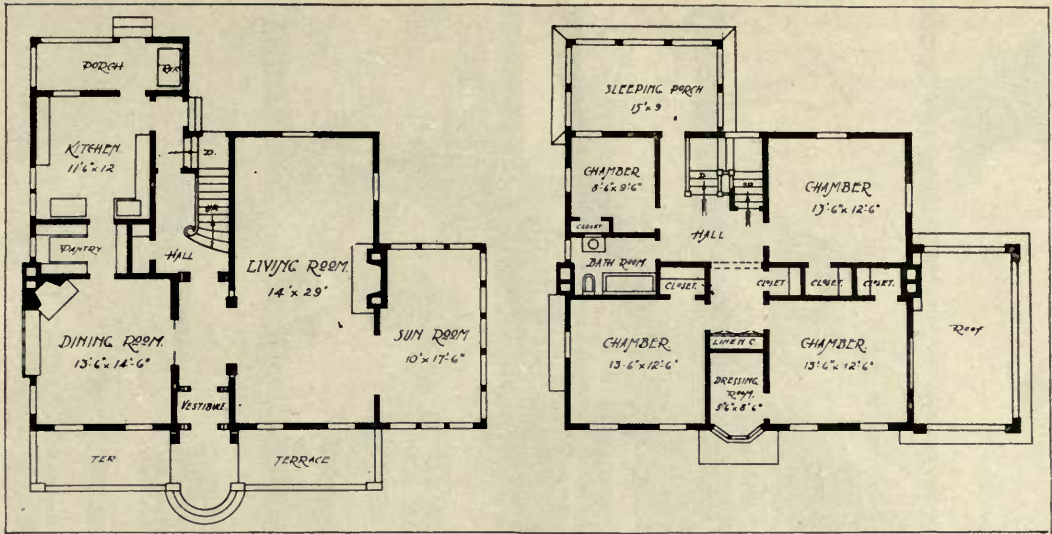
This Colonial plan, with a central hall, gives a good frontage to the house. The home here shown has a width of 35 feet, to which is added the 10-foot porch, with a depth of 30 feet for the main part of the

house. The rooms are well arranged, with the hall wide enough for its purpose, especially with the wide openings between the rooms. The stairs are not placed in the front hall at all, but are conveniently placed beyond an opening which may be closed with a door or a portiere, and are as convenient to the kitchen as to the front of the house.

The long living room with its centrally placed fireplace is attractive, especially with the sun room opening from it. The dining room has the advantage of sliding doors, so that the room may be entirely closed when desired, a matter which the



Perhaps there is no more satisfactory type for a home than Colonial. Chas S. Sedgwick. Architect.



hostess always appreciates. A corner fireplace and window group where a buffet may be built in if desired, or which makes a niche for a sideboard, make attractive features of the room.

A pantry, well fitted with cupboards and working space, stands between the dining room and kitchen. The kitchen also has ample working space and cupboard room. Beyond the kitchen is a roomy porch with one end enclosed for the refrigerator.

On the second floor are four bedrooms and a sleeping porch. The bay over the entrance fills one end of a very attractive dressing or sewing room which opens

from the owner's chamber. Closets are plentiful and well arranged.

The first floor is finished in enamel paint, in keeping with Colonial traditions, and the second story in dainty tones to suit the rooms.

The construction is of frame, the outside covered with 12-inch siding. The trimming, cornices, outside casings, etc., are painted white and the siding is given a soft gray tint, with the roof shingles a darker shade of the same gray. The window blinds are a dark green.

There is a full basement under the house, with complete outfit for laundry, drying room, furnace and fuel room, vegetable room and storage.

Building with Wood



Other material has been so abused and misused during the time when it was so plentiful as has wood. It has been left exposed to the weather where the paint was not renewed, and blamed for its short life. It has been set in damp places, and where the air could not touch to let it dry out, and then blamed for rotting. It has

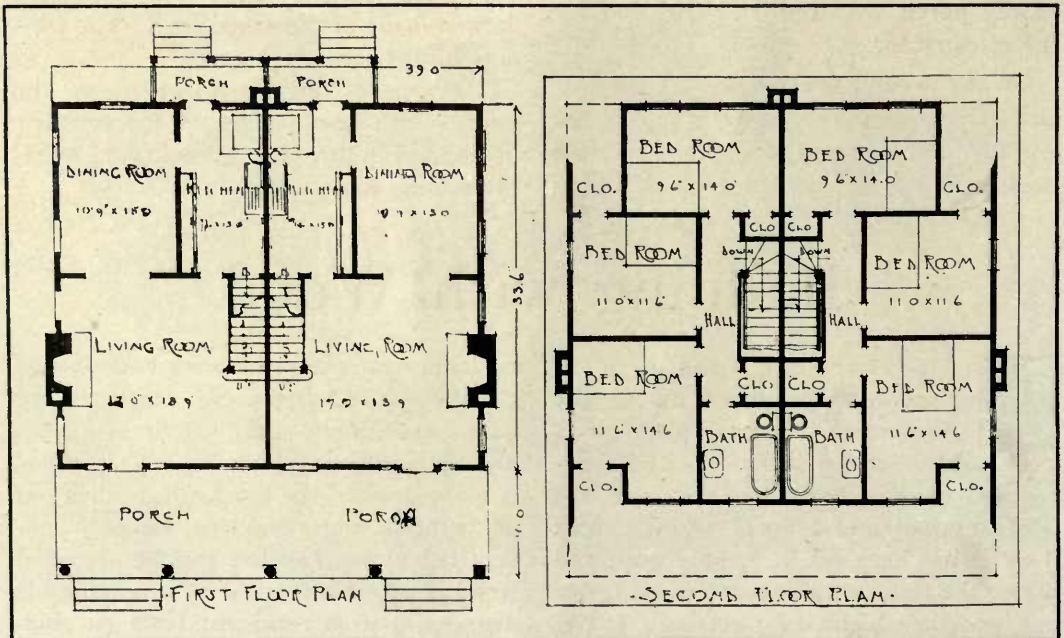
even been built into the brickwork around chimneys and fireplaces; wood beams have been found—after the fire—to have been extended under the hearth, yet wood is blamed when the mortar has fallen out of the brick joints and this wickedly constructed woodwork has caught fire. Yet wood can be fireproofed to a remarkable degree. The government tests on shin-



A double house which is attractive and home like.

gles treated with fire-resisting paints have been very favorably reported, and the materials put into use. Wood can be damp-proofed and preserved in many ways which are not new. Better still, a

proper construction will not place wood in such jeopardy, but will give it a fair chance for its life and usefulness. With more thoughtful building, instead of rejecting wooden shingles and replacing



them by materials less satisfactory except for the fire-resisting qualities, shingles will be given a fire-resistive treatment, which serves the purpose of paint in weather protection as well and is little more expensive than ordinary paint.

The designs which follow were all built of wood above the foundations. The con-

trances separated by the width of the building, the two houses are quite as separate as though a few feet of space was left between the walls, while windows looked from one house to the other and carried the sounds of family life.

The double house shown here is an interesting presentation of this solution for



A home which is commodious without being large.

struction is frame and the outside surface is covered with siding or shingles, or a combination of the two.

The double house has scarcely been given its due in the effort for economical construction, on account of our American feeling for individualism, perhaps. Nevertheless, where the narrow lot is one of the fixed conditions, the double house has its points of advantage. In the first place, it is better looking and cheaper to build because it is a larger unit. It is generally recognized in the study of housing that tiny houses set a few feet apart are not to be desired. With sound deadened, fire-wall between the two houses and the en-

the problem. Owning two 40-foot lots, and not being willing to be separated from his newly married daughter, a father built this double house, one on each of the lots, and deeded one house and lot to the daughter. A 40-foot lot is narrow, but in this case there is twenty good feet of lawn and garden on each side. No stranger can build near enough to spoil the view or shut off the light and air.

Each house is less than 20x34 feet, yet the living conditions are well taken care of. The living room, 17x18 feet, has an open fireplace. The dining room, 10 feet 9 inches by 15 feet, will allow a fair-sized gathering of people to be seated and

served at dinner. The kitchen is of the type which has proved so satisfactory in the small apartment hotels all over the country.

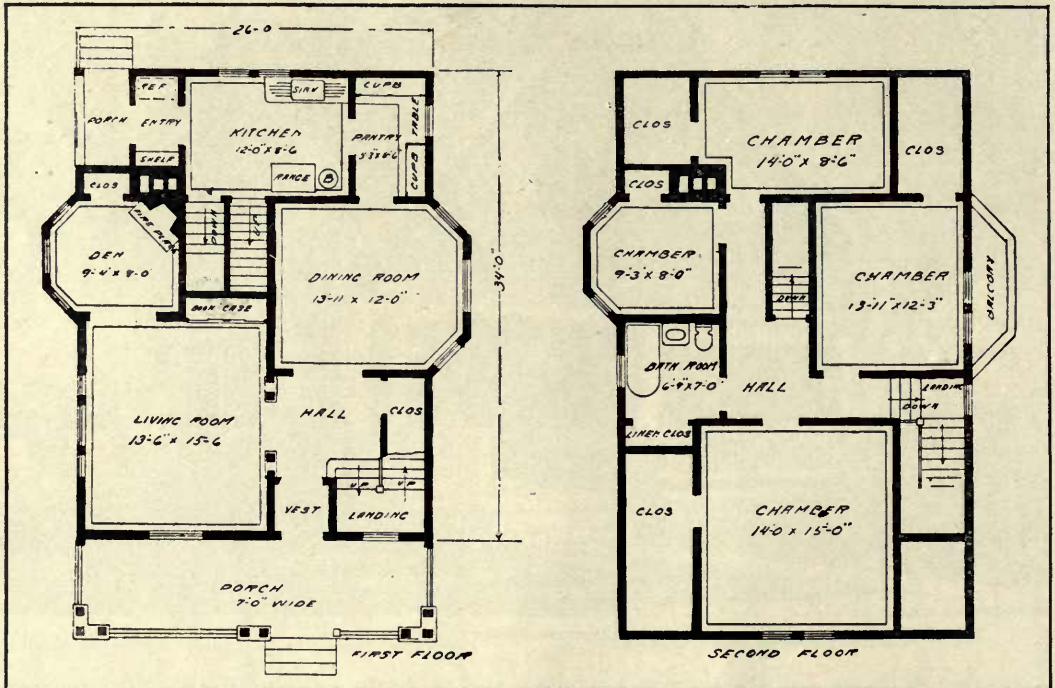
On the second floor there are three bedrooms and a bath. They are of fair size and each has a closet, with an extra closet in the hall.

Built under different conditions, where it was desirable to separate the two sides

dining room and the kitchen. Service stairs connect the kitchen with the floor above.

On the second floor are four bedrooms and a bath, with closets built under the roof.

The last home shown is a square house, traditionally economical to build. It is 26 feet square with the living room, dining room and kitchen filling the first



of the porch, this could easily be done by adding vestibules at the center of the porch, entered from the side, making the entrance door to the room opposite to the stairs, where windows are shown.

The second house is commodious without being large. The entrance is through a vestibule into a stair hall, with a coat closet cleverly arranged under the stairs. Both living room and dining room are connected with the hall by wide openings. Beyond the living room is a cosy den with a corner fireplace and a bay of windows.

A butler's pantry stands between the

floor, and a screened porch at one end of the living room.

This is quite a favorite arrangement of the small, square house plan, yet it is interesting to note the difference in the house which is made by the slight variations in the plan. The popularity of this plan is accounted for in part by the size and pleasing proportions which it gives to the living room and also the amount of light and air which it receives, with windows on three exposed sides. Then, too, the dining room by its placing seems more a room apart from the living room



An attractive square house.

while the space in common is equally available.

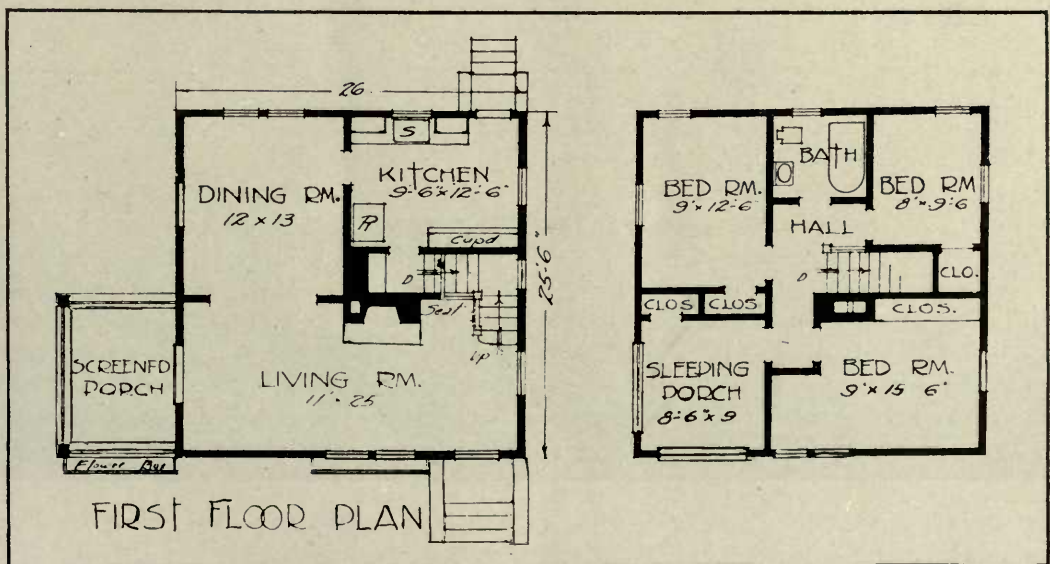
In this as in most cases the placing of the fireplace gives the note of individuality to the room. The location of the screen porch, whether at the end of the living room or at the front of it depends on the width of the lot.

The stairs are in a certain sense the key to the whole house plan. In the well-

devised plan they are so arranged as to interfere as little as possible with the big spaces of the second floor, while giving ample head.

On the second floor are three bedrooms and a sleeping porch, with the necessary closets.

The house is built of wood with siding for the outside wall. It is effective in its dark stain and white trimmings.





New York bed room with walls hung in Jacobean textile.

Frederick, J. Sterner, Architect.



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Walls Coverings---Part II.

PROBABLY no one feature of house decoration is so essential as satisfactory wall coverings, nor one that causes more perplexity. Unless the foundation of a room be harmonious, a successful interior is impossible. Rugs and wall coverings must furnish a satisfactory background; otherwise, fine furniture, attractive curtains, good pictures, produce little effect.



Pine tree pattern in shades of gray, of blue or of green.

The color of the wall once determined, the question of treatment next arises. Time has passed when wall paper alone is the solution. Burlap under the various trade names, grass cloth, canvas, buckram, and countless other stuffs present claims which cannot be set aside without a careful comparison of prices, widths, and wearing qualities. Textile hangings are more expensive than papers. They are estimated by the yard instead of the roll. A yard of burlap costs as much as a roll of fairly good paper; a yard of grass

cloth represents, in outlay, a roll of high grade paper. Their width, however, is greater and their wearing capacity in comparison with paper is as ten to one. Not only do they fade less, but after several years of service can be recolored without removing. The original color may be applied in dye or stain, thereby securing the first result, or a different effect may be gained by a new color.

There are various methods of treating burlap. Dull surfaces are to be preferred to glazed effects, yet some of the "gloss" colors afford an extremely durable and sanitary finish. With burlap must be mentioned buckram and canvas, equally durable, but differing slightly in texture.

Grass cloth is in another class. The uneven weave produces light and shade and a surface of velvety richness. It is never cheap, but it wears well, and can be recolored in much the same manner as burlap. It is better suited than burlap for

INSIDE THE HOUSE

reception and drawing rooms—the latter being appropriate for living rooms and libraries.

If a figured hanging is desired, there are many stuffs which meet the require-

ment, nor yet an old-time parlor, the tapestry hanging is recommended on the score of distinction and beauty. It affords a most attractive setting for mahogany furniture and the gold of oval mirrors.

A two-toned background has double advantages. It is almost a plain background, yet without the monotony sometimes found in a solid surface. There is an elusive charm about the two-toned tapestry. In some lights the figure is pronounced, in others scarcely visible. The variety of pattern is extensive. Colonial Louis XVI, Louis XV, and other "period" effects may be obtained, so that the walls may be in harmony with any scheme of furnishing.

Where a decorative pattern is desired, there is a wealth of fabrics from which to choose. There are first, the silk and woolen tapestries of the pictorial class, finely adapted to rooms of the baronial order, where paneled woodwork and carved oak furniture naturally find place. Flemish and Old English designs are usually selected by makers of tapestry, for the demand is greater for work of this class than for the more dainty French patterns. Good decor-

ators will tell you that there are other materials better suited to the French styles than the wool tapestries. Forest and hunting scenes are well adapted to this material, as are the always effective foliage patterns. Tapestry is admirably suited in rooms where a dignified, substantial effect is desired, affording a fine setting for carved oak.

Passing over brocades, which are best suited to rooms furnished in the period



Chinese motifs are seen in this decorative pattern.

ments. Most of the materials mentioned may be secured in a pattern, although best known in plain weaves. A two-toned linen and silk tapestry is extremely satisfactory and wears a generation. It varies in price from one dollar and upwards a yard. In width it is about thirty inches. It is expensive, but the outlay is justified when its merits are taken into consideration. When a house contains a drawing room, not a reception or living

INSIDE THE HOUSE

style, the point arises: Is it possible to find figured textiles which are not so expensive at the first outlay? There are domestic stuffs which are extremely attractive. They are primarily for curtains and upholstery and based on designs formerly found in imported fabrics. Their adaptability for wall coverings has placed them in the latter class. For rooms in country houses of a substantial type these are highly appropriate. The patterns are partly based on historic motifs, partly on more modern lines. "Gauntlet" is a copy from an embroidered glove of the sixteenth century. The ground is deep ivory, and the figure is in pinks, blues, green and lavender. "Elizabethan" is the name applied to a reproduction of a chair covering formerly at Pinxton Park, Somerset. Small flowers and birds are scattered over a deep tan background. "Reticule" shows a striking design in two shades of blue, dating back to Queen Anne's time. "Knole" has a decorative foliage effect in greens, blues, and mauves, copied from a curtain at Knole House. "Jacobean" displays all the brilliancy characteristic of Stuart embroideries. "Persian" is in faded colors



Courtesy of the Robert Craves Co.
American wall paper in shades of gray showing attractive rendering of birds and flowers.

and shows vases of roses and pinks against a straw-colored background. Many agreeable patterns are in two tones of gray, putty, ivory buff, sage, mauve and deep cream. Of bold patterns those of Chinese suggestion are among the best.

Leaving stuffs and coming to the extensive field of wall papers, the subject divides itself into three broad classes—the plain, the two-toned, and the highly decorative. The two-toned paper has the virtues of the two-toned textile in a lesser degree. The design is often just as good, and the color, barring a certain richness found in a woven material, nearly the same. Two-toned patterns do not fade as rapidly as those of plain surface and are usually higher in price.

Figured papers may be as cheap or as expensive as one cares to make them. Some of the imported makes are as costly as four or five dollars a roll; very charming "cottage" designs may sometimes be purchased for fifteen cents a roll, and between these extremes are hosts of good, bad, and indifferent patterns. The highly decorative paper has a permanent place in house decorating. There are rooms where

INSIDE THE HOUSE

a figured pattern is the only thing to use. On the other hand, it would be folly to buy a highly decorative paper for a room which calls for a plain wall. These questions must be determined by the character of the room, its size, exposures, and the style of its furnishing.

There are so many plain wall papers on the market that the choice is almost limitless. "Ingrain" and "cartridge" are names given to a plain wall hanging which has been in use for years. It is the pioneer among plain papers. Then there are crêpes and fibers, and papers of satin finish. Plain papers as a rule are wider than figured ones. Crêpes and fibers present a rougher surface; satin grades need no comment, as their name is indicative of their smooth, soft texture. "Oatmeal" papers are rough in texture and neutral in tone.

Many plain papers fade, particularly green and blue. Tan and brown hold their own fairly well although dark brown is sometimes a failure, but dark brown is not a good color anyway, so its non-wearing qualities need disturb no one. Green perhaps is the most fugitive of all colors although a good green sometimes fades attractively. In a room where the light is even, the fading process is slow, and until pictures are taken down and furniture changed, the difference is scarcely noted.

"Permanent Duplex" is the name given to a non-fading, plain paper of double

width. It does not have the "tooth" or roughness of crêpe, but has more quality and tone than cartridge. Then there are "fabric papers" which fill a middle ground between plain and two-toned wall coverings. They are smooth, but not glossy, and have, at close range, the appearance of loosely woven cloth. They come in narrow rolls and cost a little more than the usual plain papers, but hold their color and make an excellent background.

Over a long period green was the most popular of all intense tones. Then came brown, next tan, then gray in all degrees. Now we have every possible color scheme and it would be a bold decorator who would predict the taste of the next half dozen years. Most amateurs, as well as professionals, realize the importance of large quiet spaces, of brilliant color used sparingly, of securing effective contrasts and of consulting individual tastes and preferences.

For every day wear, particularly in the house occupied all the year, fairly quiet walls with figured curtains usually give the most satisfactory results in the main rooms. With this plan one room might well be quite different in treatment. The variety is limited less when it comes to a choice of effective patterns. All the nations of the earth have been drawn upon for inspiration with the result that the decorative paper when well designed and suitably placed is a delightful thing to have near at hand.

INSIDE THE HOUSE

Buying by Proxy

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

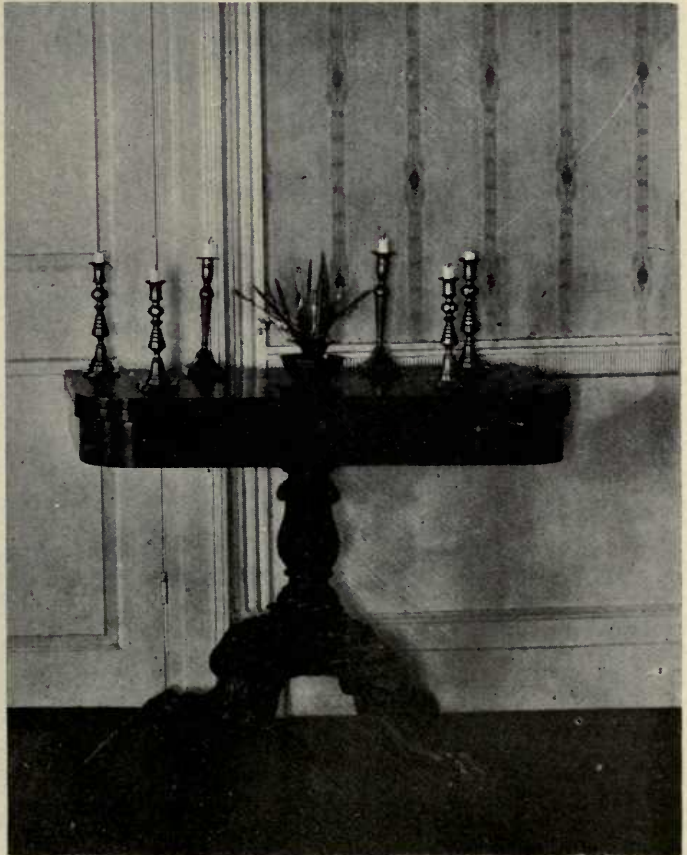
Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply.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

PYREX, the transparent ovenware, may be purchased in many designs. Among other pieces are dishes for cooking mushrooms, shirred eggs, custards, cakes, pies, breads, puddings, also casseroles, ramekins and a variety of square, oblong and oval baking pans.

The advantages of cooking and serving from one dish are many, and the fact that the glass does not chip, bend, or craze appeals to housekeepers. The simplest menu seems more attractive when one or more viands are served from glass.

In the taking of stock recently in a big kitchenware establishment a dozen small teapots in a black lusterless ware were brought forth from some hidden corner and marked half price on account of their color. A clerk explained to a customer that few people cared for dark teapots. A glance at the base of one of the well designed very graceful little articles showed the imprint "Wedge-wood."

It seems that fifteen years ago a num-



Striped paper in an old fashioned room. Antique table and candlesticks.

ber had been ordered from England by a china merchant, who later failed and went out of business. All the charm of old black basalt, so far as line, color and texture are concerned, were set forth in these interesting pots. Experience has shown that one, at least, makes delightful tea,

INSIDE THE HOUSE

pours well, and is a valuable addition to the family tea tray.

It is none too early to buy Chinese lily bulbs for Easter blooming. They may be purchased by the dozen or singly, put up in fancy boxes or wrapped in a bit of Chinese paper. As for pots and jars they are found in every possible shape and color. Hyacinth bulbs with fascinating tall glasses in green, blue, and amethyst are shown at one florist's accompanied by a printed slip with careful instructions. Old hyacinth glasses are among the interesting things in one antique shop. The colors range from deep purple to a lighter tone called by collectors "dregs of wine."

Miniature gardens for table garniture show the clever Jap at his cleverest with that inimitable blending of art and craft which seems to belong to the Land of the Rising Sun. Japanese trees, all the way



Little Trees of Jades, amber and crystal.

from one to fifty years old, appeal to many people more than the toy gardens, although all are interesting and all remarkably vigorous for such fragile looking objects.

At a recent sale of porcelain, lacquers and ivories there were a number of dwarf trees said to be three hundred years old, each in a jar of early cloisonne. Of equal interest and greater value were little arti-

ficial trees with leaves of jade and blossoms of rose quartz, white crystal, agate, amber and lapis-lazuli. Some of these little trees were in flower pots of rare porcelain and bronze, others in cloisonne or lacquer; some reproduced the flowering plum, cherry or hawthorn, others the trees in full fruitage. Some were made more brilliant by the addition of butterflies, buds



"John Gilpin's ride."

INSIDE THE HOUSE

and beetles cleverly artificial yet cleverly realistic.

Furnishings for children's rooms are always interesting when of the best type. Many of the foremost artists have designed wall papers, chintzes, cretonnes and furniture for the small lords and small ladies of creation. Several decorators now specialize in rooms for children carrying out the principles of proportion, balance, harmony of line, and just as carefully as if they were planning the main rooms of the house. The time has passed when anything and everything will pass muster for the child. Gone also is the old crowded arrangement of toys, diminutive furniture, dolls, etc., which over a long period represented our idea of "fixing up" a nursery. Now, when possible, the nursery and playroom are separated; in other words, a night nursery and a day nursery—the first usually with plain walls and figured curtains, chair covers and bed spread, and the other with gay walls, plain hangings and rugs. All the fabrics and wall patterns are designed with the little occupants in mind.

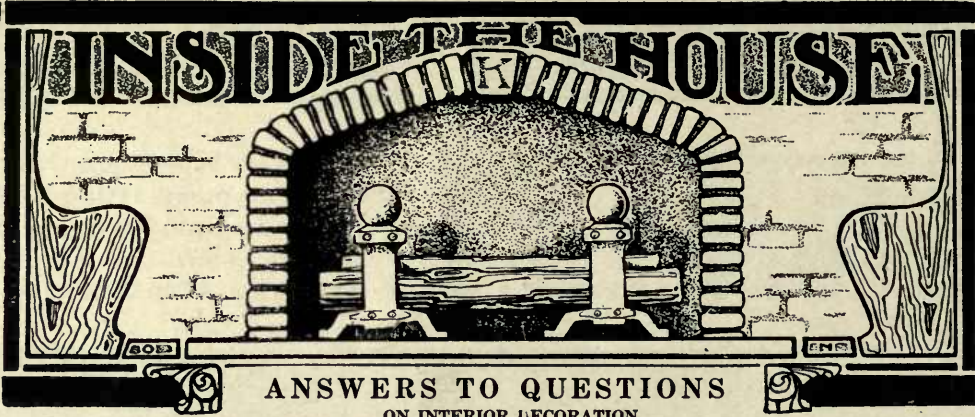
A spirited rendering of "John Gilpin" in colors of an old hunting print would delight older children. It is faithful in detail of horses and costumes and well done.

Kate Greenaway, beloved by children of at least two generations, is delightfully represented by a wall paper based on her illustrations, "The months of the year." January shows two children wrapped in



Kate Greenaway "months."

long coats and furs hurrying under snowy skies; **February**, two quaint figures; **March**, a wind-blown group; **April**, a heavy downpour; **May**, the English spring and two maidens dancing around a May-pole; **June**, sisters laden with baskets of flowers; **July**, a mother, baby and small sister; **August**, a merry dance in a field of grain; **September**, the familiar figure of big sister and little sister gathering fruit; **October**, two little girls holding a big basket of apples; **November**, a group of three bearing candles; and **December**, mother, little sister and small brother carrying holly and mistletoe.



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.

Enameled or Stained Woodwork.

H. M. K.—I enclose a plan of the new house which faces the east. As we have it planned the finishing will be as follows: The wood throughout to be yellow pine, stained brown in the dining room and ivory white enamel in the balance of house with the doors stained mahogany.

Wouldn't it be better to have the door from kitchen to rear porch and kitchen side of door from kitchen to hall painted white instead of stained mahogany?

In regard to the French doors between living room and dining room, would it be better to have these doors painted white in view of the fact that they are a part of the dining room which is stained brown?

We have also thought some of finishing the living room in Silver Gray instead of white. If we should do this, what about the dining room side of the French doors?

What would you suggest for the tinting of the walls. The wall will have a fine sand finish. We thought pink for one bedroom, blue for the other and bath, and white for the kitchen. The dining and living rooms we don't know about.

The house is new and all furnishings will be new so we have a large stock to choose from, which is the trouble.

Ans.—We note what you say in regard to mahogany doors and ivory enamel. The combination is attractive if the furniture is mahogany, but not otherwise. If you are planning to use mahogany pieces

of colonial design in the main rooms, you will enjoy the combination. Silver gray stains would hardly be possible with mahogany doors. Sometimes gray paint and mahogany doors are combined, but in a house of different design from yours.

Inasmuch as you wish a brown stain in the dining room, we would advise silver gray in the hall and living room, doors and trim alike, reserving white enamel and mahogany doors for the bedrooms. You will then have a simpler basis upon which to work, particularly with sand finished walls. The flat finish about which you ask is excellent and for a wall scheme we offer the following: Moss green in the hall and living room, brown tones in the dining room, and yellow in the breakfast room; for the bedrooms, old rose in one and apple green in the other.

In the living room, wicker furniture painted gray, and heavier pieces stained moss green would be attractive. Cretone, in which several bright tones were combined with green and gray would carry the scheme well. There would probably be no difficulty in finding an excellent rug in moss green. Oriental rugs in soft colors could be used. If the floor covering is decidedly green, let there be a sofa, or two large chairs, upholstered in gray so as to keep a good balance. There are firms where furniture may be stained to order or purchased unfinished.

The dining room furniture would better match the trim in general tone. Introduce a decided color in rugs and cur-



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MORE and more are homebuilders learning to appreciate the fact that the use of rare and expensive woods is no longer necessary in building even the most pretentious of dwellings.

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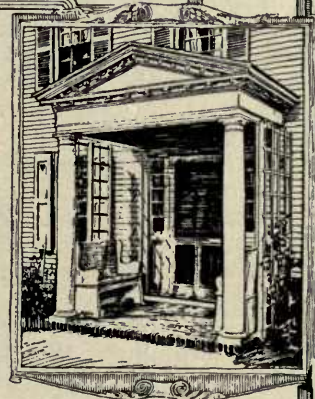
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INSIDE THE HOUSE

tains. Yellow and old blue would afford a pleasing contrast with the tan walls and brown trim and lead up well to the yellow breakfast room. The latter could be a departure from the rest of the house and have a white trim, white painted furniture, racks of blue china and blue and white rugs. Curtains of blue and white cotton cr pe would be effective, with table runners of the same. Use some yellow in the room—flowers, etc.

Simple furniture of the cottage type is advised for the bedrooms, with chintz curtains, or muslin curtains with side hanging of chintz. Cream colored walls with deeper cream paint for the kitchen would be clean and livable. If you use a floor covering here in any of the many good things on the market, let it be in green and white blocks and at the windows hang curtains of green and white gingham.

H. M. K. continued—

Referring to your letter with suggestions for our new home. We, that is the lady and myself, don't altogether agree with each other concerning your suggestions.

We will both be satisfied with ivory enamel throughout the entire house and we note that you say if we intend to use mahogany furniture the combination will be pleasing. On this basis; the living and dining rooms of ivory enamel with mahogany doors and mahogany furniture will the following do for walls: The moss green you spoke of, which we like, in the living room and old rose in the dining?

Will it be all right to leave the breakfast room as you had it or will the changing of the dining room also change it?

The bedrooms are O. K.

If this scheme will work out all right, add the necessary details and kindly put us in touch with your shopping department.

Ans.—We fully approve the re-adjustment of the color scheme for your house as indicated in your recent letter. With moss green on the walls of the living-room, old rose will be attractive in the dining-room. With this combination the breakfast room would better be ivory or warm gray, rather than the yellow suggested in our previous letter. With the color scheme as it now stands repeat the old rose of the dining-room in the accessories of the breakfast-room. Instead of racks of blue china use peasant china in old rose and green or something similar and use old rose at the windows—either cretonne, chintz or cotton crepe.

Relating one room to another by the color scheme is the basis of good decoration and can be carried out on very inexpensive lines.

Placing the Picture Moulding.

C. R. W.—We are now building a little home and ask your kindly advice as to where to place the picture moulding. Should it simply be a dividing line between the ceiling and wall or should we have a drop-ceiling with moulding on line with woodwork? Which would be considered standard, for that is what I want? We would not want to be changing every year or so.

Ans.—The placing of the picture moulding depends entirely upon the height of the room. If the room is very high and you desire the appearance of greater cosiness, the drop-ceiling with moulding is the correct solution, but if the room is low or medium and you wish all the wall height, the picture moulding is better at the junction of ceiling and side wall.

A picture moulding is not absolutely necessary, as people are not using such numbers of pictures as formally, and when one is used it is framed as though it were built into the room, flat against the wall, no wires being visible.



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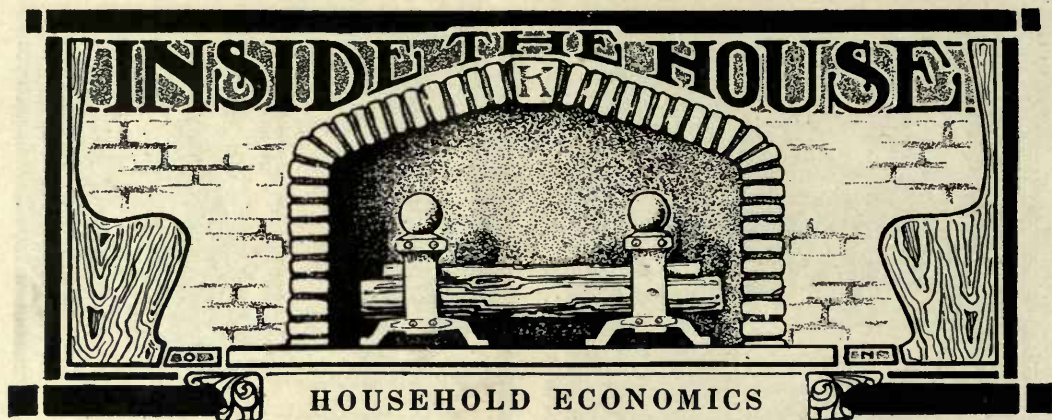
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These stamps are issued in two denominations, the 25-cent stamp and the \$5 stamp. For the convenience of investors a "Thrift Card" is furnished to all purchasers of 25-cent stamps. This card has spaces for 16 stamps (\$4.00). When all the spaces have been filled the Thrift Card may be exchanged for a \$5 stamp at post offices, banks, or other authorized agencies by adding 12 cents in cash prior to February 1, 1918, and 1 cent additional each month thereafter.

Those who prefer may buy a \$5 stamp outright. These were on sale from December 3, 1917, until January 31, 1918, for \$4.12. They automatically increase in value a cent every month thereafter until January 1, 1923, when the United States

will pay \$5 at any post office or at the Treasury in Washington for each stamp affixed to a War-Savings Certificate.

When you purchase a \$5 stamp, you must attach it to an engraved folder known as a "War-Savings Certificate" which bears the name of the purchaser and can be cashed only by the person whose name appears upon the certificate, except in case of death or disability. This certificate contains 20 spaces. Those which were filled with War-Savings Stamps between December 3, 1917, and January 31, 1918, cost the purchaser \$82.40, and on January 1, 1923, the Government will pay the owner of the certificate \$100—a net profit to the holder of \$17.60. This is based on an interest rate of 4% compounded quarterly from January 2, 1918. The amount of War-Savings Stamps sold to any one person at one time shall not exceed \$100 (maturity value), and no person may hold such stamps or War-Savings Certificates to an aggregate amount exceeding \$1,000 (maturity value).

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The Menace of the Common Cold.

Common colds occur in epidemics and are distinctly contagious. They sweep through an entire household, an entire city, an entire State, attacking the young, the adolescent, the middle aged, and frequently carrying off the aged, the weak, and the debilitated.

Epidemics of this sort, and serious disorders following make a great economic loss to business and to a community.

The causes of colds are multiform and not entirely understood. In every case, however, they are dependent upon the growth and activity of living germs which are always received from some other person. In other words, colds are infectious. It used to be thought that sitting in a draft would produce a cold. This is erroneous, but the chilling of the body which the draft produces and the weakening of the vital forces lower the powers of resistance and permit germs which have hitherto been harmless to their host to produce their disastrous effects. For it seems undoubtedly true that almost everybody harbors disease organisms.

It is an obligation on the part of persons having colds not to spread the contagion to those about them.

The germs of colds leave the body in the secretions of the mouth and nose. They enter the body through the same route. Thus a careless sneezer and the person who does not cover his mouth and nose when he coughs are breeders of these infections. The little living bodies which cause colds are so small that a million could rest on the head of a pin. When a person coughs or sneezes a fine spray carrying with it untold numbers of these germs is spread into the surrounding atmosphere to a distance of several feet and may be easily taken into the mouth and nose with the respired air. More direct contact, such as by kissing, the common drinking cup, the common roller towel,

and other things which have been contaminated may also carry the disease.

The word "colds" means an acute infection of the lining membranes of the nose, tonsils, throat, and larger bronchial tubes. The process may be even more extensive and amount to a general infection of the entire body. All of the breathing apparatus, excepting the smaller terminal portions of the lungs, may be involved, and as a matter of fact the disease may, and often does, spread to these, thus producing pneumonia. In this connection it may be pointed out that pneumonia kills more people in the United States than any other disease excepting tuberculosis and heart disease. Many pneumonias begin as a common cold.

To prevent a cold it is necessary, first of all, to keep the body resistance at a high point of efficiency. This means that the body machinery should be kept in good order at all times. Good wholesome food in proper amount, plenty of sleep, the careful attendance to the voiding of the body wastes, the taking of regular exercise in the open air, the avoidance of hot, stuffy, dusty rooms, the avoidance of exposure, are all protective measures. It should be borne in mind, however, that even robust persons may contract colds from people who have them.—*W. C. Rucker, United States Public Health Service.*

To Promote Cottage Cheese.

Uncle Sam is planning a campaign to promote the making and use of cottage cheese. The idea is to have every drop of milk in the United States yield the utmost amount of food. At present much skim milk and creamery by-products are fed to farm animals. Creamery and milk plant operators will be taught cottage-cheese making by specialists of the dairy division, Department of Agriculture, and efforts will be made to increase the consumption of cottage cheese by the public and to have more milk brought whole to creameries so that the skim milk may be transformed into by-products efficiently. Any housewife who has a quart of sour milk can make a small dish of cottage cheese.

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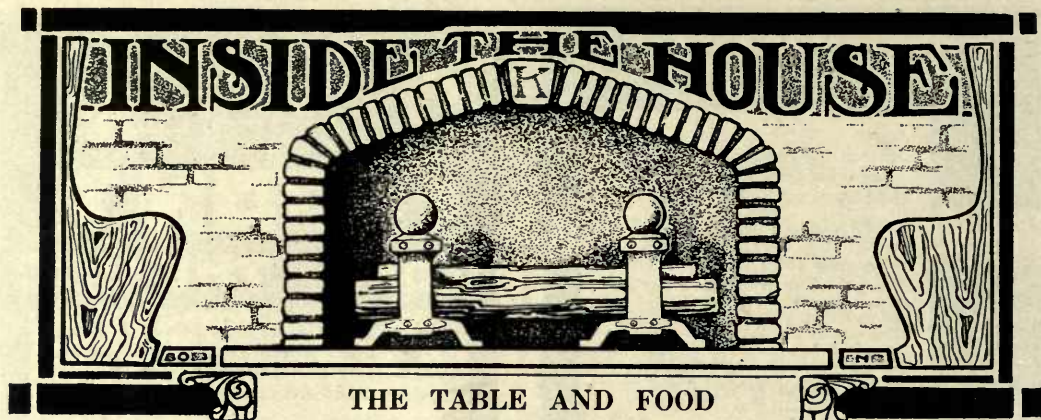
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More Fats for a Critical Necessity

F the more fortunate of our people will avoid waste and eat no more than they need, the high cost of living problem of the less fortunate will be solved."—*Herbert C. Hoover.*

The production of more fats is a critical necessity. Every pound of fat is as sure of service as every bullet, and every hog and sheep is of greater value to the winning of this war than a shell.

On an average it is estimated that each person in the United States consumes $3\frac{3}{4}$ ounces of fat a day; that includes butter and other fats, cooking fats and cooking and table oils. Our consumption is greater than that of any other nation, and we could, without endangering the health of our country, cut this amount down to a little over 2 ounces.

Someone has questioned whether the men of the nation are doing their full share in food conservation, suggesting that the club is very popular on the days when meatless dinners are due. But with hotels and clubs co-operating as closely as they do with the Food Administration this discussion is hardly fair. Fortunately it is not a question of going hungry, in this country. It is only a matter of choosing some other food than beef and wheat for part of the time, and of eating a little less of sugar and fat all of the time.

Save Butter and Fats.

The Food Administration is asking that during February we make an especial effort to save fats; that we eliminate butter

entirely from all cooking, using other forms of fat in cooked foods, leaving butter for table use only.

Europe can teach us many things as to making fats, other than butter, an intrinsic part of our diet. Beef fat which has been melted and clarified may at times take the place of butter very satisfactorily. We use it as gravy, and in many a childish remembrance nothing was better than Grandmother's gravy as she served it with her roast beef or chicken. Too often the modern housewife or her cook has allowed the fat of the roast to remain in the pan and be thrown away.

Beef fat is pound for pound as valuable as a food as butter, lard or any other animal fat, and while butter is 50c a pound in most markets, beef fat is 15c a pound. We can use it in cooking practically as we use butter.

In substituting one food for another there are other things beside the taste to be considered, even in the same class of foods. The housewife is learning something of food constituents so that she can arrange her menus and the diet of her household more intelligently than at the beginning of this food campaign. Considering only its heat giving values coconut oil, lard, bacon fat, butter or suet are fair equivalents; but there is found in butter an elusive element, classed as vitamin, which comparatively lately has been found to have a close relation to growth and health. Suet has been found to stand next to butter in this necessary

REMEMBER—That the Food Pledge which you have made, to conserve wheat, beef, fats, sugar, etc. is a serious business,—it may win or lose the war.



"Beautiful Birch for Beautiful Woodwork"

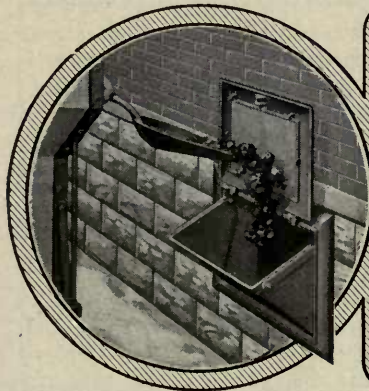
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Above, Wheaton, Ill., home. A. E. Colcord, Esq., architect. Birch trimmed.



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INSIDE THE HOUSE

quality, and is for that reason an excellent substitute. It is also a very economical substitute in the matter of cost. Suet can even be used very satisfactorily as a table substitute for butter if prepared as a gravy in a way the family like, or it may be used as a spread for bread. To prepare it for such purposes careful rendering is necessary.

To Render Suet.

Purchase kidney suet. Remove the tissue-like membrane, chop the meat fine or grind in a meat grinder. Cover with cold water and heat gently until the boiling point is reached. Simmer gently until a layer of fat remains on top and the water is clear underneath. Remove from the heat, and cool. A hard cake of fat will form, which should be removed and heated carefully again to remove any water; then strain and it is ready for use in cooking. Season with a few drops of kitchen bouquet, salt and a little white pepper; add a drop or two of butter color if desired. It is most satisfactory to use this in liquid or softened form for table use, for it is very hard when solid.

The Department of Agriculture states that if such fats are allowed to cool, removed from the surface of the water and heated with sour milk in the proportion of one-half cup to six pounds of fat, and then strained through cloth, the fat will have acquired some of the milk or butter flavor, and may be used in place of butter.

To some of us the flavoring of butter for certain vegetables seems almost essential. If this is your case, it may interest you to know that the same flavoring can be obtained from a very small amount of butter, perhaps an eighth or a tenth of the amount generally used, combined with other fat. Remember too, if you are using a vegetable fat for cake, that it is probably unsalted and unless you add salt yourself the result will be a flat tasting cake.

Try These.

Is it possible to save butter and fats where they will not be missed?

Eliminate frying in deep fat.

Instead of French-fried potatoes boil

the potatoes in the skins, peel and hash-brown them, using very little fat and a little milk to brown. Not only is this a big saving but they are more wholesome.

Instead of baking pie as usual, where quite a quantity of fat—sometimes as much as half a cupful—is used, make a nice biscuit dough in which baking powder is used to make it light and flaky and make an open-top pie—that is, one with no top crust. If made correctly this makes a delicious and substantial dish.

Cream will not be so much missed in your coffee if milk is first heated, poured in the bottom of the cup and the coffee slowly added.

When mashing potatoes do not use butter when using milk.

Much of the pleasing flavor which we credit to butter is in reality due to the additional salt given by the butter. When not using butter, season the food very carefully. Do not leave the salt to be added at the table.

If canned vegetables are used they are heated, and salt and pepper and flavoring of choice are added. No milk or butter is needed.

Canned peas can be flavored with a clove or garlic or a little sugar.

Canned corn seasoned with salt, a little sugar and paprika.

Canned string beans are seasoned with salt, paprika and a little bacon drippings.

Canned lima beans are seasoned with salt, pepper and a little grated onion.

Canned tomatoes are seasoned with salt, sugar, pepper and a little dried celery top rubbed fine.

Canned succotash is seasoned with salt, paprika and a little sugar and a pinch of mace.

Equivalents of Butter.

	Qty.	Butter Equiv- alent
1. Oleomargarine	16 tbsps.	16 tbsps.
2. Lard	14 tbsps.	16 tbsps.
3. Hardened vegetable fat...	14½ tbsps.	16 tbsps.
4. Vegetable oils	14½ tbsps.	16 tbsps.
5. Grated chocolate in cake...	1 cup	3 tbsps.
6. Cream, thin	1 cup	3 tbsps.
7. Cream, whipping, 40%....	1 cup	6 tbsps.
8. Suet, chopped	1 cup	2 cups, 5 tbsps.

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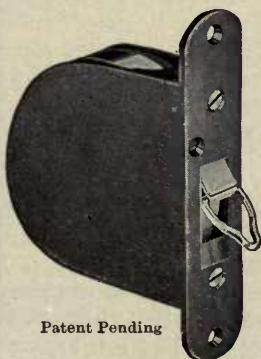
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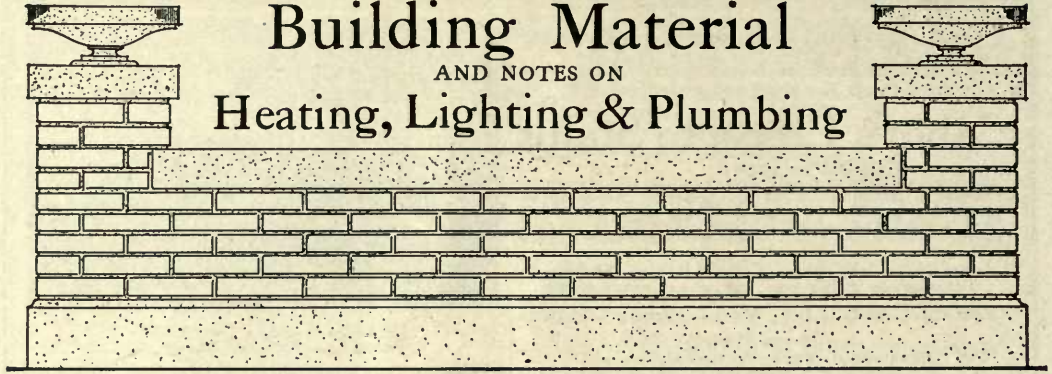
SAVE TIME
AND MONEY



Building Material

AND NOTES ON

Heating, Lighting & Plumbing



Belgian Method of Protecting Woodwork in Masonry.

THE unfortunate results which often follow the imbedding timber into newly built masonry walls is commented upon by La Semaine des Constructeurs, and attention is called to the fact that oak beams, even of the twelfth century, are frequently found in good state of preservation, and commending the builders who save the oak beams taken out of old buildings and use pieces from them as a protection for new woodwork.

"In Belgium it has been customary to nail upon all sides of the joists where they enter the walls, thin pieces of old oak forming all around it a sort of covering or a small oaken box. Old oak is always taken in preference, and to be of use it must be absolutely seasoned and free from sap.

"There are also certain other insulating substances than oak. Some masons wet clay in a little water and cover those portions of beams or joists that will come in contact with masonry; but the very best insulation is atmospheric air, especially if it be dry. In order to preserve the woods by means of air it is necessary to place between the beams and brickwork plugs or loose pieces, which keep the lime away from the wood and permit a circulation of air. Beams of soft wood can advantageously be set upon fragments of perfectly dry hard brick or pieces of tile, allowing the air opportunity to circulate between them and then around the beam. We prefer, however, the pieces of oak as referred to above, since the dampness or condensation of moisture in the atmosphere is less liable to be deposited on the wood than brick or tile."

Local Building Materials.

One phase of the present situation is the difficulty of transportation. This will mean that local building materials will be used as far as possible in each community. Local interest is likely to be developed in materials which have not hitherto been given special consideration.

A new process for making cement brick, on the job if desired, and giving them a waterproof surface and at the same time making a texture of the tapestry and moss finishes, in any color, promises to become a boon to the building industry in this time of special requirements.

From the time of the early use of modern concrete builders have constantly tried to find some form of building block or brick which should give a satisfactory building unit for concrete. Since sand and gravel are found on so many building sites, transportation is saved if the units can be made on the job. But in order to do this in a practical way no complicated machinery can be employed.

This new concrete brick can be obtained as can other brick, in quantity; but it can also be made on the job. The total capacity of two machines working together, tended by three men is given as 5,000 per day of faced brick or 10,000 per day of common cement brick.

The machines, each occupying not more than six feet square of space, are operated by a single man, with one helper sufficing for both machines. This helper works from a mixing box where the sand and cement are mixed, seemingly only dampened. The sand is delivered in wagons direct to the mixing board, and the cement is stored but a few feet away. A space 25 to 30 feet square conveniently

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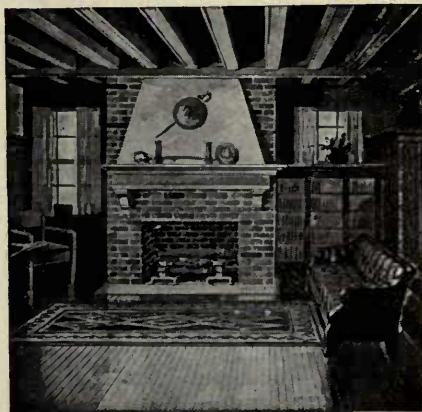
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accommodates the entire plant, the brick being carried to drying space a few feet away and ricked up to season. The brick resulting withstands a pressure of 3,000 pounds to the square inch, so each brick has a crushing strength of forty tons.

The brick without coloring is steel gray, and this is classed as the common. The coloring process is carried out through use of mineral powders which are used in connection with the waterproof facing. It is thus possible to secure any coloring desired—a color through the mineral agencies that will never fade.

Unnecessary Fire Hazards in Building Construction.

In case of fire, wood is often condemned when actually the fault is not with the material, but with the careless construction and disregard of fire hazard. The cost of proper construction in relation to the fire hazard adds only a small percentage to the total cost of the dwelling; yet gives returns in lower insurance rates, and greater safety far in excess of the additional expense.

Intelligent selection of lumber to insure the proper kind and grade for the particular locations, or different parts of a structure, is essential.

With proper selection should come the consideration of strength of the different kinds of timber. In all cases careful workmanship in framing and placing is necessary.

A consideration of great importance is proper firestops or fire barriers in dwelling house construction. This is one of the actual protective measures which is not as generally known or recognized, but is fully as important as safe chimney, smokepipe, and fireplace construction.

Dwellings are usually the least protected of any class of buildings, and when of flimsy, improper construction constitute an unnecessary hazard. Wood remains the least expensive and most universally available material. At the same time it responds to architectural treatment in a way which introduces a strong appeal on the ground of beauty and sentiment.

Since wooden homes will continue to be built through the indefinite future, special attention should be given to their proper construction, and to the rigid elimination of unnecessary fire risks.

If a fire starts from a defective chimney or flue and burns a wood shingle roof, it would seem much more logical to pass an

ordinance rigidly controlling the construction of flues and chimneys than one prohibiting the use of shingles. However, since the burning shingle roof can be seen, legislation is directed against it, and not against the defective chimney.

Fire-Resistive Treatment.

One of the late developments in the research concerning wood which is most far reaching in its possibilities is that relating to the treatment, not only of wood but of almost any material which renders it fire-resistive if not fireproof. The Lumber and Paint Associations have been working with the government, in co-operation with private individuals, upon processes which shall give a wooden shingle roof protection which is fire-resistive and at the same time can be produced at practical commercial prices. The results have been most gratifying. The formula for this paint is held by the Paint Manufacturers' Association and is being put on the market. Commercial "Fireproof paints" have been on the market for some time which have stood severe tests.

One would expect the announcement of fire-resisting paint to create a certain amount of excitement in the building world, but a certain amount of time must elapse and proofs multiplied to show the actual results in the use.

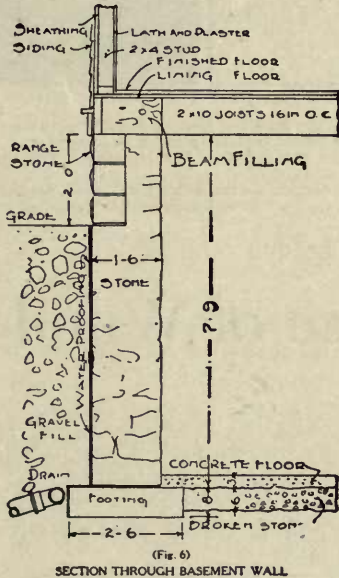
Glazing With Metal Strips.

Glass panes can be held in place without putty by the use of a flexible metal or rubber strip like a partly open tube laid upon the pane and held down by a set of clamps spaced along the pane, says a writer in *Building World*. First apply the pane of glass so as to fit it into the usual recess, then lay the prepared metal or spring strip along one side and screw on a plate at the corners of the pane and say one at the middle, these being flat plates with a somewhat incurved edge where they take hold of the spring strip, and are screwed on the woodwork at the side of the pane with the curved ends projecting out and over the pane so as to inclose the strip. The latter are, of course, put on at all four sides of the pane.

A double pane with air space between can be applied by using a deep recess and just laying a pane, then the strip, next a second pane and finally a strip that now comes flush with the woodwork and can be fastened down by the metal plate as before.

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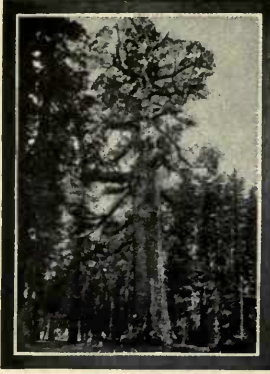
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WOODS

AND

HOW TO USE THEM



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.

The Use and Abuse of Wood

WOOD is a natural product, readily available, and suitable for almost any and every constructive use. It has been very cheap as well as very plentiful. It is easily worked with common tools and up to the present generation every boy was familiar with the first principles of working with wood. As a matter of fact, wood has been so cheap and abundant in the United States that it has been used for a multitude of temporary purposes, often for those to which it was unsuited, until as a material it has been cheapened in the mind of the people. At the same time great sums of money have been spent in advertising far and wide the advantages of new materials, while little has been said in defense of wood,—seemingly too sure in its position to need defense. When placed in direct competition with more highly specialized materials, manufactured to fill few or perhaps only one purpose wood, untreated and unstudied is often placed at a disadvantage in the given conditions. With the study which has been given by the Forest Service of the government in the last few years much valuable information has become available which will be helpful in the selection of the wood to be used and the treatment which should be given to it for special conditions.

Some of the peculiar advantages of wood may be summed up as follows:

1. Its general availability;
2. Ease of alteration or remodeling;
3. Wood is easily worked with common tools;
4. Wood is very strong for its weight, compared with other building materials;
5. Wood is a non-conductor of heat and electricity, as compared with metal; and of moisture as compared with concrete and brick;
6. Wood does not contract and expand with sudden changes of temperature;
7. Wood is beautiful, in itself and it grows old beautifully;
8. Wood offers a combination of strength, toughness, and elasticity, in connection with its other advantages.

The great indictment against wood is, in one form or another, that of short life, owing to decay, fire hazard, or other reason for disintegration. Yet innumerable examples come to mind of its standing for centuries, growing more beautiful with every passing year. The oak wainscot of the old baronial halls of England, the carved choir stalls of many cathedrals, all manner of beautiful old woodwork comes to mind immediately, not omitting wooden houses built during the days of early settlement in this country.

Modern science has made it its business to inquire why some wood has lived and performed its mission so beautifully while other wood has not lived so long nor so well, this research has been tabulated to a certain extent and is being placed where it is available to the industries.

For all ordinary construction the strength of wood is seldom questioned, the ease with which it can be worked with tools and the readiness with which it takes the place which is given it, all of these are long accepted attributes. The faults found with wood usually fall into one of three classes: It will rot—when built into a damp place. It will shrink—when not properly dried before using. It will burn—when directly exposed to fire. In addition to these it would probably wear away in time if exposed indefinitely to the weather without any protection, hence the almost universal use of paint.

When these faults are summed up the remedy for each stands beside it. Each kind of wood has its own individual traits, and the time is coming when the use to which a piece of wood is to be put will be taken into special consideration in the selection of the kind of wood to be used, and then each piece will be given such treatment as will fit it for the place which it is to occupy, and all unnecessary hazards in its use will be eliminated.

Wood is taking its place as one of the finer building materials, while many of the commoner uses are being left to other materials which are not equal to the more exacting requirements which are asked of the wood. As wood serves more in the fine capacity it will be used more intelligently; the kind of wood best fitted to the use will be selected, and it will be given the treatment and preservation which the manner of use suggests. Not only will the general public become more conversant with the specialized data available concerning wood, but the building interests will handle it in a different way. Every dealer should know what to recommend for every use, and should make a point of doing so. He should know the qualities of the various woods he handles, why they are particularly adapted for certain uses and not for others, but also the record of the wood that has been used.



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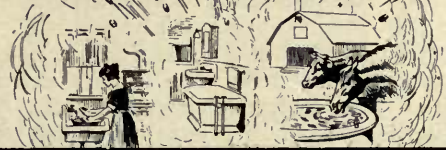
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Wood Preservation.

The natural life of the wood may be lengthened by a proper treatment for its preservation; or perhaps it would be more accurate to say that if wood is carefully placed under proper conditions, having taken the necessary precautions for its safety it is likely to develop its naturally long life of usefulness. Be that as it may it is only fair in the use of wood to give it a fair chance for length of life.

The greatest enemy of wood is the parasite which destroys it internally. We say "The wood has rotted. It always rots next to the ground, and at the end of the porch post where it stands on the floor." Dry-rot is caused by bacteria. It is communicated by infected timber, and spreads when the conditions for the culture are conducive to its growth, much in the same way that infection affects people. In the entire absence of moisture and of heat the bacteria cannot grow. Sound timbers found in the Egyptian tombs are cited as examples, and sound timber found in the Thames, dating from the Roman occupation of England tends to show that the exclusion of air prevents rot. On the other hand timbers which have never been infected may stand for a long time even under bad conditions. The lumber dealers are taking greater precautions to segregate any infected lumber, and are piling their material so that there is a free circulation of air entirely about.

Circulation of Air.

A free circulation of air is the greatest preventative measure employed against the rotting or decay of wood. Porch posts rot because moisture gathers in the cracks between the post, the floor, and the mouldings, and there is no circulation of air to dry it out. Paint or white lead which eliminates the moisture entirely also prevents the rot. When growing conditions for the bacteria are given, the chance of infection is great, since the spores or seeds of the fungi are said to be floating in the air all the time and are sure to fall on the surfaces of the timber. If conditions are favorable they will take root and spread.

Dry-Rot.

The bacteria or fungi of dry-rot consists of fine cotton-like threads which penetrate the wood cells and by the secretion of ferments dissolve many of the constituents of the wood. These and other organisms feed upon the wood and change

it as completely as the digestive processes change the material upon which the higher forms of life feed. Sap-wood is the most liable to decay because it contains much more food for bacteria and fungi than does heart-wood, which is older and not so full of life.

Research in the Forest Products laboratory at Madison has given much valuable data for the protection of wood. Field and laboratory studies indicate that much more care should be exercised in the selection of lumber and in the construction of buildings to avoid conditions favorable to decay. The following causes may result in the rapid deterioration of a building: The use of green timber; allowing timber to get wet during construction; allowing the timber to absorb moisture after the building is finished because of leaks or lack of ventilation; the use of timbers containing too much sap-wood; the use of timbers which have already started to decay.

Treatment.

It is asserted that the primary causes of dry-rot are ignorance on the part of the users, or negligence in taking the necessary precautions. In so far as this is true the remedy lies in a greater knowledge of wood and its treatment. It is well for the Home Builder to inform himself on these subjects.

Where the conditions are necessarily bad the decay of timber is prevented by treating it with antiseptics, or substances which are poisonous to bacteria and fungi. Of the many possible substances, practical considerations make only a few of them suitable for commercial use. One of the first essentials of a good wood preservative is that it shall not dissolve out when the wood gets wet or is placed in water. One of the best materials, for the purpose is creosote, a complex product of the distillation of coal tar. For comparatively dry situations such as occur in smaller buildings zinc chloride is a cheap and effective treatment, but it can not be used in wet situations as it leaches out.

Paint.

Paint lengthens the life of wood both because it keeps out the moisture, and also because it closes the pores through which fungi might enter. It is essential that wood be well seasoned before it is painted, for it will not let moisture out, any more than it will let it into the wood.



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The Service Flag in Business.



NOT long ago in discussing the service flag in front of his place of business, a prominent business man said to a friend: "Do you know what those stars mean?"

"Why, yes," his friend replied, "they mean that there are that many of your men now in Government service."

"No," said the business man, "that is not the meaning we attach to those stars. Every one of those stars means a position we are holding open for a man who has gone into Government service."

Keep the Colleges Filled.

After the war, and during the continuation of the war there will be an increasing need of technically trained men and women. Keep the schools and colleges

filled. The boys and girls, and the youths who are not called to the colors will serve their country best in this way.

Thimble and Trinket Fund.

In every household bits of old silver and silver plate accumulate to the dismay of the housekeeper. Early in the war a little English woman gathered up her old silver thimbles,—punctured and bent and useless, and asked her friends to do the same. Old thimbles and bits of silver began to pour in and were melted down and coined. In a year the Silver Thimble Fund in England has equipped seven motor ambulances, five hospital boats, a trench disinfector, and given many thousand pounds for disabled soldiers and sailors. \$250,000 was raised by gifts from those who thought they had nothing worth selling. This method is filling the intense immediate need from the discard of the years that are past.

In this country a "Thimble and Trinket Fund" has been started for aviation benefit, with stations in every city and the larger towns and also in the country districts. This fund accepts not only silver in the shape of old thimbles, spoons and broken or worn table silver, but trinkets of any kind, silver or gold, and also plated ware. In the latter the base as well as the plating is used. One mother, showing what she had picked up about the house, had old napkin rings, silver mountings from toilet articles, silver handles broken from shoe buttoners, tooth brushes, nail files, etc., broken bits of chains, rings, odd buttons, bag mountings, old bracelets, and spoons of many kinds. Memory treasures were among them,—a ring of grandmother's, buttons which had belonged to boy, and a spoon with tiny tooth marks, but as she said, "Why hoard them when possibly they might save daddy." The local organizations of the Thimble and Trinket Fund will welcome any bits of silver or gold which the housekeepers can send, in the country's need.



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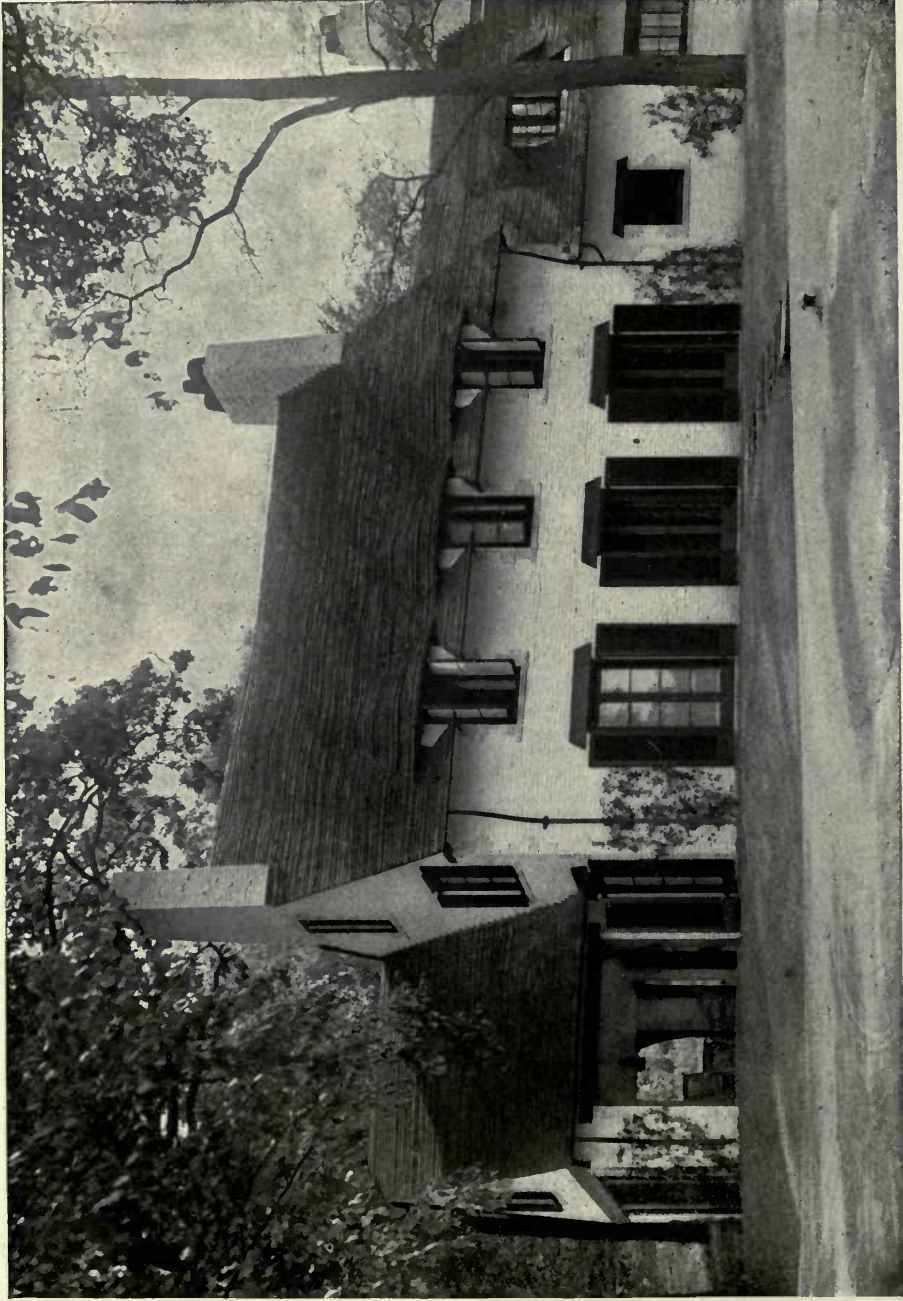
ON HOME BUILDING

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A white painted brick Cottage on Long Island.

H. L. Lindeberg, Architect.

Roof-Garden Bungalows—A Woman's Venture

Henrietta P. Keith

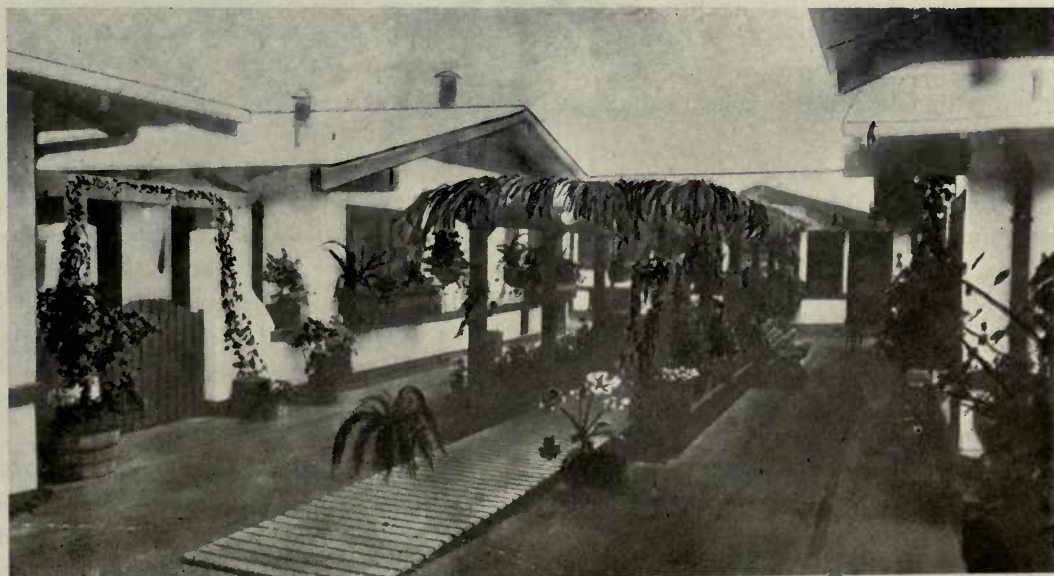
COULD anyone dream that this "bungalow-court" was up in the air and not on "terra firma"? I certainly did not when I passed by the picture, with a sign above it: "Bungalow Apartment for Rent. Inquire on Second Floor." I wanted a bungalow, so in I went.

Ascending a broad stairway from the street, what was my surprise to find it open upon a broad, spacious lobby, bright and sunny from the skylight above. It was a great big sun-parlor, all hung about with flower boxes and wall baskets full of brilliant bloom and singing birds with vines trailing up the center row of pillars. A

most heartsome place, but not a soul in sight.

Under one flower basket hung a placard, with the legend, "Ring the Bell" inscribed thereon. Most unbusinesslike, I thought, but I rang the bell. It was like rubbing Aladdin's lamp, for instantly a bright-eyed lady appeared from nowhere, apparently, and to my question, "Where could I find the bungalow?" replied, "They are right here."

She turned to a wide opening, and sure enough, there they were—eight of them, all set about a spacious court, with the pergola that you see, running down the center of the



A bungalow-court on the roof.

court. The picture is pretty, but not half as pretty as the court itself, which was like a garden all abloom, with flowers everywhere and vines and creepers running around the doors and windows of the bungalows.

It was such a surprise—this fairy-like little village—as complete and as *structural* as though on the ground below. Its broad, main street—20 ft. in width, with branching side streets 15 ft. wide which give private entrances to each bungalow, give a sense of space and freedom one would not suppose possible in such a situation.

This novel and unique building idea is the successful venture of a California woman who decided to try this development of the upper part of a large business building in lieu of another story of offices.

The outside appearance of the building, that is, the one gained from the street, is that of an ordinary two-story building or business block. The plot has an area of 90x100 feet, on which is located eight bungalows, each one of which is large enough to accommodate a family of four or five people. In the center of the "grounds" is a pergola extending the length thereof, and covered with trellises and plants. Each and every bungalow has its own box flower garden, and the effect of the first view is that of entering a tropical garden, so prolific is the growth of plants in these sheltered areaways.

Each bungalow has a living room, 14x16 feet, with a wall-bed and book-case as part of the built-in fixtures, together with a large window opening on the main street. This living room is separated from the dining room by folding doors, and, passing through the door, we come into the dining room which has an alcove window facing on one street of bungalow town. In this alcove window is a box seat. Facing the entrance to the dining room is a commodious china closet, together with drawers, etc. The base of this china closet is a roll-under bed, thus giving sleeping accommodations

for four people. To the right of the dining room, facing the china closet, and opening on the street, is a dressing room, with windows giving plenty of light. This room is fitted with built-in mirror, drawers, clothes racks, etc., giving the lady of the house the advantage of her own private dressing table. This room is 4x9 feet. On the left of the dining room is the kitchenette, completely fitted up in every detail—sink with patent plastic composition drain-board, drawers, racks, gas range, etc.

An alcove hall gives direct entrance from the outside, and off this hall is a large clothes closet, fitted with hooks and racks. Opening on this same hall is a large, well ventilated and well lighted bathroom. The garbage is taken care of by means of a trap door opening on the street of bungalow town, so that the garbage man does not interfere with the comfort of the tenant.

Extending from the main street is a passageway to where the public washstands are situated, from which clothes lines run out over trolleys, giving the tenants the advantage of high and dry air for their clothes.

Most of the bungalows are furnished simply, but in good taste, and rent for a fair price. Only one was vacant, the bright-eyed little manager told me, as they are very popular; they are so pretty, so clean, so airy and away from the street noise below.

The exteriors are of brown-stained shakes with white patent roofs, a pleasing background for the flowers and vines and a color scheme that stands the weather. Each bungalow is fitted up with outside sill cocks for hose attachments, and everything looks fresh and vigorous. They are cool in summer and warm in winter, the tenants said, and the "view" is great.

The little village "grows" on one, as you see more of it. Its well-studied beauties of related line, hue and decoration come softly out, and an agreeable sense of "hominess" pervades the whole.

The Home that an Architect Built for Himself

Charles Alma Byers



NATURALLY the house that an architect builds for himself elicits at least a little more than the ordinary amount of interest. In the first place, it is to be presumed that it will be an approximately true expression of the architect's unhampered individual-

E. B. Rust, of Los Angeles. Hence, as representing Mr. Rust's ideas, free of any of the usual influence exerted by client, it is doubtless deserving of more than ordinary study. And, even aside from this fact, the house unquestionably merits close observation from the prospective



White stucco trimmed with French gray.

E. B. Rust, Architect.

ity, for he will have had no one but himself to please. Furthermore, it should represent a sort of bringing together of many of the more worthy ideas he has gleaned from his considerable experience. Altogether, it probably may be taken as constituting a fairly representative specimen of the architect's work, although more or less governed, of course, by the amount of money at his disposal.

It is an architect's own specially designed home that is shown in the accompanying illustrations—the home of Mr.

builder. Comparatively small and inexpensive, it is attractive and practical in design and construction, and especially home-like, convenient and compact in its interior finish and arrangement.

Of frame construction, the outside walls are of white cement-stucco over a wood lath, reinforced with wire netting; and the trimming about the windows is done in French gray, while the mildly pitched roof is covered with a tarred felt composition surfaced with crushed granite. The walls are very plain, as is the de-

garden fence of lattice design, painted French gray to match the house's trim; and a rose ladder, correspondingly painted, surrounds a front window group, while on one side is a most delightful pergola. Latticed in on two sides and enclosed on one of the remaining sides by a wall of the house itself, this open-air retreat is floored with concrete and furnished with chairs and a swinging seat, and, in time, will be more or less covered

all of the rooms are especially well lighted with windows, many of them having windows on three sides; moreover, that the space devoted to halls is comparatively little, yet the connections are most conveniently planned.

The front entrance leads directly into the large living room; and from one corner of this room rises the staircase, while from near the same corner leads a short hall which gives access to the garden per-



Built-in book cases extend under the window ledge.

with vines enhancing its attractiveness. The lattice character of this fencing, as well as the shade it is painted, naturally greatly improves the appearance of the grounds, and lends itself admirably to the growth of climbing roses. In the rear is a small garage, designed to harmonize with the house.

Referring to the floor plans, it will be observed that the floor space is utilized both conveniently and economically, and that there are many delightful built-in features. It should also be noticed that

gola. This very short hall, besides containing two small closets and the stairway to the basement, also connects directly with both the kitchen and a bath room. The dining room is immediately back of the living room; and between it and the kitchen intervenes a roomy pantry, equipped with the usual built-in cupboards, serving table, and so forth, while the kitchen itself is provided with built-in cupboards also, a draught cooler, a plaster hood for the range, and the other customary conveniences. The remaining

room on this floor is the maid's room, which has a wardrobe closet, and is entered from the rear screened porch.

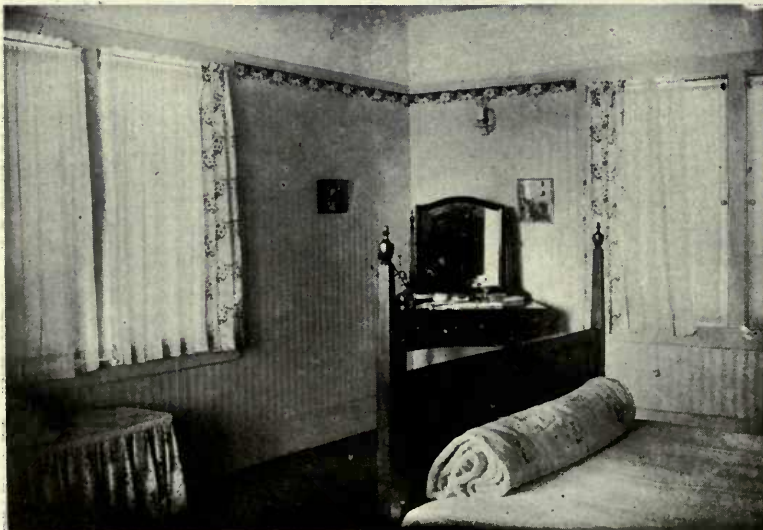
An especially attractive feature of the living room is its built-in bookcase, which extends the full length of one wall. As will be observed from one of the accompanying illustrations, this bookcase is composed of two end sections of four shelves each and a center section of two shelves, the latter being located beneath a group of five casement windows. The ledges or counter-shelves thus created are naturally an appreciable feature also. The fireplace of this room has an attractively but simply designed mantel of wood and chocolate-brown tile, dull finished, while its hearth is of glazed tile of much darker shade.

The woodwork of the living room, dining room, staircase and upper landing hall is of dull finished oak. The walls of the whole of this portion of the house are finished with a paneled wainscoting, and the ceilings are edged with a wood cove. Above the paneling, the wall space of the living room, stairway and upper hall is painted a deep buff shade, and in the dining room it is covered with paper, indistinctly figured in buffs and dark gray.



The wood work is dull finished oak.

On the second floor are two bed rooms, a children's combined sleeping and play room, a sun room, and the bath room. The sun room is provided with a wide stationary ledge or shelf for potted plants, by which it may be converted into a veritable conservatory; or, should either be more desired, it would make a most delightful sewing room or den, or even another sleeping room. Each of the two bed rooms has an excellent wardrobe closet, and in the children's room is also a small closet, while in the hall that forms the necessary connections is both a cabinet of



A dainty sleeping room.

shelves and drawers for linen and a chute.

The woodwork of all the second-floor rooms, as well as of the first-floor rooms not previously described in this respect, is of pine, which in the two upstairs bed rooms and the children's room is enameled in old ivory and elsewhere is enameled in white. In all sleeping rooms, including both the maid's room and the children's room, the walls are papered, the paper being of striped or Colonial pattern, edged beneath the picture molding with a narrow "cut-out" border.

Oak floors prevail throughout the first floor, except in the kitchen, pantry, bath room and rear screened porch, and maple flooring is used for all second-floor rooms, except the bath. In the two bath rooms the floors are of tile, and the walls are also finished with a tile wainscoting. In the kitchen and pantry the pine floors are covered with linoleum and the walls are surfaced smooth with hard wall plaster and enameled like the woodwork.

The small basement underneath the center part of the house is walled and floored with concrete. It contains a furnace which supplies the house throughout with the necessary heat in winter, and also comprises a large storage and fuel room.

Save that in advance he limited himself to a certain amount for expenditure, Mr. Rust naturally worked out the plan and the construction details of his home unrestricted, and to meet his own particular needs. The result here speaks for itself. Points, however, that deserve to be especially noted, as comprising some of the ideas he has handled particularly well and that merit careful study, are: the compactness and the



The paneled wainscoting in the dining room.

convenience of the arrangement, the excellence of interior lighting and ventilation by the numerous windows, and the number and desirability of the built-in features. There are also many other more or less important details that will interest the careful observer. All in all, this is a most charming, comfortable and practical little home.

Picturesque Building in the Old World and the New

Katherine Keene



IN THIS country most buildings show their interest and, to a certain extent, their uses at the first view of the exterior. The old-world cities have block after block of two or three-story buildings, showing perhaps a white-washed surface, but quite devoid of any distinguishing marks until one chances to peer through a carriage opening as an equipage is coming out, or when it has been inadvertently left open for a short time, and catches a glimpse of thriving palms, a pool and a charming garden within. On the exterior, the Alhambra shows a forbidding brick wall, fortress-like in appearance, as it was in reality in its early days, with the talisman of the key over the great arched entrance.

The Castle of Chillon, made famous by Byron, stands as a picturesque fortress with



Picturesque dormers and roofs.

beautiful Lake Geneva at its feet, quite as popular in picture, perhaps, for the butterfly-rigged sailboats, usually shown on the lake as for the picturesque quality of the castle itself.

The tourist and sightseer goes through castle after castle filled with wonderful things which he has always longed to see. Generally the type of building is either monumental and grand or it is commonplace even though built on a great scale. Occasionally he comes on a little touch of homelike surroundings which he wants to keep and take home with him—possibly build into his own home, feeling that it would help take the “commonplace” out of his daily living.

The first court in Chillon is one of these picturesque spots. The fundamental idea of the court, of the garden inside of the building, is always a fasci-



In the first court of the castle of Chillon.

nating one to those who do not know it. It belongs, of course, to the sunny clime, and has made itself quite at home in California; but on those of us who saw Europe for the first time before seeing California, some of these charming courtyards made a strong impression. While the castle was built of stone in huge blocks, this little court showed a stucco surface, probably rough stone work, stuccoed over and "white-washed" in a light tint, so common in southern Europe. The roofs are of tile, almost universally used in that country, charming in their soft tones. The roofs are pitched up against the walls of the building with windows from the higher stories of the castle above, much like the clerestory windows of a cathedral. The four sides of the court are all different,



Courtesy Asphalt Ready Roofing Co.

Picturesque American Entrance to a Country home.

whether one looked back to the wide arched opening through which one had entered, or ahead, or around, yet each side was of exceeding interest. The type of dormer is unusual; all of tile and hooded. Half of the window comes in the dormer, while the lower half is set into the stucco wall. There are simply roofed hoods over the doors, and over balconies jutting out on brackets. Flowers were growing on balconies and boxes.

There has been much interesting and picturesque building in this country due, doubtless, to the inspiration of some of the picture spots of the old world, a very interesting example of which is the country home, photographs of which are shown. It seems to carry one out of prosaic every-day American living into the by-ways of the old country. The house as a whole has been studied in line



Courtesy Asphalt Ready Roofing Co.

Residence of S. F. Byor at Greenwich, Connecticut.

Cross & Cross, Architects.

and composition just as an artist studies a picture on the canvas from his sketches. In fact, it is a picture in the same way. The planting of the trees on either side of the entrance is part of the scheme of the design. The slender vertical lines of the trees are part of the composition. The narrow gables,

hooded at the peak, carry the light color of the stucco up into the roof lines with a pleasing variety of line and color, in contrast with simply roofed group of windows in the long roof. Roof treatment, more than any other one feature, sets an individual stamp upon a charming building.

The Kitchen Plan

Edith M. Jones



IN talking with a young woman yesterday she showed me her new diamond ring. She was very happy in her engagement but confessed she was very grateful for her business experience as she felt it would be valuable to her all through her life. In the first place, she felt she could better understand and appreciate her husband's business problems, and in her capacity as a housekeeper she realized what business methods and efficiency standards would mean to her in the business management of her home.

This young woman's view was especially interesting to me for housekeeping is truly a business and young women do well to approach its responsibilities with some understanding of the value of business methods.

If a man were about to go into business, one of his first questions naturally would be, "Where shall I locate? What sort of a store or office can I get and how can I fit it up to best meet my business needs?" So when a woman plans her home she should as carefully consider her kitchen, for this important room is to be her workshop and office. Government statistics say that 92 per cent of the housewives of the United States do their own work. This means that a great part of the waking hours of the day are to be spent by the housewife in her kitchen, so I say no detail is too small for

careful consideration. The equipment must not only be selected carefully but in the arrangement of this equipment lies the secret of the efficient kitchen. The home-maker owes it to herself to look after her workshop and it is noticeable whenever a woman's intelligence and enthusiasm have asserted themselves, the kitchen reflects more and more comfort, efficiency and beauty.

Enough cannot be said to arouse women from the characteristic endurance of inconvenience and lack of necessary equipment. The business man, for instance, would not tolerate the lack of efficiency in his place of business that the housekeeper accepts as a matter of course.

Dr. Marion L. Burton in a recent address spoke of the lessons which the year 1917 had taught us. First of the lessons he named as thrift, and he spoke quite at length of the wastefulness of the American people. The figures measuring our weakness in this direction are appalling, but it is well to face them for it is true we, as a nation, "had it coming." But along with the tremendous waste of material and natural resources is also the great waste of time, courage and hand power, and in no place is this more noticeable than in the kitchens, and very often in those of our otherwise well planned homes.

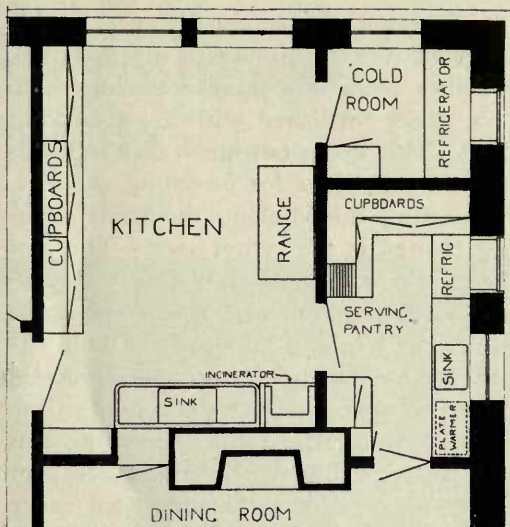
In studying business methods we quickly discover that confusion and congestion

are two things that must be avoided. Classification and a place for everything and everything in its place are secrets which every successful business teaches. These are conditions then to be especially mindful of in working out the business department of the home.

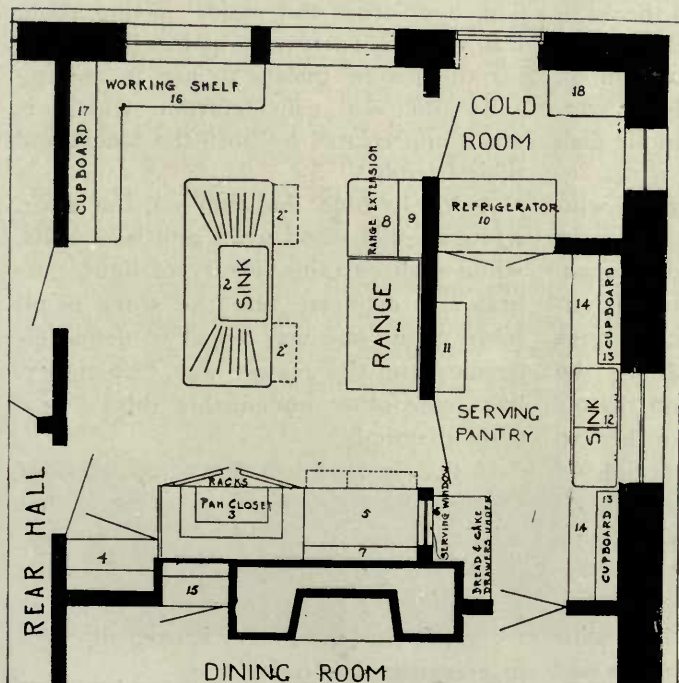
So much has been said these days about efficiency that one sometimes hesitates to know just how much the new differs from the old standard after all. Comparison has always been one way of arriving at a fair conclusion.

These two floor plans of a kitchen indicate the original plan and the revised plan as returned by the efficiency expert. The plan shows the service end of the house, consisting of the kitchen and butler's pantry, dining room, receiving room and maids' sitting room. There are many changes in the revised plan and one can easily see the reason for the changes by a few minutes' careful study.

Let us follow the changes and see if the result is not worth while. Starting from the receiving room at the rear door



you will notice the refrigerator, number 10, is placed in the wall so that it is iced from the rear but is approached from the butler's pantry. This saves many steps, as the one box can easily take care of the dining room and the kitchen. This is always advisable in a house of moderate size as it eliminates both extra care and expense of maintenance. In this partic-



KEY TO PLAN

1. Range.
2. Sink—2½ drawers.
3. Pan closet.
4. Broom closet.
5. Baking table.
6. Baking table—bins and drawers.
7. Window.
8. Shelf for spices, etc.
9. Working table, drawer underneath.
10. Refrigerator—4'x2½' filled from back and flush with wall of Butler's pantry.
11. Dish cupboards (1 ft. deep, shelves from floor 6', overhead cupboards to ceiling).
12. Sink and draining sink.
13. Cupboards with glass doors, and wooden doors for overhead cupboard.
14. Working shelf-drawers and cupboards underneath.
15. Dining room broom closet (shelf above—table boards underneath).
16. Cabinet for supplies.
17. Receiving cabinet with self-locking door.

ular instance the actual distance is also lessened over the architect's original plan. Number 18 in this same receiving room is a closet furnished with a self-locking door. This keeps out much dirt and provides a safe place for incoming supplies.

Entering the kitchen, the most striking change is the center sink. This not only gives additional wall space but centralizes the equipment. Beside the range (1) is the working table. This table (8) has a matched maple top with drawers below for spoons, knives, etc. used at the range. Above the table (9) is the salt and pepper cabinet. Here also are kept the coffee, tea, oatmeal, etc., used every day at the range. There are the two sinks, the one opposite the range for the kitchen dishes, pots and pans, and the double compartment sink in the butler's pantry for the dining room dishes. This arrangement saves many, many steps, and the breakage on dishes is always very much less, because of less congestion. Ample drain boards (14) for either side of the sink and cupboards (13) and overhead cupboards provide storage room for all glasses, decorations, etc., and the additional dish cupboard (11) at the left of pantry, one foot deep, with shelves up six feet from the floor and overhead cupboards to the ceiling, provides ample dish storage. In the butler's pantry just inside the dining room swing door is a window (6). This affords additional light for the baking table (5) and, when open, gives additional circulation of air, and enables the cook to deliver to the waitress foods for the table, thus enabling the maid to serve more rapidly and, better still, making it unnecessary for her to leave the pantry during the serving of the meal. The baking table has a marble slab with metal flour and sugar bins and drawers for mixing utensils. The cabinet (7) stores the spices, etc., used in baking. The pan closet (3) is lined with galvanized iron, has staggered hooks and

shelves also covered with the metal. The incinerator was placed in the basement, partly on account of the good space it would take from other use in the kitchen and partly for other reasons. The houseman takes the garbage down to the incinerator and takes care of it there, which seems the better arrangement in a house of this size.

There are two broom closets, one in kitchen (4) for mops, brooms, scrub pails, etc., and one in dining room (15) stores the brooms, dust brushes, and other cleaning equipment used in the front part of the house. The table boards are also stored in this closet. The silver, linen, etc., is kept in the larger buffet built for the purpose in the dining room.

In the kitchen under the rear window is a working shelf (16) which extends around on the side wall as indicated in drawings. The cupboards above and below the working shelf afford extra storage for supplies. Cutting the door in partition between kitchen and maids' sitting room makes the room much more accessible and the room more useful. The door from the maids' sitting room into the side entry way makes it possible for the maids' guests to use in coming and going—a consideration which is much appreciated by both the maids and their friends.

A lovely blue linoleum on the floor, white enamel wood work and side walls, white sash curtains, plenty of light, natural and artificial, and the story is all told. Some one was asked to define efficiency and the answer was, "Efficiency, like some other undefinable things, is a state of mind."

If this is true let's have efficiency of the best kind, for most of us know that a happy state of mind in the kitchen implies a contented household on the same principle that all business runs smoothly when the vital machinery is carefully kept in good running order.

Building with Concrete in Manilla

Anthony Woodruff

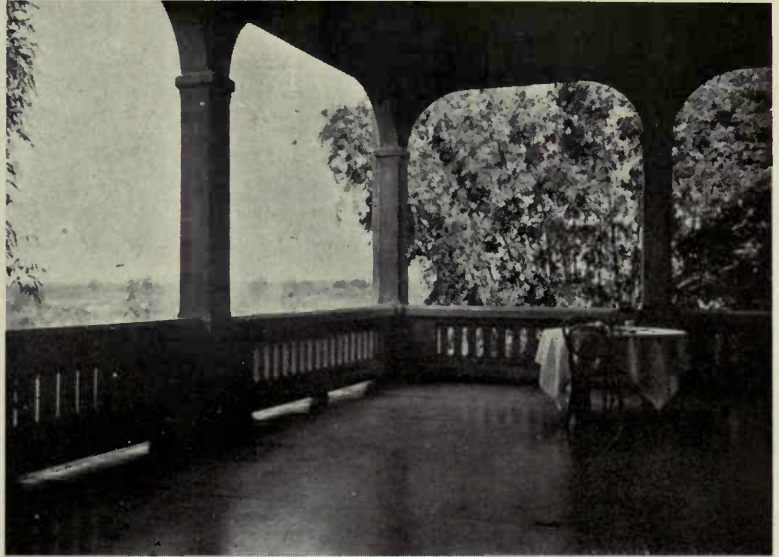


MANILLA is a city of beautiful homes and extremely picturesque surroundings; the colorful Orient, blended with the practical convenience of the Occident. The building requirements of a tropical country make special demands on building materials, and their action is observed with considerable interest. Building with concrete in

Porto Rico and the Philippine Islands seems to be giving very satisfactory results, from the reports which reach here.

Some correspondence relative to a concrete house near Manilla, published in the October Keith's, gave some very interesting data about the planning of a house in a tropical country, the materials employed, and the native hardwoods used.

Photographs of this home have come to us in the meantime, showing both the exterior and an interior view, and not only one of the porches but also the view



A dumb waiter permits breakfast and luncheon to be served on the porch.

from them, show the rice paddies with a fringe of bamboos along the San Juan river and the city of Manilla in the distance. The powerful radio towers at the Cavite Naval Station on the opposite side of Manilla bay can be seen.

The interior shows the high ceilings and airy open construction. The owner states that it was originally intended to fill the arched spaces above the horizontal beams with Venetian glass in a design of wasp wings, the bits of glass held in place by beaten metal strips. The big table



The rice paddies with the view of City and Bay of Manilla beyond.

shown in this view is of "narra," a beautiful native hardwood, much like mahogany, which takes a fine polished surface.

The porches are 40 by 25 feet and are used quite as fully as the enclosed part of the house. A dumb waiter permits breakfast and luncheon to be served here. A grand view is spread out before one as he looks from these porches.

The views of the grounds show the tropical vegetation in its glory, with a stately Royal Palm in the foreground. The grounds are lighted by electricity, using large cement poles. Below the lighting fixtures are cross arms wired for vines, and these are covered with a luxuriant growth of flowering vines, converting them into masses of brilliant color.

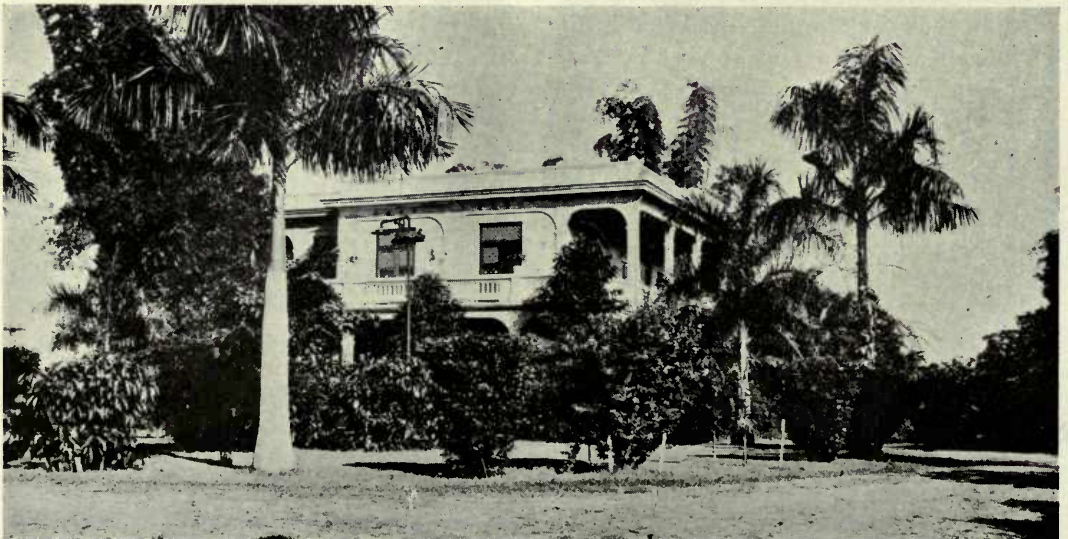
The house is built entirely of concrete,



Arches between living and dining room.

including the floors. Fine woods, used for trim and stairs, doors and windows, are the only wood work used. It has proved all that was expected of it, the owner says. During the long wet season of that climate it has been perfectly dry and the ceiling has not leaked.

Opalescent shells are set in small diamond shaped panels, according with the local custom, in the French windows.



Home of Dr. F. W. Dudley, Manilla, P. I.

A New York Study of Better Homes

THE visitor to New York during the week from May 18th to the 25th will doubtless find much to interest him and his wife in the "Better Homes Exposition," which is to be held at the Grand Central Palace at that time. This is to be a great exposition in which are to be gathered under one management all of the things which go into the materialization of a home with the avowed intention of giving assistance in the creation of the universally better homes idea, with the slogan "Better Homes Make Better Home Defenders." Comments gathered from the Recruiting Stations in the early days of the war showed the proportion of rejections

large where applicants came from poor home conditions because they were not able to meet the physical requirements of the army, though the men were loyal and patriotic and anxious to serve their country in some branch of the service.

There are comparatively few people who know what they want in the new home and how to go about it to get what they want; but a vastly larger number have the burning desire for a home without having any idea, lacking a "windfall" or unexpected bequest, of how a man on a small salary with his growing family

may by any possibility own a home, or the equity in one, where the money already put into it is safe. Business, sometimes big business works on a small proportional margin of the total investment. Only the home builder, of the business



Model Library—lounge. Better Homes Exposition.

undertakings—the aggregate of which all over the country piles up to so many figures—works individually, with little co-operation. Nevertheless the financing of the undertaking could be managed if the would-be home owner knew just what he wanted as to the details of the building of the home; but here again is a different problem. This Better Homes Exposition is an effort to co-ordinate the different problems, giving a large amount of space to the interior, the decoration and furnishing of the home and the principles underlying its satisfactory accom-

plishment. The first exposition of this kind was held at Grand Rapids and found so much interest that similar lines are to be followed in this greater exposition.

It is a curious fact that the word "home" is not associated with the elaborate house or with the abode of the millionaire so closely as with that of the humble man.

ed to the furnishing and treatment of individual rooms. Something like fifty exhibit rooms will be furnished and outfitted with carefully selected furniture under the direction of special experts. The plan is to show to the public, rooms furnished in the utmost taste and perfect harmony of color, together with explanatory lectures and talks giving the visitors an idea



One of the bed rooms exhibited at the Grand Rapids Better Home Show.

In arranging this display the range covered is from that of the home of the man with an income of a thousand dollars a year to that of the man who pays a goodly income tax.

The different units of the exposition cover the factors which must co-operate in producing better homes. Beginning with the Savings Bank and its plans of saving money toward the purchase of a lot and the building and outfitting of the home; this is followed by a consideration of a proper selection of building lots. Builders and building materials form a part of this division.

A large amount of space will be devoted

of the "why and wherefore" of the decoration. The rooms will demonstrate methods of decoration for the home, from that of the man with an income of a thousand a year, ranging upward.

Suits of model rooms will be arranged by experts each day in the presence of the visitors, and guides will escort people through these rooms.

"Popularizing art" is the term which has been applied to such talks as those initiated by that ingenious art worker, Maurice I. Flagg, Director of the Minnesota State Art Society, in the State Art Exhibits at the State Fair and given by Dudley Crafts Watson, Curator of the

Milwaukee Art Museum, with marked success for the last several years. Such studio talks for people who are not artists will be a feature of the exposition.

One division will be given over to household utilities, while another division will be devoted to educational features where in a miniature theatre will be given lectures on art in the home, home decoration, food talks, travelogues, movies of industries, talks on the designing of furniture, et cetera. There will be exhibits of landscape gardening work and materials, flowers and plants, and all of the manifold things which go into the making of a successful home.

The Domestic Science features of the Better Homes Show will be of great importance from an educational standpoint. There will be a series of exhibits and demonstrations of model dining rooms, laundry rooms, kitchen furnishings, and a number of talks and lectures. The cookery talks will be featured along war time thrift.

One of the unusual features of exposition will be found in the center of the main floor of the exposition hall. Here will be set a revolving stage with foun-

tains and scenery for a novel fashion show review with live models of men, women and children, showing the latest styles in house dresses, home costumings, service uniforms for house servants, dressing gowns and full dress affairs in costumes.

As a popular educational influence an exposition of this kind may have advantages over the museum, the school or the shop. In this respect the museum and the school fall short because they lack touch with life; the shop because it is too close to life to see beyond its sordid details.

Before American homes will be really satisfactory people must realize that "a chair is more than a place to sit, a table more than a thing from which to eat, and that a davenport has other charms than just a place to rest."

The accompanying photographs show two of the rooms exhibited in the first Better Homes Show and indicate the treatment given and the completeness with which the rooms are carried out. One could easily believe them to be rooms in the home of a friend or acquaintance. The quiet taste in which they are carried out is very attractive.

A Two-Story Brick House



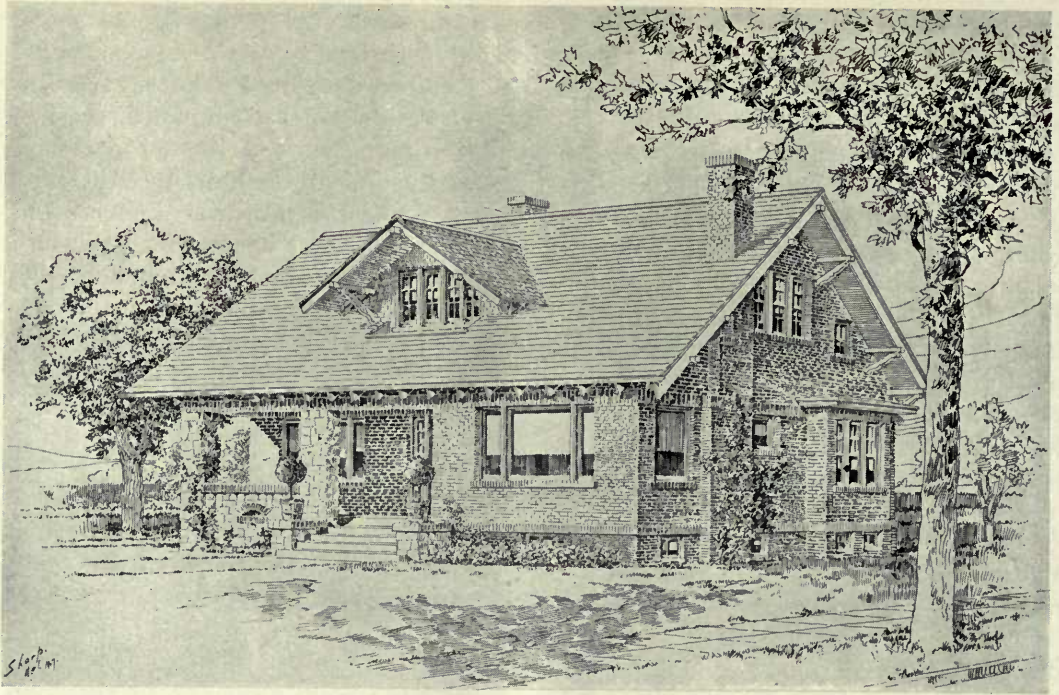
HE Hoosier State is pretty nearly the center of gravity of the wealth and population of the United States. When it comes to homes, the people are eager to adopt the best of new ideas in homes, but extremes in styles don't take very well.

For the better class of homes, the best methods of construction and durable materials are demanded. So the use of brick—"the everlasting material"—is popular.

These are the plans of a new Indiana home. There, they will very likely call it a "bungalow," even though in the Gold-

en State—where bungalow styles originate—it would be called a two-story brick house. Anyway, it is a good design and planned with many of the excellent features of both the bungalow and the full two-story house.

The outer walls are entirely of brick, except the screened rear entry which is sided up on account of the numerous openings for sash and screens. The 9-inch brick walls are "furred out" with 1x2-inch vertical strips spaced like studs for lath and plaster to keep them dry and warm. There is a 4-inch edging of brick



An Indiana Home.

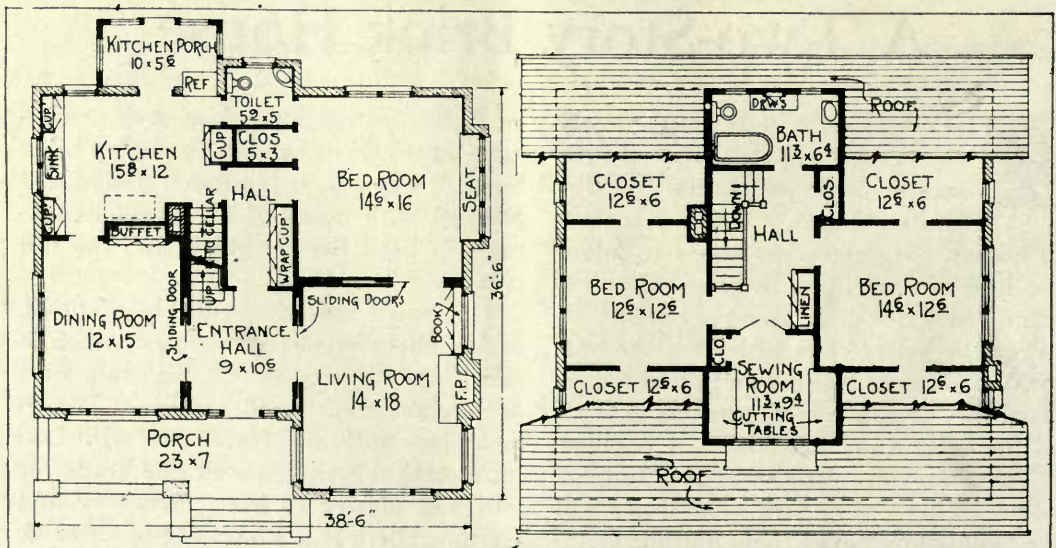
E. W. Stillwell & Co., Architects

forming a water table at the line of the bottom of the floor joists. A belt course of the same brick set on end runs all around the house at the tops of door and window openings.

Window sills are brick on edge. Porch wall copings are the same and have a ce-

ment finish on top. The principal part of the porch material is stone. The roof is shingled but has enough pitch for slate or tile if desired when building.

The owner's faith in brick is attested to by his preference for that material 13 inches thick for basement walls. The



basement is full size (exclusive of the porches). It has a small boiler room and a separate fuel room, the laundry and storage space occupying the principal part of the basement. There is an outside stairway. Basement floors are concreted and cemented.

The plans are very compact giving a surprising amount of living space in a house which is not large. There is no waste room in the central hall, yet as the plans show, every part of the house is entirely accessible through it. The living room and bedroom on one side of the house takes advantage of the space which is given to the porch on the other side. We should like to call attention to the use which is made of sliding doors. These have all the advantages of casied openings with the additional possibility of closing the opening entirely when that is desired.

This plan is so arranged that the housewife need not wear herself out going up and down stairs every time she wishes to go to her own room. The bedroom and toilet on the first floor, completely shut off from the day rooms, yet opening conveniently to them, is nicely planned and saves many steps for the woman who is both mistress and maid.

Second-story ceilings are full height with square corners in bedrooms. Closet ceilings slope but a large hinged window in each one is expected to give ample ventilation and to keep bedrooms cool. *

The sewing room has ceilings partly sloping. It is equipped with work cabinets built up solid below with drawers and cupboard doors.

It is a house that will not depreciate as time goes by, but rather will improve as time passes.

An Up-to-Date Home



MODERN home that is "up-to-date" now includes a sun parlor on the first floor and a sleeping porch on the second floor, these rooms being finished in every respect the same as other rooms and prepared for both winter and summer use.

The home here shown is 37 feet in width, including the sun rooms, and 31 feet in depth for the main part of the house. The rooms are of good size, yet not over-large. The plan has been carefully studied in all of its details,—the width of stairs, the width of doors and windows, the width of halls in the second story.

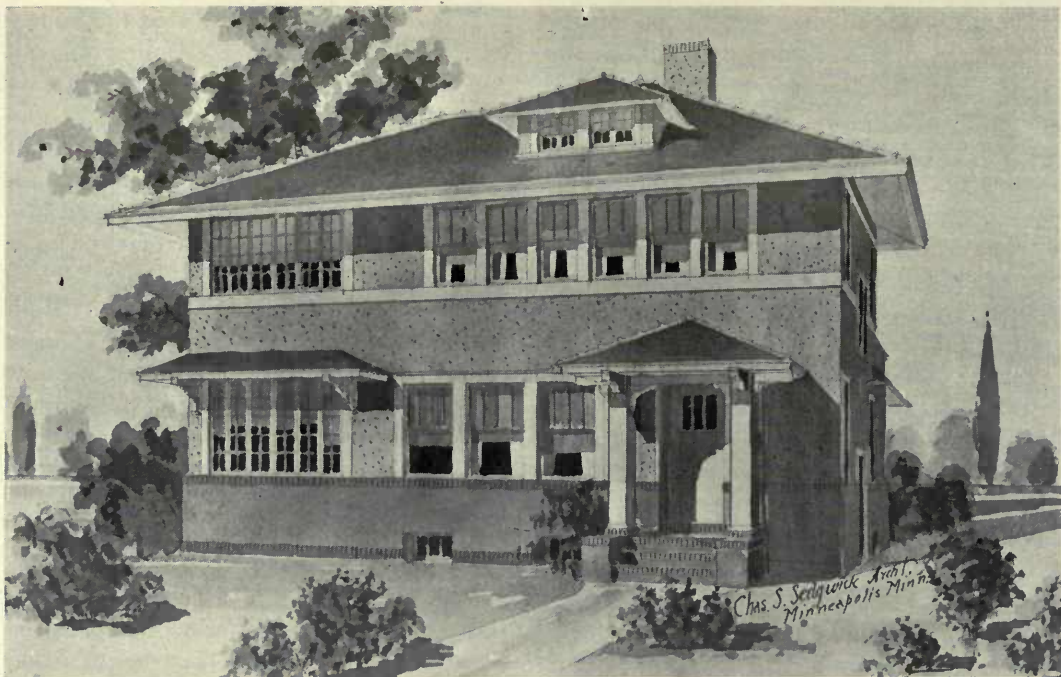
The rooms are well arranged on the main floor, with sliding doors which shut off the dining room and the sun parlor. The fireplace in the living room is so located that the flue may be used for the

kitchen range where gas is not used for cooking.

The stairs are conveniently placed at the end of the living room beside the entrance vestibule. The sliding door closes off the stairway when desirable yet conveniently pushes into the wall at other times. Many rooms are never quite comfortable in cold weather on account of the draughts in the room which are caused by an open stairway. Steps from the kitchen reach the same landing as the main stairs. The stairs to the basement are underneath.

The dining room has a built-in buffet and cupboards, and is well lighted, with groups of windows on two sides. The kitchen is well supplied with working space. The kitchen porch is very roomy.

On the second floor are three chambers and a large sleeping porch. The linen closet is unusually roomy. In the bath



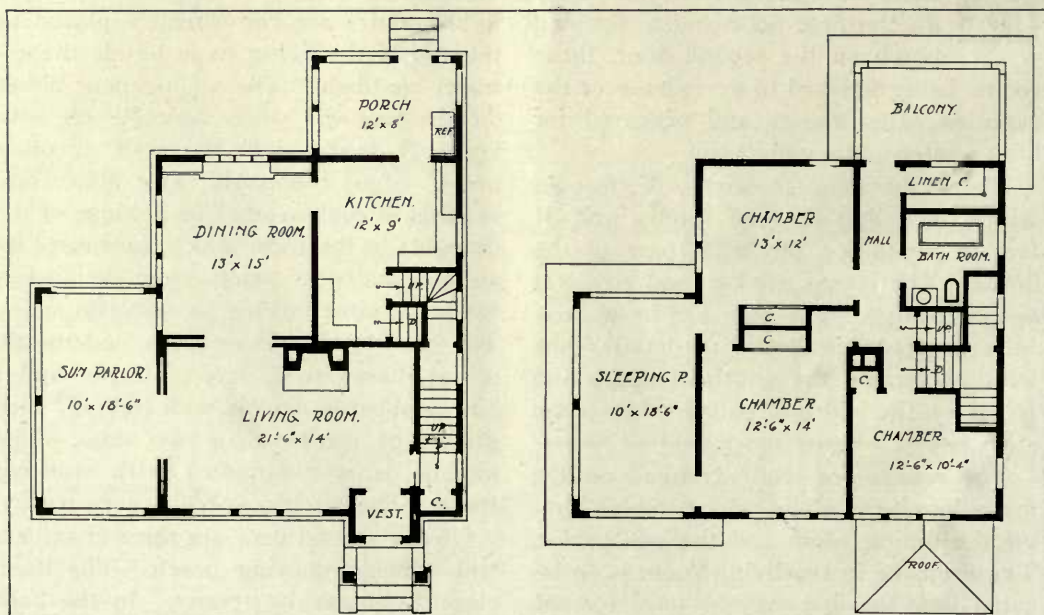
A Home with large sun porch and sleeping porch.

Chas. S. Sedgwick, Architect.

room the tub is set well out from the wall to make it easier to clean about it. An open balcony is reached from the hall.

The first story is finished in Mission oak, the second story in enamel, with floors of birch.

There is a well equipped basement under the house with concrete foundation walls. The walls of the house are of frame construction, sheathed, papered, back plastered and again plastered on the inside. From the grade level to the sill



course of the first story windows the outside of the house is veneered with a selected dark oriental brick. Above this the walls are covered with metal lath and cement stucco. The sun parlor windows are hooded.

The outside casings, cornices, et cetera, are all painted a light cream color. The

roof is covered with a dark Spanish tile, with tile hips and ridges.

Both sun parlor and sleeping porch are fitted with out-swinging casement sash, which can all be pushed to one side opening the entire space. The day rooms of the whole lower floor open well together being closed by French glazed doors.

The Decorative Quality of Brick



With brick terrace and piers on either side the entrance.

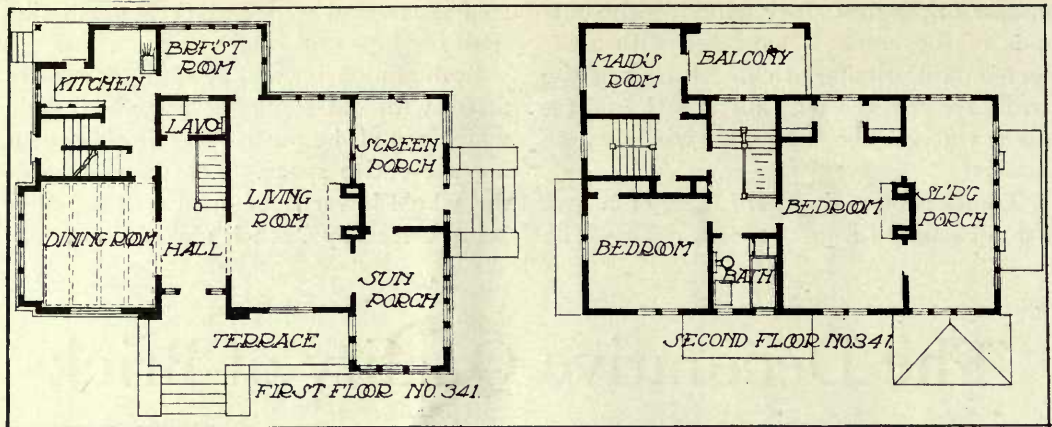
J. W. Lindstrom, Architect.

WITH the greater use of concrete and stucco comes also a greater appreciation of the decorative quality of brick and the effective contrasts and combinations which may be made with these two materials used entirely in a structural way. A tile roof is a very logical as well as an attractive feature in this combination.

The home here shown is built of brick to the sills of the first story windows, with stucco above. Brick piers on either side of the entrance have a wide panel of brick

laid "herring bone pattern," after the manner of brick floors and walks. Buttresses are carried above the hooded roof over the entrance and in this are embedded the staples holding the heavy chains which carry the projection of the hood.

The floor plan has the popular arrangement of living room on one side of the central hall and dining room and kitchen on the other side. A lavatory is conveniently placed at the end of the hall, under the stairs.



A breakfast room opens between the living room and kitchen on the sunny side of the house. The kitchen is small but with well arranged working space.

The basement entrance is at the grade under the service stairs, and this stairway connects closely with the maid's room on the second floor. A balcony over the breakfast room is reached by a door from the maid's room. This gives an excellent opportunity for sweeping rugs and dusting furniture.

The main room on the second floor is over the living room and has two roomy closets cleverly arranged on either side of

the window group. This bedroom has the luxury of a fireplace and the long sleeping porch is reached by doors, one on each side of the fireplace, making an ideal suite of rooms for either living or sleeping, in both summer and in winter.

Two porches open to the living room on the first floor. One which projects the width of the terrace is enclosed with glass and becomes a part of the winter home. The other is only enclosed with screens and gives an entrance from the side.

The terrace wall is built of brick and is carried to the same height as the other brick wall of the house.

Hollow Tile and Brick

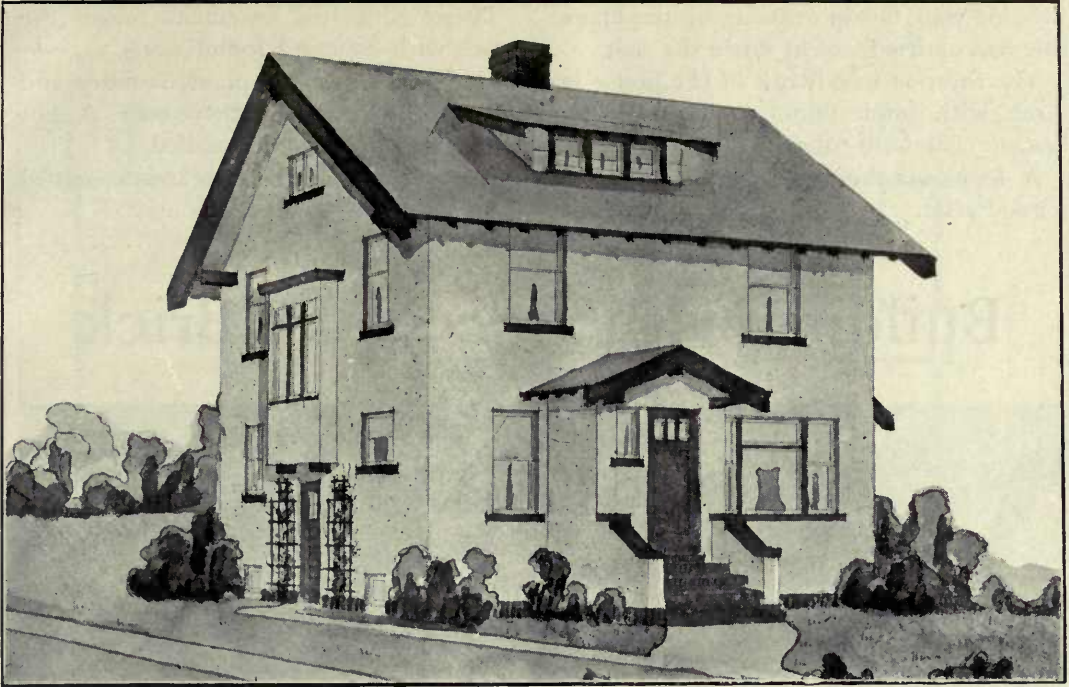


THE design illustrated shows a square house on simple lines using hollow tile for the exterior walls, with brick window and door sills and for the rail and steps, as well as a soldier course at the grade. This touch of color together with the stain of the shingle roof gives life to the design. The living room is very attractive with its wide bay, and corner fireplace. Sliding doors close the opening between the living and dining room. A den is located off the living room, and has built-in bookcases.

Beyond the dining room and opening from it by a French door is the sun porch, which may be used as a dining porch during the warm season.

The stairs are closed from the living room and are accessible from either part of the house. A door at the grade level on the landing of the basement stairs is also the kitchen entrance.

On the second floor are three large chambers each with ample closet space, good wall space, each well lighted and ventilated, while on the rear over the sun porch is a large sleeping porch. The bath

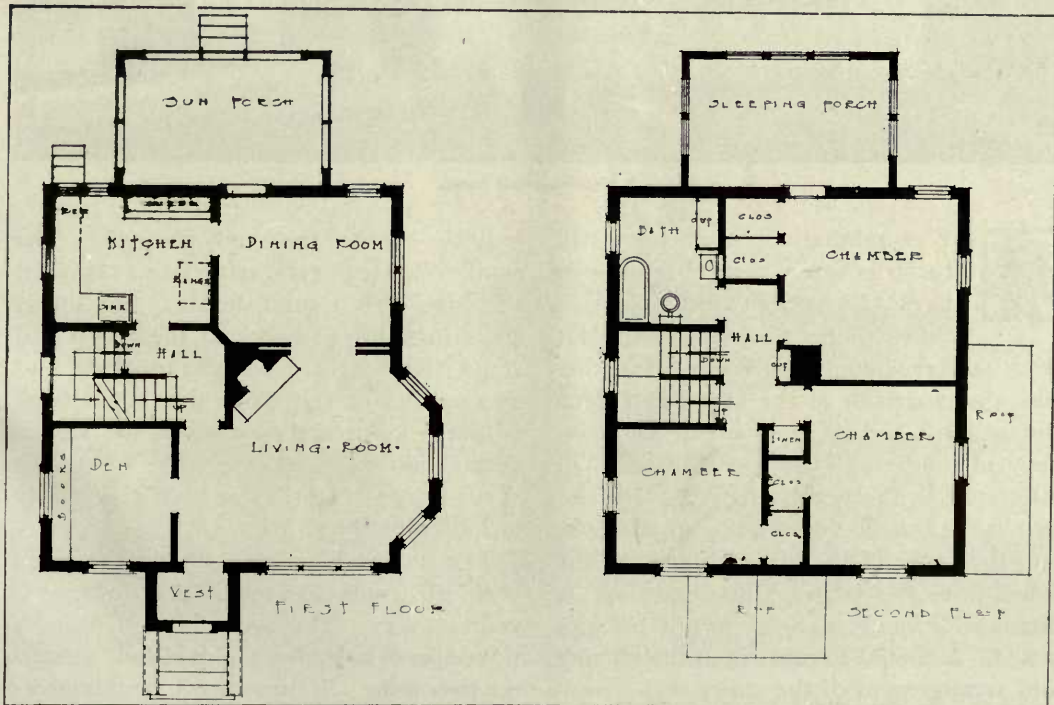


Brick gives a touch of color.

W. W. Purdy, Architect.

is large enough to have a linen cupboard built in.

The exterior shows the stair landing projected, thus breaking the bareness of



the side wall, but in drawing up the plans this was omitted, to cut down the cost.

The interior woodwork of the house is birch with birch floors throughout the house. The bath room is tiled.

A door over the main stairs leads up to a good attic.

There is a full basement under the house with concrete foundations, accommodating the heating plant, laundry and storage, fuel and fruit rooms. A hot water heating plant is installed.

A small garage in the rear is designed to be in keeping with the house.

Building with Stucco and Brick

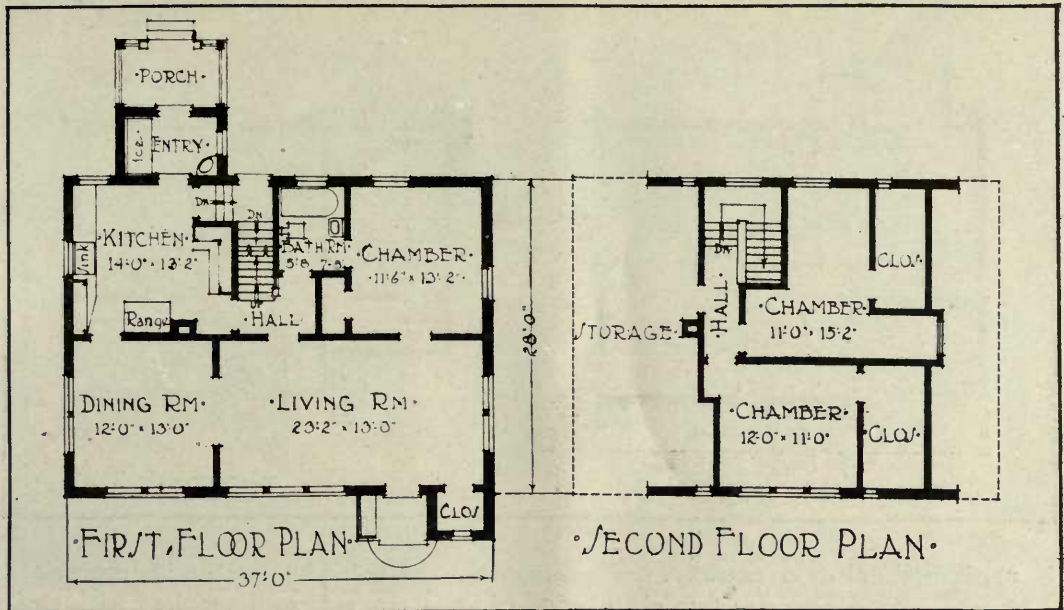


A pleasing small home.

THE combination of brick with stucco is often very charming in effect. From the exterior the two homes here shown would not seem to have much similarity, nevertheless a comparison of the first floor plans shows a marked likeness in the arrangement of the living rooms. With two feet difference in the width of the houses and five in the length, yet one is a small house and the other of the larger type. At the same time the larger house has not so much additional space as might be supposed. A chief difference is in the placing and arrangement of the stairs.

Both homes are well planned. The smaller house is very attractive as is often the case with a small house. The bit of color in the brick work of the porch and steps, the line of color at the grade and at the sills of the windows, in contrast with the color and texture of the stucco surface is very agreeable. The simplicity of the lines and of the entrance give a note of individuality.

The entrance is into the living room with the coat closet beside it in a convenient way. The room is well proportioned and has pleasing window groups on two sides. It has direct communica-

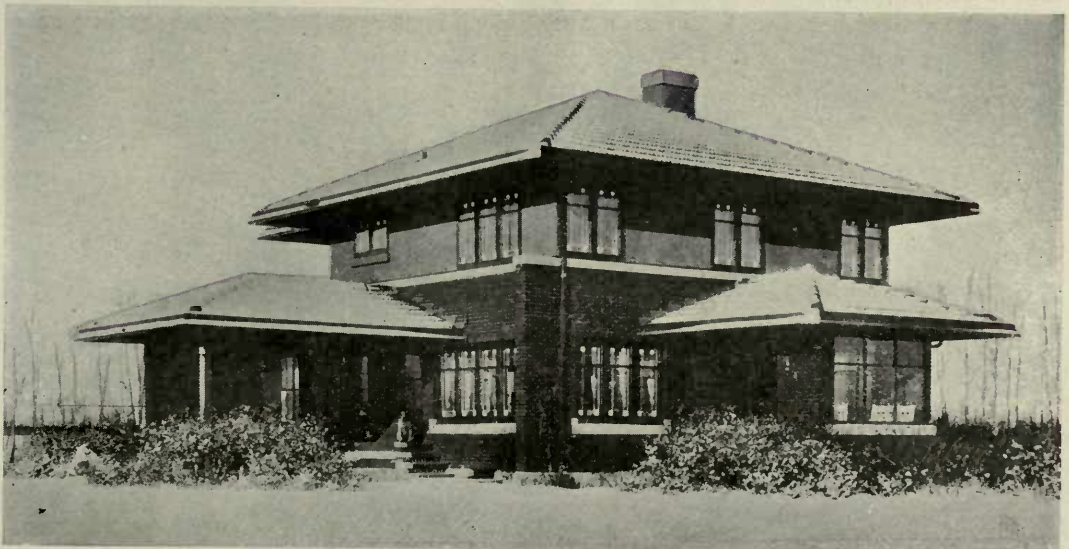


tion with all of the other rooms. The dining room has a wide opening connecting it with the living room. This might be closed by sliding doors if especially desired, and many housekeepers like to be able to entirely close off the dining room while the meal is in preparation.

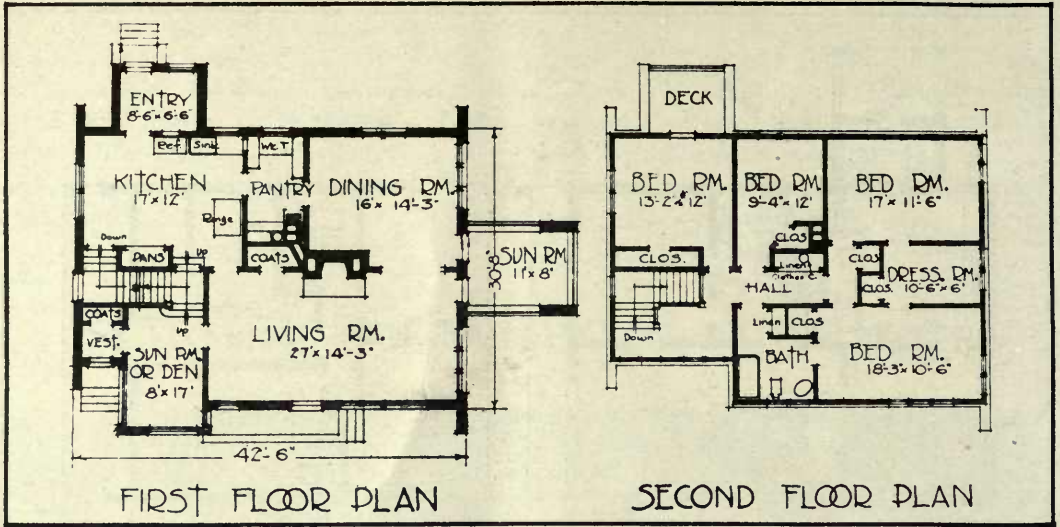
The bedroom may be entered directly from the living room or through the little

hall and bath room. This hall also gives communication to the kitchen and the stairs.

The kitchen is compactly and conveniently arranged with ample cupboard and working space. The refrigerator is in the rear entry and here is also a conveniently placed lavatory basin. The grade entrance from the basement stairs



Built of brick with a frieze of stucco.



is used for a kitchen entrance as well.

On the second floor are two chambers with windows in the gables and closets and storage space under the slope of the roof.

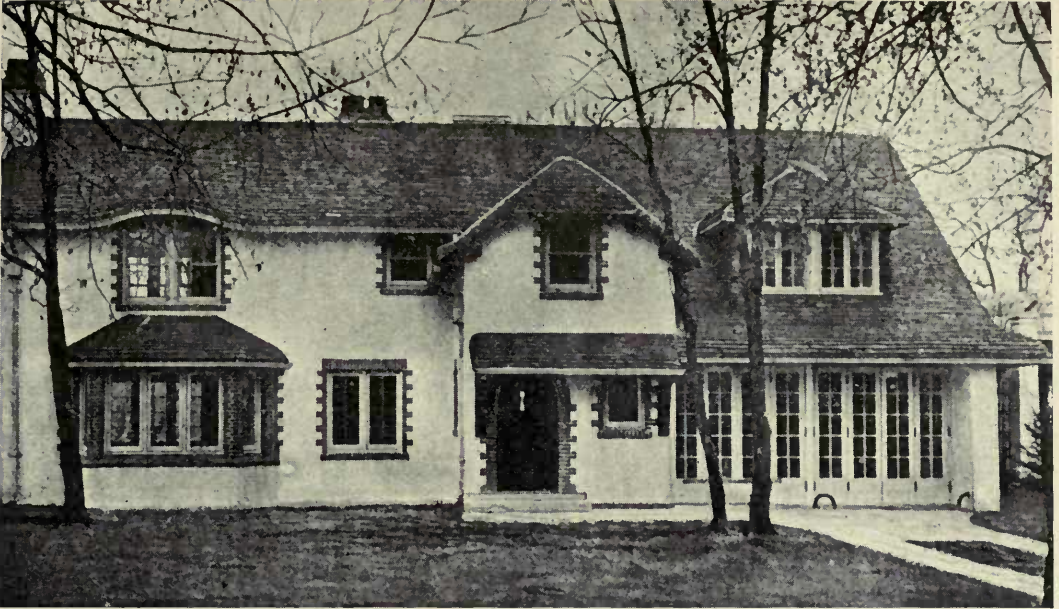
The large home has in addition to the usual rooms a den beside the entrance and a sun room which opens from both the living room and the dining room by French doors. There is a fireplace in the living room and good closet space. A pantry stand between the dining room and kitchen and the stair landing room may be reached from either the kitchen or the front of the house.

On the second floor the bedrooms are of good size and well supplied with closets. A dressing room connects the family rooms. All are well supplied with windows. A deck over the rear entry is reached from one of the bedrooms.

The house is built of brick up to the sills of the second story windows, with a sill course of cement or stone, and stucco above. The roof has a wide overhang, and being built of tile is very effective.

Between the brick piers which carry the roof of the porte cochere is a seat built in and surrounded by the planting as a garden seat.

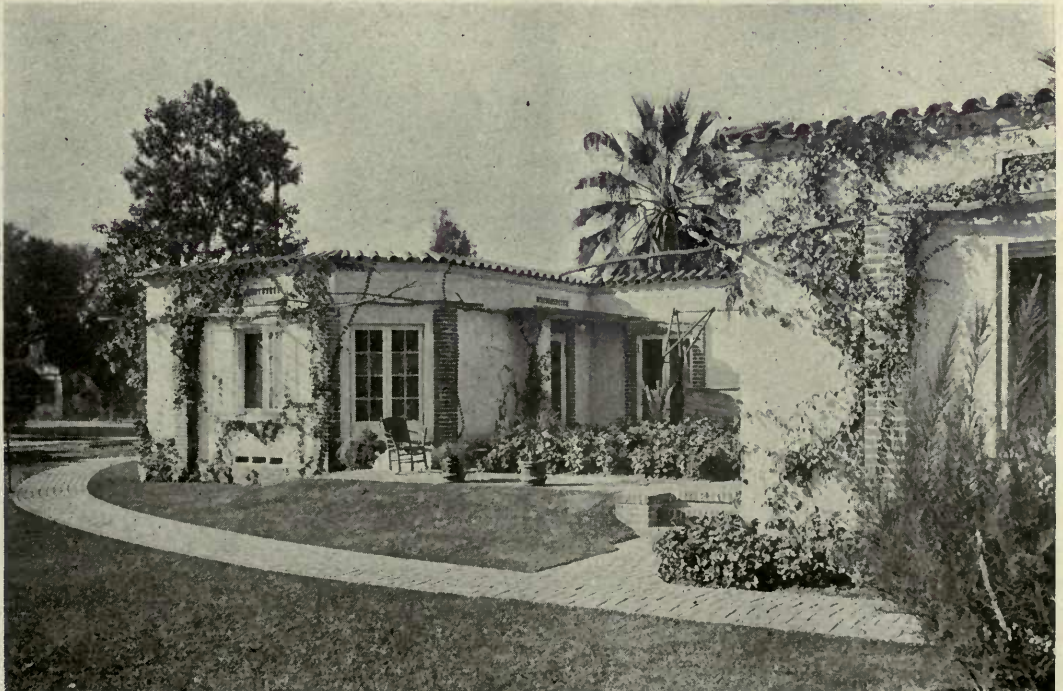




Courtesy Creo-Dipt Company

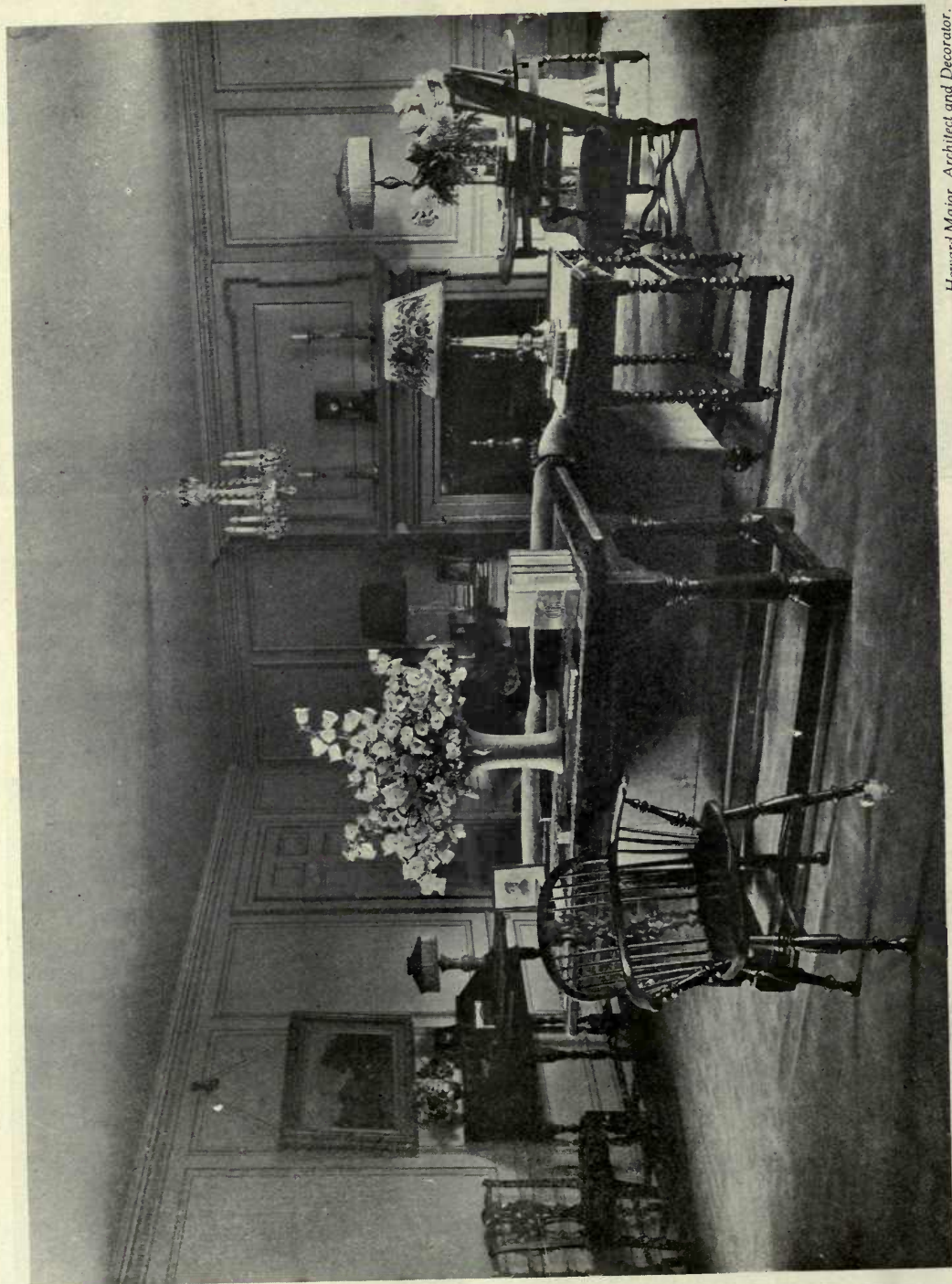
Chatten & Hammond, Architects.

Brick arches over openings, brick jamb and mullions for a group of windows and brick piers give a practical solution of construction problems in building with hollow tile, and also with stucco over frame construction—Perhaps no combination of building materials has greater possibilities.



Maryland Cottages, Pasadena.

Myron Hunt, Architect.



Living room in the Christopher D. Smithers house, Glen Cove, Long Island, showing admirable arrangement of furniture.

Howard Major, Architect and Decorator.



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Living Rooms and Libraries

IT would seem unnecessary to make a distinction between libraries and book-rooms, for a real library is always a book-room, but of late the word "library" has lost its original significance, and is often used interchangeably with "living room." The average house does not contain sufficient space for a book-room pure and simple, and the tendency has been to combine the sitting room with the library, a plan which has both advantages and disadvantages. There is an undoubted charm to the well-appointed living room with books, pictures and comfortable furniture and if it does not have to serve many other purposes will meet the requirements very well. The living room has grown to be an expected feature of the modern house and here the architect not infrequently does his best work.

If the decorator is equally successful the color scheme is quiet and restful, and the room is probably the most attractive of the house; but it cannot be called a book-room, and "library" is usually misapplied. If the room has but few books, say low, built-in cases on either side of the fireplace, the word "living room" is more appropriate. Where bookcases extend around the entire wall and the atmosphere is one of books, "library" might be used, although in the average house this room will also be the living room.

Whether the room has few or many volumes there are several distinctive features, and as it is the part of the home used most by the family it should be worthy of the decorator's best efforts. In the well-designed house the architect has given every assistance to the decorator, and if the latter does not err, the room cannot fail to be attractive, unless marred by the unfortunate final touches, which many householders consider necessary. There is really very little to do, for the architect has done so much. The well-designed trim, usually in the form of a high wainscot, the generous fireplace, often extending to the ceiling, and the built-in bookcases, occupy most of the wall. There is not much space to be decorated, and the simpler it is treated the better.

Where the trim is oak, the ceiling beamed, and the fireplace of brick, sand-finished plaster furnishes a satisfactory wall treatment. It suits the living room as the more dainty wall coverings do the drawing room, and provides a consistent background for the simple, sturdy furniture necessary. Such treatment makes many pictures superfluous. In fact the room is better for their absence unless few in number and carefully selected. Pictures and prints suit well the atmosphere but they should be made of secondary importance to the books. If there are

INSIDE THE HOUSE

many prints, a plain paper or textile makes a better background than plaster, which, by reason of a certain largeness and simplicity, is most effective when rather bare.

Northwest rooms receive a steady light from the north all day, and a strong light from the west in the afternoon. The colors should be warm but not bright, also the room will seem garish at a time when most in demand. West rooms are comparatively dark in the morning and well lighted in the afternoon. A morning room facing the west needs quite a different

treatment from a living room facing west. What would make one cheerful and cozy would cause the other to be too bright. If a living room with a western exposure is shaded by a piazza it can take a fairly warm tone, for nothing so successfully cuts off the sun as a piazza, a fact which has practically doomed the long veranda.

The present tendency in decoration is to avoid strong tones in large areas but to use bold colors in small quantities. Southwest rooms usually need cool color schemes for here the sun is fairly strong in the morning and powerful in the after-

noon. Color treatment in relation to the amount of light received in a room is a broad subject, and all such suggestions must be general, unless specific rooms are under discussion. Broadly speaking, rooms finished in dark wood need stronger tones than rooms where white paint or light woods are used, but there are many exceptions, notably the successful combination of unstained plaster with dark oak. A beautiful living room is recalled where the trim is Circassian and the furniture old Italian walnut. On the walls is an oil stain of warm ivory color. Old rose curtains, and rugs in which old rose is the principal color, form the strong color-notes.

In a Colonial living room an old landscape paper is sometimes a good selection, particularly if the bookcases



Living room in the residence of Cornelius Bliss Jr., Westbury, Long Island.
Where the book shelves are sunk in the paneling.

INSIDE THE HOUSE

are low, and the paper is regarded as a decoration in itself and not made a background for pictures. Some of these old papers are in two tones of gray, others are more brilliant and require plain curtains and comparatively plain rugs. The rugs for a library are usually deeper in coloring than those selected for a drawing room for the whole scheme of color is in a lower key. A rug lighter than the walls will throw the room out of scale, and it is well to remember the old rule that the floor should be darker than the walls, and the walls darker than the ceiling.

In a room where the trim is white built-in bookcases should be white also. Detached cases of mahogany are harmonious in a library done in Colonial style. Sometimes a high, old-fashioned bookcase of mahogany proves interesting in a room where low built-in cases are white. Placed between two windows, or where to balance a door, it usually helps the proportions of the room. When finished with traceried glass a fitting storing place for fine bindings is at hand. Such a piece of furniture is particularly useful where rare books must be considered, for built-in bookcases are often without glass doors. If there are many books, and the locality is a dusty one, glass is necessary for protection, although the charm of the open shelf admits of no dispute. There is something very intimate and personal about shelves filled with volumes in reach of every member of the family, but the bindings often suffer from dust, heat, and dampness, particularly from heat, which is one of the great enemies of bookdom.

Where a library is constantly growing, sectional cases have many desirable fea-

tures, and there is no question of the protection that this type of case gives. Great improvements have been made in sectional designs, and it is now possible to buy bookcases which conform to all styles of interior trims. The old criticism that



Desk in an old fashioned living room in New England.

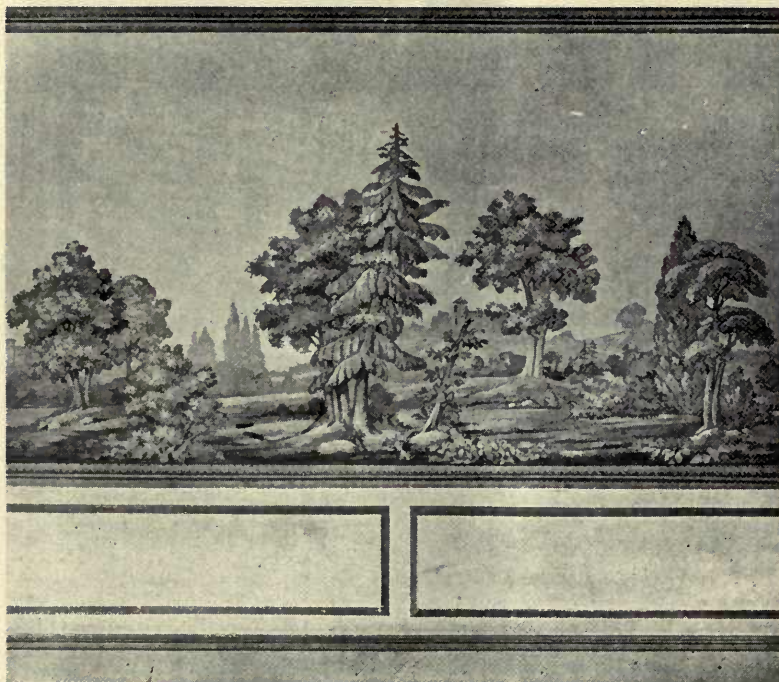
they were unnecessarily deep and consequently took up a great deal of room does not hold good now, for the improved type is of admirable proportions and of fine execution.

The low built-in bookcase has been a great fad in this country, but its popularity is now diminishing. A scheme growing in favor is to sink the shelves in the walls, and, if the room be paneled, to

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place the shelves in such a way as to add to the architectural beauty. Frequently when a real book-room is desired the shelves are built flush with the walls, and if the books are not of sufficient number to line the room the additional space is paneled. Sometimes these panels are

if the shelves balanced a fireplace or a group of windows, an additional beauty would be gained for the room. Architects delight in planning such schemes and would doubtless be glad to depart oftener from cut-and-dried traditions if clients would lend co-operation.



Courtesy of the Robert Graves Company.

"Arcadia" scenic paper in shades of gray and sepia.

made with doors which can be removed at any time as additional shelves are needed. Rooms of this character have a dignity which it is not possible for the living-room-library to achieve. While more costly in the beginning, the extra outlay is justified if the number of books warrant the scheme.

In a real living room, the space on each side of the fireplace could be filled with shelves built flush with the walls, or one end of the room could be thus treated, and

What the living-room-library walls should contain besides books depends on the extent of the wall space and the taste of the owners. It is seldom in the decorator's province to plan the pictures. This is sometimes fortunate, sometimes otherwise.

If the walls are hung in grass-cloth, buckram, burlap, or other plain covering, an excellent background is provided for photographs, prints and engravings. Where low bookcases extend around the room, a print collection looks very well strung along the wall, above the cases. Black-and-whites are particularly effective thus treated. A good many prints can be used in this manner without marring the quiet of the room. After the books are in place if a few big things are added, such as a beautiful picture, a decorative bas-relief, a really fine piece of bronze, little more is needed. The books in their colored binding are part of the wall treatment, and this fact should be taken into

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consideration in planning the room. They provide a strong decorative note and if the walls above are crowded with pictures the rooms will appear restless in spite of the good work of the architect and the decorator.

An English writer says: "One invariable condition to be observed of interior

wall surface, is that they keep their places as backgrounds for humankind and for the furniture and other objects requisite for human needs. Walls in a word should never be allowed to obtrude themselves into greater prominence than strictly belongs to things accessory and subordinate."

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.

MARCH is a month of bargains whether one seeks linen, rugs or furniture. Owing to the delay in shipments, many of the new linen designs are just appearing on the counters.

Ireland is suprisingly well represented, considering the many difficulties in the way, while never have Madeira and the Philippines loomed larger in the linen industry than today. For many years the delicate cutwork of Madeira has been steadily growing in favor, while importations from the islands of the Pacific show an increasing gain. Japan's part in the linen output continues in importance, and China, always more conservative, is well represented.

Japanese linens are often embroidered in that semi-realistic maner of which the oriental is complete master. Luncheon and tea cloths, tray cloths of all sizes, doilies and center pieces may be found in an extensive variety. Special sets of china



Painted tray in light olive green, pale orange, yellow, and old blue.

are sold in some of the Japanese shops with which to accompany each pattern. One large importing house, famous over a long period of years, for the quality of its Chinese, Japanese and East Indian goods, shows linen of charming design and texture, also fine oriental cottons.

In Irish linen the large square cloth designed for a round table is still a favorite. The main border of the cloth is circular

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and woven to outline the table-edge. Some of the new patterns are "shamrock," "lilac," "narcissus," "shamrock trail," "ivy" and "Canterbury bells."

Among the most expensive of the luncheon cloths are those of Italian filet.

kind—the latter being very attractive in its refined simplicity.

The step from tray cloths to trays is a short one and quite logical. Wicker trays for light weight china, and wood and lacquer for more serviceable wear, may

be seen in many of the shops. The painted specimens, if well done, are always effective and, when not in use, form an agreeable addition to sideboard or serving table. Many and varied are the decorations found on some of the painted trays. A particularly good example is illustrated. Here the colors are very pleasing, being an agreeable harmony of soft olive green, yellow, pale orange and old blue. Cretonne, chintz, printed taffeta and wall paper are used as a



Courtesy of Minnet & Co.

Larchmont set of willow so designed as to take up little room.

In one shop, where linen importations in all lines are a specialty, a luncheon set of Italian cutwork with inserts of filet was noted. The main cloth, twenty-seven inches in diameter, with twelve round doilies eleven inches wide, and twelve of six inches, bore the price mark "eighty-five dollars"; while a luncheon cloth of the same size in Madeira cutwork, accompanied by half a dozen doilies of ten inches each and half a dozen of six inches each, carried a tag labeled twelve dollars. Each set showed very fine work of its

basis for the "framed" tray, which, in its various phases, has made use of pressed leaves, butterflies, sea-weeds, milk-weed pods, and old fashion plates.

It is none too early to pick up good things in furniture with an eye to the porch, living room, or bed-chamber. In wicker there are many interesting things which are made with compactness as an objective point. The "Larchmont" set is a case in point. The chairs when not in use slip under the table and are scarcely noticed. For the porch or for an informal

INSIDE THE HOUSE

corner of the living room the "Larchmont" would be extremely useful. A decorative cretonne is used for upholstery and adds a dash of interesting color.

Many good remnants in printed fabrics may soon be secured. Some of these are expensive importations which cannot be duplicated at present. In French cretonnes a beautiful forest design was noted in which pine boughs and oak branches interlaced. Another suggested an old tapestry with heavy foliage borders through which a distant landscape appeared. In chintz an old Kent design, reproduced by the hand blocking process, showed poppies and other English field flowers on a white ground. Kent designs have long been famous and this is a characteristic example.

Leon de Chasse, writing in *House and Garden* on draperies and upholsteries, gives valuable information. Among other things he says:

"In many ways our domestic silk goods equal the foreign importations. The taffetas, satins, reps, armures and damasks made by some of our best domestic mills are so like the fabrics made abroad that it is hard to distinguish between them.

"The weave and the texture of the goods is a far more important matter than the origin. In taffeta, for instance, it will be advisable to discard the thin, loose woven, stiff article, with its 'papery' feel. The best drapery silk will be the soft,



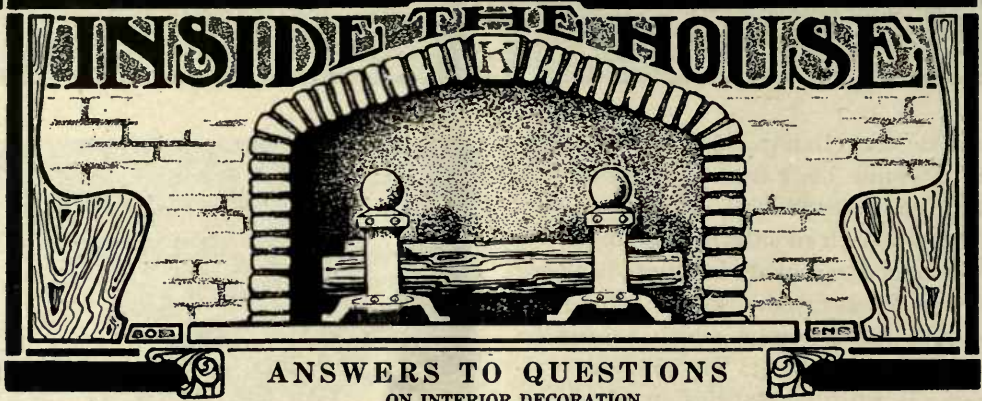
English chintz, printed in Kent from blocks fifty years old.

closely woven taffeta which will not split or break as the stiffer ones do.

"Much the same can be said of the drapery satins and the reps. See that the face of the satin which you select is closely woven and that the heavy cotton cord or filling of the rep is well covered with silk.

"The cotton armures and their numberless variations have proved excellent drapery fabrics, especially for rooms of a light character—boudoirs, bedrooms and so on—and even the most inexpensive have given satisfactory results. It is noticeable that cotton generally holds a dye better than silk; and for that reason, if no other, the mercerized and cotton armures are splendid fabrics to use in a seaside or country home."





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.

Building the Color Scheme.

J. S. F.—I am sending a plan of the house into which we are moving soon. I am in doubt about the color scheme for the three front rooms which open into each other respectively: Den, living room, and dining room. Would they not be better finished in the same color scheme with the walls all the same? At present the den is in pea green; the living room in light yellow or warm tan and the upper part of the dining room the same, with the lower part in red burlap. We expect to have these walls re-tinted but may have to leave the burlap. I will use a rug I already have in the dining room—a domestic rug in oriental coloring. The thing which I want to have decided first is the kind of rug to get for the living room to use as a plain background for small oriental rugs and figured upholstery. The rug I have in mind would be very effective for this one purpose but am afraid I can not figure out a color scheme for the entire room which would harmonize with it. The rug is very effective in gray and black and would make a splendid background for my Sarouk rug which I want to use in front of the fireplace and around which I want my main furniture group. But I don't know whether to build my color scheme around this rug or merely use it as a bright color note for the room with possibly a rose colored pillow on the davenport and a decorated floor lamp.

Ans.—It would indeed be better to carry out the same color scheme in the three

rooms as you say. If you keep the burlap it would be well to paint it light tan color so as to have all the walls in tan, almost ivory, then your rug colors will look well.

The Sarouk rug in black, rose and light old blue would give a lovely color-scheme. Would you be afraid to use a black carpet as the back-ground? They are very effective and popular. Then use the rose pillow and somewhere two blue ones. Don't use any mulberry but keep to the salmon rose. It is the complement of the blue which is doubtless a greenish blue. I should have both lamp-shades in the salmon rose.

For the upholstery a striped velvet with the rose, blue and black, if it can be found or a mixed and perhaps changeable material. The design, if there be one, must necessarily be a very indefinite one.

In addition to net at the windows, I should use thin silk curtains of the blue or the salmon. Madras is not used as a furniture covering as it is too thin. Damask is used for both large and small pieces of furniture, also satin in plain colors. The laquer lamps are very lovely and the shades as I suggested of salmon. The same would be good for a Chinese vase if it could harmonize with the color, or would blue be better?

We feel that the table mats made of a silk velvet and printed or painted with the various colors of the room in conventional all over pattern make a satisfactory summing up of all the color notes in the room and they can be made to exactly fit

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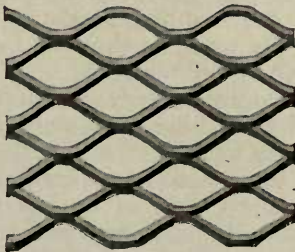
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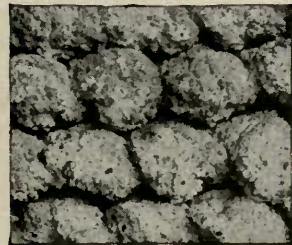


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INSIDE THE HOUSE

the table. Sometimes stitches are put in to brighten the design.

For the "den" how would you like a chintz to cover the English chairs and the wicker ones, and then you will not need to use the slip covers. Paint the wicker chairs in black and any other color you wish to emphasize in the chintz.

I would have a stuffed chair to harmonize with the davenport, being careful not to have too many differing styles of furniture.

Why don't you curtain your casement window as you wish and then use the same material at the middle window with the heading at top only and with ring and pulley so that you can draw them aside when you wish?

French Doors or Portieres.

H. F. M.—On the enclosed sketch you notice the opening to dining room and also to porch. Are these too close to have French doors alike to each? We had thought of simply leaving an opening into dining room for hangings, but would, of course, prefer doors. Are plate-rails considered as good for dining rooms as formerly?

For years I have had the tans and browns for dining room and living room, and feel that I would like a change.

My living room rug is Wilton in beautiful shades of green, ivory, tan and black, the effect of all, green. The wood work will be oak, fumed finish. Do not like green walls. My dining rug is Wilton in tan and rose. All furniture for both rooms is fumed oak and brown wicker.

Ans.—I should prefer the two sets of French doors in dining room and porch as the hangings would be rather meaningless and the doors more constructive. Plate-rails are very, very seldom used now unless in the exceptional case of completing a particular plan or as a rare means of making the room appear less high. The walls would be lovely in old ivory like the rug color and then use bright green gauze silk curtains and cover the furniture with tapestry or striped velvet, using some black with a little gold or bright green like gauze curtains.

In the dining room use rose gauze curtains at windows and French doors. With portieres between the two rooms use the gauze on each side the color of the room with interlining between. The davenport with velour or tapestry and one or two chairs of the same would give a dignity to the room and a good finish.

To relieve the brown color you could have the wicker furniture painted black or ivory enamel with the color of the curtains picking out certain parts of the construction and with cushions to match the curtains in color.

Oak Finish.

H. W. L.—I would appreciate some suggestions from you on interior decorations. The house faces the west with sun parlor on the south and dining room north.

I had planned the wood work in dining room and living room in natural oak; the walls in the living room to be done in tan, and dining room walls in blue. Would you suggest paper or flat tone paint? The sun room wood work I wanted in a silver gray, would that work out well, and what color would you suggest for the walls if gray is used on the wood? The rooms are paneled with the exception of sun parlor. Would you suggest a different color for vestibule? I had thought of having tan up the stairway and into upper hall with the bedrooms in different colors.

Ans.—As you are planning for natural oak finish in the living room, and dining room, they would be more beautiful if you have a dull rubbed finish allowing the grain of the wood to show its beauty. In the dining room with the blue wall-covering, it would be very distinguished if you had a little blue stain put on and rubbed directly off so that a little blue would settle in close to the silver flakes of the grain and crevices of the trim and then the whole dull finished and rubbed down with wax and ground pumice.

Paper on the walls gives a more hospitable appearance and is more durable than paint. The silver gray stain rubbed in and then off and dull in finish would be

INSIDE THE HOUSE

very good for the sun room, with walls a shade lighter and still gray. Then for cushions and furniture covering any plain bright color you like best or you can use chintz with many colors in it.

The tan up the stairs seems to be the only way to rightly extend the living room color. The vestibule could be in a bright orange color for it is small and jewel-like in proportion to the other rooms. Keep the wood-work in the natural dull-finished oak, however.

Turkish Rug as Color Key.

B. F. C.—Will you kindly send me suggestions for treatment of wood work, walls and ceiling, curtains and cretonne covers for davenport and one or two chairs for a room 15x15x8 and bow windows about 3x6. Exposure on all sides. Furniture is mahogany with a Turkish rug, old blue with dull rose and orange designs, shades dark green or white. Wood work at present is painted dark green and we do not wish to go to expense of burning or scraping it or putting on several coats of paint.

Walls and ceiling are to be painted with a dull finish paint and we may use a cut-out border if advisable. Walls must be light, as the room is not very light when shades are drawn half way.

Ans.—Taking your Turkish rug as a key-note, we would suggest old blue as a predominating tone in the plain over-curtains, using chintz for shades. The chintz should have a feeling of blue and could also show ivory, a little rose or yellow and if possible a little mahogany color. Have the wood work ivory and the walls a little deeper tone of the same. The ceiling lighter.

For the New Home.

C. F. H.—I have been a reader of your magazine for some time and recently I became a subscriber and must say that it is an interesting and fine magazine to have.

We have bought a little home, a sketch of which is herewith enclosed and we will be very grateful to you if you will give us your idea as to how we should decorate it, in wall treatment, wood-work, furnitures, curtains, etc.

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INSIDE THE HOUSE

The furniture in the dining room will be fumed oak.

Ans.—With fumed oak in the dining room we should advise using orange colored draperies, with a tan neutral toned wall-paper or paint if you prefer the latter, though, of course, it is much colder in feeling. The rug would be tan and brown with notes of orange and the woodwork a stain about like the furniture only a little lighter.

In the living room by way of contrast you could use blue green in curtains with walls of gray and woodwork stained darker gray by two shades, leaving places where the stain seems to settle in a distinct or opaque tone of gray like marble dust. The furniture might be gray willow with cushions of the greenish blue having a design of gray or a background of gray and the figure the green-blue.

The bedroom would be ivory enamel woodwork and furniture with chintz having gay flowers and birds. And the kitchen in yellow as to walls and draperies, with pale yellow woodwork and furniture.

Curtains and Hangings.

C. C. D.—Enclosed you will please find floor plans of our new home and will you kindly give me some suggestions?

The house faces East. The dining room will be finished in gum wood, finished Circassian, and the living room in natural oak. The dining room will be paneled and the rug will be Persian in the dining room and has tan, green and rose in it with a touch of black.

The living room furniture is fumed oak and rugs are not selected. How would you treat casement windows in dining room? What kind of draperies? How would you treat French doors between living room and dining room and the one leading to back dining porch? We have on hand green window hangings.

Ans.—The curtains for the casement windows in the dining room with the Persian rug of tan, green and rose, should be thin gauze silk in rose the tone of the rug, or a net, but the color would be prettier.

Use the old green hangings in the living room at the regular windows and at each end of the group of casement windows with net on the casement windows themselves. Use net on the living room side of the French doors and next to the glass on all windows. On dining room side of the French doors use the thin rose silk.

To Lay Linoleum in Cement.

M. P.—Will you kindly advise me about laying linoleum on my kitchen floor. I should like to have it laid with cement.

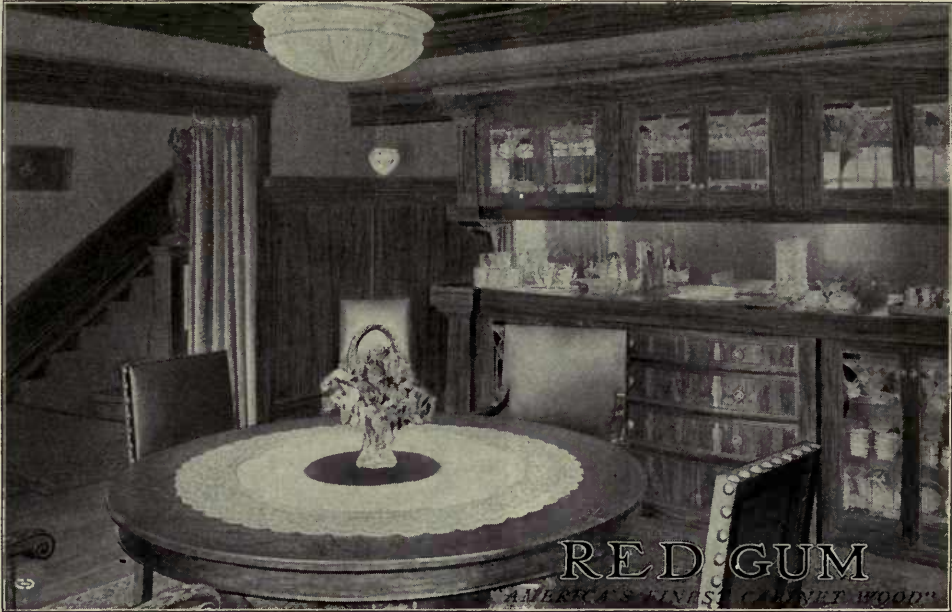
Ans.—It is hard to find a material, even the most costly, which is better for the kitchen floor than linoleum, properly laid in cement. It may be laid over the present floor.

Cut linoleum to fit the room on all sides, letting each strip, if there are more than one, overlap each other about one inch. Raise the quarter round or shoe around the wall so as to allow the linoleum to run under and be covered by same, allowing about one-fourth inch from the wall for expansion. Let the linoleum lay in this manner about a week before the final trimming and cementing. It is a good plan on wood floors to tack the linoleum in front of doors with a small brad to keep from breaking the trimmed edges. When linoleum is ready to cement, raise the under piece so as to overlap the upper one, this giving a fresh edge to cut to and trim by running a sharp linoleum knife along the edge of the top piece. After a perfect fit has been made, raise the linoleum and give the floor quite a heavy coat of good water-proof linoleum cement and place linoleum and roll down with a lawn roller, or if the room is small, it can be pressed down and weighted with brick or sand bags. It is a good plan to weight the edges along the seams in any event, to insure good, tight seam so as to prevent the water from getting under the linoleum.

It requires about one gallon of linoleum cement to ten square yards of linoleum.

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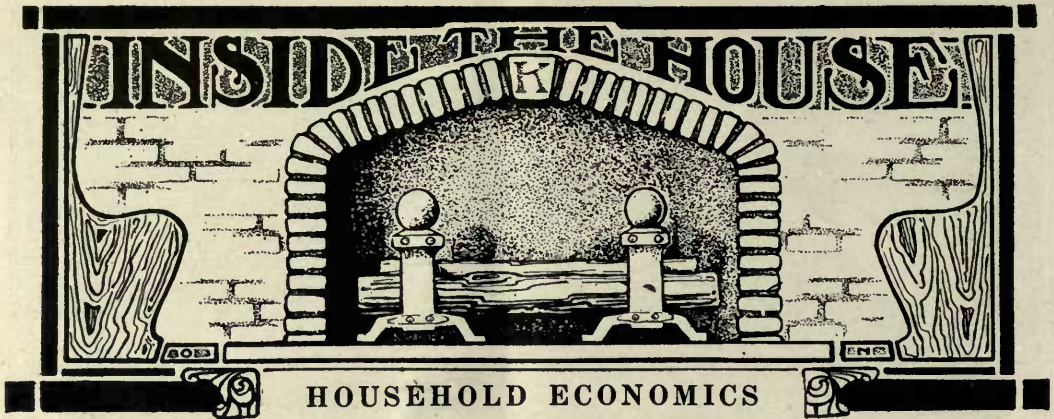
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My Grocery Box

Sarah Spencer

MOST housewives, I suppose, have been annoyed by having a nicely cleaned floor tracked up by the grocery boy on a rainy day. My trials of that kind have passed with the building of my grocery box.

I think there is no class of magazine that I enjoy more than I do those on house and home building, and a well designed floor plan affords me as much

pleasure often times as a musical poem. But I always study plans with an eye to doing work conveniently, systematically and as to saving both time and energy. Quite frequently a seemingly very beautiful plan turns out to be not at all beautiful, because it is not efficient. Because there are so many more housewives that do their own work, I am more interested in the little home than the big one, and I am sending this description of one of the conveniences which I have worked out in my own home which may suggest a solution of some other housewife's problem.

By actual measurement my grocery box is twenty-six inches long, by thirteen wide, by eighteen deep. The length was determined by the back porch extending out that much from the corner of the house, and that particular space was chosen because it was closest to the kitchen and would lessen steps.

I had the carpenter take two twelve-inch planks for top and bottom and cut the ends eighteen inches long. These were nailed together and braced on both sides, top and bottom by strips three inches wide. These hold the box in shape and furnish a place to put on hinges and hooks. The doors are swung from the top and a hook and staple fasten them at the bottom. The box is fastened to a post and the wall.

The bottom of the box is thirty inches



The Grocery box and the delivery boy.

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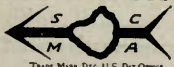
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INSIDE THE HOUSE

from the floor on the inside and fifty inches from the ground. These heights I find are very satisfactory as almost any boy large enough to deliver goods can reach the box from the outside conveniently. If one's house should set higher some device such as a platform or steps would have to be made.

I find the box a labor saver in many ways. I can put my groceries away now when it best suits me and not simply to clear a space for work. And as the squirrels and jay birds are very numerous here I find the box saves in another direction. If I want to leave the house and go away before the things come in I can, with perfect assurance that they will not be eaten and scattered about by my little neighbors.

After the box is explained, almost all the boys co-operate very willingly in using it. Sometimes a new boy will take it as a personal affront, but he soon understands about the birds and the squirrels and so falls in line.

I had mine painted the color of the house so it is not objectionable in looks. Most women are enthusiastic over it and any carpenter can make one.

For my family of four and a maid mine is quite large enough. A sack of flour weighing twenty-four lbs. may readily be placed in it: and other articles besides.

Salt to Sweeten Grape Fruit.

During the recent sugar shortage it was discovered that salt on grape fruit gives it a fine flavor. Tree ripened grape fruit, such as begin to come from Florida in December, is often preferred without any sweetening at all. Honey, maple sugar or syrup, cane sugar or syrup also make a good sweetening for this fruit. Try putting salt on your grape fruit, and then add sugar as you want it.

America's Four Armies.

If this war is to be won, we shall have to put several armies in the field: The *army of soldiers* in the trenches, making of their breasts a rampart for free government and free men; the *army of food pro-*

ducers in the furrows; the *women's army of food conservers*, beating back the flank attacks and the rear attacks of the world-old camp follower of war—famine; and the *patriot army of civilians in the business and political worlds*, fighting against disloyal greed, unpatriotic partisanship, perverted personal ambition, and economic treason to the Republic.—*Carl Vrooman*, Assistant Secretary of Agriculture, before American Bankers' Association.

Castors.

Have everything which needs moving frequently put on castors. If these are not easily adjusted, use the little metal, sliding shoes which may be driven in with the stroke of a hammer. Glass or wooden castor cups will save heavy articles of furniture from marring the hard wood floor when they are moved. These can be bought in sets at a house furnishing store.

Around the Kitchen.

When dusting doughnuts with sugar place doughnuts and sugar in a paper bag, close the top with the hand and shake well. The result will be perfect and very little sugar will be used. The doughnuts will be covered evenly, a dozen at a time.

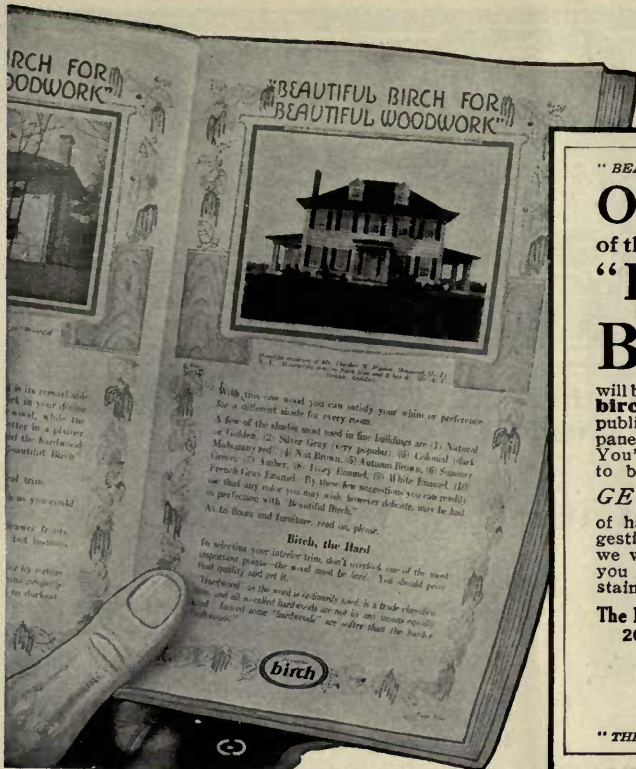
When baking pumpkin or custard pies take a long strip of cotton cloth, about an inch wide, and bind it around the outside of crust when pie is ready for the oven. The crust will keep its shape and will not be easily scorched.

When baking beans put a pinch of ginger in them and they will be much more easily digested. The ginger will never be detected.

Use denatured alcohol on a soft rag for polishing mirrors or pictures. It makes the process much shorter than when soap and water are used.

Keep a small washboard from the ten-cent store in the bathroom cupboard to use when washing out a few small articles. When there is a baby in the house it is invaluable.

Common laundry starch wet with cold water will take out all traces of iodine stains and will not injure fabric or color.



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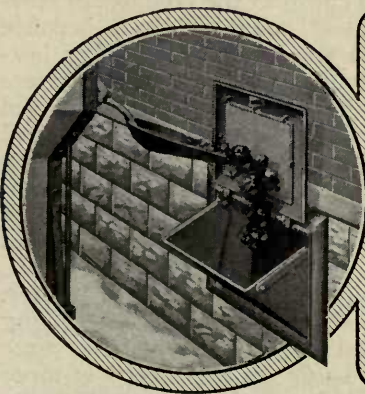
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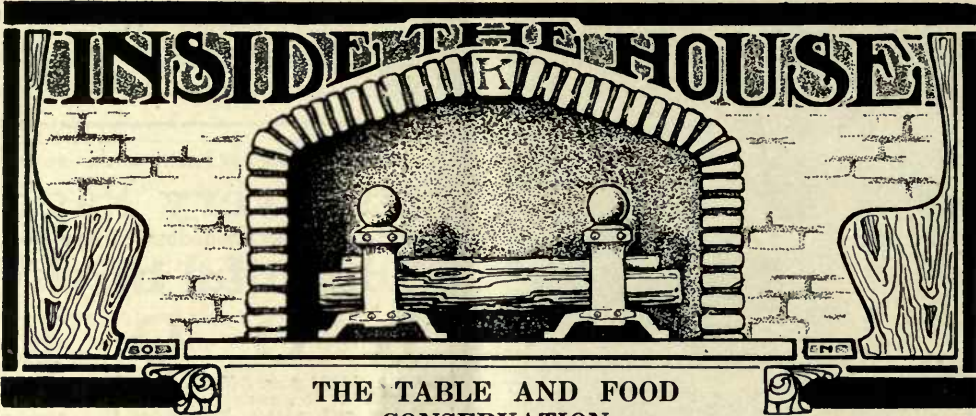
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Team Work and the Food Supply

*It ain't the guns nor armament
Nor funds that they can pay,
But the close co-operation
That makes them win the day.*

*It ain't the individuals
Nor the army as a whole,
But the everlastin' team work
Of every bloomin' soul.*

—Kipling.

THERE is a simple problem in arithmetic: Given a shortage of a million tons, which we will call for convenience 2,000 million pounds. Divide this among 100 million persons, and by the 365 days in the year. The result, which is almost a negligible quantity in this instance may be multiplied by a shortage of many millions without putting any hardship on this country if everybody does his bit. More than this the country is ready to stand a bit of hardship to help win. But it is the "everlastin' team work" which will win the day, both on the other side and here. A farmer sees a grasshopper eating in his meadow with little concern. He even sees a little cloud of them rise as he walks through the grass and it is a trifling matter. But when thousands, hundreds of thousands of these insects start to eat their way steadily through a field the devastation is immense. It is team work that does it.

If the American people had continued to eat and waste as usual there would be

little food for the allies, even though a thousand people here and five hundred in some other places worked and denied themselves to the uttermost in the cause of conservation. It is the team work "of every bloomin' soul" which is necessary to win the cause.

Nothing has been so great a set-back to the Allied cause as the collapse of Russia; and Russia collapsed,—not because the Germans were pressing on her borders, but because her people at home were not fed. The Russian trouble started with bread riots, it came because she had failed to organize and feed her own citizens. We cannot risk the collapse of another of our Allies for lack of food, while we are holding or using more than we need.

Organization is the crux of the matter, and the Food Administration is giving more detailed instructions as the time goes on; and this greater detail is more than welcomed by the housewife. To many families bread is indeed the staff of life. How to make bread, good bread, using as little wheat as possible; using no wheat at all when she finds a way is one of the greatest problems of the housekeeper.

The Food Administration has been testing the flours made from other grains and the rules which give the best results and these have been made accessible as far as possible to the public, both through bulletins and through widespread publication.

"Know the grim truth; All the blood, all the heroism, all the money and all the muntions in the world will not win this war unless the Allies and the people behind them are fed."—A War-Food Message.

INSIDE THE HOUSE

A Barley Campaign.

In many localities barley is a local product and may be milled and used without transportation. It is now being milled with special reference to its use for bread. For that reason the barley flour which one gets is much sweeter, or does not have the bitter taste and is not so dark as that of last summer even. To many people barley bread seems to come nearer taking the place of wheat than other grains. In baking powder biscuits no wheat flour is necessary or it may be used "fifty-fifty." Barley may be substituted for wheat flour in rules for cornmeal muffins where some flour is needed to bind the corn and keep the bread or muffins from crumbling.

Barley and rye may be used interchangeably in some rules, while in yeast bread equal parts of rye and wheat flour may be used.

Barley Baking Powder Biscuit.

- 3 cups barley flour or 1½ cups white flour and 1½ cups barley flour
- 1 cup liquid
- 4½ tablespoons fat
- 6 teaspoons baking powder
- 1 teaspoon salt

Corn Meal Muffins.

- 1 egg
- ½ cup sugar
- 1 tablespoon lard or equivalent in fat
- 2 teaspoons baking powder
- 1 cup flour
- ¾ cup corn meal
- ½ teaspoon salt

Milk enough to make a batter.

Melt the fat in the muffin pans and pour the excess into the batter. Bake a light brown.

Bran Muffins with Raisins.

- 2 cups of health bran
- 1 cup flour
- 1½ cup sour milk (buttermilk)
- 1 teaspoon soda
- ¼ cup molasses

Raisins or nuts or both

Mix dry ingredients, add sour milk and molasses, raisins or nuts. Put in muffin pans and bake slowly 35 minutes.

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M. L. KEITH

742 Metropolitan Bank Bldg., Minneapolis, Minn.

INSIDE THE HOUSE

Barley and Rye Bread.

Saving wheat is, after all, our greatest problem. Some people can eat vegetables and to a large degree cut out the use of bread or omit it entirely from certain meals. But these people are the exception. Most people must have bread, and its texture and color has much to do with the satisfaction which they find in their food, and therefore with its real nutritive value to them. Barley and rye do not require so much wheat flour as do the meals.

In the rule which follows $6\frac{3}{4}$ cups rye flour and $6\frac{3}{4}$ cups wheat flour may be substituted for the barley and wheat flour.

Barley Yeast Bread.

- 3 cups liquid (milk and water)
- $1\frac{1}{2}$ tablespoons sugar
- $1\frac{1}{2}$ tablespoons fat
- 1 tablespoon salt
- 1 cake yeast, compressed or dried, softened in some of the liquid
- $3\frac{1}{2}$ cups barley flour
- 7 cups wheat flour

Directions for Making Yeast Barley Bread Using Compressed Yeast. Soften the yeast in some of the liquid. Combine the ingredients as for wheat bread. Mix into a dough. Knead and let rise to double its original bulk. Knead again and put into pans. When again double in bulk bake about 45 minutes.

Using Dried Yeast. Make a sponge over night with 1 cake of dried yeast, the liquid, and part of the flour. In the morning mix into a dough with the remainder of the flour and knead. Let rise to double its original bulk. Knead again and put into pans. When again double in bulk bake about 45 minutes.

Rules for yeast bread made from corn meal, oat meal, and rice, were given in the August number of Keith's, under the title of "War Bread—Save Wheat."

Conservation Desserts.

Satisfying the American "sweet tooth" is one of the problems. Rules for a "sweet," as the dessert used to be called in English hotels in the tourist days, in

which little or no flour, butter, and sugar are used have been studied, and a few are given below.

Cornflake Macaroons.

Whites of 2 eggs, beaten very stiff, with a pinch of salt

$\frac{1}{2}$ cup sugar

2 cups corn flakes

$\frac{1}{2}$ cup of shredded cocoanut, or more.

Drop with a teaspoon on "buttered" or oiled tins and bake in a slow oven for 20 minutes.

Date Crumble.

2 eggs, whites and yolks, beaten separately

$1\frac{1}{4}$ cups of dates, seeded and cut

1 cup of English walnuts (or any nuts) broken in pieces

1 cup sugar

$\frac{3}{4}$ cup flour

2 teaspoons baking powder

Spread in a sheet in a shallow pan and bake in an oven which is very hot when the batter is put in and immediately tempered to a slow oven. Bake about 25 minutes.

This may be used immediately, cut into squares and served with whipped cream; or it may be kept like fruit cake, crumbled on a dessert plate and served with whipped cream.

Marshmallow Pudding.

1 pound marshmallows, cut with scissors

1 pint of cream, whipped stiff

1 cup of blanched almonds, chopped

Candied cherries, cut in two

Mix together, put in a mold and keep in a cold place two or three hours before serving.

Bulletin: Milk for Children.

The only food which can supply practically all of the needs of the body are milk and eggs. For babies, milk is, of course, the most important food. An interesting pamphlet on "Milk as a Food for Children" will be ready February 15th, and will be sent to any address free of charge. Write to the U. S. Children's Bureau, Washington, D. C.

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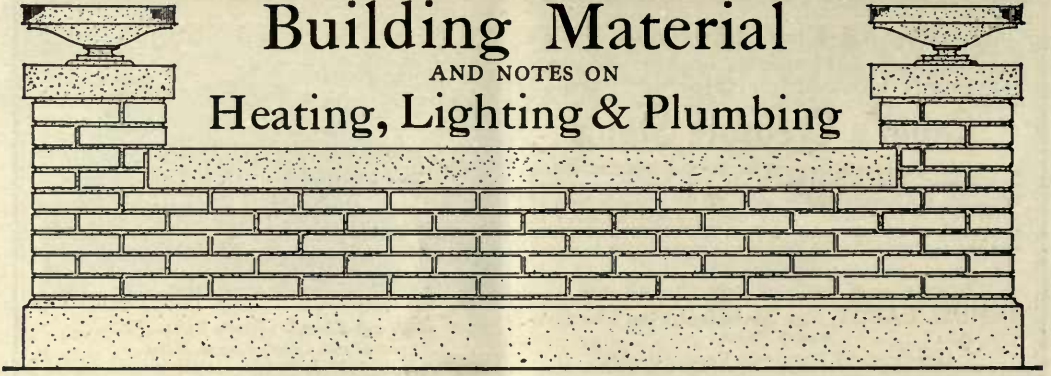
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Building Material

AND NOTES ON

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Is the Concrete House Practical?

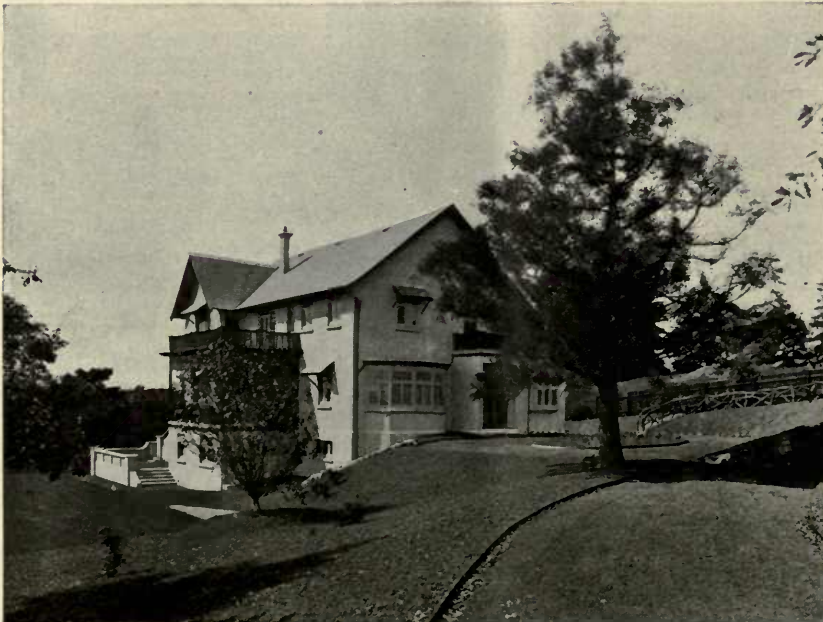
FEW people have any idea of the possibilities of concrete, either from an economic or from an artistic point of view, in its relation to the home builder. As a people we do not know the plastic material nor how to use it as did the old mission builders, and the Spanish cathedral builders in Mexico in the times of the early Missions of the Pacific coast. Concrete has been used in Porto Rico for bungalows with wonderfully attractive results. Homes

have been built there with 4 and 6 inch reinforced concrete walls, generally one story, in the true bungalow spirit, carrying wide sweeping roofs. Tile is introduced into the surface and trellises and vines are used with charming effect.

The difficulty is that most people are not thinking in terms of concrete when they design. One could hardly expect a design which had been selected or decided upon, irrespective of the material of its construction, and then changed so that it

could be built of concrete, to be a preeminently successful example of concrete work. The designer must be thoroughly familiar with his material and its possibilities, and its strong points, also how best to utilize them. The builder must know his material and what will be its condition some years hence. The workman must know how to handle his tools.

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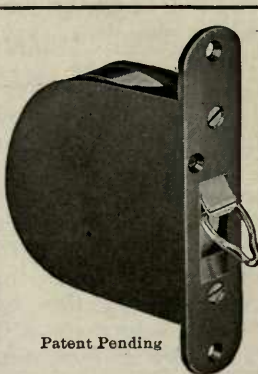


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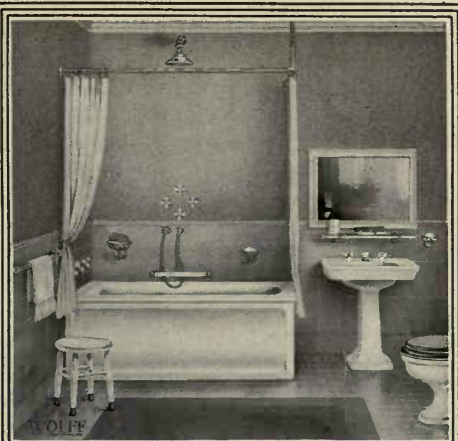
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parts of the country, notably Southern California, very successful work has been done. A reinforced concrete house with precast walls was shown in October. The various types of concrete construction are being developed in many places.

The architect of the great Immigrant Station at Ellis Island, New York, Wil-

struction. The slab thickness between the concrete beams is 2 inches. Beams are 8 inches deep, spaced 20 inches on center. The house has a shingle roof and the walls were furred for lath and plaster.

There are many individual touches about the house which are both unusual and interesting, especially the wood finish and ceiling

beams. The living room, hall and dining room are all finished in chestnut paneling, which extends from floor to ceiling, stained a deep brown. For the second floor construction, the forms were made of heavy chestnut plank laid over heavy wood beams all rough-sawed; the concrete floor slab was put over this but the wood framing and beams were left as a finished ceiling, all stained a deep brown like the side wall paneling. The effect is very pleasing. Hardwood floors have been laid over the cement slabs, except in the kitchen and



Two views of William A. Boring House, New Canaan, Conn.

liam A. Boring, built his own home of reinforced concrete, though much of his work is being carried out in brick and stone. Two views of the house are shown. The walls are 9 inches thick in the first story, 7 inches in the second, and 6 inches in the third, with reinforcement, generally of $\frac{3}{8}$ inch rods 24 inches on center. The partitions are of concrete 6 inches and 4 inches in thickness. Both walls and partitions are poured by the use of steel forms. The floors are of reinforced concrete of the floor tile con-

servants' quarters, where the floors have been left a cement finish.

The exterior walls have a rough stucco finish of white Portland cement and sand. Other buildings including the garage and cow barn are also of poured concrete.

Concrete construction has been used for buildings on the Thomas estate in Virginia for some years. The "Wall" cottage which is shown, is one of the numerous concrete cottages on this estate.

This cottage is 25 feet by 25 feet, out-



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side dimensions and contains six rooms. The walls are 12 inches thick for the first story and some of the cottages have walls 6 inches thick and some 8 inches thick above that level. The concrete for this construction is as described as similar in process to other work on the same estate where a thin, very wet, mix of concrete was

used and a large quantity of crushed field stone embedded in the mixture.

It was found that with thick walls, where it was possible to bed a large amount of field stone in the concrete, it was just as cheap as thin walls which had to be heavily reinforced.

The forms were handled in such a way as to use two tiers of forms, or a total form height of 4 feet, and pour one tier a day. The lower forms were taken off each morning and swung up on a frame so that they were handled together in long strips and in the new position were filled again. Thus the two tiers alternated every two days. The concrete was handled in wheelbarrows to 4 feet above grade. Above this height pails were used as far as the second floor level, the pails being handled in wheelbarrows four at a time and taken to different parts of the building and passed up to the tops of the forms by hand. Above the second floor level the pails were hooked to a grapple four at a time and raised to the form level by a drum on the mixer. They were then carried by hand. No staging was necessary, as the floors followed the walls, nor was any staging or outside scaffold used in handling the forms. In both cases the exterior stucco finish was put on about 60 days after the walls were up. The stucco is very thin, in some places not more than one-eighth of an inch thick.

A report from Auckland, New Zealand,



"Wall" Cottage at "Huntland", near Middleburg, Va.

says that the use of concrete by the farmers of New Zealand is increasing rapidly. It is used in making all kinds of farm buildings and appliances and is found very satisfactory. The local cement works are able to supply the demand with a very good product, and but a small amount of special brands is imported.

The first illustration shows the \$20,000 home of the former Austrian consul in New Zealand. The house is built of concrete block with plaster applied direct to the inside block surface, and stuccoed on the outside.

We wish to acknowledge the courtesy of CONCRETE, both for the use of these and other cuts and for their ready co-operation in the preparation of material relating to the use of cement and stucco.

Asbestos-Cement Sheets for Roofing.

A plant has been established at Bold, near Widnes, Lancashire, for the manufacture of asbestos-cement sheeting, plain and corrugated. It is claimed that the product will be of special value in the work of European construction when the war is over.

This form of roofing was invented 20 years ago, and the process of manufacture has been improved recently so that the common fault of lamination, a tendency to peel, no longer exists, and it is said that the tops of the corrugations are as strong as any other parts of the sheets.

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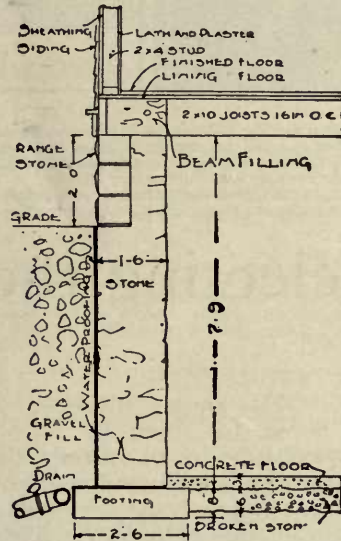
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(Fig. 6)
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WOODS

AND

HOW TO USE THEM



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.

Selecting the Wood for Interior Finish

NO ONE knows, until he builds a home for himself, how many problems of an entirely different nature he will meet, and how each of these are inter-related with the others. No one problem can be left until the others are settled, because the latest one is likely to unsettle the first, so the experienced ones plan the whole house, even to the finishing of the interior woodwork and the furnishing of the rooms before the work is actually under way. Suppose, for instance, my-lady sees a new piece of furniture which she must have in her living room. It is the very latest thing and upsets her first idea for the finishing of the woodwork. The new finish which she decides upon is better upon a different kind of wood. With the other wood a different treatment in the hall seems advisable, and this in turn influences the type of design for the front entrance—possibly makes it Colonial. A Colonial entrance is in keeping with a certain type of exterior treatment, and the whole design is modified, by the purchase of one piece of necessary furniture.

When the house is planned the furniture should be placed, drawn to scale on the plan, the color scheme and type of furniture decided upon before the working drawings and specifications are completed.

As the modern house is built the woodwork of the rooms, to a certain extent dominates the room. Its treatment sets the key for the decoration and prescribes, within limits, the type of furniture which may be satisfactorily used.

"Finished in hardwood" or "finished in oak" is often given as the slogan of quality when a house is placed for sale, as a fine wood calls for good workmanship. With the growing popularity of painted furniture comes a painted finish for the woodwork and in the better class of work birch or a hardwood is sometimes used under paint. So the old classifications are lost. A painted job may be a very expensive job, with its fine wood and many coats of paint and enamel; while simple ways have been found in the finishing of a hardwood to show the beauty of the grain and enhance the natural color while giving the beauty of the dull finished surface.

The home builder who expects to get the most satisfactory results at the minimum cost will do well to make a little study of the woods which are available for his purpose both with reference to the way he wishes to use them and also to the local conditions and market.

A series will be published in this department giving a little study of the different woods with the special advantages

and characteristics of those most largely used. There will not be space to go into the subject exhaustively with reference to any one wood; but any home builder who wishes further information or other data will, on request, receive advice of expert authorities on the subject.

Oak.

It is doubtless easily within the facts to say that oak is probably the best known and most widely used of all the hard woods. Because of its great durability and handsome grain it is always popular. In the northern latitudes oak has been used for fine woodwork ever since such woodwork has been known. Oak wainscoting in English castles and manor houses, and carved oak choir stalls in the cathedrals date back to the earliest time, and grow more beautiful with age.

Oak is found on all of the continents of the northern hemisphere and at the high altitudes just south of the equator. Botanists recognize some fifty species in the United States. Commercially these fall generally into the great groups of the white oaks and the red oaks. These two groups supply about equal amounts of lumber. The third group, the live oak grows on the Pacific coast and was used for ship building in the early days, but little is made into lumber now.

Oak is our most abundant hardwood, and the amount of oak standing in the forests is approximately 40 per cent of all the American hardwoods combined.

Both red and white oak are highly durable, and have practically the same lasting qualities for inside work. White oak is closer grained than red oak and will take a higher finish. For outside work white oak lasts better than red oak. In color red oak tends to be more uniform than white oak, and shows a more splashy grain, both when plain sawed and when quarter-sawed.

Any one familiar with hardwoods will easily distinguish between the ordinary red oak and the ordinary white oak, but there are some species which come so close to the line of demarcation that it sometimes is difficult to distinguish between them. The Hardwood Record gives the following means of identification: Cut off a portion of the surface at the end of the wood. Looking at this section, light colored patches or lines can



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be seen running irregularly across it, somewhat like tiny flames. Examine these lines under a magnifying glass. Any one can distinguished between the spring growth and the summer growth in the oak. Examine closely the pores of the summer wood, not the large pores of the spring wood. If these summer-wood pores are distinct and if you can see into them readily and can count them you are looking at a piece of wood from one of the red or black oaks. If, on the other hand, the small pores are indistinct, if you cannot see into them and if there are so many that it is impossible to count them then, if the cut is a smooth one, it is a piece of white oak.

Quarter-Sawed Oak.

The medullary rays are the bright streaks, radiating from the center of the log outward like the spokes of a wheel. By quarter-sawing, the rays are cut edge-wise and appear as bright streaks of flakes, often called mirrors, on the surface of the board. This method of sawing is what produces the beautiful figure in quarter-sawed oak.

As a matter of practice the oak log is placed on the saw carriage, and sawed in the center, then the halves turned down on the carriage and sawed again in the center, making four quarters. The quarters thus obtained are set on the carriage edge up and sawed so that the surface is at right angles to the rings of growth. This method of sawing reveals the splash that occurs in the medullary rays of oak growth, and exhibits a very beautiful figure.

Quarter-sawed oak, both white and red, costs more than plain-sawed, as the cost of producing quarter-sawed stock is much greater than plain-sawed, as more waste occurs, labor is heavier, and only the very large and choicest logs can be used.

Expert knowledge is required in every process of manufacturing oak lumber. From the felling of the tree in the forest, the transportation of the timber to the saw mill, the selection of logs by size and quality according to certain specified methods of sawing, to the reduction into lumber itself, and the proper piling and seasoning, all must receive the most careful attention.

While the home builder has always considered oak a standard in the use of hardwood, the way it is used from season

to season varies quite materially. Quarter-sawing of the oak gives more "figure" on account of the way the medullary rays are cut. Sometimes the boards are selected for the elaborate figure, other seasons the less noticeable grain is desired.

As with any hardwood it is equally true with oak that especial care must be exercised between the time that it leaves the factory or even the dry kiln, and the time that it is in place in the completed structure. It has been very carefully manufactured and if it is exposed to moisture or ill-treatment it loses much of its actual value and never can take so fine a finish in the completed home. It will be likely to shrink and leave unsightly cracks. A contractor may be careless and the owner should see that the finishing lumber is properly stored. It should not be put into place until the plaster is fully dry.

Oak Floors.

Perhaps in no other part of the well finished home is oak more generally used, or the standard of excellence as for the floor. Many other woods make an excellent floor, one which will take a good finish and which wears well. Some other woods will stand heavy wear better than does oak, but no other wood is at the same time so pleasing in color.

Hardwood floors should not be laid in a new building while the walls or plaster are damp. It is a good plan not to lay the finished floors until the painting and decorating have all been done. Then the workmen will have no occasion for tramping over it.

Finish.

Oak lends itself admirably to almost any style of finishing. Wood finishers usually classify oak, walnut, ash, chestnut, and mahogany, as open grained woods with which a paste filler is advisable for a fine finish. By means of the stain and finish any tone may be produced without losing the really handsome grain and texture of the wood. It may be toned to suit any condition, from a soft gray, through the range of browns, either soft or strong in color to the almost black finish which was so popular some years ago.

The finishing of the woodwork of the home is, however, a part of the interior decoration and the color scheme and the furniture of the room should be fully decided upon before the woodwork is finished.



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Let us save in food, in service, in clothes, in luxuries, but not in money.

Let us use it by giving it to save the wounded, the suffering, our friends, our country.

—Henry Van Dyke.

Not a Matter of Geography.

The tendency for successful men and women to gravitate to the larger centers is so general that we have come to regard such removal as inevitable. The Mayos, with their wonderful surgical skill and the great organization which has grown up around them, have given the country the rare spectacle of people from New York and San Francisco taking the train for Rochester, Minn., not to view the scenery, but to consult a specialist. Yet laboratories for such advanced investigation, one would have said, were not to be created on a prairie, nor were skilled

assistants to be obtained or induced to go there. Perhaps the greatest service the Mayos have rendered is the blow they have struck at the notion that opportunity is a matter of geography, says the New York Evening Post.

This again illustrates the much discussed quotation, which seems to be properly attributed to John Paxton, a Presbyterian minister:

"If a man can write a better book, preach a better sermon, or make a better mouse-trap than his neighbor, though he build his house in the woods, the world will make a beaten pathway to his door."

New Brooms.

Soak new brooms in hot salt water. Do this once a week and hang the broom up to dry, so that the pliable broom corn will dry straight.

Advantages of the Metric System.

With the closer co-operation between the United States and European countries, a greater familiarity with the metric system becomes necessary, even if we continue to use our older, clumsy system. Realizing the convenience of our decimal system of money, the use of this similar system in weights and measures is likely to appeal to the country as an economic advantage.

In the manufacture of standard parts for machinery there has been some adoption of the metric system on account of its greater exactitude. For the benefit of those who may wish to know the value of one system of measurements in the terms of the other we give a few of those most commonly used:

1 millimeter	= 0.03937 inch.
1 centimeter	= 0.3937 inch or 0.0328 foot.
1 inch	= 2.54 centimeters.
1 foot	= 30.48 centimeters or 0.305 meter.
1 meter	= 39.37 inches.
1 mile	= 5280 feet.
	= 1609.3 meters.
	= 1.609 kilometer.

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KEITH'S MAGAZINE

ON HOME BUILDING

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The little home in the Minnesota woods.

KEITH'S MAGAZINE

VOL. XXXIX

APRIL, 1918

No. 4

A Home Given Up For War Work

E. V. Boudette



IN a wooded district which fringes one of our growing cities stands the charming home shown in these photos. The young doctor and his wife who planned and built it a few years ago had lived in it only long enough to put on the finishing, homey touches, set the flowers in the boxes at the window ledges, start the vines clamb-

ering over the rough surface of the stucco and start the planting, when the German armies battered their way through Belgium in the attempt to reach Paris, and German "frightfulness" began. The response to the danger alarm and the call for help was, perhaps, nowhere more immediate than in the case of individual Americans who knew the situation and



The invitation of the entrance.

understood the needs. Physicians were among the first to answer the call and Dr. Kenneth Taylor and his wife have been in France through all of these terrible times, devoting themselves to the war sufferers. Reports have come back of some of the wonderful work done by this young doctor in finding new treat-

Europe. The brilliant German scholarship on the theme of war has been demonstrated to be grimly practical. The wonderful German dyes masked the work in high explosives, and now the medical profession of the world is devoting itself to finding ways of combating Germany in her chosen field. Hospital



The home built by Dr. Kenneth Taylor and his wife.

ment and methods of relieving those suffering from the terrible and atrocious methods of warfare put into practice as a result of German scientific study in the days of peace. We have been very slow to actually believe that a people, seemingly kindly and friendly folks, should, through the years of peaceful prosperity, have been deliberately planning, even to the minute details, this frightfulness and the Gehenna which is now spread over

service has seemingly accomplished the impossible in saving and protecting the men at the front. Trained men saved, even from the standpoint of military efficiency alone, are better than fresh, untrained men for the army. The work of the hospital is better than that of the recruiting station to keep an efficient army in the field.

Dr. Taylor now holds a captain's commission and is Director of the Research

Department, American Red Cross Hospital in Paris. He has done some notable work, especially in gas gangrene, while his wife has been one of the many angels of mercy in that stricken land.

In the meantime the little home in the Minnesota woods must seem to them like some half remembered dream of a different phase of existence; an Arcadia of peace and quiet with nature and the world in tune to young happiness.

Charming as it is from the outside—with its picturesque groups of small paned casement windows, the simply latticed and hooded porch with its hospitable seat, the simple lines of the roof, the vine-inviting surface of the stucco—with-



The charm of the living room.

in it is not less so. The interior bespeaks the hominess which is promised by the outside. The entire simplicity of the treatment in the living room adds to its charm. A cup of tea may be brewed at the fireside from the kettle on the crane. Real wood, perhaps from the trees outside,

fills the wood basket and is ready to be laid on the quaint andirons, giving the cheer of the open wood fire. Books, music, tea, before an open wood fire, surely it is the epitome of comfort and peace. We might reverse the slogan and say, "Good home defenders are good home builders, ready to drop the peaceful arts and forgetting themselves take up the arduous toil to which the country calls them."



The hooded porch with its hospitable seat.

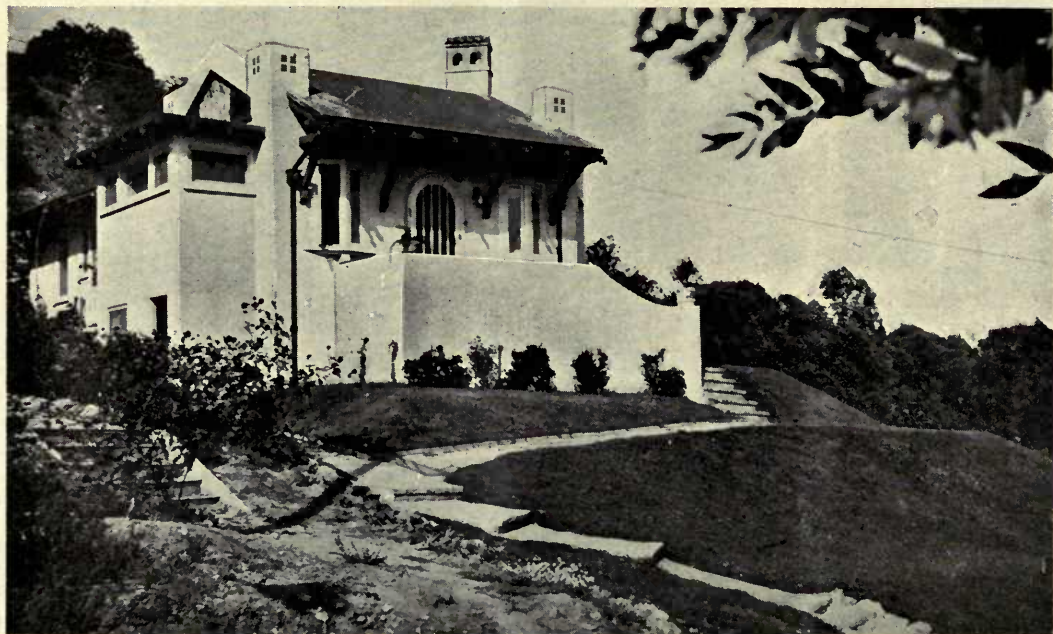
A Hillside Bungalow

Charles Alma Byers



ALTHOUGH the house occupies a hillside of decided slope, it is designed with but virtually one floor level. This, of course, has been made possible by excavating and filling in until a practically level ledge

roofed in quite irregular fashion, as to lines and elevations, and even its walls are of much broken alignment—all combining to comprise a treatment that makes the house especially well suited to the particular nature of its location. On



The main entrance and the approach.

Paul Arnold Needham, Architect.

was created. The grounds in front and at one side are charmingly terraced and grassed, presenting a pleasingly dignified appearance as seen from the winding roadway that ascends to the crest of the surrounding hills; but in the rear they rise irregularly and quite abruptly and are left wild and natural—comprising, in fact, a garden of Nature's own and undesecrated handiwork, of shaly soil and boulders, of scrubby trees, cactus and other wild vegetation.

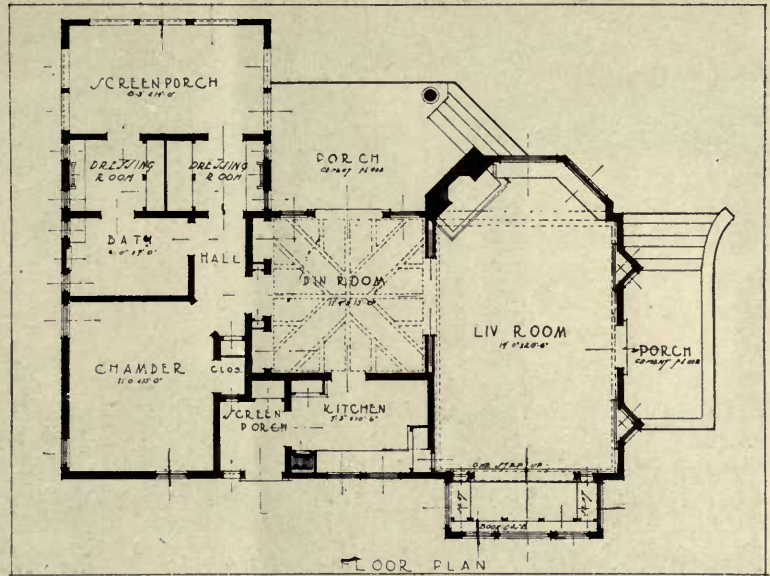
The bungalow, as shown by the illustrations, is but one story high. It is

the front is an enchanting little entrance porch, enclosed by a low, plain wall, and only partially roofed by a rather wide eaves extension of the roof; and on one side is a most delightful pergola-porch, covered only by the usual pergola beams and screened on the one open side by vines. On account of the house's considerable elevation, from both the front porch and the side pergola, as well as from the interior by virtue of the numerous well-arranged windows, are commanded charming views of the low-lying city in the distance and of the environ-

ing hills and valleys.

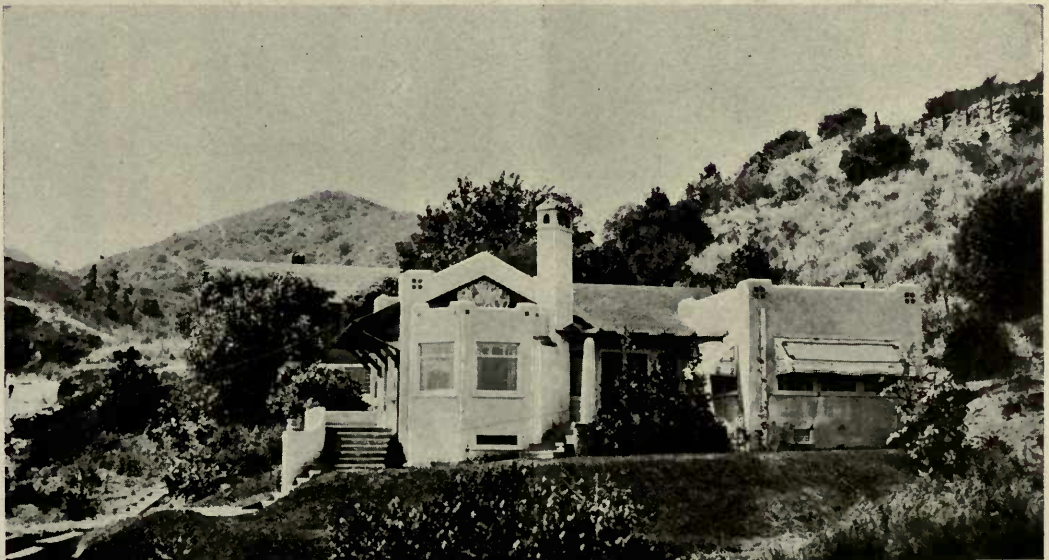
In design and construction, the house has a most solid, substantial appearance, and its lines are graceful and attractive. The walls are of white cement-stucco, over heavy metal lathing and sheathing, and inlaid squares of red tile comprise an interesting touch of color decoration to the faces of the various slightly buttressed corners at the gable

ends. The exposed framing timbers are of rustic redwood, painted a rich shade of brown; the roof covering is of tarred felt, surfaced with a layer of crushed red tile, and the pergola and the porch are floored with red cement, while the winding walk that leads into one end of the latter is paved with red brick. As may be imagined, the color scheme is thus made decidedly attractive, as well as



mildly striking, and against the background of the green hillside it offers a contrast that is indeed effective.

The front door, designed with an arched top, opens directly into the long living room, which room, with its library alcove at one end, extends across the entire front. As somewhat counterbalancing the alcove extension, in ceiling effect especially, the opposite end of this room



The Bungalow nestled among the hills.

Paul Arnold Needham, Architect.



The living room fireplace built of tile and hooded with copper.

is designed as a sort of large bay, with windows in two of its angles and a fireplace in the remaining angle. The ceiling of the central portion of the room follows the line of the roof with a seemingly considerable pitch, while the ex-

tensions at the ends of the room are ceiled in the ordinary way. The ceiling of the main part of the room thus forms the under side of the roof itself and is finished with wide boards, the edges covered with battens giving a paneled ef-



The buffet end of the dining room.

fect. The small gables created at the ends of the chapel-like portion of the ceiling are filled with opaline art-glass. In the main wall on the front are two small oriels, and, in addition to the other windows already mentioned, the book alcove contains a total of five short-length windows in its three walls.

This alcove, elevated about six inches above the common floor level of the liv-

is somewhat closed off from the remainder of the room by a sort of colonnade arrangement, and it is beneath the sections of low wood railing at the sides of the passageway arch that may be espied the doors of the cabinets under the seat. In one corner of the living room, at the right of the entrance to the alcove, is still another low cabinet—in this case built into the wall, so as to extend



The library end of the living room, showing window in the gable.

ing room, contains a book-case that extends the full width of the end wall, only two sections of which have glass doors. The top of the long book-case constitutes a convenient shelf for bric-a-brac. Against each of its two remaining walls is a small built-in seat; and in the designing of these seats a rather unusual but especially serviceable arrangement has been created, in that, instead of being of the common box type, they are provided with hinged doors in the ends extending toward the living room proper. As will be observed by referring to the photographs of the interior, this alcove

through and into the kitchen—which affords a convenient sheet-music case. In the other end of the living room, near the fireplace, is a long window seat, of the ordinary box type.

The living room and alcove walls are paneled to a height of five feet ten inches, and capping this wainscoting is a plate rail that extends on a level with the top of the built-in book-case. The woodwork here is of California redwood, sandpapered and waxed but left in possession of its natural soft-red color, and the plastered portions of the walls are tinted in a rich buff shade. The color scheme is

particularly restful, as well as conducive to a cozy and home-like interior, and the lighting fixtures, as helping to maintain this general effect, consist of two inverted domes suspended from the two cross-beams of the chapel-like ceiling, supplemented by a few well-placed wall lights. The fireplace is constructed of boiler-plate tile, of dull buffs, browns and reds, and has a hood of copper.

in the same manner as that of the living room. The lighting fixture has three frosted glass globes, with Roman gold mounting.

In the bathroom is built a box seat for soiled linen. Each of the dressing rooms contains a most complete built-in dresser, including the usual mirror, shelves and drawers, and so forth, and also a roomy wardrobe closet.



Showing the window groups of the screened porch and the window in the gable beyond.

The dining room, immediately in the rear, is closed off from the living room by a pair of sliding doors, and from it direct access is had to the side pergola by way of a pair of French doors. This room possesses an especially convenient arrangement of built-in china closets, sideboards, cabinets and so forth, which, with the arched doorway in its center, occupies the entire width of one wall. To fully appreciate this feature, in respect to both serviceability and uniqueness of design, the accompanying illustration of it should be noted.

This room is both walled and ceiled entirely with California redwood, finished

The interior is floored with oak throughout, except in the kitchen and bathroom, and for these two rooms pine, covered with lineoleum, is employed. Due to the natural forward slope of the grounds, there is a large basement under the front part, and a furnace located here, with additional room for garden implements, and so forth.

This bungalow was designed by and is the home of Paul Arnold Needham, architect, who has specialized largely in hillside homes. Of course, the lady of the house exercised a certain influence on the planning of the interior, which has produced excellent results.

A Shingled Bungalow

Gertrude Appleton Luckey



ALTHOUGH the bungalow illustrated by the accompanying photographs is more or less typical of many that have been erected lately, it has a charm of its own that makes it distinctive. This charm, that is of the exterior, lies in the simple roof lines of the building, in the graceful curves of the eaves over the entrance door, and in the soft cool gray and white coloring.

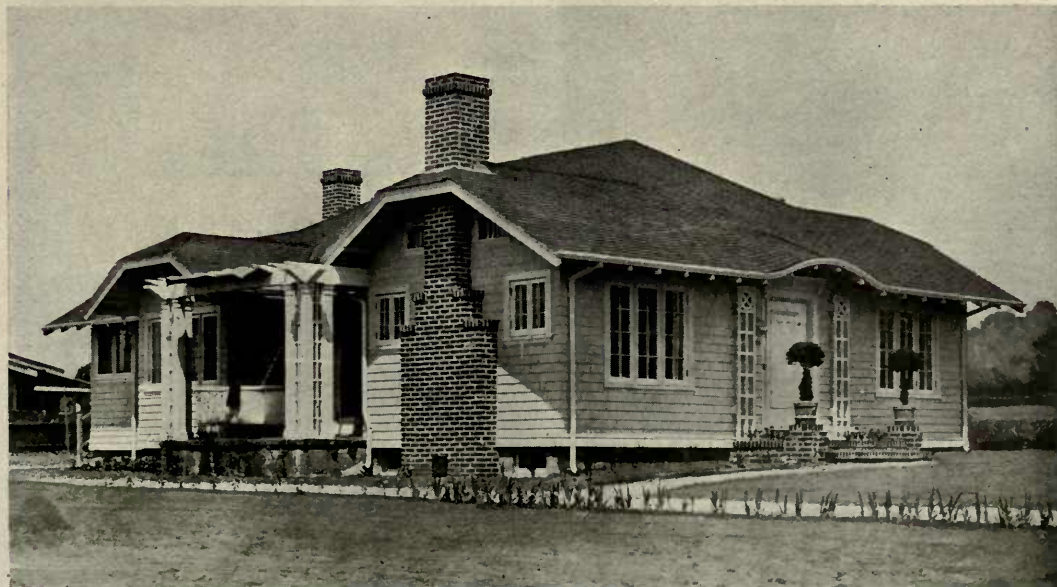
When we depend on one particular feature of the elevation to give interest to



The distinction of the entrance.

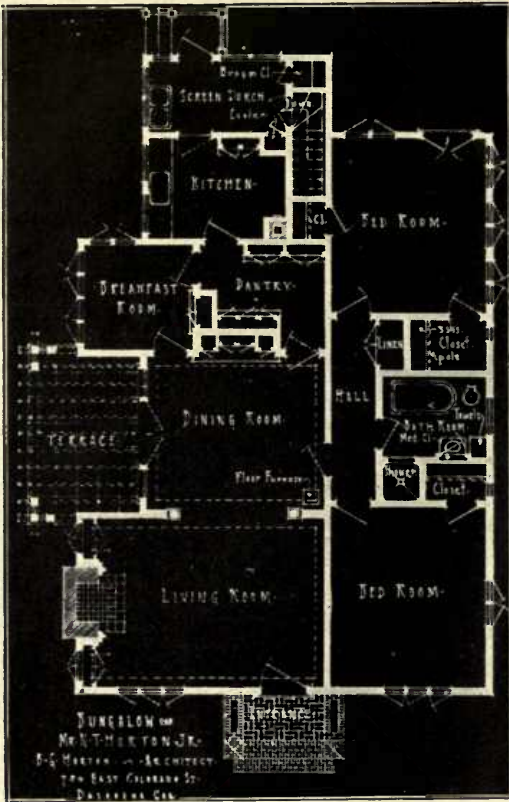
the design, it is advisable that this particular feature should receive special study so that it will attract attention to itself. In the house before us, the entrance, though very simple, has been the subject of careful designing, with the result that this particular feature gives character to the whole house. The nicely proportioned door with its moulded trim, in

contrast to the plain trim elsewhere, gives a pleasing effect, an effect that is increased by the moulded cornice and carved brackets over the door. In a short



The side entrance of the bungalow is as interesting as the front.

B. G. Horton, Architect.

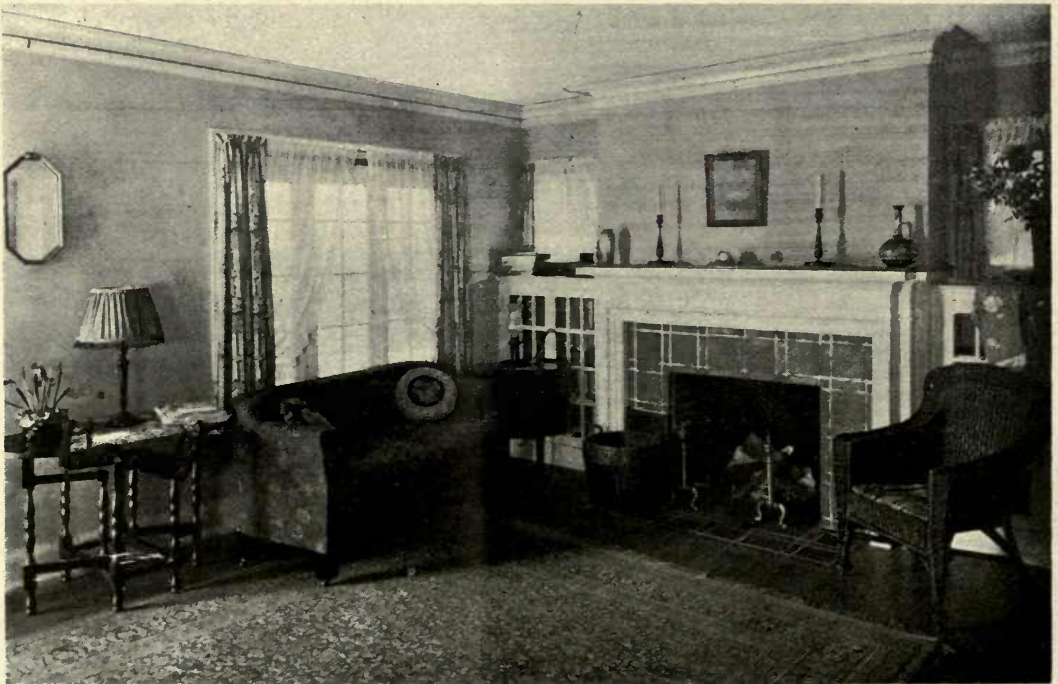


time when vines are climbing over the lattice at each side the effect the entrance gives will be charming.

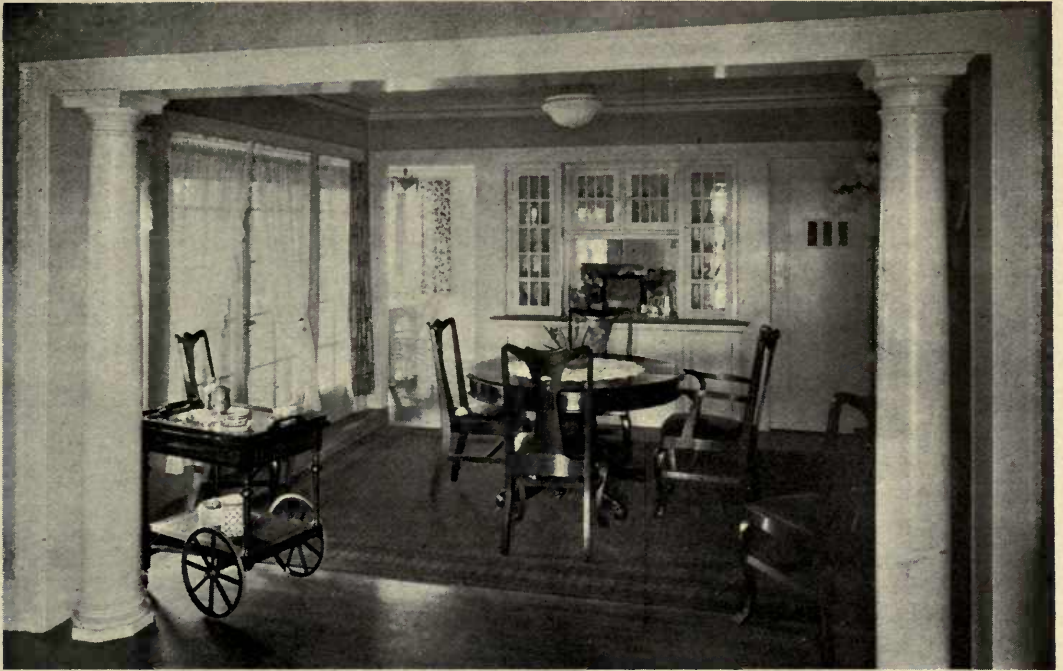
The exterior coloring of the house is evident from the photographs. The walls are stained light gray, the woodwork painted white and the roof stained green. These tones, with the red brick of the chimneys and entrance steps, give a restful and artistic combination of color.

The side elevation which shows in the photograph is equally pleasing if indeed not more so than the front. The latter is characterized by extreme simplicity, and the former is made interesting by the broken roof lines and cut off gables, by the red brick chimney which gives color and by the pergola covered porch. The design and detail of this porch is particularly good and will repay careful study.

The arrangement of the interior is best understood by referring to the accompanying plan. It will be seen that the accommodation consists of six rooms,



The living room in gray and white has a touch of color in curtains and furnishings.



The dining room as seen through the Doric columned opening.

pantry and screen porch. The rooms are well lighted and ventilated and are all a convenient size.

The front door opens directly into the living room, an arrangement that is especially popular in mild climates. Immediately on entering, the vista which appears is through this room and the dining room to the breakfast room beyond, which gives an hospitable aspect to the house.

The accompanying view of the living room gives a good idea of this artistic room; the Colonial mantel with its novel arrangement of tiles is very effective and shows the careful attention to detail that has been given to the whole house. The walls are papered with light gray paper and the woodwork is finished in ivory enamel. The archway between the living room and the dining room is an interesting feature; the Doric columns, finished in ivory enamel, have a distinctly Colonial effect which is in harmony with the buffet and furniture of the room.

Looking through the open door we see the breakfast room. It also is finished in ivory enamel and is a bright and charming room. It is furnished simply, as such a room should be; the enameled furniture is brightened by a touch of blue and this



The bed room has many windows and doors.

color is in evidence in the chintz curtains.

The bedroom at the back of the house is the most practical kind of bedroom that can be planned, that is a combination of the ordinary type of bedroom and a sleeping porch. As a bedroom it has plenty of wall space for the necessary furniture, and as a sleeping porch it has windows on two sides, also a pair of French doors. The walls and curtains

of this room are in tan shades, a color that will not fade in the bright light to which this room is exposed. The other bedroom is finished in ivory enamel and old rose.

The whole design of this house is characterized by simplicity of treatment and careful attention to detail; the rooms are all bright and cheerful, and are artistically decorated. The arrangement of the floor plan is convenient and practical.

The Housekeeper's Argument

Myrtle Middleton Powell

" . . . And grow up to be an architect . . . a person who quarrels with women about the location of their kitchen sinks."



WISH I could remember in which one of the best sellers of yester-year the observation above quoted is made. But I do not.

Suffice it to say that it has come to me today with surprising clearness because

that is just what I have been doing for the most of the day. Not exactly quarreling but I should say arguing about the sink. Also the bath-tub. Likewise the laundry-tubs, lavatories, and other accessories in the way of plumbing that we have come to think of as indispensable in the appointment of a modern residence.

Now, dear reader, before you read a line further will you please take the witness stand and answer a few questions? I have never seen your home, but I will venture the assertion that the bath-tub is jammed up so close to the wall, or, worse still, in the corner that one would have to be as supple of body as a professional contortionist to clean around and under and about it with mop or dust-cloth. Is it not true? Ah! I thought so. And the lavatory. Doesn't the waste-pipe as



A cabinet under the window in the bathroom.



No pipes through the floor.

well as both supply pipes pass through the floor, when all three might just as well be turned through the wall at no difference in cost of installation, but "O, the difference" in sweeping or mopping when the floor space is free and one pass of the broom or mop will suffice for the action.

Then there is the water-closet. What evil spirit is it that possesses the architect to pounce upon some corner of the room with "Ah! There is just the place for the water-closet?" If placed against an unobstructed side wall this article of bath-room furniture may be reached from either side and cleaned about without the necessity of getting down upon hands and knees to perform the act. But when crowded into the corner as it is in nine out of ten of the bath-rooms I have known it becomes a complicated proposition that serves well to try the temper of house-maid or mistress or whoever it is that has the responsibility of its

keeping. A little foresight as to pipes and less crowding would avoid all this.

I have been planning, recently, the house of my dreams. That is to say I have been planning it for ten years, more or less, but now that the dream of the years is about to become a reality I am so anxious that all of these so-called minor details shall be worked out in a satisfactory way, which is to say, in a way that will lighten the work of keeping the house, that I have lived for the last few weeks with yard-stick in hand and pad and pencil near by that I may jot down the exact position of doors and windows; the width of passages and dressing-rooms; the heights of ceilings and countless such items that shall mean so much to me in the comfort I am to get out of this home.

Probably you will be interested in knowing that my bath-room is to be on the west side of the house where it can have a daily sunning—best of all disinfectants—and that the tub is to be of iron with good porcelain enamel. It is to be made in two pieces, that is to say, the tub



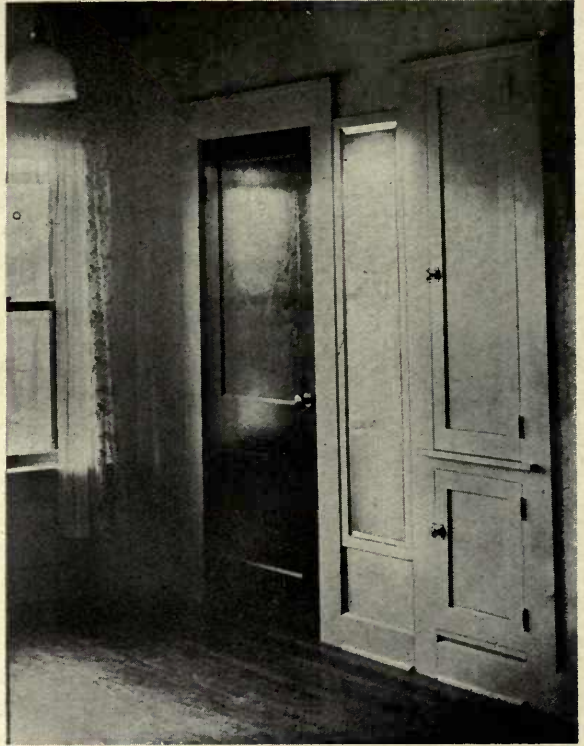
The upper cupboard on one side of sink has flour bin with sifter built-in.

proper and the rim upon which it will be placed, and which, when the last coat of enamel is on, will show no sign of joining and will look exactly as if it might be cast in the one piece. No more cleaning around the claw feet that support the tub I am now using. And, another point: This new tub is to be set right out in the middle of the floor so that it can be cleaned all around in a jiffy. "Ah!" You say, if you are a woman, "Won't that be fine?" And "Yes," I answer, "It surely will." And though it has cost me a good deal of heated discussion I am sure that in the end I shall be glad for the courage of conviction that prompted me to stand for this one specification. Of course, if the tub is of the "built-in" variety that one sees a good deal now-a-days in attractive tile, it does not matter so much about having it in the corner of the room since the cleaning underneath is obviated.

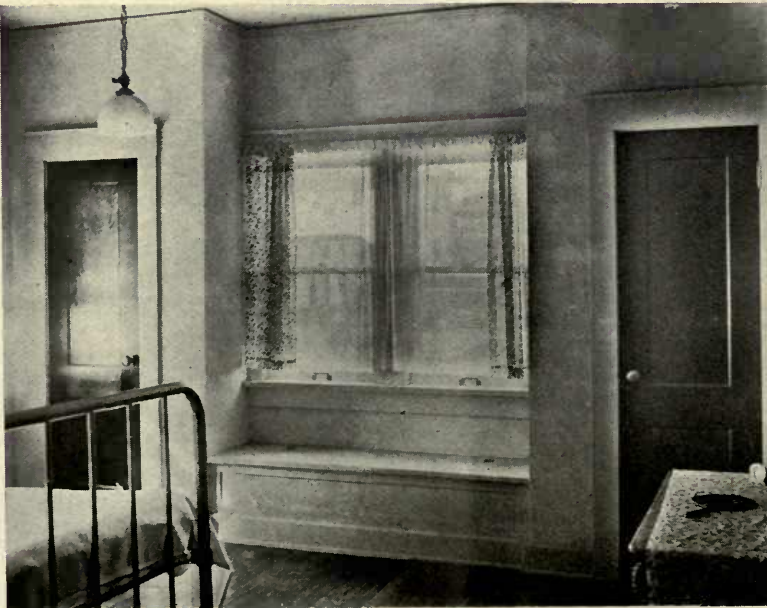
But, even then, it is harder to polish the tub, inside, when it is in a corner,

than when one can move all around it.

There are a number of interesting built-in details, for instance, the fine work-table along the whole north wall of kitchen, measuring twenty seven inches by eleven feet, with cupboards overhead and drawers and bins underneath. The flour-bin with the sifter is built into the upper cupboard ready for use above the working top. This was taken from a patent kitchen cabinet and incorporated into the new cupboard and is found very convenient. In one bed-



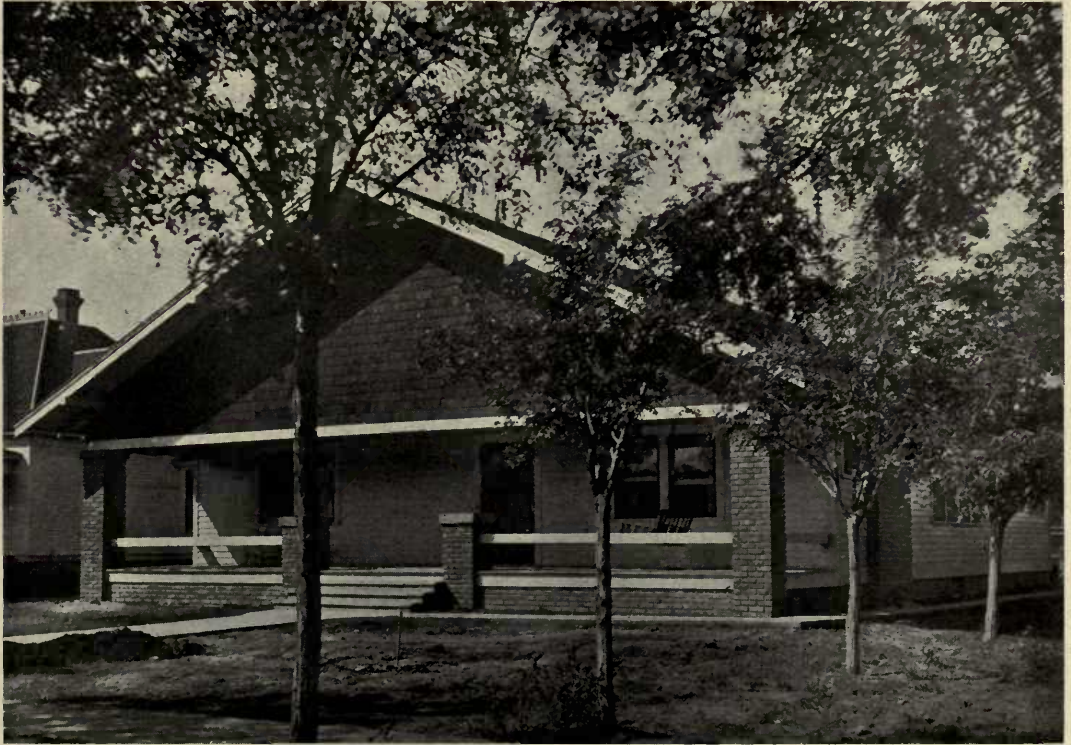
Cabinet for hinged ironing board with cupboard for iron under it.



Two closets with window seat locker between.

room there is a window-seat with hinged lid and a closet on either side. In another room there is an interesting corner which is shown, with door leading into a dressing-room, panel mirror in the wall, and iron-board closet with

try porch at the rear which accommodates the refrigerator, hot water tank and laundry tubs. All doors and windows have weather-strips and all lights are controlled from flush push switches. To me it is altogether a well-appointed and well-



The bungalow has a wide porch across the front.

board hinged and ready to be lowered for instant use and a place for the electric iron; also a socket for the cord arranged to accommodate not only the iron but also the reading-lamp at a table, near-by.

There are a number of interesting window-groups assuring an abundance of light and air. There is an enclosed en-

planned house, but the crowning achievement of it all is the strictly up-to-date bathroom. This one room, perhaps more than others, may often be improved by a little intelligent study. These suggestions are given hoping they may be useful to other home builders in the placing of plumbing fixtures and other conveniences.



The Remodeled Kitchen

Edith M. Jones



IT IS surprising what remodeling will do to a last year's suit, an old-fashioned house, and most of all, to the big kitchen in the old-fashioned home. Remodeling is much like the touch of the fairy wand and the house that once seemed quite impossible

out of the question. They bought the place, however, after careful consideration and made ready to live in it for a time. In the meanwhile they set about to discover the possibilities and after a period of much planning and no end of pleasure they were ready to begin remodel-



Remodeling is like the touch of a magic wand to a house.

responds to the magic touch and is often made even more interesting and beautiful than if newly built. Mistakes so often happen, even in the most carefully planned new houses that the chances are the house that has been lived in will reveal limitations and possibilities more clearly and the results after remodeling prove correspondingly satisfactory.

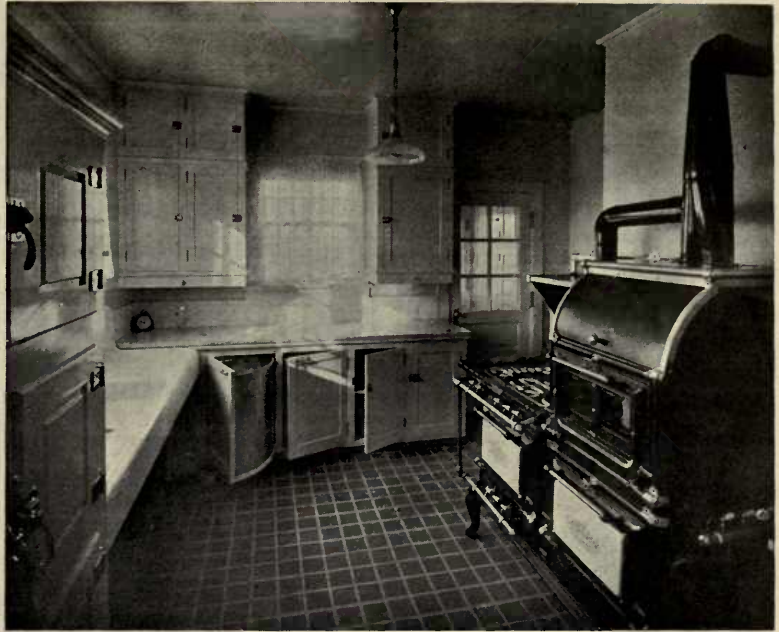
Friends of mine bought a country place a few years ago. The place was ideally situated, the right distance from town for an all-year house and the views and land were wonderful. But the house was quite

eling. The magic wand was surely very active and the results were nothing short of the marvelous. No one could ever have planned a house like it with surprises at every turn, but not an inch was wasted and such a complete transformation I have seldom seen. Partitions were removed, sunporches built on, every modern convenience added, and last but not least, the service wing completely made modern and efficient. Roughly, this is the layout:

Entering the rear door, you step into an anteroom, on one side of which is the

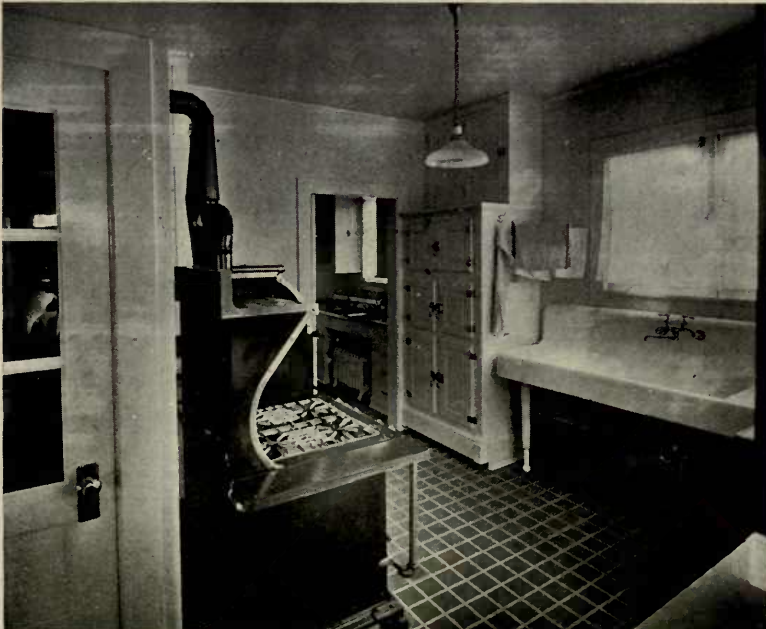
pan closet, provided with shelves and hooks for hanging all kettles, etc. On the other side is the kitchen broom and mop closet. Overhead storage cupboards for additional supplies fill the space above the cupboards to the ceiling.

Entering the rear door of the kitchen, one is at once impressed with the compactness of arrangement, the convenience and beauty of the entire kitchen. At the right of the rear door the carefully planned, well-lighted baking cupboard immediately claims one's attention. The working shelf and the six-inch back-facing are of vitrolite, a beautiful pure white material which gives a peculiarly spotless appearance to



The baking cupboard and work shelf claim the attention.

a laboratory of any sort. The cupboard beneath the shelf at the right stores the baking tins. The swinging flour and sugar bins are made of heavy vat tin and are built separate from the woodwork so that they can be easily cleaned and aired. The bins swing out on rollers when in use and back under the shelf when not needed. They are absolutely mouse and dust-proof and have proven themselves an altogether satisfactory arrangement for storing 100 pounds of sugar and flour. Buying in large quantities, when living in the country, is especially desirable in usual times, and requires ample storage capacity. The cupboards and



Showing the pantry sink beyond the refrigerator.

overhead cupboards above the working shelf are for spices and other supplies used in baking, etc. The two shallow drawers which you will notice in the picture beneath the cupboards are very convenient for the baking knives, etc., and provide a necessity for which there seemed otherwise to be no space.

The beautiful one-piece white enameled sink has ample drain boards at either end, and ideally situated as it is beside the cupboards and beneath the windows, commanding a most lovely view of the garden, must surely go a long way toward making dish-washing a less irksome task.

The refrigerator has drainage and is filled from the outside. It was ordered from the factory and painted to match the rest of the woodwork.


The range is a very complete one and is equipped to burn "blau gas." Blau gas is perhaps the most satisfactory substitute for city gas so far discovered and has surely done much for the comfort of

the suburban kitchen. Beside the range is a metal work table where hot things from the oven may be placed, without danger to the table top.

The door opposite the rear entrance leads to the basement and the door at the left opens into the maid's sitting room. There is also a small screened porch which the maids prize very much, as they feel it belongs exclusively to them.

Hospitality plays such a large part in the life of the successful country home that it seems of especial importance to consider the service wing from not alone the standpoint of efficiency, but with extra thought for the comfort and careful housing of the workers. Purring machinery is a joy wherever it is in evidence, and especially in the silent wheels which move the work along smoothly in the well-ordered kitchen. It surely is vital to the ideal home and the cost of time, effort and money brings a return that is in every instance truly worth while.

Use Grape Vines for the Trellis

NSTEAD of having purely decorative vines over the trellises, why not plant grape vines this year? They grow quickly and give a wonderful shade. To those who are fortunate enough to have their homes near open woods or wild growing things, the wild grape has great possibilities. Strong young roots can be gotten near any old growth of the vines. Anyone who knows the fragrance of the blossom time of the wild grape, who knows its quick growth of shade, and the delicious fruitage needs no further recommendation. In preparing grape juice the flavor of the wild grape is much finer, to many people, than that of the cultivated grape. There is not much difference in the shade it gives between the wild and the cultivat-

ed grape. What could be more decorative in the fall than vines loaded with the purple fruit of the grape. Climbing roses and other decorative vines may be set and grow intertwined with the grape until it reaches an older growth.

A friendly sort of fence is made by training a grape vine to run on wires between stakes. This is artistic and most pleasant to look upon. Best of all, it provides a means for planting some thirty or more permanently productive grape vines that will be of value for years. However, the person planting such a trellis should have it in mind to be kindly disposed even when there is a considerable loss of the grapes as they ripen, remembering that an ordinary hedge would bear no fruit for anyone.

—*Evelyn Watson.*

Structural Simplicity in Bungalow Building

R. M. Cassidy



THE human race loves simplicity, the complexities of dress and surroundings which are about us are not ours from choice, they are forced upon us. Could we have our way, we would build plain walls, plain window casings, omit frescoed ceilings and molded panels, but when such a thing is suggested people hold up their hands in horror. Then along comes the bungalow and tells us to go ahead, simple construction is the only thing worth fighting for, it is the easiest to keep clean and provides an interior far more conducive to rest than a fussy treatment creates. When we come to think of it, it is the simple, unconventional use of timbers, windows and porches that we like about the bungalow. In the examples we like best there is a noticeable lack of deception—each rafter and stone serves a certain purpose with no attempt being made to hide that purpose.

This six-room bungalow illustrates the simplicity which it is the aim of every conscientious designer to express in terms of wood, plaster, glass and brick. The general appearance of the exterior from any vantage point typifies compactness,

solidity and restfulness. The roof is low and flat and all gables follow the direction of the projections which they cover. The exterior of the house is of shakes, laid sixteen inches to the weather, with broken joints, and especial care has been



The porch is large enough to serve as out door sitting room.

taken that no belt course or flaring window casings mar the even tone of the exterior surface. The general trend of all lines of the elevations is horizontal, even the vertical lines flare toward the base in a horizontal direction. The heavy porch piers are made of cobblestone laid with wide, deep, white mortar joints and the timbers they support are of rough Oregon pine, stained a rich brown and fully exposed to view. Asbestos composition roofing covers the porch, laid on 1x6

inch sheathing surfaced on two edges and one side and sloped just enough to shed water. Six by eight inch rough timbers running through the cobblestone piers, sixteen inches above the porch floor, form a railing and serve as a seat. The porch is ten feet wide and fourteen feet long, large enough to serve as outdoor living room during the long summer

where fireplace and bookcase are located. This is easily the center of attraction and holds its position by reason of the use for which it was designed, that of serving as a family gathering place where a warm fire may be enjoyed on a cold winter evening.

Tan and brown was selected as the color scheme of living and dining rooms



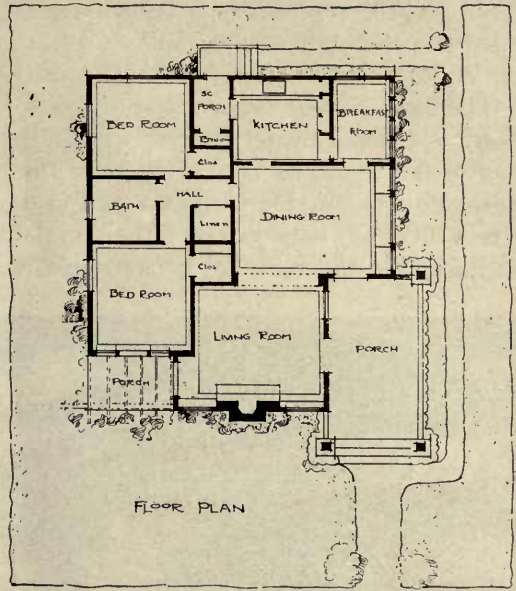
The exterior typifies solidity and restfulness.

months. An entrance porch is the key to the house; if the steps leading to it are low and wide and it wears an air of gracious hospitality, one may be sure of finding the same welcome emphasized to a greater degree in the interior of the house. This house is no exception to the rule and the ease with which the scale of the room is held by the massive fireplace is the key to its warm expression of homeliness. Each wall surface has been designed with a view to harmonizing with the wall adjacent to it but at the same time all have been kept subservient to the south wall,

which are connected by a wide opening and the cement plaster surface of the fireplace is tinted a shade darker brown than that of the walls. The changeable opalescent hues of the hand hammered copper hood blend with this and reflect, in spots, the occasional golden graining of ceiling, beams and finish, while the leather upholstered furniture adds the finishing touch of harmony to a study in repose and simplicity. Many who have stood wrapt in admiration of the richly time-stained beams of the old English manors have wondered why our modern "beamed

ceilings" never arouse the same genuine interest and enthusiasm, but any carpenter who has constructed one of those "beamed ceilings" knows why that interest is lacking. The beams of the old English manors are structural members performing the service for which they were erected but the false beams of our modern work are imitations, pure and simple. A real beam helps uphold the ceiling but our false beams are fitted to the completed ceiling after it is already supported by the ceiling joists! The truth of Wm. Morris' words when he said "In order to be beautiful a thing must first be useful" is no more aptly proven than in the added appreciation we unconsciously give the real beam over its false imitator of the same size, color, shape and position. The crudest rafter holding in place the roof of a barn is more capable of inherent beauty than the most exquisitely carved boards nailed around a core and attached to a ceiling already supported by other means. That is the reason why this roof treatment holds an indescribable charm for the person who appreciates sincerity in construction. Not an unnecessary bolt has been used in joining the tie beams and rafters together and no attempt has been made to hide them, even though they are crude and black and common. In being carefully cast from strong, durable iron and constructed so as to perform perfectly the work of joining two timbers, they are far more beautiful than any so-called "ornament" which might be used in their concealment.

Undoubtedly the time is coming when we will stop trying to deceive ourselves about the price of our homes; our inexpensive homes of today are more thoroughly inexpensive than they have ever been in the past and more useful. Twenty years ago it was customary to crowd as much of the atmosphere and trappings of a mansion into a six-room



house, whenever the opportunity presented itself, but the bungalow has changed all this and therein lies the secret of its popularity. It exists as a shelter and workshop and whether six thousand or one thousand dollars are spent in its erection we will always most admire those types which perform this service best and in the simplest way.

The roofing of the entire house is asbestos composition laid on 1x6-inch sheathing. This sheathing is surfaced on one side, except in the living room, where it is surfaced on both sides so that the under side forms the ceiling of the room. Surfaced tie beams of 1x6-inch Oregon pine bolted to the rafters prevent them from spreading at the plate and spaces between them are filled in with surfaced pine. Staining and varnishing of the ceiling, rafters and tie beams was done at the same time the other parts of the interior was finished, so that no variation from the regular working routine was necessary, and the cost of the construction was found to be a little less than that of a plastered ceiling. In winter the room heats quickly, as the material never becomes intensely cold, but in summer there

is no great difference, as it is well ventilated and the higher ceiling allows a freer circulation of air.

The head casing beam above the windows is carried entirely across the south end of the room, its face being on a line with the front of the bookcase and seat. The wide, high windows on either side of the fireplace are recessed back from the

larger than it really is and for this reason the size of the dining room seems exaggerated. When one can stand and look into an entire room, seeing everything in it, he is only half as anxious to go on as when he sees only part of it. Perhaps it is only the age-old trait of human curiosity which urges one on into the dining room to see where the buffet is located.

Under two short, wide windows and one large stationary one, it is placed at the end of the room where it will be most accessible. Accommodation for silverware, table linen and china is provided and there is no need to get a chair every time one wants to get something down from the upper shelves. China which is used most is kept on the upper shelves of the two cabinets and that rarely touched is left on the lower shelves, which



The fireplace sets the scale for the interior.

face of the beam by a wide return, and, as the windows are stationary, the top of the bookcase may be used as a shelf for flowers or bric-a-brac. Brown mottled brick have been used for the two short shelves above the fireplace jambs and the light brown mortar joints are recessed fully one-half inch in order to gain a rich shadow.

Careful study of the floor plan shows how economically the rooms have been planned so as to secure convenient relation to each other, the maximum amount of closet space and best arrangement for good ventilation. Whenever two adjacent rooms are so placed that one projects beyond the other, each room appears to be

are harder to reach. The finish and general treatment of the dining room is similar to the living room in squareness and simplicity and to the close observer the absence of the picture mold will be accounted for in the head casing beam which is carried across doors and windows entirely around the room and has its upper edges molded so as to receive picture hooks. The rectangular shape of the room permits of the best placing of furniture and allows plenty of room for seating around the table.

A breakfast room joins the dining room on the north, where it receives the early morning sunlight and is convenient to the kitchen. Versatility is an enviable attri-

bute of a breakfast room—it serves equally well as a child's playroom in the morning when mother is busy in the kitchen, lunch room when company is being entertained during an evening, or coat room if baby is asleep in the bedroom. The woodwork is white enameled, the walls tinted light blue, and blue and white curtains hang from the curtain rod resting on hooks screwed into the head casing of the window frame. A plate rail five feet six inches above the floor holds plates and bric-a-brac and a blue toned rug is placed underneath a white enameled breakfast table with its snowy covering. The effect is light and cheerful and the room is always warm and bright in the early morning.

Joining the breakfast room on the west is a kitchen only 9x10 feet but fitted with all the conveniences of a modern culinary department. The range is situated on the west side of the room, close to the boiler, which is in an asbestos lined closet taken out of one corner of the clothes closet adjoining the rear bedroom. Light for cooking operations comes from two windows above the sink, which is directly north of the range, and makes it possible

for one to cook without standing in one's own light. Doors opening to screen porch, breakfast room and dining room make table space in the room impossible, but to overcome the difficulty the cupboard has been constructed with a counter shelf five feet six inches long and the sink has two feet of drainboard on either side. The cooler with vent to the outside air at top and bottom is built in against the north wall convenient to both sink and cupboard.

The bedroom wing is entered through a short hall which allows access to the bath from either bedroom. An ample linen closet is built in this hall and each bedroom has an adjoining closet approximately four by five feet in dimension. Each bedroom is large enough to permit several different positions of the furniture and the front pergola was originally intended to serve as a sun porch though it might be made to do duty as a sleeping porch. As a whole the house is well proportioned, the rooms are logically placed and the cost is reasonable. It is possessed of unlimited possibilities and in this instance has proven a very comfortable, inviting home.

An Italian Bungalow of Stucco

Louise N. Johnson



HAVE you ever considered the qualities that sum up a true home? True, they are difficult and elusive to define. Sometimes the utmost in luxury fails to achieve that mystical something, while frequently the modest little bungalow succeeds. Perhaps our failure to succeed is often caused by our whirlwind following of the fads in architecture that every decade brings with it; a desire to get that particular window so attractive in some other house, the line of this roof, and the jaunty appearance

of that porch. Each idea is perhaps good enough in itself, but combined they strike a discord. Some planners, with tastes and knowledge of architecture above the average, design a home possessing all of the essentials, but the typical home planner, left to himself, is apt to produce a dwelling imbued with a "home-made" appearance.

That a certain period type of architecture, such as Spanish or Italian, can be followed on simple lines has been proved. To illustrate this, I am showing a

lovely little bungalow of what might be called an Italian type of architecture, whose distinctive and impressive style, not its size, is the keynote of its merit. The plain exterior gives a classic and imposing air, decidedly individual, the straight lines used so effectively in Italian architecture are predominant, and its very freedom from showiness gives it poise. It stands out quite as effectively as a

reached only by passing through another, this "living all over the house" arrangement is apt to cause more extra steps than is saved by avoiding stair climbing. The floor plan of this bungalow successfully eliminates this disadvantage by a long hall, cleverly lighted by a skylight, leading from the roomy reception hall in the front to the bathroom in the rear, with easy access to all the rooms, and dividing



Cream colored stucco with a touch of color in the brick work.

home built on a larger scale, and is a fine example of results obtained at a nominal cost without detracting from the effectiveness of the bungalow.

Cream colored stucco with white trim, with no touch of color on the exterior, preserves the dignified appearance. An ample porch, with cement floor, covered only at the entrance, extends across the front and one side of the bungalow, with openings into the living room, reception hall and bedroom.

The fault in many bungalows with the one floor arrangement is the inaccessibility of the rooms. Where one room is

the living part of the house from the sleeping apartments.

Old ivory—this seems to be a season that favors old ivory—is used throughout the interior. An air of comfort and coziness reaches every inch of this modest little home. The old Colonial hall, with its many casement windows, long mirrored closet door, and colonnade entrance, is charming in its simplicity. The large fireplace in the living room, which with the built-in bookcases cover one side of the room, adds just that touch to the home life most essential. The old ivory mantel and the tile hearth blend exquisitely

with the color scheme of this room, which is a soft tannish brown, turning on gray.

The dainty dining room, paneled, tap-estry paper being effectively used between the panels, and the high casement windows, give cheer that the most costly home could not excel. The bedroom opening from the porch through a French door has the color scheme carried out in rose, which is charming with the old

ivory. The other bedroom is in pale green. Casement windows are in both bedrooms, also in the bathroom.

Convenience also was not overlooked. There is a splendid built-in refrigerator in the pantry, a little alcove with telephone table built in, a clothes chute in the bathroom, and all those little conveniences which mean so much to the housewife.

Mulching Peas

M. Roberts Conover

USUALLY I do not have great success with peas upon my garden soil, which is a sandy loam and suffers for moisture. During the past season I have solved the problem. My garden was closely planted this year and I found that the only space I had for my earliest peas was upon its upper and drier part. I planted the rows to run east and west which was across the natural slope of the ground. I hoed the soil twice after planting and then spread a thick mulch of straw between the rows. I left it there until the peas were harvested. The soil kept moist and soft beneath the mulch and the peas grew luxuriantly. I had five pickings of peas when usually I have but one or two.

When I removed the vines and mulch after the last picking I planted sweet corn which grew vigorously and yielded well, notwithstanding that these rows are close to the hedge about my garden.

The second planting of peas was in another part of the garden hardly more favorable and the mulch of straw was applied as soon as the peas were up. The yield was good and the vines kept their vitality longer than usual.

The latest planting was made August 1st and the mulch was applied as soon as the seed was planted. The seed germination was good and growth satisfactory.

This mulching, aside from conserving moisture and fertility, saves hoeing and is clean to walk on when picking the peas.



The soil is kept soft and moist beneath the mulch.

Planning the Bungalow

THE bungalow, if it is built in a warmer climate, as is often the case, can be given more freedom in floor plan than the compact house of the North and East. The coal bills need not be counted in the building and upkeep of the house, while the direc-

fireplace, and book shelves under high windows fills one end of the room. Beyond, the dining room opens with French doors. The group of French doors and windows which open from the dining room to the porch make a very attractive feature of the house, both inside and out.



A Bungalow built in Texas.

E. W. Stillwell Architect.

tion of the prevailing summer breezes are of greatest importance.

This bungalow, built in Texas, is so arranged as to take advantage of the cool breezes in the sleeping rooms and porch. The house faces north and for that reason a good photograph is not easy to get. The casement windows with their long white wooden muntins make very attractive window groups. The same design for cutting the glass is used for the doors.

The entrance is from the porch into the living room, which is well proportioned, being 19 feet by 14 feet 6 inches. The

Communicating with both the dining room, the kitchen and the porch is a small breakfast room. A buffet is built into the dining room, with a door beside it which communicates directly with the kitchen.

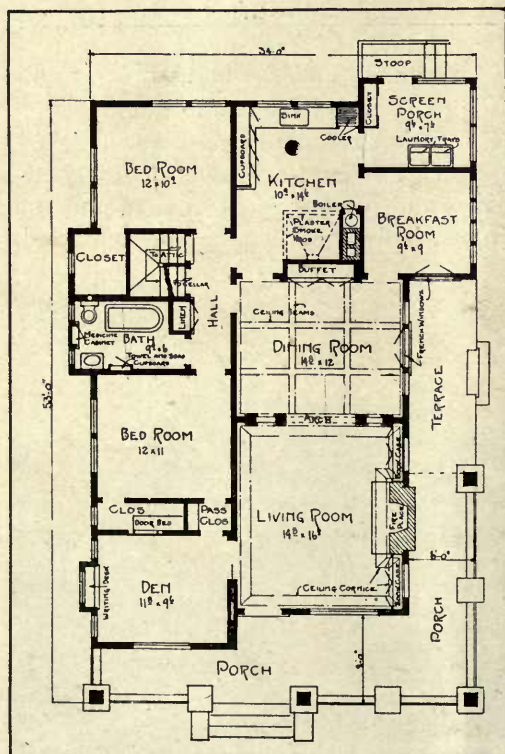
The kitchen is very well arranged with a light and uncrowded space for the range beside the chimney. The boiler is enclosed, an excellent precaution. Opposite the range is a long working table with sink, cupboards and draught cooler.

The rear porch has an unusual feature in the counter-balanced stairs to the attic space. It is a swinging stair that pulls



A Bungalow with white trimming and white Portland cement for the porch.

E. W. Stillwell, Architect.



There are hardwood floors throughout the entire house.

In the den a writing desk is built into a niche with a window over it. The closet space is well planned.

Laundry trays are set on the rear porch and a plaster hood is built over the kitchen range.

The building of this home was a first experience in building for the owners, and they went at it very carefully. In the first place they had plans and specifications which were so complete as to be commented upon by the workmen. No contract was let. The entire work was under the personal supervision of the owner and the work was very satisfactory all through. The owner writes that the house is comfortable under the climatic conditions, that of northern Indiana, cool and airy in summer and warm in winter. He especially commends the casement windows for ventilation and comfort.

The Bungalow in the North



HE prestige of the term Bungalow and the thing for which it stands,—the compact, convenient, inexpensive home is so far-reaching that the cottage and the small house is given the name, by courtesy to the idea,

way to the kitchen under the stair landing. The stairs to the basement open from this landing and a grade entrance gives direct access to the basement from the outside as well as a side entrance to both front and rear of the house.



The bungalow idea adapted to the North.

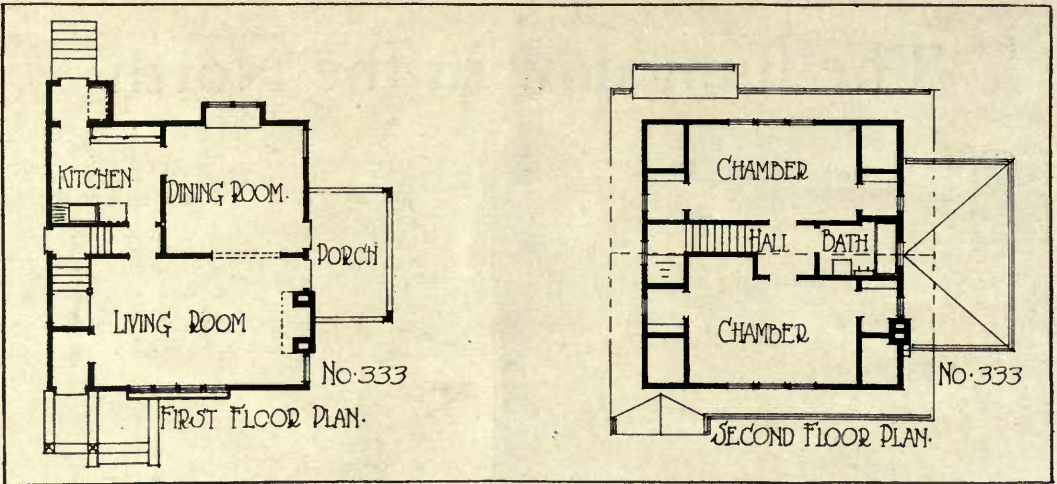
J. W. Lindstrom, Architect.

at least, even when the roof is made steep enough to give space for rooms on the second floor. Such "Adapted Bungalows" are the two homes in the group here illustrated. They have the homey sense which made the original type of bungalows so popular, while the dormers of the first home shown give full two-story height to the sleeping rooms on the second floor.

The floor plan is well arranged with the entrance at one end of the living room with the stairs beside it and the passage-

The living room has windows on three sides insuring good light and air. The fireplace at the other end of the room has a door to the sun porch beside it. The sun porch also communicates with the dining room, while the wide opening between living and dining rooms throws the two rooms well together. A niche for the serving table or buffet is built in with windows over the serving top. The kitchen is small and conveniently arranged.

On the second floor are two sleeping



rooms and a bath, while each chamber has two good closets.

The second home has two well arranged sleeping rooms on the ground floor, while additional space may be finished in the attic if more room is needed.

The entrance is pergola covered and the outer door opens into a vestibule, protecting the living room in cold weather, while it may be allowed to stand open, against the entry wall, when only a single door to the outside is desired.

The dining room is small and rather cleverly placed between the kitchen and living room. Stairs to the basement and to the attic space lead from the passage way and from the living room, respectively, with the refrigerator in the passage way, where it may be iced from the outside, if desired. The kitchen is small and conveniently arranged, with the cupboards beside the sink, and both near the dining room door.

A screened porch opens from the living



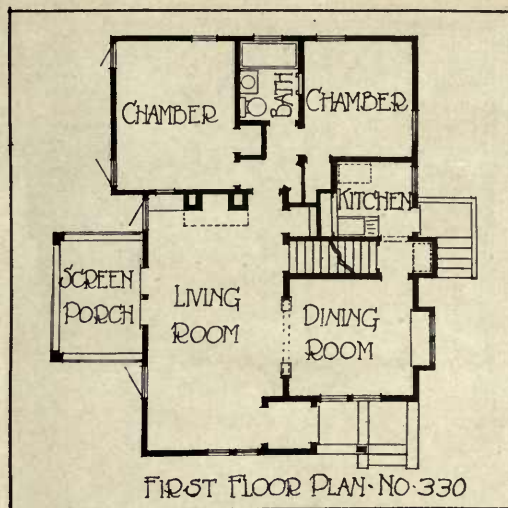
The vines are just starting over the stucco.

J. W. Lindstrom, Architect.

room by glass doors. A seat is built in beside the fireplace, and there is a good closet beside the stairs.

Beyond the living room a small passageway connects the two bedrooms and bath. These sleeping rooms are entirely set apart from the living part of the house. Nevertheless, if the housekeeper wishes to have her bedroom open to the kitchen for her own convenience a door could be cut in the partition between them, without any other rearrangement. Each chamber has a closet and there is a medicine cabinet in the bathroom.

The exterior of this house is of stucco and the trimmings and woodwork are painted white. The planting and vines have only started, and in a short time will give effective ornamentation.



The first home is built of wood and given a dark stain which tones with the brick of the outside chimney.

A Five-Room Bungalow



FIVE-ROOM bungalow with three bedrooms is often especially desired. Here is such a plan. At the same time it is so arranged that the larger room, back of

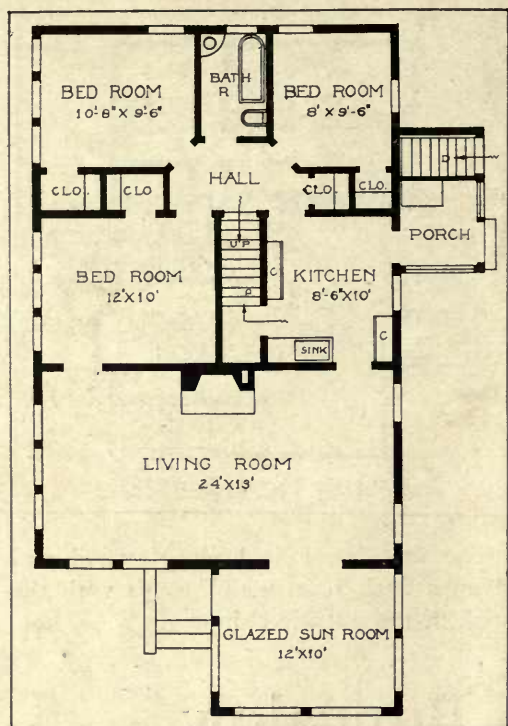
the living room, could be used as a dining room.

The dining table is set in one end of the living room according to the arrangement shown. The sink and cupboards are



Built on simple bungalow lines.

Chas. S. Sedgwick, Architect.



placed on either side of the kitchen door, so that no steps are wasted in the washing and putting away of the dishes. In this case the sink is placed at the farthest side of the kitchen from the other plumbing, making a small additional cost in the plumbing, rather than giving a long space for the housewife to carry dishes three

times a day for washing and setting the table. The basement stairs open from the kitchen with some useful closet space, which can be used in many ways. The stairs to the attic space lead from the small hall which connects the bedrooms and bath. Each bedroom has a good closet with a closet opening from the hall.

The rear porch has some good working space, and the refrigerator is placed there. Outside stairs to the basement are beside the porch.

The living room fills the whole front of the house. The entrance is through the glazed sun porch at the front of the living room. This use of the sun room is often a solution of the problem of the entrance, where the home builder does not want the usual small vestibule. The sun room is glazed with double hung windows, and should perhaps be considered another room in the house, making this a six, rather than a five-room bungalow. French doors connect the living room and sun porch. The fireplace is on the opposite wall, giving a central chimney with a flue for the furnace, and if desired another for the kitchen. The growing use of gas of some kind for the range has largely eliminated the necessity for a kitchen flue.

The exterior is of stucco with dark stained trim and timber work.

Bungalow or Small Home

THE real bungalow never has a gambrel roof, and unless it is rather large there is not more than storage space under the roof. A fascination in the word bungalow has carried it over all argument and placed it wherever an inexpensive yet charming small home is found or desired. This is the sense in which the term has come to be used, rather than in the more strict sense.

While the original home of the bungalow was, we are told, in India, it early became so acclimated to the Pacific slope of our own country, and in fact to the whole Southwest that in America the home of the bungalow is California. The gospel of the small, convenient home has spread, however, and it takes a somewhat differing form, depending on climatic conditions.

In the North and East, where a base-



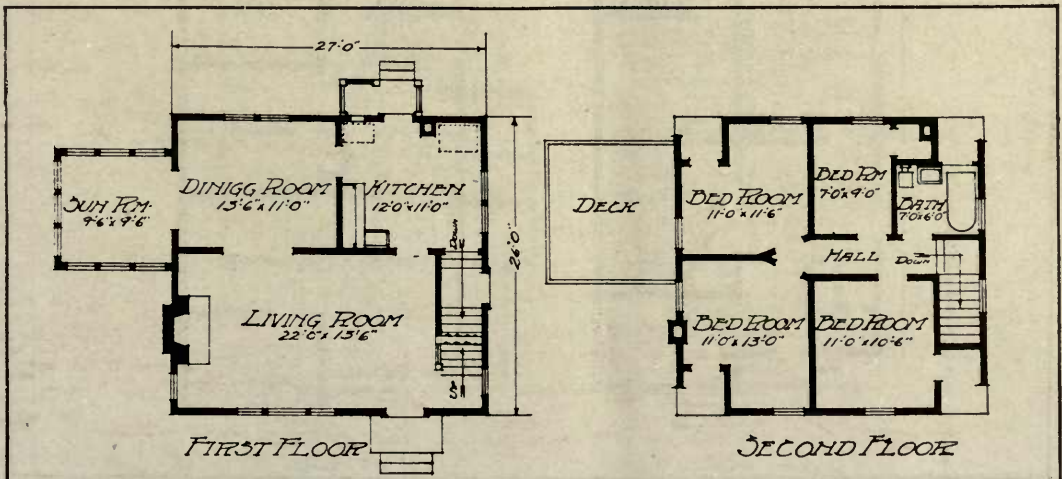
Built among forest trees and wild growing things.

ment is necessary under the house to keep the floors warm, and every square yard of wall surface exposed to the weather is a factor in the coal supply, the compactly built house is a general necessity.

A group of these compactly planned houses are shown here. The first was built in one of the newer suburbs of the city with forest trees about it and all sorts of woodsy growing things which have not yet deserted their old haunts.

The house is admirably planned. One might wish that the sun room extended to the fireplace with a door from the living room as well, but this is a matter that could be adjusted easily.

The living room occupies practically the whole front of the house, with the stairs beside the entrance. These are so placed that the basement stairs, under them, lead from the kitchen, with an outside entrance at the grade level. The fireplace is at one end of the room.



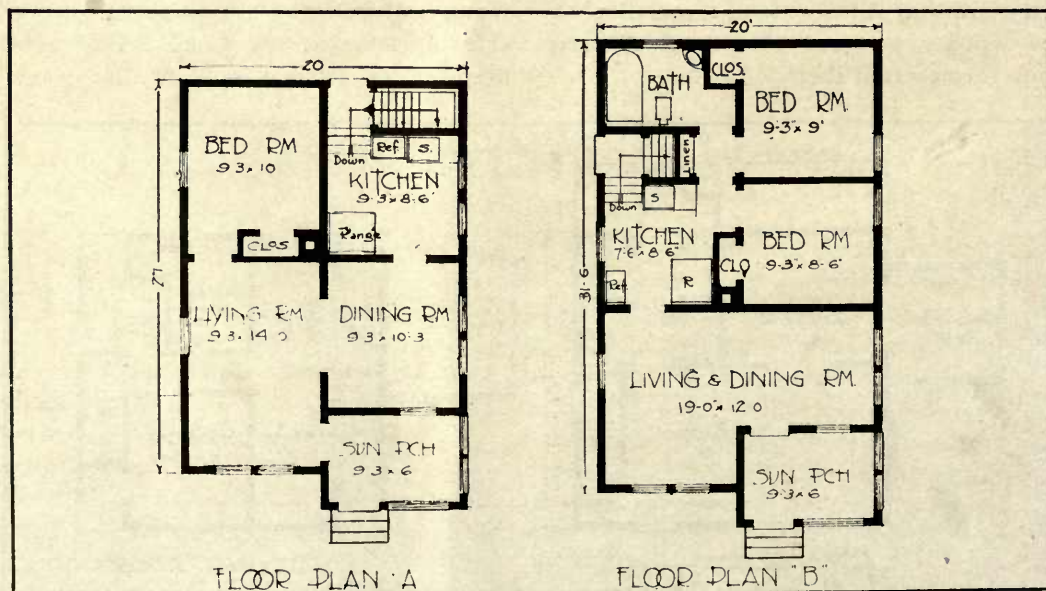


A small home.

French doors connect with the dining room while the sun porch opens beyond.

The kitchen is very compact and complete. Cupboard space is beside the dining room door. A china cupboard in the dining room might easily be arranged by

one section having doors on the dining room side. This would allow dishes to be washed and put in the cupboard from the kitchen and taken out from the dining room side. The sink beside the working top of the cupboard seems small, but



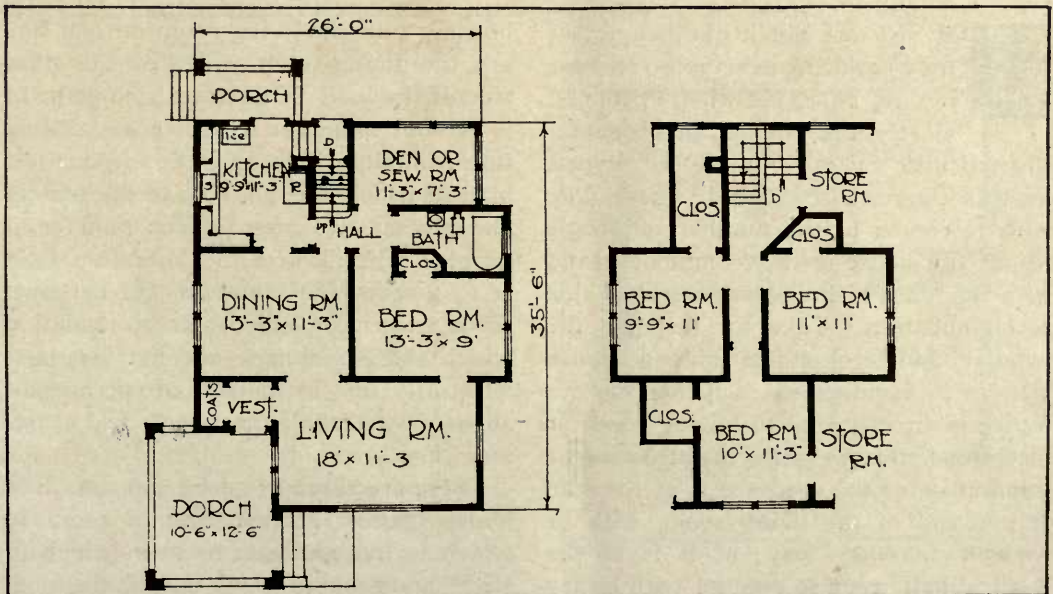


The placing of the screened porch is unusual.

the arrangement is really quite "workable," especially if a proper drain board is arranged or sufficient care exercised, so that dishes may be washed in the sink and wiped from the working top of the lower cupboards. The refrigerator is iced from the outside, and the range stands in a niche formed by the chimney and may be easily hooded and properly vented.

On the second floor are four bedrooms, small, yet livable, each with a closet under the pitch of the roof.

The second house shown is much smaller, being only 20 feet in width. Two plans which might be called minimum plans for one, and for two bedrooms are shown with the photo of the exterior. Plan "B" is compact and well arranged



in the general placing of the rooms, with the bathroom and bedroom opening from the small hall, in which is a linen closet. Many people would wish to reach the first bed-room without going through the kitchen and would want a door from the living room, sliding into the partition,—but for the added expense of the construction and the fact that a sliding door requires three or four inches more in the thickness of the partition. In case the sun porch were placed on the other side of the house a dining room alcove would be formed, connecting with the kitchen, allowing the larger space to be furnished and used as living room.

The last design shows quite a roomy home which is yet very compact. The living room is a little more than 11 by 18 feet, a well proportioned and fair-sized room. With four sleeping rooms besides the one which may be used as a den or

sleeping room, it would pleasantly accommodate a good-sized family.

When it is realized that the cost of building a house may be figured approximately by the cubic contents, it is easy to see that every extension in length, width or height, which adds to the cubic contents adds to the cost of the house. On the other hand, if the requirements of the family can be housed in small space, 26 by 36 feet on the ground in this instance, with the second floor rooms included under the pitch of a comparatively low roof, it gives the maximum accommodation at the minimum of cost. When the house is well built and as attractive as that shown in this photograph it seems a very satisfactory design for a small home.

The screened entrance porch is very attractive and adds a note of the unusual in the first impression.

Study of the House Plan

The Minimum Plan

Anthony Woodruff

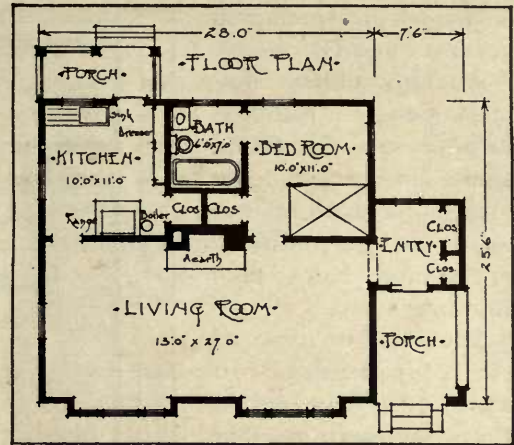


HOUSES are much like people; as they naturally develop no two are exactly alike, yet when examined closely the simpler plans generally fall into several quite definite types. At this time we shall study these only with reference to the number of people which the house will accommodate and with reference to the arrangement of this accommodation. Take for instance the popular and economical oblong house plan as to arrangement: Either the entrance is directly into the living room or reception hall from which the other rooms communicate; the entrance is at the side or one end of the living room, with or without an entry way; or it is of the "central hall" type so popular with larger

houses, with the living room on one side and the dining room or den on the other side of the hall. This latter arrangement is seldom found in what we are calling the "Minimum Plan," that is, the smallest plan in which it is possible to adequately and pleasantly house a given number of people. The ideal of the Minimum Plan is to give to the housewife, in her own home, the convenient accommodation which she is seeking,—and not very satisfactorily as a matter of permanent abode, in the small apartments and apartment hotels.

There are three essential elements in a house plan. It must contain room in which to live and eat; room in which to sleep; and room in which to cook the food.

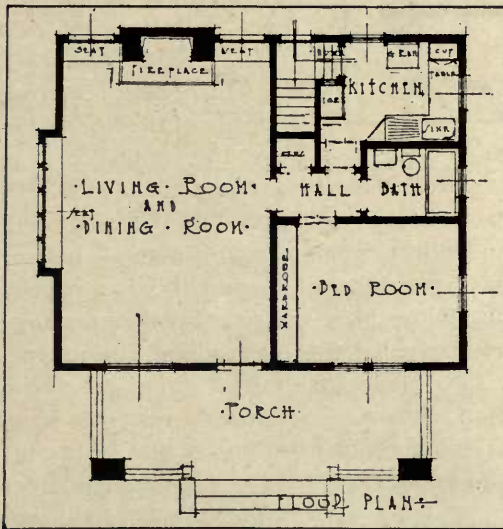
Whether it is desirable or not, it is possible for the same room to serve more than one of these purposes. It has been the general custom to use one set of rooms for living by day and another set of rooms for sleeping at night. A very old-fashioned lady once said that she could not live in a house which did not have a spare room, to give her soul-space. Modern souls are perhaps more easily accommodated, for the ultra modern lady seems able, even, to use the same space for day rooms and for sleeping rooms, for the sake



Minimum Plan. Type "A" No. 2.

done for a short period of time or under especial emergency. The thing we are studying is how a family may have the real advantages of the small apartment, yet with all the comforts of home, and at the same time build the home as economically as possible.

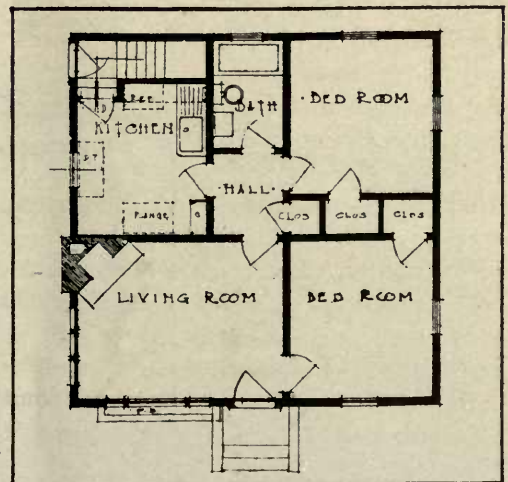
The tendency of modern times is to build homes which are smaller on the outside,—and at the same time larger on the inside, than the old-fashioned homes, as anyone will realize who remembers the sprinting she used to do in a rambling old kitchen when breakfast was late, and yet how no one room in the house was big



Minimum Plan. Type "A" No. 1.

of other things which she can get in the small apartment.

Taken in its simplest form, a home for two people must contain a living room, a kitchen and a sleeping room. The dining table may be set in one end of the living room, or an alcove off the kitchen may be used as a breakfast nook. In some of the tiny apartments one finds beds in desks, beds in buffets, and beds on the closet doors, not to mention beds which, by touching something on the side of the wall, disappear into a panel in the ceiling. Human ingenuity has been exercised to fold away a whole family into a two-room apartment, and this may be satisfactorily



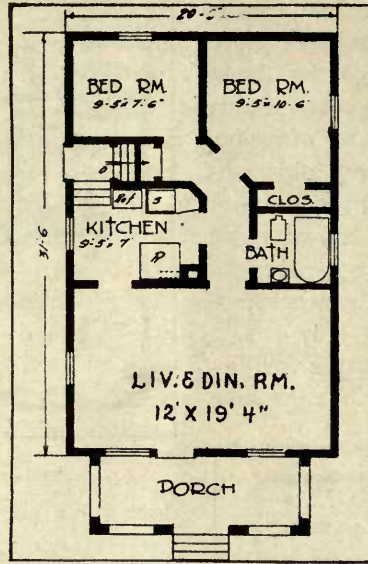
W. W. Purdy, Architect.

Type "B" No. 1.

enough to gather a group of guests.

A study of the simplest possible plans is helpful in eliminating non-essentials in any plan, in as much as it is easier and less confusing to add more than to take anything away.

The smallest type of the Minimum Plan which we have called Type "A," must contain a good living room, attractive and roomy enough that it may also be used for dining, a good bedroom, an accessible bath room, and a kitchen which need be only large enough for the necessary culinary appliances. Two arrangements of type "A" are given, one with the living room across the end of the house and the other with the living room across the full front of the house. In plan No. 2 the bath room opens only from the bedroom, which while very convenient in most conditions, is not so good as when it opens into a small hallway, but for the sake of compactness is allowed in this case. In plan No. 1 a tiny hall gives access to the bedroom and bath from the living room and also connects with the kitchen. In case it was desired to finish rooms under the roof or to have a second story, the stairs would go from this hall, eliminating the closet. With a dormer in the rear to give head room for the stairs and windows in the gables two fair



Type "B" No. 2.

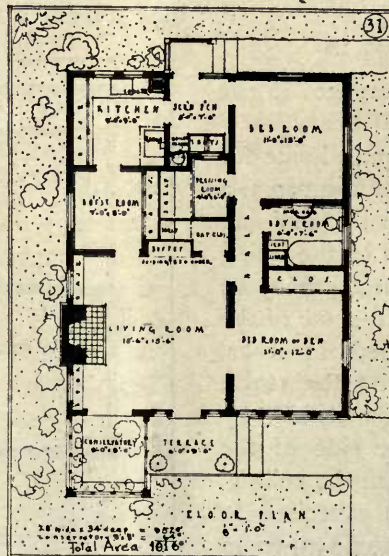
rooms could be finished under a moderately pitched roof. While no working porch is shown one could easily be added. The grade entrance on the landing of the basement stairs saves a duplication of steps.

The next step in the development of the Minimum Plan shows two bedrooms instead of one and we have called this type "B," showing two arrangements, one with the bedrooms occupying one side of the house, beside the entrance, the

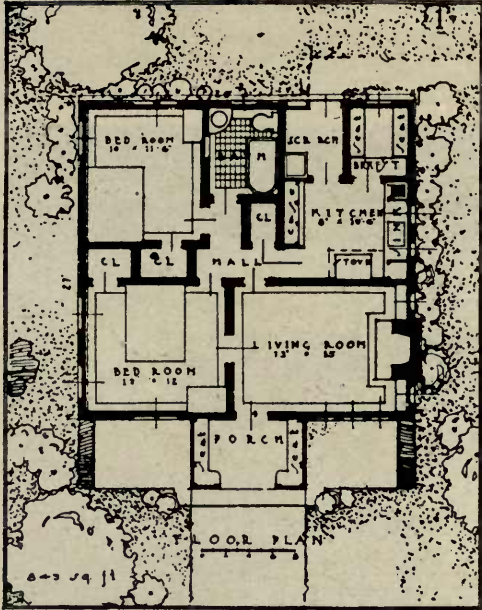
other with the two rooms at the rear. In each case they connect with the bath room and other rooms through a small hall or passage way. Following this is a special bungalow plan where a breakfast alcove and screened porch are added, and no provision made for stairs. Another special plan shows a breakfast room, a large dressing room from one of the bedrooms and an arrangement by which a bed slides

under the so-called buffet and cupboard and closet space.

The next step in the development gives the dining room separate from the living room. This type which we call Type "C" is the usual type of small house and many excellent plans may be found, both in one story and two story houses and all the degrees of the "story and a half house." We show an excellent arrangement with one sleeping room with the main floor



Walter Swindell Davis, Architect.
Special arrangement.



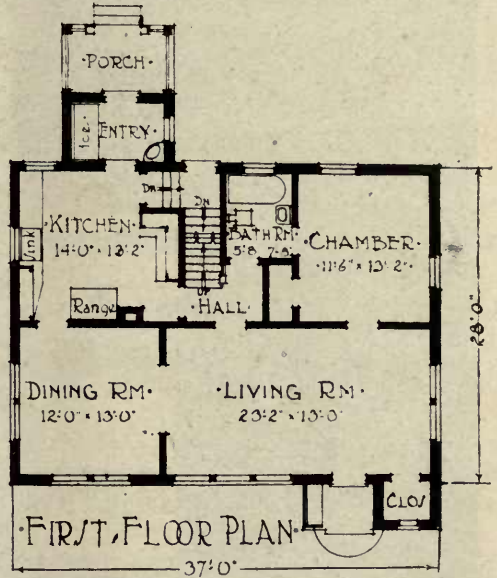
Walter Swindell Davis, Architect.

With a breakfast alcove.

and two sleeping rooms under the roof.

These plans have been gathered from many sources to illustrate these special points. Most if not all of these houses have been built in some part of the country.

This study in house plans will be continued in the development of the units which every house must contain; the relation of the bath room to the bedrooms and the matter of its communication with them and with the other rooms, the kitchen and pantry, laundry, screen porch, stairways and entrances.



Type "C"



Courtesy Creco-Dipt Co.

A home which carries the traditions of thatch and stucco.

George Rheinfrank, Architect.



A dining room holding many suggestions for bungalow builders.



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Bungalow Furnishings

SEVERAL women were defining their ideas of a bungalow not long ago, in the following manner: "All on one floor and very simple as to furnishing," "Sloping roofs and plenty of veranda space," "A sleeping porch, a dining porch, a living porch and a dry corner near a fireplace when it rains." "Where housekeeping is possible when a maid is impossible."

Kipling, in the "Letters of Marque,"—in which are jotted down the impressions of a young Englishman traveling for the first time in India,—coins the word "bungalaoathsome" to express the hero's disgust of the usual one-story dwelling.

Long ago the American bungalow threw off the early traditions and limitations. There are almost as many types as weeks in the year. "Colonial" bungalows are sometimes discussed, and quite lately someone has built a "Moorish" bungalow. Perhaps the adjective does not matter if the right principle is expressed. But to attach the simple straightforward term to all sorts of erratic schemes is to abuse more than the name.

Sincerity of purpose, honest construction, consistent furnishings, should be expressed, and, we would like to add, simplicity of living within.

A bungalow of my acquaintance in the Middle West has always seemed to me

particularly attractive in its scheme of furnishing. Outwardly it conforms to tradition by being all on one floor. But there is no old-time veranda with low overhanging roof to shut off the sun—all quite wise in a warm country but out of place in our climate, in a little house lived in all the year. The woodwork is flat with few moldings and, like the exterior, stained a light brownish gray.

Wallboard has been used in the living-room of a tone two shades lighter than the trim. At the windows hangs casement cloth of a color between the walls and the woodwork. On the floors are rugs of plain surface, a shade darker than the trim. So far the background is neutral and decidedly quiet. Color is present and brilliant color, but in comparatively small areas. A stencil border on the curtain carries orange, soft green and old blue, and these tones in cretonne of a bolder pattern cover a sofa and two chairs. In season flowers in all shades of yellow and orange are used liberally and at all times a great deal of green foliage.

The man who built this bungalow and the woman who furnished it had one idea in mind—to make the little house livable, comfortable, cheerful and comparatively simple of upkeep. Perhaps the word "livable" sums up and includes the other attributes, for a really livable home is al-

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ways comfortable and cheerful. Also, no livable house is difficult to maintain in the class which it represents. Comparisons with bungalows must be made with bungalows, not with a different type of dwellings.

Visitors coming to this little house are impressed at the door with its consistency. Within the living room, low, spacious and sunny, the first impression is strengthened; and deepened in the dining room. Those who cross the threshold of the kitchen are enthusiastic over its compactness and convenience.

In the dining room the wall and floor treatments of the living room are continued—with, however, an entirely different drapery scheme. Bedford scrim hangs next the glass; over-curtains are of cretonne, matching the slip covers of the

living room. A small window looking out on a clothes-yard is curtained in yellow sunfast secured on rods at the upper and lower sashes.

Quite small is the dining room, but seems larger by reason of French doors, which open on an enclosed porch. At the large opening on the living room side are folding screens of neutral burlap, hinged to the wall and opening and closing easily and quickly. Such a device has the advantage of giving privacy when needed, yet apparently adding space and light. Screens of this type are sometimes made like French doors.

The furniture for the dining room had been selected from a manufacturer who makes a specialty of finishing cottage pieces to order. The chairs are of rush with high slat-backs, the table a simple



Seaside bungalow furnished with old New England pieces.

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gate leg, and the sideboard a combination of "board" and serving table. In the living room a substantial magazine table of the same make, a Morris chair, an old-fashioned Windsor painted black, the cretonne covered pieces mentioned, and two Chinese wicker chairs comprise the furniture. A fireplace with a brick hearth and high nook adds beauty and comfort. Two bedrooms are finished like the living room and one, the guest room, has painted woodwork and walls. Color schemes are gray and old rose; gray and apple green; and deep ivory, pale yellow, pomegranate and old blue. Walls are plain, and pattern in each case is supplied by curtains, rugs, etc. Of course, there is a sleeping porch which for seven months of the year is daily, or rather nightly, in use.

Built on craft lines is another bungalow, in the same town by the way, but of two stories. The lower floor consists of hall, living room, dining room and the compact service part. The dining room and living room are practically one room with the hall included.

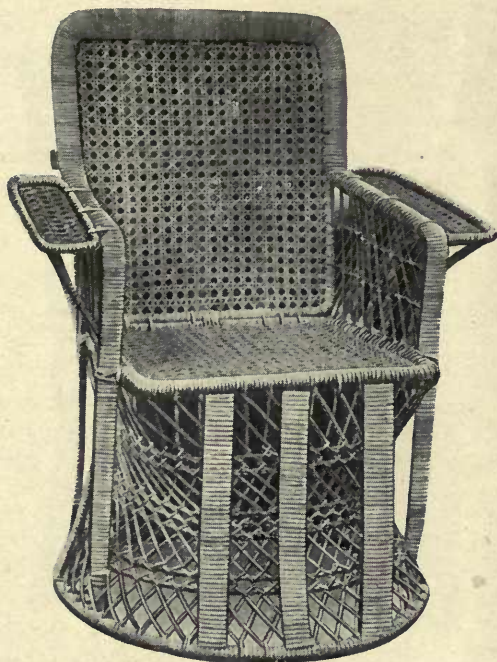
Neutral-colored burlap is used throughout this floor with the exception of the service portion of the house. It is undyed burlap of a warm gray, with a slight pinkish cast. The ceiling is in natural-colored plaster brought down to a low, flat molding. This, too, takes a warmer tone than is usual in plaster. The surface is rather rough, suiting the room as anything fine and smooth would not. As is often the case in low-studded rooms, the shadows are many and wonderfully helpful to the color effect. The side walls are eight and a half feet in the clear, and seem lower owing to the strong horizontal lines of furniture and woodwork. The latter is birch stained warm gray.



Harrison chair of willow.

It is interesting to see how privacy has been secured in a treatment that practically makes one room of three and three rooms of one. The porch gives direct entrance to the hall, which, being undivided from the living room, seems much larger than it really is. Had the staircase been placed near the door, had it received the prominence usually accorded it, the hall would seem contracted. It is located as far from the entrance as possible, and is screened in such a way as to be almost hidden. It rises from a low landing at right angles with the entrance, and until one ascends it the "wherefore" and the "whereto" are unnoted. The screen is an upright lattice repeating the strong lines of the vertical moldings, and is helpful in a composition where the principal divisions are horizontal.

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That old standby, the Chinese hourglass chair of rattan always at home in the bungalow.

A fireplace of light brown brick has high back settles on either side, of birch stained to match the trim. A narrow

shelf, scarcely more than a molding, frames a sketchy landscape let in to the over-mantel. This landscape is painted on burlap, and seems to be part of the wall. It is one of the things that might be made atrocious, and one dislikes to think what might happen if the unskilled were to thus decorate their house. But the maker had the sure, swift touch of the artist and stopped in the right place. His canvas might be called a suggested landscape, for it is in reality only a suggestion. In this particular house it is well placed, giving to the room a very pleasing touch of color. The gray tones of the burlap are repeated in the casement curtains, which are of a coarse, transparent canvas. In winter a copper-colored silk is substituted for the canvas, adding greater warmth and producing an entirely different color effect. In an all-the-year-around house it is an admirable idea to have summer and winter curtains, not only as warmer and cooler effects are desired, but also for the variety which such a plan gives an interior.

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.



VERY interesting printed linens, cretonnes, etc., are reviving the patriotic designs of the late eighteenth century, while others set forth scenes and emblems based on the present war. Whether these new textiles will become the vogue, as did the

Toiles de guerre of more than a century ago, remains to be seen.

Speaking of things patriotic a writer in that beautifully printed magazine, "Good Furniture," refers to the work of Charles Jelstrup which, as yet, is known only to a limited number of people. Recently a

INSIDE THE HOUSE

novelty in hat boxes was noted "decorated with a very striking example of patriotic wall paper after the fashion of the hat boxes in the days of our great grandmothers. There was a marked difference, however, in regard to the subject represented and also in the rendering of the decorative design.

This modern hat box had as motives for its decoration the Eiffel Tower, the sky-line of Paris, aeroplanes in the upper air and anti-aircraft guns in the lower foreground. This charming bit of industrial art from our artistic friends beyond the sea was unfortunately in the hands of a sprightly and attractive young modiste dashing on her way to some fashionable client. So both the hat box and the modiste were speedily lost to view in the hurrying crowd that filled the sidewalk from store to curb. Where this ornamental bit of printing came from or where it went remains a mystery.

There are, however, patriotic wall papers being designed and printed in the United States but they are being designed by a French artist, Charles Jeltrup, and not by American talent.

This experienced artist worked formerly as a regular designer on a salary at an industrial plant in New Jersey. After the European war began and taxed the utmost resources of all nations Jeltrup received his call from France to join the

colors. Being beyond the age of active service, he was assigned as military attache at the French consulate in New York.

In this way the gifted designer was enabled to maintain some of his old associations in New York and to continue in



Patriotic wall paper designed by Charles Jeltrup.

his spare time the quiet tenor of his artistic work. His studio, however, had a martial air and the artist while at work is usually garbed partly in mufti and partly in his military uniform. His rifle and other accoutrements of military service are to be seen about the studio, and in places of honor above the mantel are displayed portraits of famous French army men, such as General Foch, General Pau, and the distinguished and much beloved "Papa" Joffre. Aside from these martial touches the studio has remained a commercial designer's studio of four years ago. The walls are covered with still popular designs of radiant roses, brilliant peacocks, gorgeous birds of paradise, all

INSIDE THE HOUSE



Courtesy of Richard C. Thibaut, Inc.

Modern scenic paper.

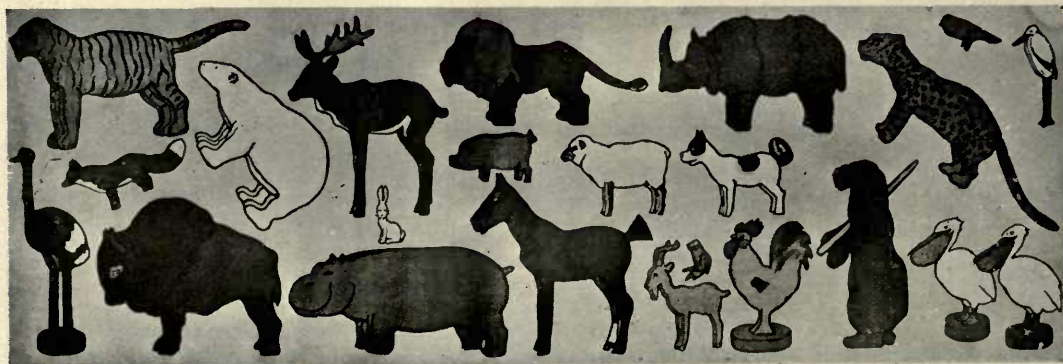
developed for exquisite chintz and wall paper patterns.

The mildly patriotic designs worked out by Jelstrup when America first declared war on Germany, when parades of for-

eign deputations along Fifth Avenue were a popular form of entertainment, are only at the present time appearing on the market. They are somewhat in the style of that French hat box depicting Eiffel Tower, the flying machines and the anti-aircraft batteries referred to above. But instead of scenes in Paris, these wall papers represent the Municipal Building in New York, the Brooklyn Bridge and other familiar objects of local interest used as a background for soldiers and sailors in the varying costumes of the allied nations.

Some of the new landscape papers are extremely fine in color and design. Several could be used in the way that the well known Zuber scenic papers have earned deserved recognition.

A long hall in a certain city house is six and a half feet wide. When the statement is added that it is forty feet long, a dismal, dark passageway is at once conjectured. Perhaps it would seem so in reality, if it were not for the wall treatment. The general color scheme is blue-gray which in itself adds breadth. Above a gray canvas is a scenic paper designed by Zuber, the clever Frenchman. It is in twelve sections and so skilfully hung that



Jungle poster for a child's room.

INSIDE THE HOUSE

the effect is that of a painted wall. It calls to mind the old landscape patterns seen in Colonial mansions of New England and the South. Architects of that period realized the value of these decorative wall-hangings, and decorators are now appreciating their wonderful possibilities.

There are miles of distance in the Zuber clouds and far-away castles. In the foreground is clearly defined foliage in strong but subdued colors. Green, blue and a pale orange make an effective color harmony. The ceiling is lighter gray. The woodwork, as elsewhere, is painted white and the furniture is new mahogany of old design.

One new American design shows a delightful garden seen through marble columns. There are fountains in the middle distance and a perspective which suggests space and light.

A very important series of reproductions of old patterns has recently been undertaken by one of the largest wall paper manufacturers in this country. For old houses or new houses of Colonial treatment these block printed papers will meet a definite need. A new design of great charm for a child's room shows a frieze of happy children depicted a la silhouette. As this is a "cut-out" scheme many variations are possible.



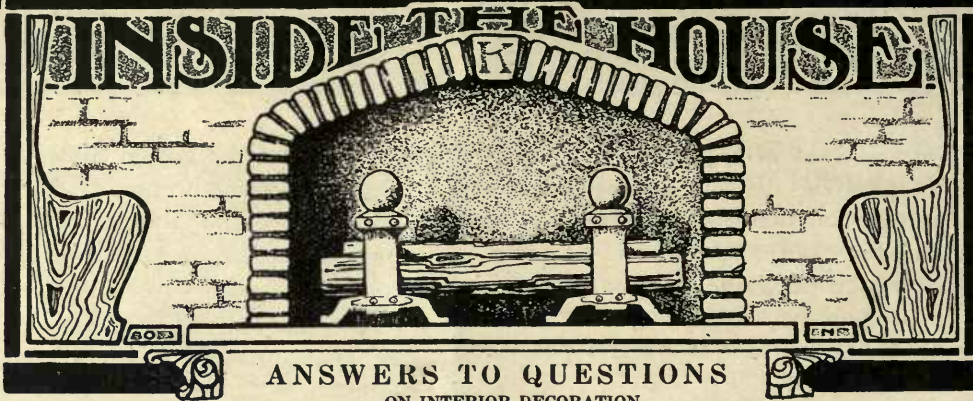


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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan.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

Suggestions for a Bungalow.

E. E. G.—I am an interested reader of your magazine, and would appreciate your help in planning the interior decoration of my bungalow. I am enclosing sketch, showing floor plan. All the walls are of plaster, smooth finish, and I would like to know what color to use for the different exposures; also, rugs and draperies, as I will have to buy new ones for all rooms. Dining room and living room connected by sliding doors. The furniture in the dining room is Mission, Early English finish, while my piano is mahogany. I had thought of having the living room furniture match that in the dining room. I especially like the dark green walls, with two-tone green rugs, but I understand the green would make the rooms on the north side look too cold. Please advise me as to the best way to do the woodwork and floors. They are of pine. All the walls of my house were originally white plaster. Would you advise kalsomine or paint or wall paper?

Ans.—Your letter has been read with interest and we take pleasure in sending you suggestions for your bungalow. We give you a color guide which may be executed in paper, paint or other medium. You will find paint admirably adapted to your bungalow. You will see that they have depth without too much intensity and that all the tones are well fitted for a bungalow interior.

With plain walls the curtains and upholstery should be figured in order to make contrast and variety.

Herewith are the rooms in sequence:

Living and dining room connected by large opening, "slate green" for side walls; "light gray" for ceiling; curtains of chintz in black, green, gray and pale orange; rug in gray with border in green, pale orange and a little black. Kitchen in cream, woodwork in light gray, floor in one of the many good floor coverings (linoleum, etc.) in blue gray and cream. Curtains of gingham or cotton print in blue and cream. Front bedroom pale gray walls, lighter ceiling; curtains in old rose, gray, green and black, rugs in gray and old rose. Rear bedroom in pale yellow walls, lighter ceilings, rugs in soft blue with gray and blue border and curtains in gray, blue, black and yellow, woodwork ivory white.

Floors, except in kitchen, should be stained a grayed light brown and the woodwork in the main part of the bungalow should be a shade lighter than the finish.

Natural Wood Finish for Bungalow.

C. H. W.—We are planning to build a bungalow and would like some suggestions as to finish of walls, rugs and curtains. The living room will be 15x18 and the dining room 12x15, with about a 6 or 8-foot opening between. The sun room will be 14x14 opening from living rooms by French doors. Then there will be a bedroom 12x14 just back of this sun room and it also opens out of the living room. The woodwork we prefer to leave natural oak, unless in bedrooms we might finish in white.

We have a rug which I thought I would use for the sun room. It is light

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INSIDE THE HOUSE

tan background with design of Nile green, black, white and sort of a brick. Will buy a set of wicker furniture for this room. Would you suggest the natural color for this rug and what color for the wall and ceiling? Most of three sides will, of course, be windows. All walls will be sand finish and painted. I prefer the very light shades.

In living room we intend buying a new piano and book-case in dull mahogany, while we have some rockers in oak which we will use in this room.

For the dining room all the furniture will be of oak.

In the front bedroom I want the furniture to be either bird's-eye maple or ivory. Would the very light pink wall be good with this furniture? I would like it, as my back bedroom will have to be light blue.

Our house will face the south, bedrooms and sun room on west and living room, dining room and kitchen on east. Rooms will all have plenty of light.

Ans.—The plan of your new bungalow shows an excellent arrangement of rooms and one that affords an interesting decorative treatment.

We note your preference for light tints and for paint, both of which we approve, also the wish to use natural oak as a trim. For the main rooms of a bungalow we greatly prefer natural woods to white enamel, unless the bungalow be of the so-called "colonial" type when it ceases to be real bungalow.

The living room color suggested, you will note, is merely a tone deeper than natural oak, which is pleasing with the deep amber tone for the dining room and with the pale green of the sun room—the latter chosen to blend with the rug.

Pink is attractive with bird's-eye maple when the wood is new, before it takes on the yellow cast which seems the fate of all bird's-eye maple. As a permanent scheme apple green as a wall tone is suggested with pink used in the accessories—in rugs, curtains, etc. The choice of blue for the rear bedroom is excellent. If the furniture for the main bedroom were

white enamel this pale pink wall would be admirable. White enamel furniture, however, does not combine well with an oak trim.

Your suggestion of white paint for the woodwork of the bedrooms is recommended. Ceilings in all the rooms where the oak finish is used should be several shades lighter than the walls. With white enamel a white ceiling is in good taste.

For curtains in the living room, use a cretonne with a groundwork similar to the wall tint and a figured pattern in yellow mahogany color and green. In the dining room use curtains of the same material, and in choosing rugs select those of plain tone—like the walls of the living room, with or without borders.

For the bedrooms use the craft rugs in plain tones with borders. In both bedrooms use gayly patterned chintz.

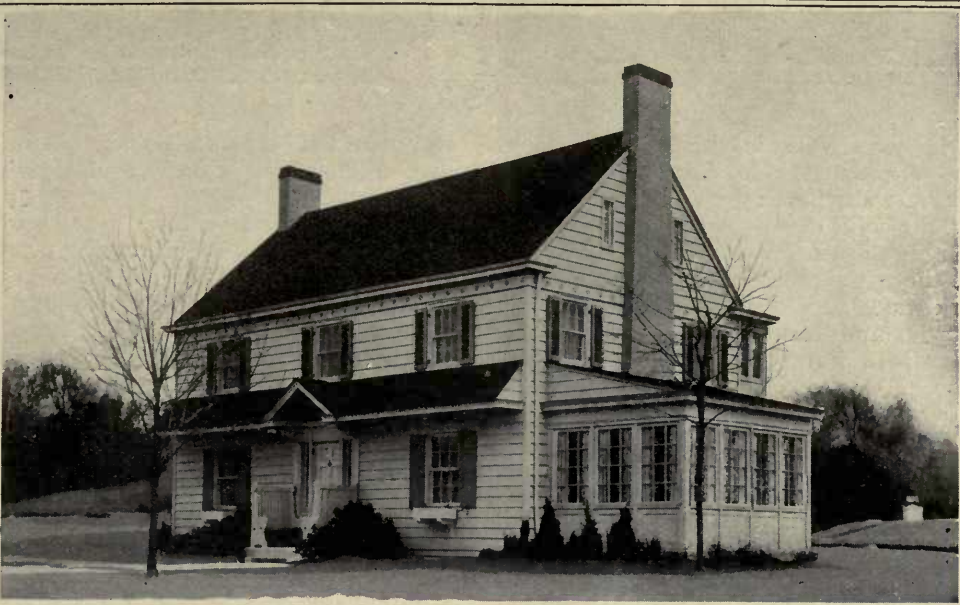
Red and White for the Bungalow.

H. E. M.—I enclose herewith floor plan for our new home nearing completion and I would like your opinion in regard to decorating.

The living room and the dining room will be finished in oak, and the other rooms in pine. The plastering is to be sand finish, and we expect to tint the walls. What would you suggest for colors in tinting in the different rooms?

Also what color would you paint the outside? The house is a one-story bungalow with very wide cornices, and faces the west. The sleeping rooms are in the south side. Have been a subscriber of your magazine for some little time.

Ans.—It would be very good to stain the oak first a tan and then when it is dry to apply a coat of bright emerald green and rub it off so that only a little of the bright green remains with the tan showing through, then tint the walls tan. This would be for living room and dining room. In the dining room use a chintz with tans and greens, etc., and in the living room a Camelian sun-fast, a changeable material and very effective, and either a tapestry or velvetine for furniture.



House of Herbert P. Luce, Hollis Gardens, N. Y. Aymer Embury II, Architect.

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INSIDE THE HOUSE

The woodwork in the sleeping rooms can be painted alike with white paint, using a wall tint of gray for one and yellow, the color of a buttercup for the other, with blue-green for the third. If you prefer, the gray room may have the woodwork and furniture stained gray, not painted, and combining it with a blue-violet in a light tone like an iridescent glass.

I should paint the outside of the bungalow white with red roof and black in the shadow places under the roof and so on, with a red brick walk leading from outside doors to the street. The porch railings would be white with lines of red, picking out the moulding and black to accent the shadows.

Stencil Borders in Bungalow.

W. E. K.—Enclosed find floor plan of our new bungalow. I would like to know what color schemes you would suggest for all rooms. For living room, woodwork in gum finished like brown mahogany. In dining room the woodwork is same as living room with skeleton panel and cornice in both rooms. What would you suggest as to curtains, drapes, paper, color of brick for fireplace and color of stain for oak floors in both rooms? The breakfast room and kitchen are all white with either a reed table and 4 chairs or white enamel in breakfast room, white linoleum on both floors and bathroom. There are oak floors all through house. I would rather use a flat wall paint on bedrooms, if desirable, and probably a paper border to match drapes.

Ans.—The curtains in living room should be blue and wall paper tan with blue shades for the lamps lined with tan. In the dining room, curtains should be either gold gauze silk or changeable green camelian with a tapestry paper including tan brown, etc. The fireplaces in both rooms should be tan brick and floors will be brown like woodwork.

In the breakfast room use India print or chintz for curtains to keep the room gay and hospitable and have the walls painted with three-quarter-inch stripes in a group about six inches from the

woodwork in each wall space. This will give a charming panelled effect and is very attractive.

In the bedroom with old ivory and mahogany a rose color taffeta silk or gauze would be good if the mahogany is not toward the violet red. The walls in deep ivory.

As you intend having all walls painted use a stencilled border, not a paper one for color. White shades should be used throughout the house. In your own room, brown rug and brass bed, why not use golden draperies or changeable camelian with some contrasting color. The wall would be deep golden cream.

With the green rug, I would use chintz draperies, as you do not want too much green in the room.

Treat the Bungalow Like a Flower.

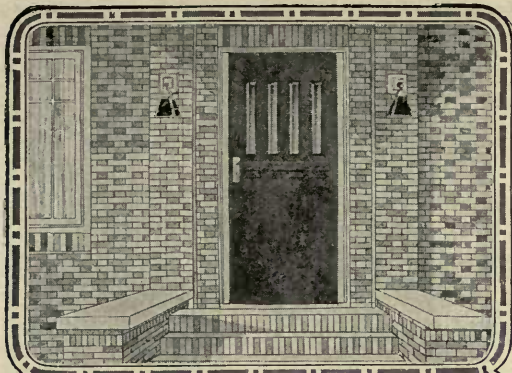
S. J. C.—I am enclosing floor plan of a small bungalow.

Will you kindly give me an inexpensive plan for the interior decoration, color scheme for walls, woodwork, floor, etc. I want something new.

Ans.—You should treat your bungalow like a flower, say a pansy-scheme, beginning with the bedrooms, use pale yellow for the first one and a deeper rich yellow for the other with creamy woodwork in both. The kitchen in bright pale Nile green with white woodwork and gauzy white marquisette curtains in all three. They wash easily and do not cost much.

Then do the dining room in blue-violet, rather light and a little neutral and the living room in violet also light and neutral. The woodwork in both of these would be a light delicate gray with a violet feeling, like the tones in iridescent glass. Finally, the sun parlor would be a summing up of all the other rooms with chintz hangings and furniture coverings, in it you would find the yellows and greens and violets and gray and the furniture in here as well as the woodwork could be painted in highly glossed black enamel to allow the colors to reflect in its surface.

I am anxious to have this house a real picture for its plan is so charming.



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← This shows the 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 waterproof metal track.



INSIDE THE HOUSE

HOUSEHOLD ECONOMICS

A New Ironing Board



GROUP of school teachers, tired of being in someone else's home, decided to have a home all their own. They took a little apartment and equipped it for the necessary housekeeping. They were more or less crowded, of course, and there were many of the little kinks in the housekeeper business which they had to unravel, as they did not have the time of the usual housekeeper. One of their greatest annoyances was the irrepressible ironing board. It was in the way in the kitchen, it would fall down when it was put in the closet, something was spilled on it when it was laid up on the pantry shelf. There was no good place to set it up and it was in the way every place.

One day the Ingenious One had an idea. An ironing board could be built into the kitchen table, where it would fold out of the way when it was not needed, and where it could be simply pulled out ready for use. The table was built



The ironing board and support folded under shelf of five foot cupboard.

with many experiments as to height and length. All the little details of the hardware, the hinges and the rest which made it solid on the floor when in use. Even the cover which should snap in place when the board was opened was carefully studied.

It worked pretty well and the first steps looking toward a patent were taken. But the Ingenious One was not satisfied. The table took more space than was necessary. Then she had another brilliant idea. Why have a table at all? Why not build it under the working shelf of the cupboard? Careful measurements showed that it could be folded into the space taken by two upper drawers. The height would be just right. It could be built into any cupboard. It would take no additional space in the kitchen. There would be room for it in any kitchen where there was room for a 5-foot cupboard. Further experiment showed that the board could be hinged and folded into a space of four feet. So she



The board folded in short cupboard.

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INSIDE THE HOUSE

began all over again and built the ironing board into the cupboard.

The tallest friend and the shortest friend and the middle sized friend had all been asked to use the ironing board, and after a year of experiment 33 inches was established as the standard height. It is



The ironing board ready for use.

always better to have an ironing board a little too high rather than too low, but this seemed the best height for the average convenience. Nevertheless there is nothing hard and fast about the height. It may be altered to suit the case.

The board is built in two styles. Where five feet is available a 54-inch ironing board is set on a pivot and folds just under the working top of the lower cupboard, and the well braced leg folds under it. The hinged panel snaps up into place, and the board is out of sight.

The second style is four feet in width, and the 54-inch ironing board is in two parts hinged together and one end doubled back before the board is folded under the shelf, only requiring a deeper pocket.

The first thing required of this iron-

ing board was that it should always be ready for use. Where the board was in a single piece there were no difficulties for the cover was put on in the usual way. But in the short board a special cover or pad was necessary which should snap smoothly into place when the board was opened. Considerable ingenuity was exercised in preparing such a pad, but that too was accomplished.

When vacation came the Ingenious One went to the nearby city to see about putting the new cabinet ironing board on the market. To her surprise she found the millwork people not only ready to manufacture them for her, but asking the contract for taking over a certain field for manufacturing and supplying them. So she drew a long breath, signed the contract, and took the next train back, arriving just in time to open the new term of school.

Save Kitchen Utensils.

Manufacturers of kitchen utensils have issued an appeal asking that care be taken to conserve pots and pans as much as possible on account of scarcity and cost of metals. Hotel men have responded by issuing the following suggestions to their kitchen employees:

Don't heat foods in a pan without water.

Don't use coarse scouring powders.

Handle kitchen utensils with care.

Soap and water are the most economical and easiest cleansers, also they are far less damaging to the hands.

Buy shapes and sizes that can be used for many different purposes.

Don't scrape pots and pans with sharp knives. Soak them instead.

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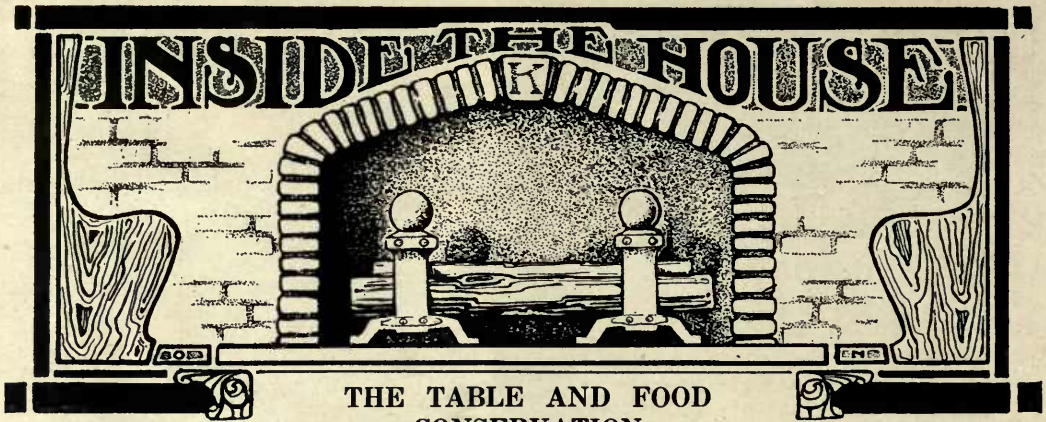
YOU might not care to rent your attic after finishing it with Carey Wall Board but the point is this: If it can be so transformed that one room is worth \$100 annually to a renter it certainly is worth that to you in the comfort you and your family will get out of it. Thus, this economical improvement is justified in these conservation days.

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Our Allies Need Wheat

THE cry for food, and especially for wheat, grows constantly more insistent from all our allied nations. Lack of food for them means a weakening of our fighting power.

American housewives are thus put into the front trenches. They **MUST** save wheat to send to France. What is one wheatless day a week, to those in the midst of plenty? White bread is something of a fetish to some people, even though it is known to be lacking in nutritive and other health values. Really, why should we insist on using it at all?

All the traditional usages of the housewife-cook vanish with such a fundamental change in the diet as that required by the use of other grains for wheat flour. All her tested rules must be replaced and tested, and this is no small undertaking. Yet it is small when set beside what is required by other patriots in the front trenches, and does not require greater preparation.

The Food Administration keeps busy a large force of experts in household sciences, preparing and testing such rules as will be helpful to the housewife with the use of other flours and meals.

Corn flour, which is being milled now and is much finer in texture than corn meal, offers great possibilities. Here are some rules for the use of corn flour.

Corn Flour Griddle Cakes.

- 1¼ cups milk
- ⅔ cup corn flour

- ⅔ cup white flour
- 1 tablespoon fat
- 1 egg
- 2 teaspoons baking powder
- ¾ teaspoon salt

Add beaten egg to milk, and add to dry ingredients which have been well mixed. If sour milk is substituted for sweet, use ½ teaspoon soda and no baking powder.

Bake a test cake adding a little more soda or some baking powder if it seems raw inside.

Corn Flour Muffins.

- 1 cup milk
- 1 egg
- 2 tablespoons fat
- 1 tablespoon sugar
- ½ teaspoon salt
- 1 cup corn flour
- 1 cup wheat flour
- 4 teaspoons baking powder.

Combine the milk, egg and melted fat; sift dry ingredients together and add to the liquid. If sour milk is substituted for sweet, use ½ teaspoon soda and 2 teaspoons baking powder.

Rice which has been left over and even mashed potatoes are excellent in making a type of batter cakes which are both good and perhaps less difficult of digestion than griddle cakes made from flour and meal. Corn may also be used in the same way.

Rice Batter Cakes.

- Add to 1 cup cooked rice 1 beaten egg,
- ½ cup milk, 1 teaspoon fat, enough flour

"Know the grim truth; All the blood, all the heroism, all the money and all the muntions in the world will not win this war unless the Allies and the people behind them are fed."—A War-Food Message.



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INSIDE THE HOUSE

to hold mixture together, and $\frac{1}{2}$ teaspoon baking powder. Cook by spoonfuls on an oiled griddle or in a frying pan. Serve with honey or syrup.

Steamed Brown Bread.

- 1 cup cornmeal
- 1 cup Victory bread crumbs
- $\frac{1}{2}$ teaspoon salt
- $\frac{3}{4}$ teaspoon soda
- 1 cup sour milk
- $\frac{1}{2}$ cup molasses

Mix the cornmeal, crumbs, salt and soda. Add to sour milk and molasses. Steam two to four hours. Bread may be dried off in the oven for about fifteen minutes.

"Co'n Pone."

- 1 cup cornmeal
- 1 tablespoon fat
- 1 teaspoon salt
- $\frac{1}{3}$ to $\frac{1}{2}$ cup water, or enough to make a soft dough

Combine ingredients and cook as for mush, and while still hot shape into pones by molding a portion of the dough in the palms of the hands, so that each will be approximately 6 inches long, 3 inches wide and $1\frac{1}{2}$ inches thick in the center, sloping off to $\frac{1}{4}$ inch thickness at the edge. Cook on an oiled skillet 20 to 30 minutes and finish by browning in the oven.

Steamed Pudding.

- 1 cup sour milk
- 1 cup molasses
- $\frac{1}{3}$ cup fat
- 1 egg
- 1 teaspoon soda
- $1\frac{1}{2}$ teaspoons salt
- $\frac{1}{2}$ cup raisins
- 3 cups rye flour

Steam three hours in buttered molds.

Pie Crust.

No. 1:

- 1 cup rye flour
- 3 tablespoons fat
- $2\frac{1}{2}$ tablespoons water
- $\frac{3}{4}$ teaspoon salt

No. 2:

- $\frac{3}{4}$ cup rye flour
- $\frac{1}{4}$ cup white flour

- 4 tablespoons fat
- 3 tablespoons water
- $\frac{3}{4}$ teaspoon salt

Chocolate Cake.

- 1 cup liquid
- $1\frac{1}{2}$ cups sugar (or strained honey)
- 3 eggs
- $\frac{1}{2}$ cup fat
- 1 teaspoon salt
- 4 teaspoons baking powder
- 3 squares chocolate
- 1 cup rye flour
- 2 cups white flour

Milk.

Don't allow a drop of milk to be wasted. The children must have milk. It is most valuable as an all-around food. Its protein is most adaptable to uses by the body; its sugar is easily utilized; it supplies lime; while butter-fat contains something absolutely necessary for children and probably for older persons as well.

Many of the rules for the different breads use milk, either sweet or sour. Many housekeepers have been accustomed to use milk generously in making yeast breads, as giving a greater nutritive value to the bread. It had especial value when used in white bread. The digestive residue from white flour, according to Dr. Wiley, is decidedly acid. When skimmed milk is mixed with it, this acidity is corrected in proportion to the amount of milk used.

To Clarify Fats.

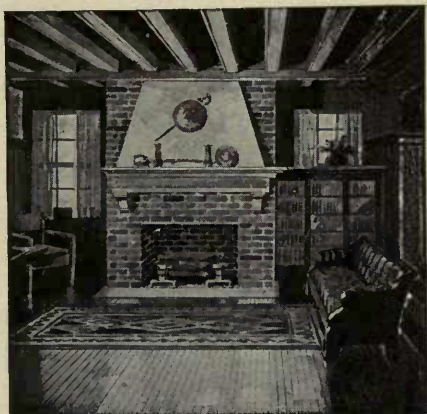
Fats left from cooking may be clarified by mixing with water and heating, with constant stirring, until the steam from the boiling water has carried off some of the odors from the cooked fat.

The drippings from fried sausage, ham, bacon and pork, chicken, make a sweet, savory flavoring, and can be used alone or in combination in seasoning vegetables or in cooking certain foods. The fats from mutton, duck, goose and turkey are often considered too strong, but if used in combination with other fats, this flavoring can be satisfactorily toned down. Cottonseed oil, corn oil, peanut oil and olive oil replace animal fats fully in cooking.

Eat one meal a day of vegetables, exclusively. The habit will be good for your health and good for your country.

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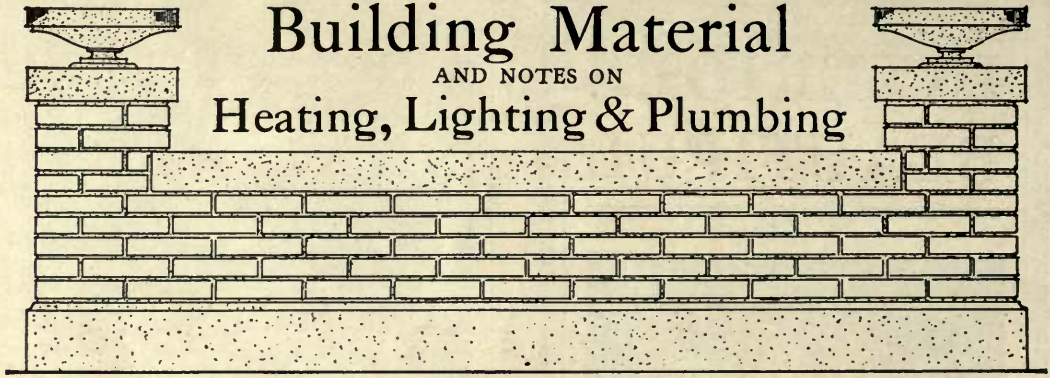
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Built to Retain Heat

MOST householders would feel it quite a hardship if they were required to hold \$500 in the savings bank, drawing four per cent interest. It is not an uncommon thing in any city for a householder to throw two tons of coal every winter through the cracks in his house. It would require the interest on \$300 to \$500 to pay for the coal so wasted. Ten per cent of that amount would probably have been sufficient, while it was in the process of building, to supply the labor and material necessary to insulate the house against weather.

A leaky roof and a house which leaks around the doors and windows when there is a heavy storm is a source of the greatest annoyance and continued expense, and measures are taken to avoid such faulty construction in every house that is even moderately well built. Water stains on the walls and ceilings keep such faults under the eye. But a faulty construction which only leaks wind sometimes strains the capacity of the furnace and melts the coal pile without coming to the notice of the householder at all, except as he complains of the cold weather and his own discomfort. There are no tell-tale lines and spots on the wall, except an occasional little pile of snow which has sifted through and cooled that corner of the room so much that it does not melt immediately. Weather-leaks in the house are leaks in the purse of the householder.

The reliable modern builder knows how to build a weather-proof house and has

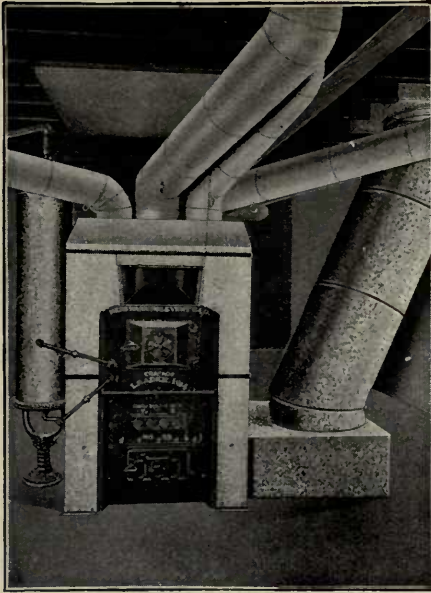
more satisfactory materials at his command than the most lauded old-time builder. The process of building a house has been worked out in a scientific way, and many types of materials are on the market to meet every need. The commercial contractor says that he "cannot get the money out" if he builds such a house. The money goes out fast enough after the shell he builds is completed; whether a man can get it into his pocket again is quite another matter.

Notice two houses side by side, when the snow is deep. There is no snow on the roof of one though it is not steeper than the other, and catches the snow in the same way. "What a warm house, the snow has melted from the roof." Yes, but it costs money to melt the snow on the roof.

Insulation.

When building in a cold climate a complete insulation of both roof and walls will pay for itself in reduced coal bills as well as in that comfortable feeling of warmth where there are no little drafts. If the attic is not used at all the insulation may be laid under the attic floor, meeting the wall insulation under the eaves, or the roof itself may be insulated giving its protection to the space under the roof as well and allowing a certain amount of heat from the other floors to reach the attic. Either process is entirely practicable, depending on the way the house is used.

There are many insulating quilts and felts on the market which are efficient and



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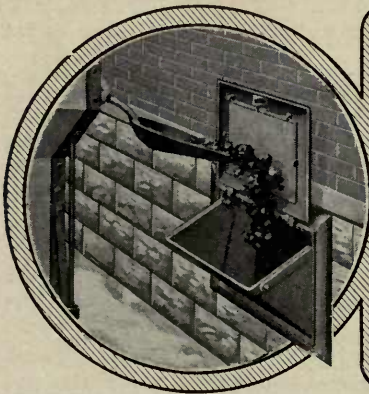
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which are not unnecessarily expensive. Early builders often went to great trouble and expense "to make the walls warm." In the early days of Indiana statehood a prosperous farmer who had been a carpenter in his youth "back East," built kilns and burned brick on his farm and filled in the entire framework of the farmhouse he was building for himself, with these home-made brick. The outside was covered with siding and the inside plastered in the usual way. The brick filled frame made a warm, solid house which is standing in perfect condition today.

Paint-Conservation in the Springtime.

Nothing is more depressing than a house badly in need of paint. A fresh coat of paint adds new life to the building painted and a sense of comfort to the owner or even to the passerby. At the same time the improvement in its appearance is only a small part of its usefulness.

In going through any section of any American city in which frame buildings abound one is immediately impressed by the startling number of buildings that need repainting. That is, one is impressed if he takes heed of the fact at all. Usually we are so used to the paintless condition of buildings that we give no thought to the matter. Only in the best residence districts of American cities is paint used in adequate quantities.

Where people have saved a few dollars that should have gone to the painters, they have wasted many more dollars in the rapid deterioration of buildings because of lack of paint.

In these days when economy and conservation is wisely advocated everywhere, it may not be inappropriate to give some consideration to a phase of wastefulness that has prevailed in this country since the time of its settlement. The people of America have economized on paint and have permitted the buildings of the country to deteriorate with frightful rapidity.

As a matter of fact the average paint coating is only three one-thousandths of an inch thick and yet this thin coating is required to withstand expansion and contraction of the underlying surface, abrasion or wear from storms of dust and sand; of rain, sleet, hail; the absorbing, drawing and expanding influences of the summer's sun and contraction from the cold of winter. It must have both hard-

ness to withstand to a reasonable extent this surface wear and yet enough elasticity to meet internal strain and to conform to changes in the underlying surface and it must penetrate and cling to the surface upon which it is applied. It must also retard and prevent from access to the underlying surface both the moisture and atmospheric gases which cause decay. If possessing the virtues of a good paint it must in the course of time, when repainting becomes necessary, present a suitable foundation for the new paint coating.

In the usual three-coat work how many years should this nine one-thousandths of an inch of paint be expected to completely protect the wood from the weather?

In many cases it is actually cheaper to repaint the old home than to economize by allowing the weather to take the life out of the wood. Unprotected wood rots quickly. Wood that is kept well painted will last a century or more as is evidenced by the old Colonial houses of New England,—where "the new part" was built about 1800, as the owners tell us, with pride.

The man who feels that he cannot build the new home this year can perhaps give the old house a coat of paint if he is to live in it for another year. It will give the place a sense of cheerfulness and will also do its part toward keeping up the morale of the country, which is needed at home this year when so many of the boys are in the army.

Notice the next time you pass a newly painted home and one badly in need of it. See how one gives a bit of cheer while you unconsciously sigh as you pass the other and feel sorry for the family. Aside from the psychology of the case, those who know assert that it is more expensive to prepare the wall and give it the three good coats of paint which it requires, than the sum of the single coats given every little while. This does not take into account the improved appearance of a frame building after a needed coat of paint has been applied; nor of the fact that such a building generally brings better rentals, or the further fact that a property owner who permits his buildings to deteriorate for lack of paint shows a lack of public spirit and civic pride. The man who keeps his buildings looking attractive and well-kept raises the standard

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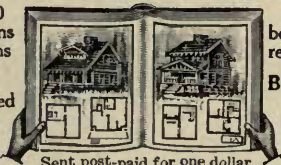
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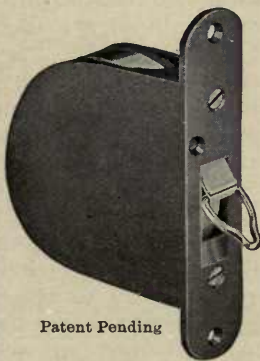
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The Carpenter Business.

"So you want to hear something of the old-time carpenter, do you?" asks Uncle Joel, in the National Builder. "I have been thinking a lot about those days lately, perhaps because I have quit the business, and have more time to think, but I have wondered what some of these \$5.00 to \$10.00 a day carpenters would do if they had to do the work we did with only the tools we had.

"I can remember the first time I ever saw a screw driver used in a bit stock; I thought it the greatest invention of the age. In fact, the development of the tools the farmer uses has been a wonderful thing to me.

"I remember the first frame house I worked on. It was for a new farm house and the farmer cut the timber from his wood-lot, and we hewed out the posts and sills with broadaxe and an adz.

"I have seen an expert adzman that would go over one side of a 12x12 with an adz and it would look as though it had been gone over with a jack plane. Then, there were the raisings.

"Oh, yes. A 'raising' in the country was something to look forward to, and something to remember as well. We used to frame the sides of the building on the ground; then the farmer would send word and all the neighbors would come and help put the frame in place.

"I remember that 8x8's were considered pretty fair size for posts and sills, and then some of the old fellows would shake their heads and say that we were skimping things.

"I have often wondered what some of those old chaps would say if they could come to life now and see some of the balloon frames that are being put up. Just think of it—a two-story and a half house with nothing in it bigger than a 2x4, except the floor joists!

"The carpenter business is not what it used to be before the specialists got into it. I tell my boys they don't know what work is now. We used to lay a floor of rough boards and then get down with our planes and make the whole floor smooth.

It's the same with window frames. They are ready made now. All the carpenter has to do is to fit his windows."

"You spoke of the \$5.00 a day carpenter of today, Uncle Joel. Don't you think he earns his money?"

"There are two ways to look at that, and we must be fair to the carpenter of today," said Uncle Joel. "Fifty years ago the carpenter worked ten or twelve hours a day and he worked hard. The carpenter of today works possibly nine hours a day, having nothing real laborious to do, in comparison with the old-time carpenter, but he accomplishes more."

A Washington Forester in France.

From a letter home.

"Our regiment has been divided, some going north, east, south and west, to the timbered regions of France. We are doing everything from felling to transporting the milled product. We have constructed our own buildings, barracks and mills. We have built stoves, bakeries, field kitchens and all our camp equipment. Our mills are designed to cut from 6,000 to 10,000 feet per day for the portable types, to 35,000 feet B. M. for the stationary ones. Of course, we run the mills night and day. In this camp we are hauling logs on sleds as we have had cold weather with plenty of snow. Twenty inches of snow is the most that has fallen. My company is now located near one of the large coniferous forests of France. French forests are mostly artificial and are well cared for. A forest here certainly does not look much like the lumber woods of Washington. The French do their logging with bulls; frequently one sees ten or twelve bulls hitched to one log. They haul the entire tree to the mill and cut it into the desired lengths on the log deck.

"The forests are traversed by many good roads. France is a land of beautiful roads. The French manufacture fine lumber, but certainly take their time about doing it. Much of the common work is done by women. Part of this company has taken over a French mill and are operating at night, the French working during the day-time. The French cannot 'compre' our speed in doing things."

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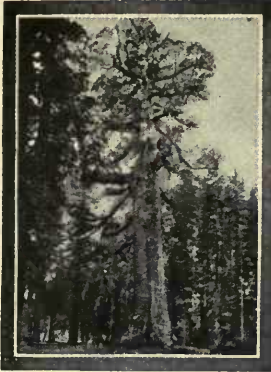
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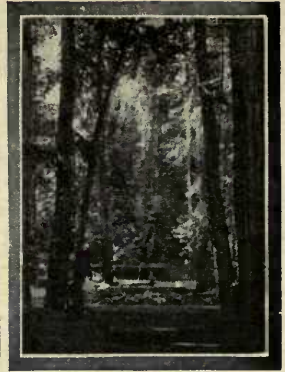
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WOODS

AND

HOW TO USE THEM



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.

Pine and Its Uses White Pine

ALLEN WHITE



O write a history of white pine in building would be to write a history of the country. The early settlers in New England came chiefly from parts of England where wood construction was almost universal. They were familiar with wood; they knew how to use it; and they knew good wood when they found it. So they naturally went to the forests about for the material for their homes although stone and clay were to be found in every community.

So satisfactory a building material did they find in the wood of the white pine forests for the building of their first crude homes that in the days of prosperity when the stately Colonial mansions were erected with the greatest care, where no labor or expense was spared, the same material was used. As is usual in Colonies everything is influenced by the usage in the home-country. England was building homes of the Georgian type, largely of stone and brick. The colonial builders found their wood an excellent medium for carving the most subtle curves and holding a fine edge, even when exposed to the weather. So they copied the stately lines of the English mansions, developing the delicate mouldings and carved motifs, adapting the classic orders of architecture

to meet the requirements of wood and developing bit by bit what the discriminating call the Georgian Period of Architecture in America, but what to the general public comes under the blanket-term of Colonial Architecture.

It is to the peculiar characteristics of white pine as a wood, easily worked and durable, that we owe our Colonial Architecture. No other material than one which could be adapted to the discriminating requirements of the period for making a handsome interior, yet at the same time able to withstand exposure to the weather for exterior work could have drawn development along such lines of delicate beauty.

In those early days pine was used not only in places where its special excellences were utilized but it was used for practically all building.

The natural development in the building of many homes through a period of years, together with the efforts of the lumber industry has been to effect a certain degree of classification by means of which each wood may be given the specific use in which it excels and for which its cost allows it to be used. Definite information, gathered from building experience, is most important in the selection of the wood to be used.



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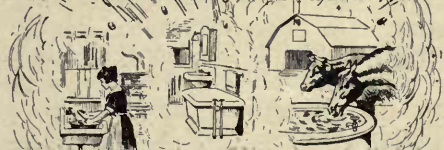
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There are two great groups of pines, as there are two main groups of oaks. These are the white pines and the yellow pines. While white pine is soft, light and easily worked, longleaf pine in the yellow pine group, is heavy, strong and stiff, ranking ahead of some of the hardwoods in these properties. Between these two, other pines offer almost every gradation in properties.

The marked characteristics of white pine, whether it is grown in the East, the Middle West, or in Idaho and Montana, are softness of texture, evenness of fibre and closeness of grain, ability to stand exposure to weather through varying degrees of temperature and through varying amounts of moisture. It shrinks less than most other structural wood, and so is less likely to open at the joints or to warp after once being put into place. It is light in weight, and therefore has not the carrying strength of harder, heavier woods. Its great excellence lies in the ease with which it is worked and its ability to withstand exposure to weather without deteriorating. It will take the most delicate wood carving, as evidenced by Colonial details which have stood through a century, both inside of the house and exposed to the weather. Its freedom from pitch or resin enables it to take paint and enamel finishes satisfactorily. It absorbs and grips the paint so that it holds longer and more perfectly than most woods, either hard or soft.

The first native white pine used in the United States was grown in the New England states, New York and Pennsylvania. Since then the trend of production has gradually been westward, and today the great portion of white pine on the market comes from Northern Minnesota, Wisconsin, Michigan, and from Northern Idaho.

These districts of the East and Middle West, commercially speaking, have furnished the great and seemingly exhaustless supply of white pine lumber up to ten years ago when Idaho white pine came into the market. According to the White Pine Bureau, a close analyzation of the comparative qualities of the white pine from the East, Middle West, and from Idaho, results in finding only those slight differences which are due to changes in

climate and soil. For practical purposes, the white pine grown in any of the three producing territories is identical, and can be used interchangeably by the discriminating builder.

White pine is especially recommended for outside uses, where exposure to the weather or dampness is the test,—including sash, doors and blinds. Also for inside doors and door frames, and especially interior finish which is to be enameled. White pine is used very satisfactorily for kitchen cupboards, pantry and closet shelving and also for lath. White pine is limited in its use for general framing purposes, where other woods serve by their own qualities as structural woods. White pine is recommended for studding, in avoiding springing or buckling of door and window frames and the consequent sticking and binding of doors and windows, and cracking of plaster.

Cut-over Timber Lands and Meat Production.

The utilization of the cut-over lands of the South for live stock production promises to help meet the decrease of grazing lands in the West, in some part at least. It is asserted that a large percentage of the cut-over land is capable of an intensive type of agriculture. Southern Pine and other lumber associations have taken the initiative in the matter, and have at hand ample data concerning the forage crops that thrive on cut-over lands.

The necessity for an increase in live stock production and the importance of the development of the industry in the South was emphasized in a message to the Association from Herbert Hoover, Food Administrator of the United States:

"An immense obligation rests upon the United States to increase live stock production as a vital necessity in winning the war. The reduction of the breeding herd of meat animals in Europe has become increasingly serious. The demand on the United States for meat and other animal products is, and during the war will continue to be, far beyond any previous experience. With the end of the war, large demands will be made upon us for breeding stock, and a continued demand for animal products while her herds recuperate.



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These war times have brought to us the days of the fulfillment of the impossible. Many things which four, or even three, years ago we should have unquestioningly have said were impossible, are established facts, which we must meet by doing other things which in the natural course of events we should consider impossible. We are like the man who, when his friend's life was in danger, picked up a stick, but finding it too small, threw it aside and took a much larger one to give him succor, freeing the friend from the machinery. Going back the next day he was appalled to find that the first stick, which he had thrown aside as too small, was too heavy to lift and the larger piece, with which he had saved his friend's life, was entirely beyond his usual strength. That is just the situation at the present time. Many a man never worked in his life as he has since he has been wearing the khaki. With never a grumbling word, youths who have been pampered from babyhood have stepped into a man's place in this struggling world. When we meet the great necessity, the limits of the possible are found only an elastic borderland swinging back and back for those who will to go through.

Civilian Workers Wanted for Ordnance Department—Special Training for Those Not Experts.

Men having a high school education, some shop training and the natural ability to adapt themselves to new work, may qualify for a government appointment in which under government instructors they will receive the necessary training for the

positions. Those who have the required technical training will be placed and advanced as quickly as their ability justifies.

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These positions are under civil service regulations, but applicants will not be required to report for examination at any place. Papers will be rated promptly and certification made with least possible delay. Apply or write for further information to C. V. Meserole, special representative of the Ordnance Dept., U. S. A., Room 800, 79 Wall street, New York City.

Two Pounds of Wood Equal to One of Coal.

Persons who plan to relieve the coal shortage this year by burning wood can figure, roughly speaking, that two pounds of seasoned wood have a fuel value equal to one pound of coal, according to experts of the forest service. While different kinds of wood have different fuel values, the foresters say that in general the greater the dry weight of a non-resinous wood, the more heat it will give out when burned.

Where wood is to be burned in a stove or furnace intended for coal, it will be found desirable, the foresters say, to cover the grate partly with sheet iron or fire brick, in order to reduce the draught. If this is not done the wood is wasted by being consumed too fast.

Ancient Stone Work.

The stones of the great pyramids are not laid with mortar. The great pieces of stone were evidently rubbed backward and forward upon each other until the surfaces were assimilated to each other, and so perfectly assimilated that to this day the breaks between them can hardly be discerned.

KEITH'S MAGAZINE

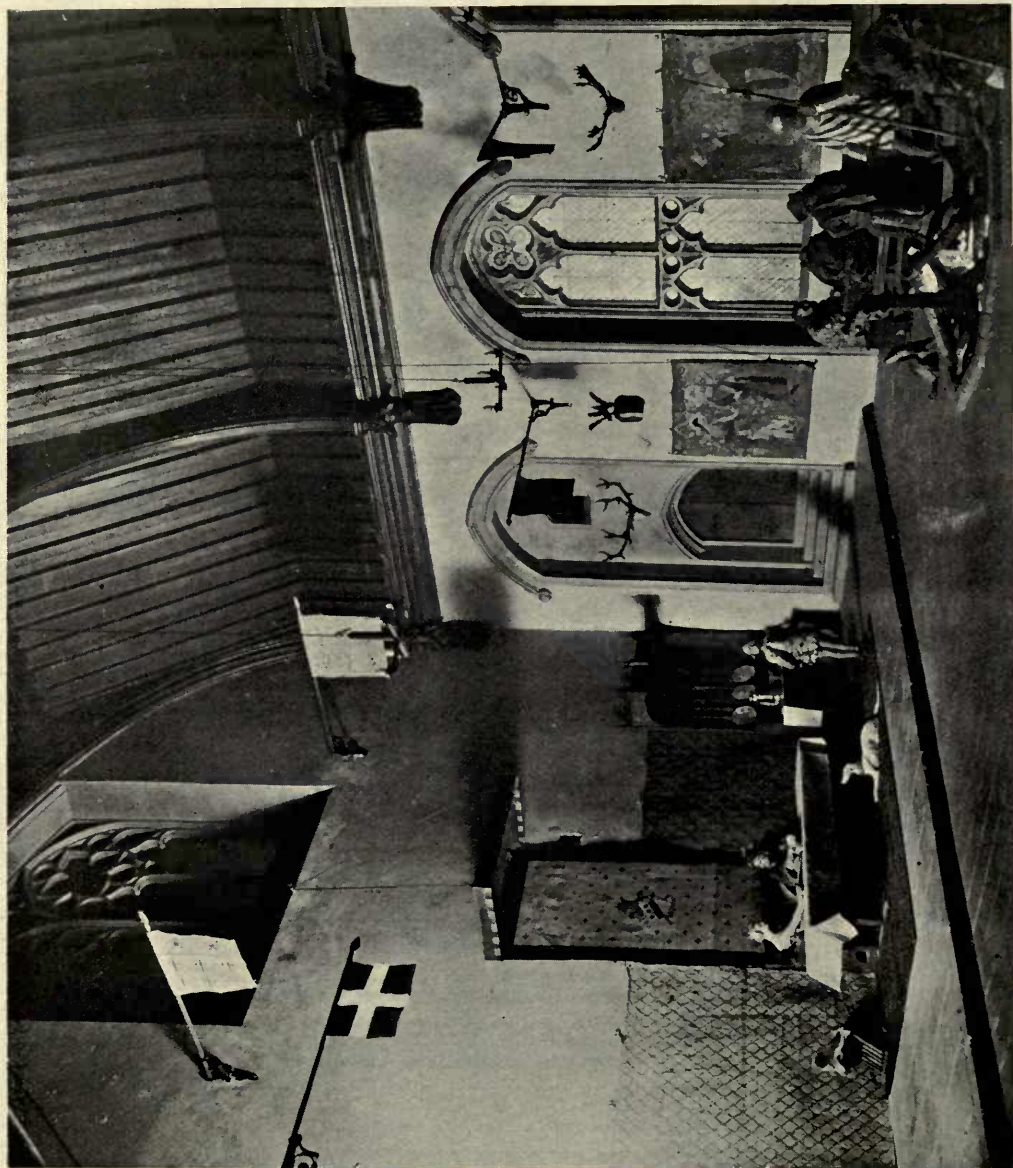
ON HOME BUILDING

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The hearth is of a still earlier date, and placed in the center of the room, the smoke escaping through a hole in the roof.

The Hall of Penshurst, England,—home of the Sidney family in the 14th century, from a model in the Metropolitan Museum, New York.

Furniture in the Making Beginning with the Hall

Virginia Robie

NO part of the house has undergone greater changes than the hall. From the lofty apartment of the mediaeval dwelling, it has passed through countless stages; has dwindled, expanded and been made to serve many purposes, but today there is a tendency to restore it to an earlier character — more a hall and less a room. The gradual expansion of the old-time narrow passageway into the reception-hall and its decline in popularity in favor of the entrance-hall are phases of modern house-building.

During the Middle Ages the hall was the main room of the house, serving as living room, dining room and kitchen. Furniture consisted of chests, stools, a long trestle table, and two or three massive chairs, the latter placed upon a dais for the

master of the house and his distinguished guests.

Below the dais the long and narrow table was set with viands less costly than those served to the master. The placing of the salt divided the guests from the serving people. "Below salt" is an expression which has endured until today. On the dais were chairs with high backs and canopies. The latter were convenient in case of rain, for the raftered roof was not always proof against the weather. Benches without backs for the guests, and stools for the servants constituted the rest of the dining-room furniture. Between meals the tables were placed against the wall and the chairs were drawn to the fire. At night the serving-men slept on pallets of straw on the hearth.



Gothic chair, showing tracery and carving of thistle on the back and the linen fold pattern on the sides and lower part.

At this period of the world's domestic history, the twelfth and thirteenth centuries, the hall was literally the *all* of the house. The next century added another room in the home of the affluent—a "withdrawing" room for the ladies—the beginning of our modern drawing-room. Here the mistress of the house with her ladies-in-waiting could retire when the

toms and the manners of peoples and all so closely allied to architecture and the lesser arts that separation is difficult. The march of civilization is not through wars and devastation, but through the arts of peace, nowhere so well demonstrated as in the home.

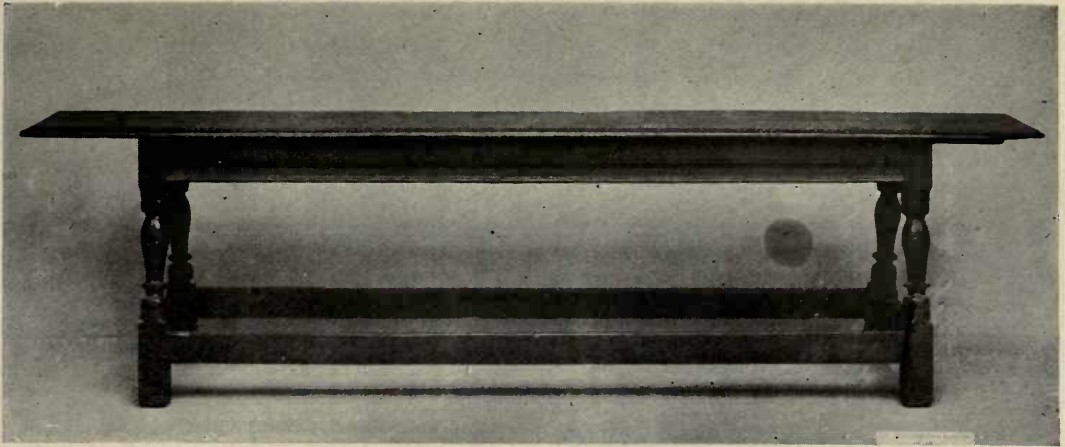
The fourteenth century it will be remembered was one of great architectural activity. Some of the finest cathedrals of England and France were built at this period. In a lesser way domestic architecture felt the impress of the times. This was the great Gothic period, when the pointed arch became a constructive detail of all architectural work, religious and secular. Furniture followed the trend of the day, either in outline or ornament, and the massive chairs, great beds, carved chests and coffer were marvels of craftsmanship. The development of the chest, in its various guises of coffer, hutch and *bahut*, forms an interesting phase of furniture-making. The cupboard, the dresser, the credence, the cabinet, and the bureau were all evolved from this primitive article.



Elevated chest or early cabinet showing Gothic feeling in the carving and metal work.

music from the minstrels' gallery became too loud, or the jesters' jokes too broad, or the drinking too boisterous. The hall was losing its original significance though still the main apartment. The fourteenth century inaugurated greater comforts in the sleeping arrangements of the household. The gradual evolution from the primitive bed of rushes to the enormous canopied beds of this century makes an interesting chapter in the history of domestic furniture. The history of the home is so interwoven with that of cus-

By the fifteenth century the hall had lost its original character. It was large and often a meeting place for the owner and his friends, but as rooms multiplied it ceased in turn to be parlor, kitchen, and dining-room. It was gradually approaching the hall, pure and simple, of the seventeenth and eighteenth centuries. It retained its fine proportions, its lofty dimensions, but the raftered roof had given place to a beamed or vaulted ceiling. The big fireplace had grown more architectural, though still retaining its generous



For several centuries the bench, next to the chest, was the most important piece of furniture.

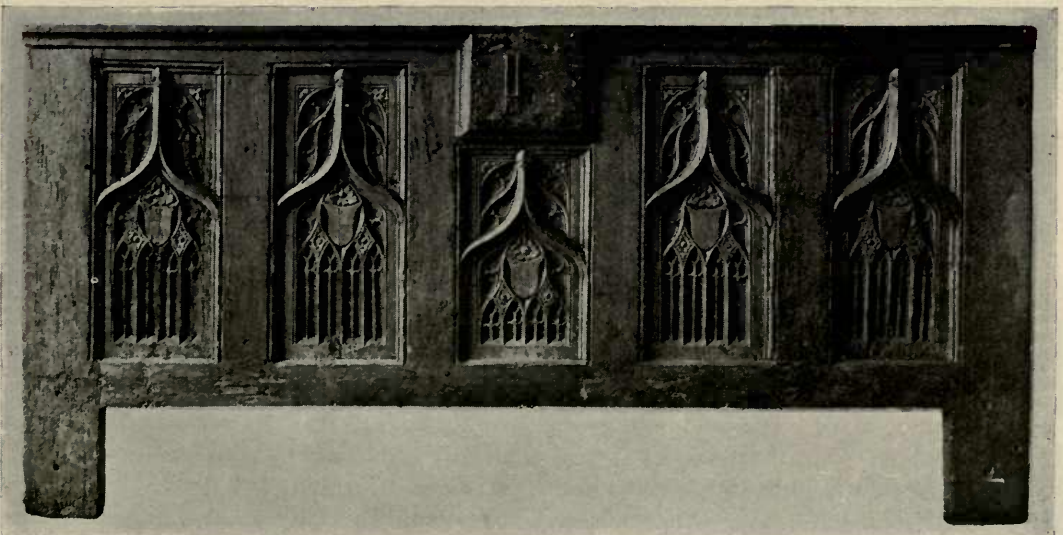
hearth. The rough walls were gone and in their place were oak panels and fine tapestries, the latter imported from Flanders, for the day of the French looms had not arrived.

It is an interesting fact that during the Middle Ages the staircase was not a feature of the main hall. There was—and still is in many houses abroad—a stair-hall, built solely for the staircase and taking its name from that circumstance.

The earliest staircase, if we may use our imagination in lieu of reliable information, was probably a ladder which

could be lowered and raised at convenience. Feudal homes were fortified homes. They performed two important functions—to afford shelter and to keep foes at bay. Doors were small, so that one person only could enter at a time, and windows until the late fifteenth century were scarcely more than loopholes.

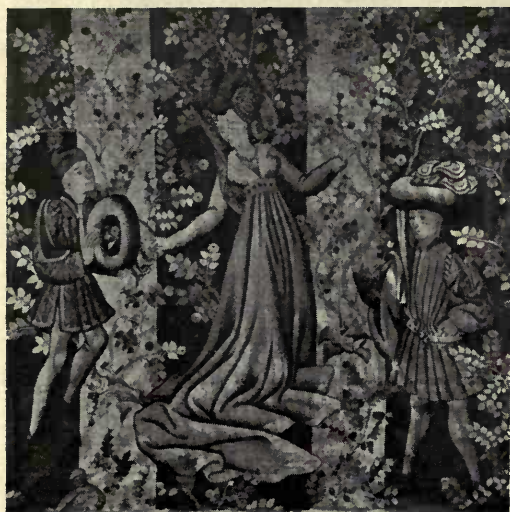
With the sixteenth century came a transformation in living. The Renaissance, beginning in Italy, was gradually spreading light throughout Europe. The house was no longer a stronghold; it had become a home. Windows were larger,



Oak chest of the 15th century—French workmanship.

and comfort and convenience were important factors in all departments.

The seventeenth and eighteenth centuries belong to modern times, when conditions of life in many ways were closely



French Gothic Tapestry—"The Battle of the Roses"

allied to our own. If space permitted, it would be interesting to trace the development of the American hall from the first rude dwellings of the colonists down to the beautiful homes of the late eighteenth and early nineteenth centuries, which, especially in the South, are the flower of our architectural achievements. The halls of these old houses are full of dig-

nity and beauty. The staircase is usually an important feature. With its white risers and mahogany handrail it combines both utility and beauty. The hall is a hall pure and simple—it is not a receiving place. The fine old parlor fulfills the demands of formality; the sitting-room meets the informal needs of the family. As a hall this particular type has never been surpassed. It has the hospitality of the early centuries, yet fulfills but one function—that of a beautiful entrance to the home.

Our later architects were not so generous with space. By the middle of the nineteenth century that benighted thing, the entry, came into existence. It was small, it was dark, and to add to its ugliness the stairs arose abruptly from the front door. The entry was a mistaken idea of economy—economy of space.

The reception-hall was a protest against the entry. It was the swinging of the pendulum from one extreme to the other. The entry gave scant welcome. The reception-hall took the whole world to its arms. It had great virtues and great faults.

Now, while a modified reception-hall or living-hall is favored by many architects, the return of the entrance-hall is truly at hand.

Putting the Garage Into the Landscape

E. I. Farrington

THE average suburban garage, built long after the house which it neighbors, looks pathetically out of place. It is evident, even to the casual observer, that it was not provided for when the house was built, and the grounds laid out. Even when a new house is built and the garage constructed

at the same time, it often happens that the latter is not made to fit into the general scheme of things, as it should be.

The easiest way to remedy this difficulty is to bind the garage to the lot, and associate it intimately with the house, by means of suitable planting. In other words, the garage must be made a part

of the landscape work. On a large place it is a simple matter to use trees, shrubs, and vines so generously that the garage will cease to be obtrusive. It is a harder matter to landscape the garage on a small lot.

It isn't necessary to mask the garage or try to hide it, but planting around the base and at the corners will wholly transform its appearance. Of course the nature of the planting must depend upon the shape, size, and style of the building itself. If it is large, some of the more conspicuous trees can be grown around it. If the building has horizontal lines, trees with a pyramidal habit should be chosen. The same is true if the owner desires to increase the apparent height of the building. The tree which comes most quickly to mind is the Lombardy poplar. Usually, however, this is not the tree to use. It cre-

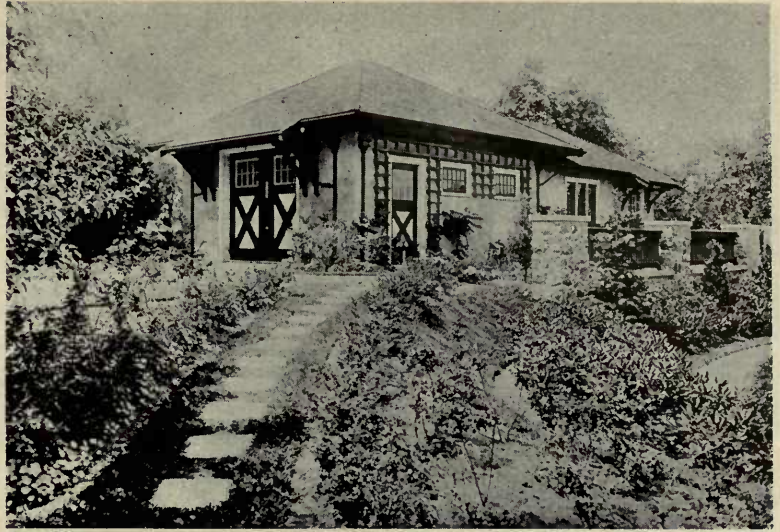
This garage fits into the landscape.

ates the desired effect for a few years, but it grows very rapidly, and soon becomes much too tall. It is a good tree to use if a man wants to sell a place. It is a poor kind to use if he intends to remain in it.

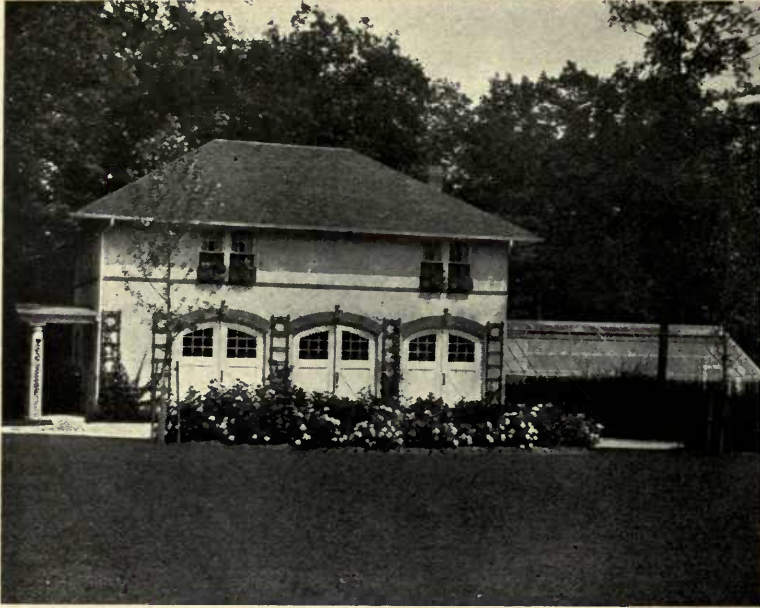
Much more desirable is the ginkgo, or maidenhair tree, which, as a rule, has a fine pyramidal form, although occasionally it becomes branching. This tree has several advantages, among them being its attractive foliage, reminding one of the maidenhair fern, its long life, its freedom from insect pests, and its attractive grayish bark.

There is a fastigiate form of the sugar maple, which is also good.

When the garage has more perpendicular lines, trees with a spreading habit are needed, unless, as has been said, it is desired for some reason to accentuate the perpendicular. The



Showing good corner planting.



Garage and greenhouse, with shrub bed opposite the entrance.

scarlet maple, European linden, and catalpa speciosa are good trees to use.

As a rule but a few trees will be used anyway, except on large places. Usually they are best placed at the corners, and some distance from the building. If the garage is approached by a long straight drive it may be found desirable to border this drive with trees. Here is about the only place that Lombardy poplars can be used successfully, and sugar maples are probably better even there. If there is a winding drive, trees should be used with care, for it is not desirable to hide curves so that the drivers of machines traveling in opposite directions cannot see each other.

Of course shrubbery will be relied upon for most of the effects obtained. What has been said about trees and their relation to the building applies in large measure to shrubs. It is a simple matter to emphasize the vertical lines, especially by the use of evergreens. Such kinds as the Irish juniper, the native cedars, the retinospora, and others, have a habit which is almost martial. Isn't it true, though,

that these evergreens are used too freely, as a rule? They are handsome in winter, of course, but in summer they become more or less monotonous, lacking the variety and constant changes of color which can be found in the deciduous plants.

With a proper choice it is possible to



These trees will soon become too tall.

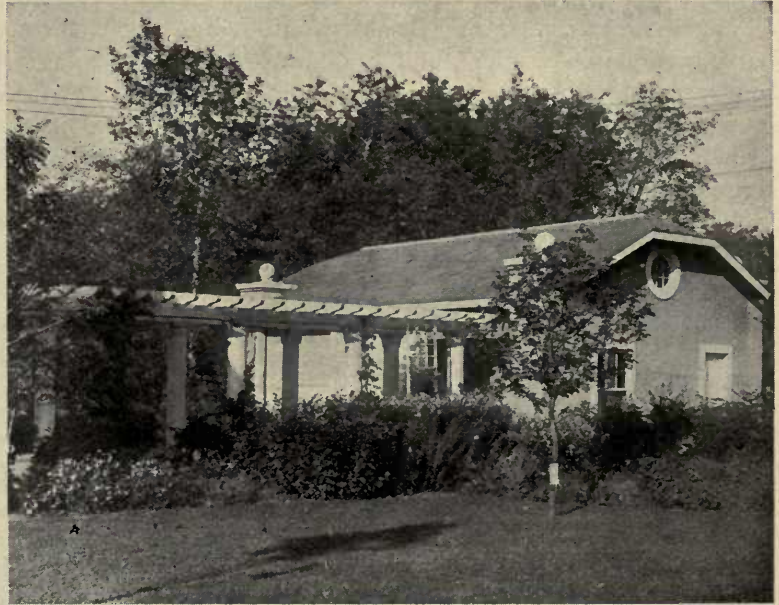
have flowers or bright colored berries all the year round. Of course something depends upon the locality. Forsythias in some places are of unequalled beauty in the spring. In other places, however, they do not thrive at all, and it is useless to plant them. Perhaps on the whole it is wisest to fall back on such shrubs as lilacs, weigelas, viburnums, spiraeas, deutzias, hydrangeas, altheas, Japanese roses, barberries, and privets.

In parts of the country where the soil is free from limestone the broad-leaved evergreens can be used to especial advantage, the rhododendrons, azaleas, mountain laurel and leucothoe being most valuable. It is better to steer clear of the hybrid rhododendrons, unless their hardiness has been fully proved. For a tall kind the native *Rhododendron Maximum* may be chosen with *Carolinianum* for a dwarf sort. *Catawbiense* is also a good hardy kind, but its flowers are not so pleasing as those of the *Carolinianum*, a variety recently introduced. In sections where much trouble with the lace-winged fly is encountered, it is best to rely on a hardy imported variety, *Smirnowii*, the felt-like leaves of which are proof against this pest. *Kaempferi* is the best azalea to choose.

If the building is low, and set close to the ground, very dwarf shrubs will be needed. Perhaps, indeed, it may be best not to have any planting at all around the base, but to mass shrubs heavily at the corners. The higher the foundation, the

larger may be the shrubs used about it.

If shrubs are massed heavily along the base of the building, let them have a sinuous outline, with an extra projection at the corners. As a rule, the shrubs should stand about three feet apart when planted. It will be necessary to take out some of them, though, after a few years. Most people seem to think it is necessary to dig up the whole surface of the ground where



Effective use of shrubs and perennials.

the shrubs are to go in. When this is done, large patches of bare ground remain uncovered for several years, unless a planting of some such ground cover as *Pachysandra*, *Euonymus Radicans*, or *Myrtle* is made. It is a better plan to make a place for each individual shrub.

Even with a large garage it isn't desirable to have an unbroken base planting. The effect is much better if there is an opening at intervals, disclosing a glimpse of the foundation.

Sometimes it happens that the position and general character of the garage makes base planting of any kind impossible. Then it is well to use vines on the walls, especially if the latter are stone or cem-

ent. Usually the appearance of a cement garage can be improved greatly by the free use of lattice work. There is no better vine to use than *Euonymus Radicans Vegetus*, which is evergreen and perfectly hardy in all the northern states. It is the best substitute that has been found for the English Ivy, which can, of course, be used freely farther south. The *Euonymus*, like Ivy, will need no lattice work, clinging to the wall itself. Such deciduous vines as *Wistaria*, *Clematis Paniculata*, *Akebia*, *Actinidia*, and the climbing roses, all of which are good, need supports. The red climber, *Excelsa*, and American Pillar, are charming when grown against a stucco background.

If the driveway leads past the garage instead of directly to it, a large bed of

shrubbery can be massed to advantage opposite the entrance. Then such kinds as make a good show of flowers may be chosen, perhaps *Hydrangea Aborescens*, *Hydrangea Paniculata*, *Deutzia Pride of Rochester*, *Weigela Rosea* and *Eva Rathke*, *Spiraea Anthony Waterer*. As a rule the taller growing shrubs like lilacs, altheas and *Viburnum Opulus* are not to be chosen in such a situation. A bed planted in *Rugosa* Roses or the low growing *Prairie* Roses would be attractive.

Of course no one can set down hard and fast rules for dealing with garages in general, but it is safe to say that the appearance of our suburban towns would be greatly improved if more attention were paid to this subject of planting the garage into the landscape scheme.

What to Plant for Borders

M. ROBERTS CONOVER



N many instances a border needs to consist of striking lines of color, to define a walk or a boundary or give apparent length to a small garden. In other cases, it must modify severe lines and break them into interesting masses. Often it is merely a lovely accompaniment to a winding path.

Border 1. For a garden walk:

Sweet alyssum at the margin, scarlet geranium occupying two feet of its width; back of this, bedding begonia.

No. 2. A dainty border for a planting of white and purple asters is formed of *Centaurea* (Dusty Miller) at the outer edge with an 18-inch strip of ageratum.

No. 3. A good border three feet wide adapted to outer sides of a garden consists of a background of *Kochia* or Summer Cypress set 2 feet 3 inches apart and a planting of *Calendula* or pot Marigold with plants about 8 inches apart. Sweet Alyssum is used along the edge.

No. 4. A pansy border, 18 or 24 inches in width is lovely. Purple and yellow pansies, or any colors, may be set 3 feet

apart in a cool situation, favoring the pansy bloom. Ivy planted with scarlet *Verbena* is beautiful.

No. 5. Along a middle path, dwarf box edging with a wide bed of begonia is very rich and lovely.

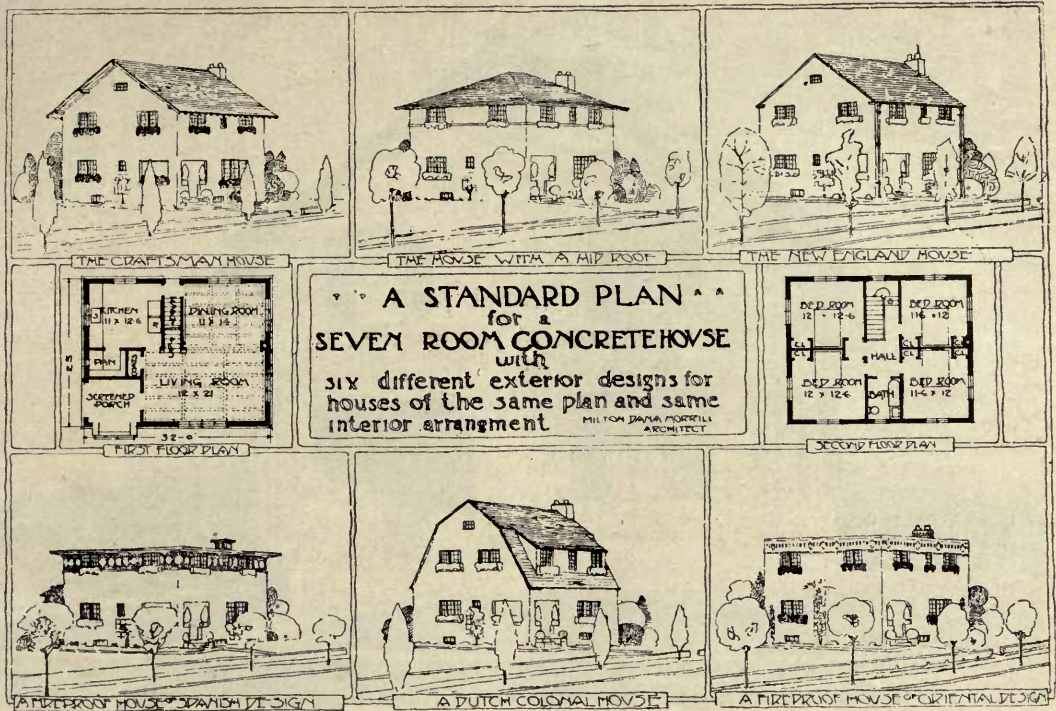
No. 6. Another pleasing border is formed of *Dusty Miller*, *Scarlet Zinnia* and *Gypsophilla* in the order named.

No. 7. A border of royal beauty as to color consists of purple *Iris*, white *Iris*, purple and golden pansies edged with *Cerastium Tomentosum* (Snow in Summer).

No. 8. Annual *Phlox* in a strip three feet wide with a margin of semi-dwarf white *Antirrhinum* or *Snapdragon*.

No. 9. A border that is adapted to almost any situation is composed of a background of *Kochia* or Summer Cypress with a planting of *Sweet William* about 3½ feet wide. Close at the margin are maiden pinks (*Dianthus deltoides*).

No. 10. A low border pleasing in color effect: Dwarf Sweet Alyssum, *For-Get-Me-Not* in an 18-inch strip and *Tom Thumb* Marigolds.



A Standard House Built of Concrete

Milton Dana Morrill



NOT many years ago shoes, clothing and other wearing apparel were all made up separately, piece by piece. Little by little it was found that these articles could be standardized and made up at wholesale. The result is that these standard articles are much less expensive than articles of the same quality when made to order.

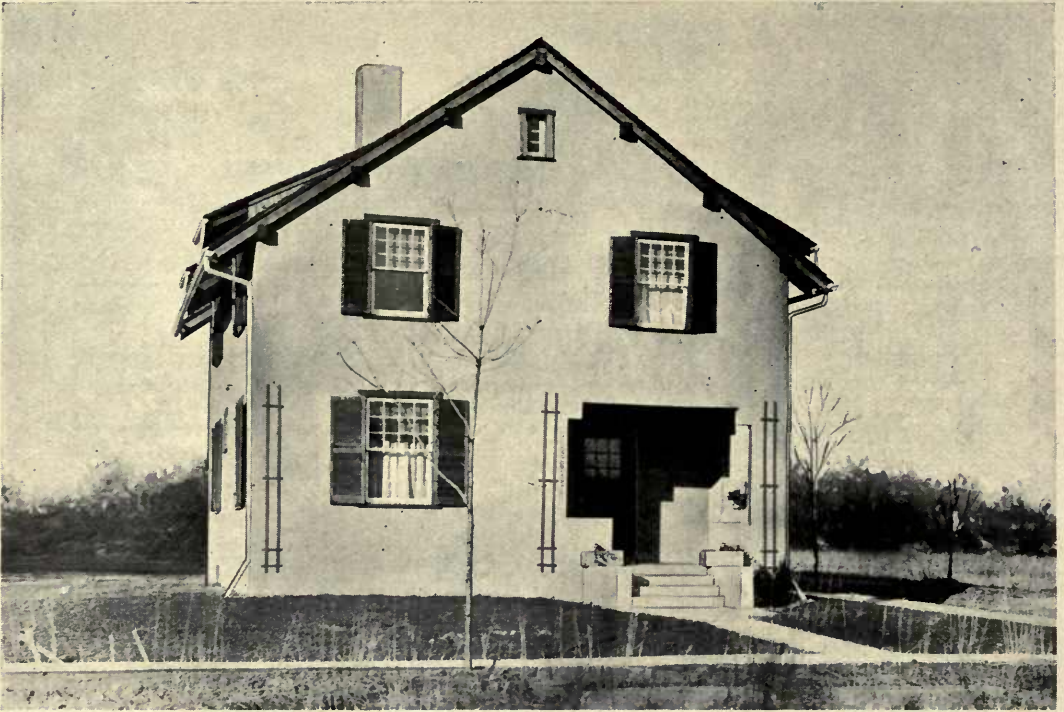
Recognizing that the same principle would hold true in home building the research department of one of the great Portland Cement Companies authorized the writer to work out a standard plan for a moderate sized suburban house. The result of this study is here shown.

The aim in the design has been to give the most compact and convenient house

and one that would be moderate in first cost as well as low in the yearly upkeep and repair expense.

The reader will note that the house is nearly square in plan. This shape requires the least exterior wall to enclose a given space. The front porch is of the built-in type and serves as an open air living room in summer. In winter this space can be enclosed with glass, when it becomes a sun room and serves as a vestibule.

An ample closet for wraps is found just beside the front door. The living room presents a spacious appearance as it is 21 feet in length and opens with the dining room. The ceiling is finished with the beams exposed. The stairway leads di-



Reinforced concrete house, where the porch may be enclosed in glass.

rectly from the living room with only a portiere across the entrance. This need be drawn only in the coldest days when much of the heat would otherwise escape up the open stairway.

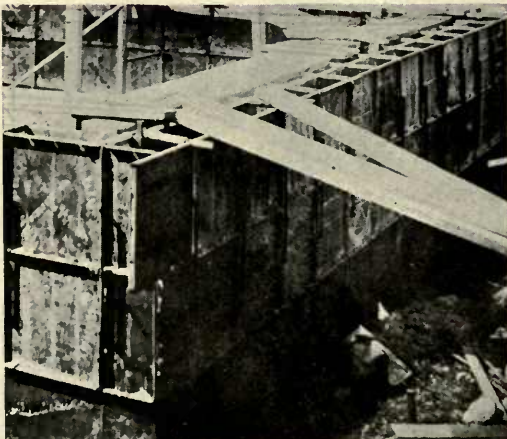
The kitchen is light and airy with windows on both sides and has a good sized pantry adjoining. Space for set tubs adjoins the kitchen sink. The cellar en-

trance is direct from the outside so that the usual cellar doorway is made unnecessary.

In the second story there are four bed rooms and a bath room. Hanging clothes racks are shown in the bed rooms as these take up less space than the usual closets.

The reader will note that six exterior designs have been shown, all of which can be used with the same standard plan and interior arrangement. This gives a choice as to the exterior appearance. An entire block might be built up with these standard houses but on account of the different exteriors and possible changes in color of the cement stucco no two of the houses would be exactly alike.

The building of these reinforced concrete houses can be made to a large extent a machine process. Steel moulds are used to form the walls and mixers are used to prepare the concrete. Most of the work can be done by unskilled workmen. One advantage of this construction is the fact

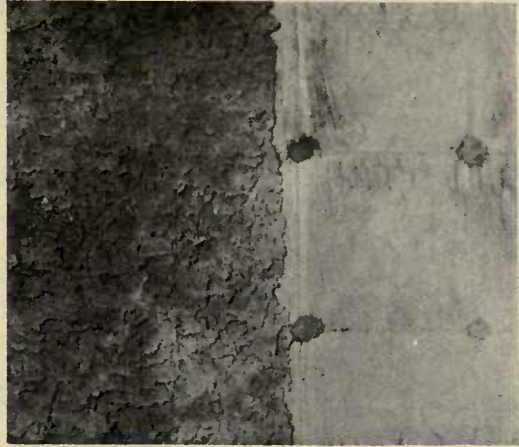


Construction view showing steel moulds set up to form a section of reinforced concrete wall.

that in most every location the materials to make concrete can be found near by. Clean coal cinders, which are a waste product in most places, can be used to mix with the sand and cement if gravel or crushed stone is not at hand. Cinder concrete is naturally less in strength, but when properly made and reinforced it has proven amply strong for house construction.

The reinforced concrete house has sometimes been confused with the stucco house, which is of wooden framework plastered over with cement mortar. The reinforced concrete house has the walls moulded in place and is reinforced by steel bars, which are embedded in the concrete. Thus these walls have the combined strength of the concrete and the reinforcing steel.

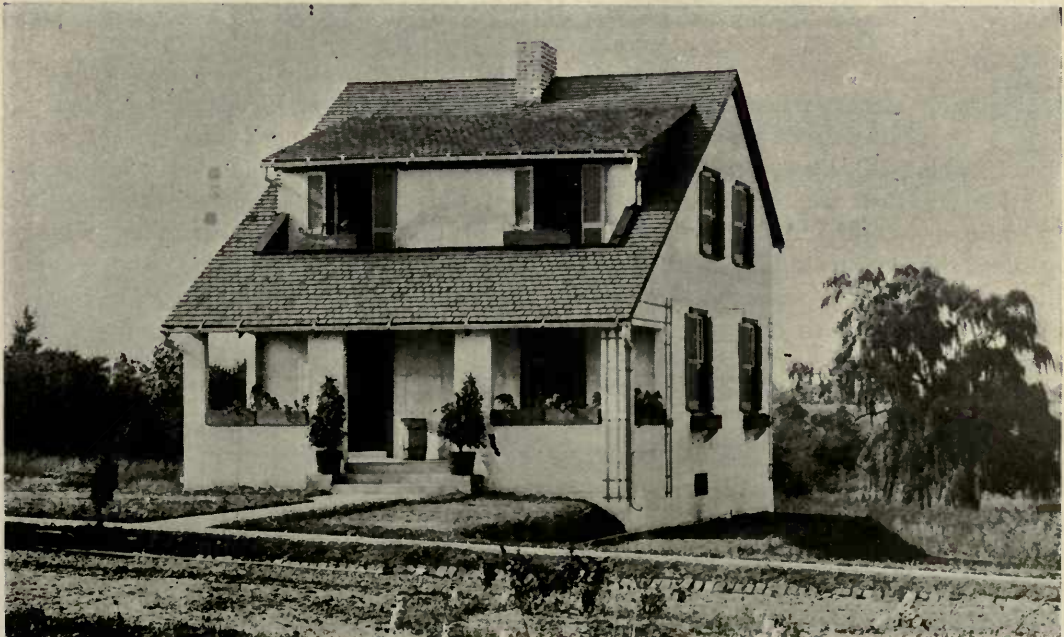
Concrete in itself is not a new building material. The Romans built the great Colosseum of concrete. Much of the stone facing has been destroyed but the concrete part stands today just as good as it was one thousand years ago. This



Stuccoed finish on left. The right shows rough moulded concrete wall.

Roman concrete was mixed just as we do it today. Small stones, sand and cement were mixed with water until it resembled mud. It was then placed or poured into the forms to make the walls. Today we have the advantage of the steel reinforcement as well as steel forms in which to do the work.

In house building we can make only the exterior walls of concrete, leaving the in-



A reinforced concrete house near Washington, D. C.

terior to be of the usual wood frame construction, or the floor slabs may be of reinforced concrete also. These can be finished with a hard wood surface. We can, if desired, go a step further, and make the whole structure of reinforced concrete, giving the floors a polished cement finish. This makes a house that is entirely fire-proof and is perfection from a sanitary standpoint. The interior of such a house is much like that of a china dish. It can be washed out from top to bottom. All of the corners can be made curved and all of the usual woodwork at the windows and doors can be omitted.

An interior of this sort will be very simple and plain, but if the walls are given a stipple finish and rugs are used as floor covering such an interior can be made very attractive.

The reinforced concrete walls make not only a very substantial and warm house in winter but present a very attractive


appearance with the cement stucco finish which is generally used. This stucco finish can be made of white or gray cement and tinted if desired. It can also be left with a smooth or a rough texture, whichever is preferred. Vines and flower boxes show to advantage against these stucco walls when used to decorate them.

Estimates on the construction of these concrete houses range from \$3,200.00 to \$4,000.00, according to location and the cost of materials. This figure is based on a complete, well-finished house.

Concrete has already become the standard construction for pavements and streets as well as for factories and warehouses. It has taken the place of stonework for bridges and on engineering works. It will become also a standard construction for house building as soon as the building public realize what a wonderful material they have in reinforced concrete for home building.

Four Rooms and An Inglenook

Persis Bingham

IME was, and not so very long ago, either, when ease, comfort or beauty from an architectural point of view were not to be mentioned in the same breath with a modest little one thousand dollar house. If by some chance a would-be client strayed into an architect's office expecting either art or convenience to emanate from the investment of a small amount of money in a home, he was speedily disillusioned by the "can't be bothered with it" route in the shortest time possible.

But all that is changed now. Architects and designers on whose efforts hung the reputations and monthly dividend checks of numerous building investment companies have burned midnight oil over the small-house problem. Esti-

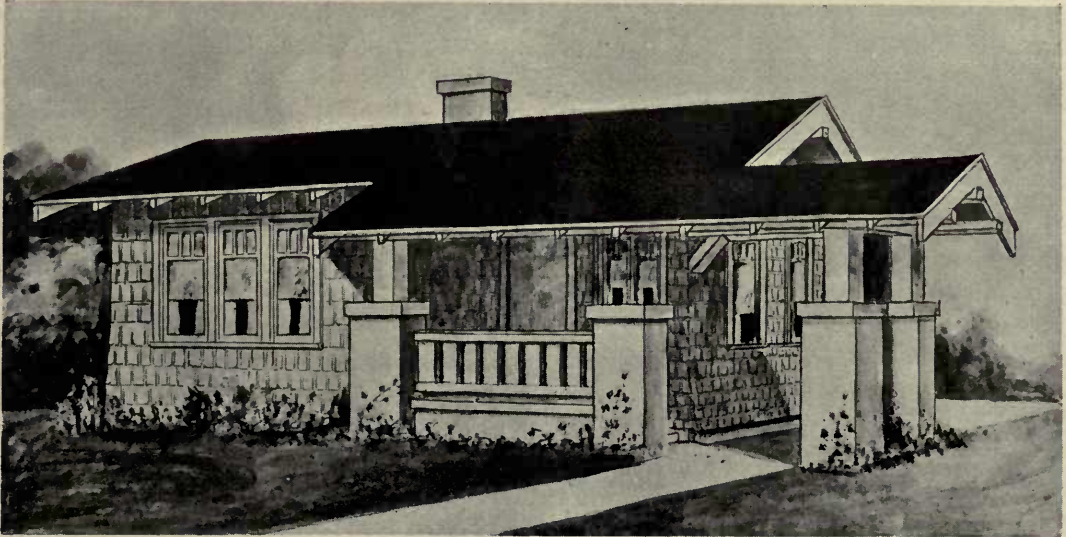
maters have worked overtime to figure the most economical lengths of lumber to use; plumbers have worked out the simplest runs of supply and drainage pipes and finish carpenters have evolved the best and quickest methods of making built-in bookcases, buffets and seats. Building companies have been intensely active agents in the development of the southwest during the past ten years, and it has been to the man of small means that they have had to make their appeal as well as the rich man. Competition has always run high among them and each spurred its designers on to give the customer more for his money than any rival concern, with the result that the small house has been the gainer thereby.

The old idea of an inexpensive house

was four walls, a floor and ceiling for as many rooms as the money would buy lumber to build. Fireplaces and cupboards were unmentionable luxuries to poor families, much as they were needed. Paradoxical as it may seem, the woman who had no servants, who did her own housework—the very woman who needed more conveniences than her wealthy sister, able to afford hiring her housework done—was the one who had no conven-

moved into these compact little living quarters to do most of their housework themselves.

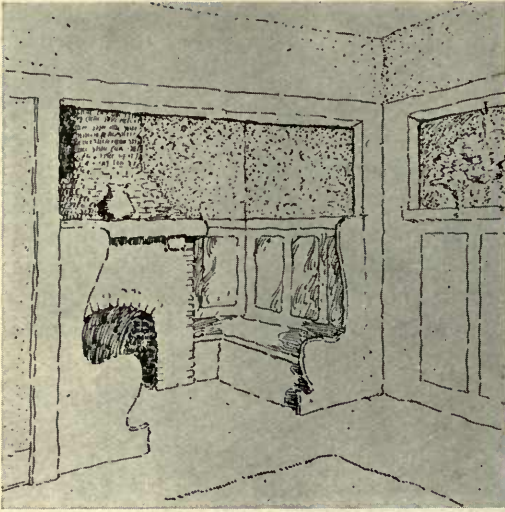
The new idea of the small house is all the convenience one can get for the amount of money expended. "Cheerfulness is more important than Persian rugs and contentedness is more valuable than Gobelin tapestries." That is why the four room home illustrated here has a cozy inglenook instead of a dark hallway;



An inexpensive bungalow.

iences whatever. The years 1908-1915 changed this state of affairs. During that period the small house blossomed forth with inglenooks boasting real live fireplaces that you could burn coal in, hardwood floors, built-in buffets and bookcases, instantaneous water heaters, coolers, up-to-date bathrooms and clothes closets large enough so you could walk into them straight ahead without scraping your elbows on the side wall plaster. Exteriors acquired dignity, became well proportioned and comfortable looking. Inside finish grew to resemble the finish of more pretentious houses and gradually it came about that women who had formerly kept maids and unnecessarily large houses, dismissed their servants and

French doors on the south side of the dining room instead of ordinary windows; and a wide overhanging front porch roof instead of a short, scrubby one. The house faces north, affording morning sunlight in bedroom and bath, afternoon sun in living and dining room and a front porch, partly shaded at all times of the day. The living room is separated from the dining room by a low bookcase but-tress and from the inglenook by a dropped arch and two curved seat arms. It is lighted from the north and west windows and also from the south over the but-tresses. The inglenook is nine feet wide by six feet deep in the clear, with brick fireplace in the center and a wooden seat on either side. Tops of the seats are



The inglenook and fireplace.

hinged at back so as to lift up and permit of storage beneath. The fireplace is simplicity itself, as far as the construction is concerned. Built of red brick, the face is perfectly plain up to the mantle shelf supported on two square brackets; above, the chimney is stepped back to the flue. It would be difficult to conceive of a less pretentious, yet substantial structure. The inglenook is a great saver of fuel in that it heats more quickly than a large room, and in nine cases out of ten its seats accommodate as many people as necessary.

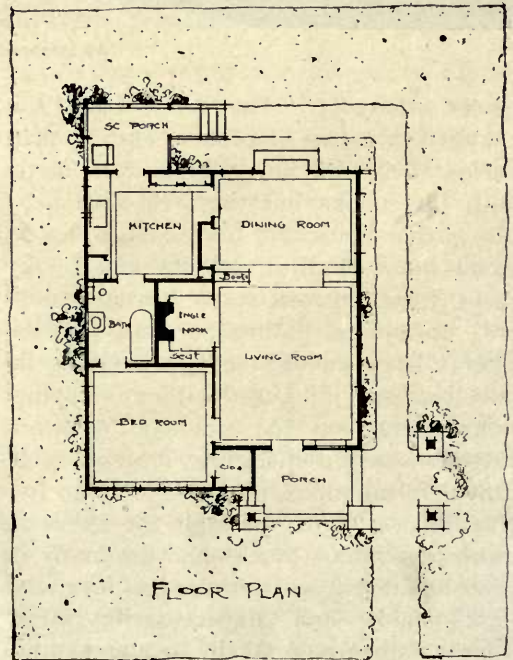
The dining room opens to a rear pergola and garden through glazed French doors. It is an exceptionally cheerful room for a small house, as it is so well lighted and so easily accessible. On party occasions it is conveniently a part of the living room and the vista through French doors that open to a fern-hung pergola is especially pleasing. Distinctly individual little touches like this have helped make this home noticeably different and attractively charming.

The kitchen is accessible from screen porch, bath and dining room. Part of the west wall has been moved back to make room for a dining room buffet and a boiler closet. The space in the angle is reserved for a range. Cupboards line the

south wall of the room, and sink, drain-board and cooler the east. The room is very conveniently arranged.

The front bedroom is arranged with entrance to bath and living room. It receives morning sunlight and is planned to accommodate bed space in three different places. A large clothes closet has been taken from the front porch space and tends to widen the left front wing.

Across the entrance pathway which is at the right of the house extends a portion of the porch roof, supported on two cement plaster piers. This portion of the roof is lower than the rest and returns on itself against the west wall of the house. Cement steps lead up to the porch, which is enclosed by a low redwood rail combined with redwood cross-pieces. Railings and crosspieces are stained brown so as to contrast with the white cement plaster of the piers. Shingles laid with broken joints and stained light brown have been used for exterior of the house, darker brown paint for window casings, white sash and a white asbestos composition roof.



"The Touch of the Magic Wand"

Edith M. Jones



FOLLOWING the description of the remodeled kitchen in last month's magazine let me call attention to not only these pictures of the butler's pantry with its beautiful double compartment sink for washing the dishes but also the various things which were done in remodeling the old house which would not have been attempted with the greater initial cost incurred in building a new house from the beginning. It is in such ways that one feels the touch of the magic wand and its difference from the rubbing of Aladdin's lamp, the magic of a pleasing change rather than something entirely new, yet to be tried out. The amusement room in the basement is generally left to be finished later. It is in the second building that the householder is impressed with the necessity of such conveniences, that the ash receiver with its many compartments which revolves easily so as to bring another pan under the fire box, is built into the floor under the furnace; the patented coal chutes are put in; and that the electrical equipment for the laundry is installed, when the additional expense seems impossible in the new house.

The remodeled plan of the kitchen and pantry is shown with the communication



The double sink of german silver is the crowning touch of utility and beauty.

to the dining porch. The double compartment, sink of german silver is the crowning point of utility and beauty. A sink in the butler's pantry is especially desirable, as no dirty dishes in a well organized home should be taken to the kitchen to be washed because of the congestion, breakage and unnecessary steps.

The broom closet and the table board closet are shown in this picture and the door opposite this closet opens onto the sun-porch where meals are served

through many months of the year. This porch overlooks the beautiful gardens and with the view of the wonderful country beyond I am sure food served in such ideal surroundings would indeed taste like "ambrosia fit for the gods."

The linoleum on the floors is in a de-

and artistic lamps close beside the comfortable chairs. A grand piano, and a few well chosen pieces of good mahogany make altogether a most restful and desirable room. But there seemed to be a need for an amusement room, and because there was no space on the first floor it was decided to use the basement under this living room which, by the way, was the newly built wing to the old home. So the basement of the new part was made into an amusement room.

The cobble stones on the place were collected and built into a splendid great fireplace. As there would be no way of getting the huge divan down the stairs when the house was completed, it was brought in and stored carefully before the outside walls were finished. This bit of forethought was worth while, for this room is indeed the sum total of cheer and comfort. It is a haven where the winds and storms of the outside world can not reach or mar its security and restfulness.

The laundry and furnace room are separated from this

sign of blue and white squares and the woodwork and side walls are painted in white enamel. My friend is a most exquisite housekeeper and a peep into this dainty kitchen is really a great delight.

There are several other interesting features in this house of which mention should be made.

The owners of the house are students and lovers of art and music and the living room is an expression of their tastes. There are ample built-in book cases—and built-in music cabinets—good pictures

amusement room by the old outside foundation wall. The original basement was large enough for a good sized laundry and drying room and the furnace and coal bins. The laundry had three soap-stone tubs set well out from the wall so that they are well lighted and easily cleaned. The electric washing machine and wringer, the center floor drain, the ironing board cupboard and the furnace pipes at one end of a winter drying room with the white side walls make a complete equipment that does much to lighten the

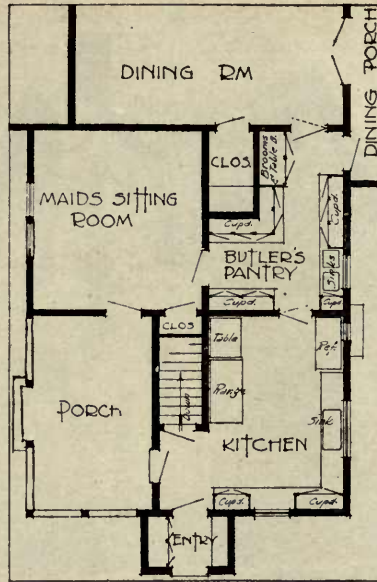


Cupboards, with broom closet beyond.

dread of any "blue Monday."

The furnace room has a rotary ash receiver which, by the way, is an arrangement worth while for the nuisance and dust of ashes is quite overcome. The coal room holds the entire winter's supply of coal and there is a patented coal chute which has a number of advantages worth considering, both from an inside and outside point of view. The ash receiver and the nearness of the coal bin door make caring for the furnace a much simpler and a far less irksome task.

The pump, run by the windmill or the gasoline engine, fills the storage tanks and solves the problem of the water supply and altogether the advantages of the city with the charm of the country have been attained. Especially is this true



when I add that the well heated garage has two cars, — a roadster and a touring car—thus overcoming the one remaining obstacle to the suburban country home.

It seems to me I can hear my reader saying, "yes, but all this costs much money and one might better have built a new house than rebuild the old one!" But I still insist there is a peculiar satisfaction about last year's hat that appears as a new creation on Easter morning, or

the neglected vacant lot that is made to bloom and blossom under the gardener's wise planting or, best of all, the old-fashioned, inconvenient house that unfolds into a model of modern charm and convenience under the magic wand of an architect's experience and his ability to get results by good planning.

A Well Planned Home

IN the design illustrated the house is located on a corner lot. The entrance is through a small stoop, roofed under an extension of the front gable. The vestibule keeps the cold from the hall in extreme weather.

The stairs are in an alcove, so arranged that, while the hall does not take much space neither does it seem narrow. The coat closet opens conveniently from one end of the hall.

The main rooms of the first floor are finished in white oak, quarter sawn, and given a medium stain, with oak floors. The brick work of the fireplace, which is unusually attractive is carried out in a

light tan. High casement sash are over the bookcases. A built-in buffet fills one end of the dining room with leaded glass windows over the serving table and leaded glass doors to the china cupboards.

In the sun room the sash are all casement. A projecting bay and seat on the main stair landing gives a protection to the side entrance. Access both to the basement and to the kitchen are given by this door.

Special attention is called to the kitchen arrangement. The sink and cupboards are placed beside the dining room door so that dishes are carried the shortest possible distance from the dining room table



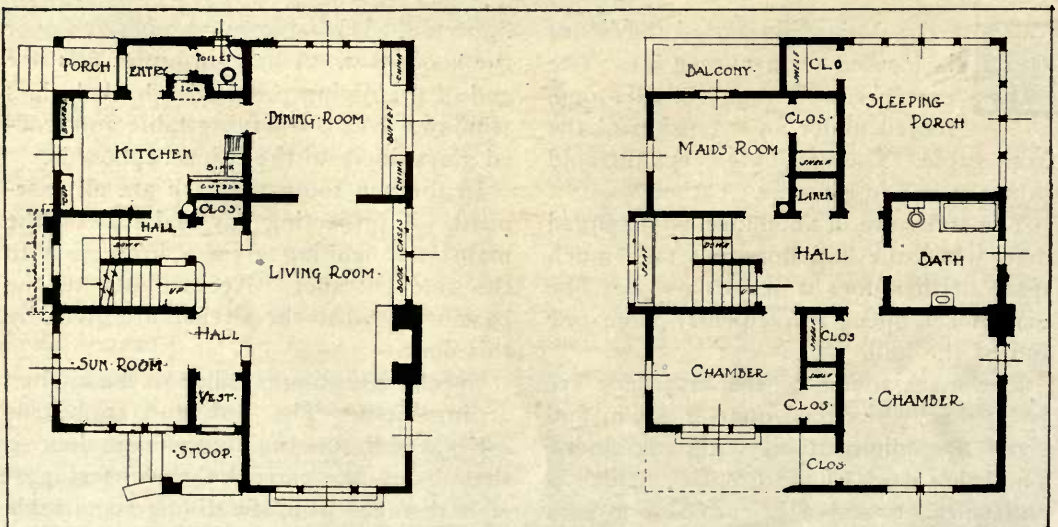
A pleasing home, entered through a stoop under an extension of the gable roof. W. W. Purdy Architect.

to be washed and can be put directly into the cupboards.

Common practice places the refrigerator in the entry to the kitchen because there it can be iced without entering the rest of the house, and because it is out of the heat of the kitchen. At the same time the ice box in the rear entry means a long distance from the kitchen, and many steps in carrying the cold dishes,—

salads, desserts, etc., between the refrigerator and the dining room. In this case the refrigerator is recessed in the wall so that it is out of the heat of the kitchen. It is iced from the rear entry, and at the same time is very convenient in the kitchen and near the dining room door.

A toilet opens from the rear entry. There is a small rear stoop. The space for the toilet, and perhaps for the entry



might be used for a pass pantry if desired.

On the second floor are four excellent chambers and a bath room, which is large enough to give plenty of room for the fixtures without being cramped. A curtain shower is placed over the tub. The rear chamber with its 8 windows is really a sleeping porch. It is provided with a good closet as are all of the rooms, the front chamber having two closets, and the possibility of a corner fireplace beside the flue if desired. A linen closet opens from the central hall. A stairway over the main stairs leads to the attic. In the rear of the maid's room is a French door, leading to a balcony for airing bedding, so convenient to the housekeeper. A clothes chute is reached from the hall and from

the kitchen on the first floor, the soiled clothes dropping into the laundry in the basement.

Maple floors are used for the kitchen and for the second story, except for the bath room, which is of tile, with a tile wainscot.

The exterior walls are of light cream cement over metal lath with a "soldier" course of tan brick at the line of the grade. The chimney is built of the same tan colored brick as are the floor and steps of the stoop. All woodwork is stained a chocolate brown, with a reddish tan color for the roof.

The photographs were taken soon after the home was completed and before the grounds and planting had become as attractive as they would be in a few months'

Wood or Brick—Which?



FEW houses are so designed that the owner may select from a variety of exterior materials, according to the dictation of price and tastes, but not many of the genuine bungalow style permit of this choice.

Whether this home is built of brick—as planned—or of wood, it will appear best with the brick porch walls and columns. The roof is shingled. Here again, the builder has a choice of materials for the lines are so simple and the roof pitch is sufficient for slate or tile.

The seven-room bungalow is the standard plan for families of average circumstances. Two bed rooms will do if there is a den which can be utilized when needed.

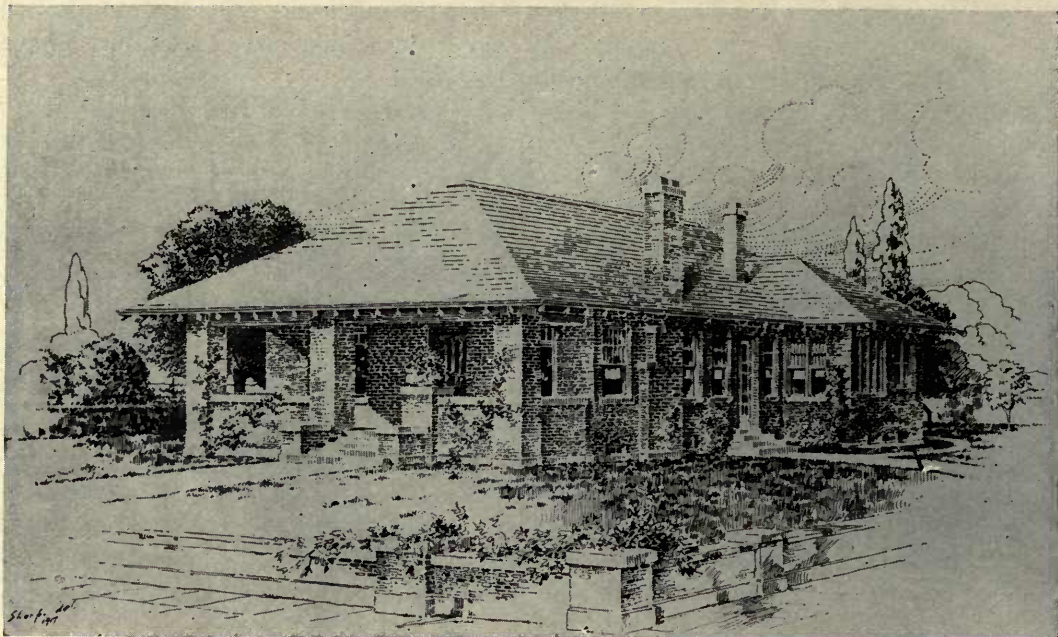
A breakfast room is now considered an essential adjunct in half of the Eastern-built and in most of the Western bungalows of the Pacific coast. It halves the meal-time work for the housewife, being

indispensable in the servantless house. The breakfast room makes an ideal sewing room, sometimes a play room and occasionally an emergency bed room.

This house has a full size concrete basement divided into five rooms; for storage, heating, fruit, fuel and laundry. The latter room has outside stairs to the yard, directly under the kitchen windows.

There is an attic which is eight feet high in the center. The peak of the roof is extended out at the rear (with roof hipped) far enough to form a dormer with four hinged windows. This makes a well-lighted attic that affords more storage than most people ever require.

In the smaller plan the breakfast room has been expanded into a small dining room, which is yet large enough to seat eight people at dinner comfortably. The den is omitted, as well as the large dining room, and 13 feet is cut from the length of the house, reducing the size of the

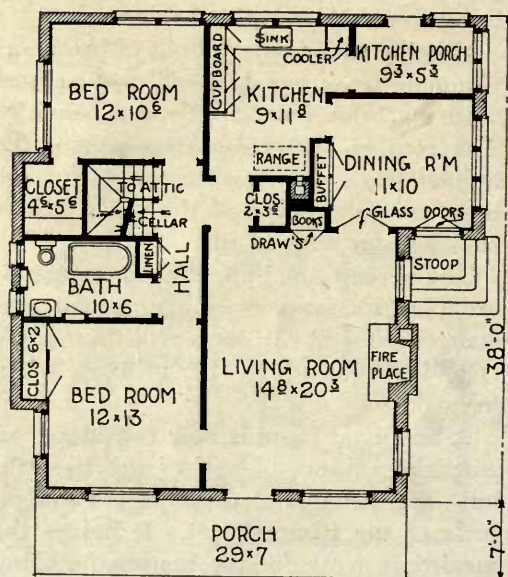
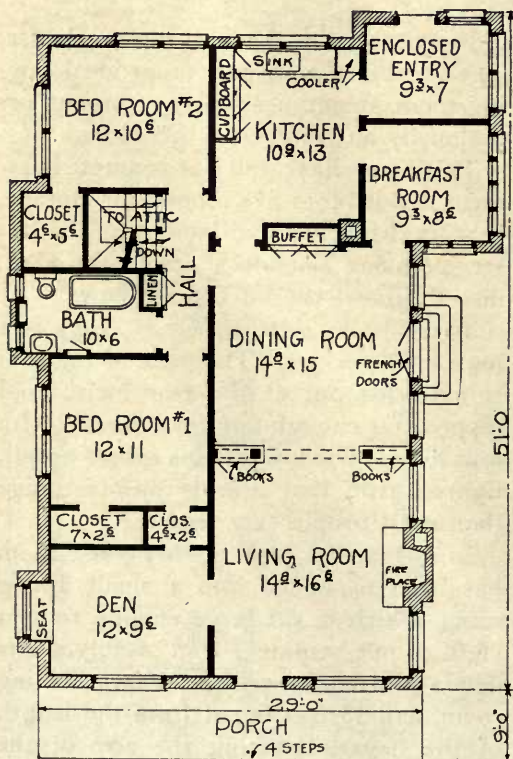


A bungalow built of brick.

E. W. Stillwell, Architect.

house by something like a quarter of its length. This smaller size will, of course,

make a material reduction in the cost of building the home, while giving excellent accommodation where less room is required than that shown in the larger plan. The dining room serves for breakfast also, and the den is omitted entirely.



A Convenient Home



AN attractive stucco home, full two stories in height, and with the entrance through the sun porch is shown in this illustration. The windows are grouped so as to be effective on the exterior and both effective and convenient on the interior. The garage

work to be done. The sink and cupboards are near each other and near the dining room door. A short run of stairs from the kitchen reaches the landing of the main stairs, while the basement stairs are underneath. The main stairs open from one end of the living room, beside



A home that is two full stories in height.

J. W. Lindstrom, Architect

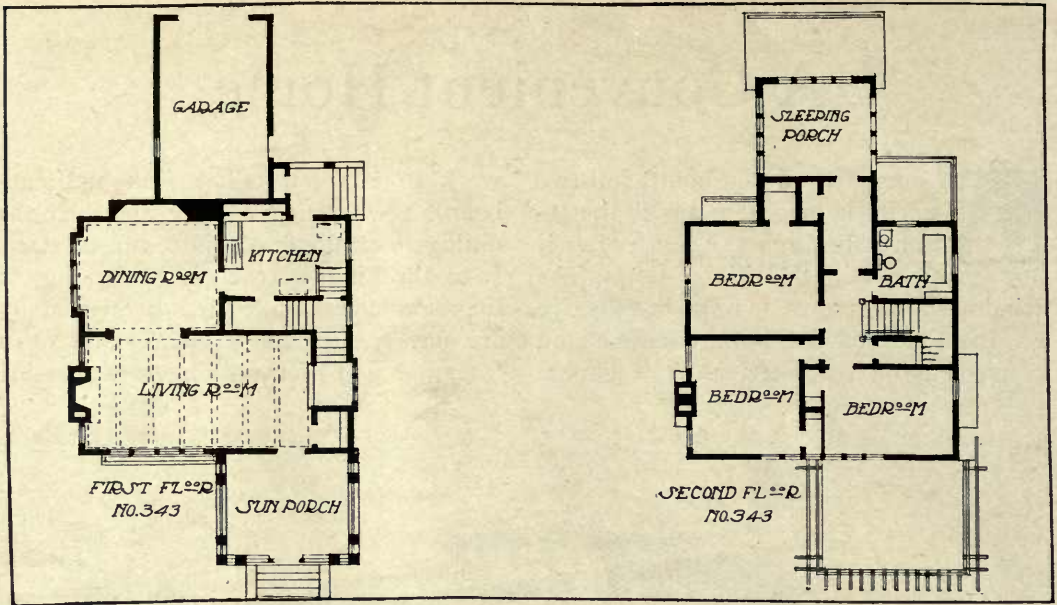
connects with the house, and the sleeping porch on the second story is over part of the garage.

The living and dining rooms are of good size and well-proportioned. A wide opening connects them. The group of windows in the living room is on the axis of the dining room, opposite the niche of the buffet making an attractive vista in either direction. The fireplace and windows beside it fills one end of the living room. The kitchen connects directly with the dining room and is very conveniently planned with relation to the

the entrance and there is a good coat closet beside them.

On the second floor are three bed rooms and a bath room. A hall connects with the sleeping porch and a closet opens from this hallway. Each room has windows on two sides, giving cross ventilation.

The exterior gives opportunity for the growth of vines which are as yet only started, especially the rafter ends over the sun porch at the front. When these are loaded with blossoming vines it will add protection to the porch from the summer



sunshine and add a very attractive feature, as well. Sometimes the most satisfactory vines to plant, where a full growth is desired, are those which can be gotten from

the near-by woods; bitter-sweet, whose orange-red seed berries cling through the winter, wild grape, or wild clematis with its feathery seed balls.

A Stucco Cottage



WHILE this home illustrated gives the impression of a low roofed, widespreading cottage and might be called a story and a half house, the second story rooms are full height.

The plan is suited to an east or a south frontage. The main part of the house is 35 feet in width and 25 feet in depth. The living room extends across the front of the house, being 20 feet 6 inches by 13 feet wide. French doors open into the sunporch, which extends the full width of both living and dining rooms, and may be glazed and finished the same as the living room.

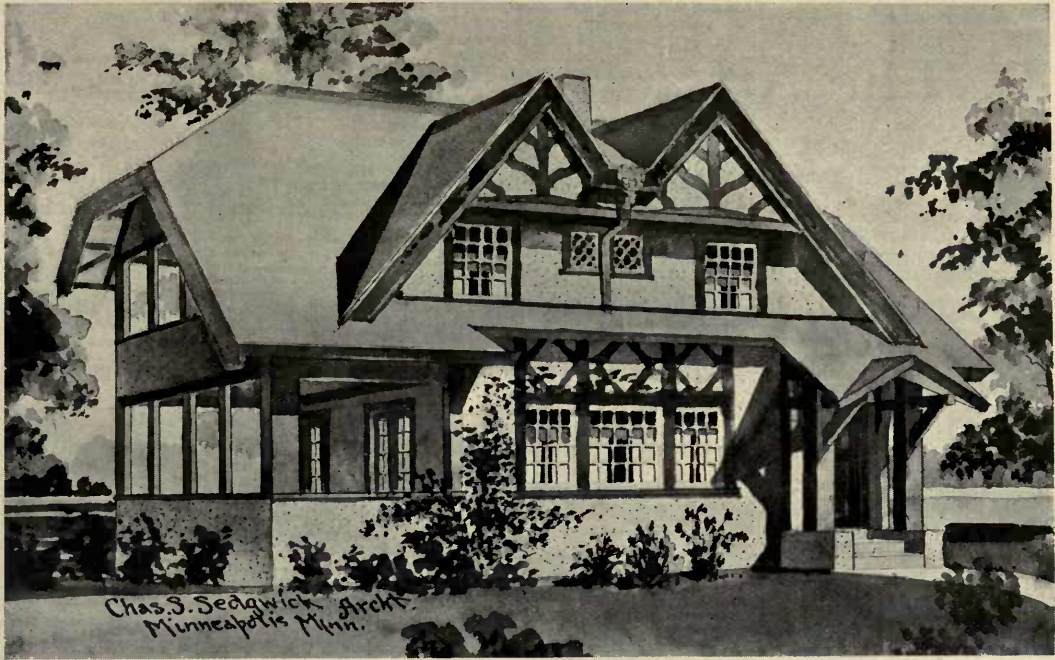
The entrance is at the end of the living room through a vestibule from which the stairs lead to the second floor, with a small coat closet at the curve of the stairs.

A niche is thus formed in the end of the living room, which makes place for the piano, or where a davenport may stand. The placing of the fireplace gives a central chimney and furnace flue.

The dining room opens from the living room with a wide opening, and has a built-in buffet projected under a bay of windows.

The basement stairs are under the main stairs with an outside entrance at the grade level. A short, steep, run of stairs leads from the kitchen to the main landing. An additional step at the top would relieve the steepness from the kitchen if so desired.

On the second floor are three good bed rooms and a sleeping porch. There are good closets from each room, and a stor-



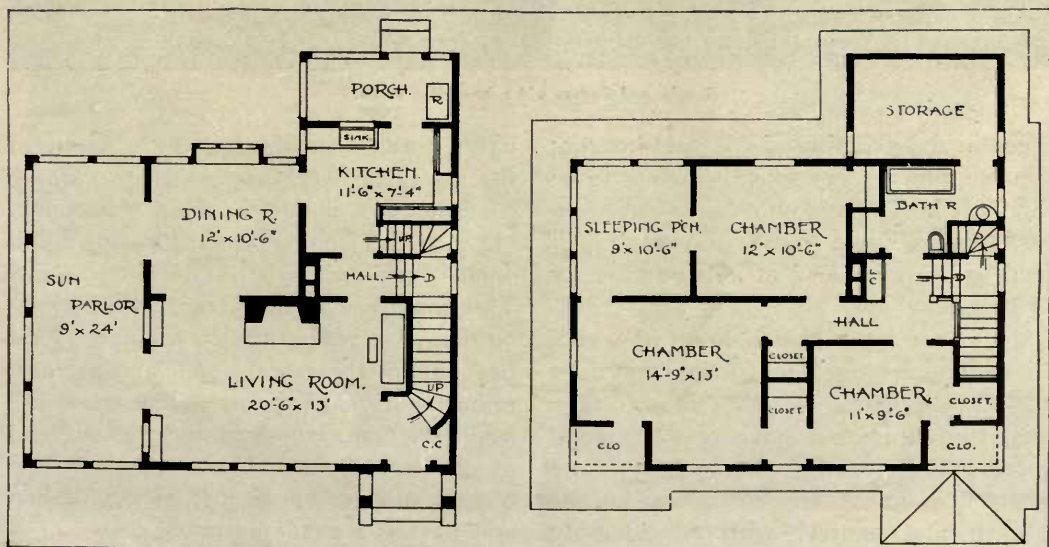
A Stucco cottage with timbered gables.

Chas. S. Sedgwick, Architect.

age room over the rear porch may be reached from the bath room. The second story rooms are finished in white enamel with floors of birch. The main floor is finished in birch.

The basement extends under the whole house with coal bins under the porch, arranged for furnace, laundry, etc.

The construction is of frame with cement stucco, and half timber finish in the gables. The outside woodwork is stained dark brown with creosote; all window sash is painted white. The roof is covered with shingles, stained. At an additional cost of something like \$200 this house could be built of hollow tile.



The Attractive Small House



HE home which is small on the outside, simple in construction, yet so planned as to fully accommodate the family, is in demand. There is no satisfaction in living where people are too much crowded. It is not the useful living space that is to be re-

larger outside dimensions. While the smaller house is 26 by 24 feet, not including the porch, the larger is 31 by 38 feet for the largest dimension, the dining room side of the house not extending quite so far. One living room is 22 by 11 feet, while the other is 30 by 15 feet. The

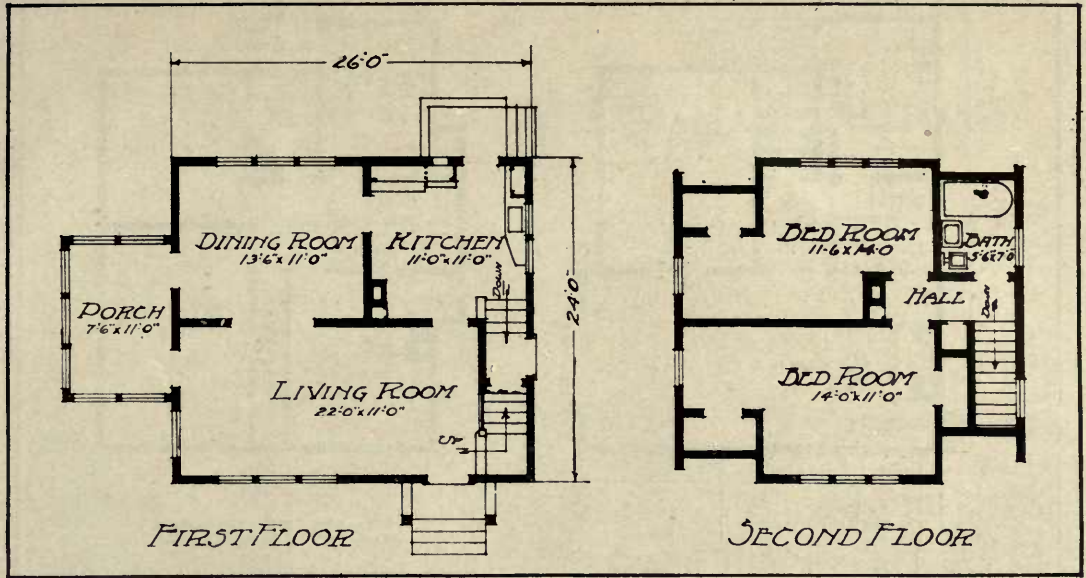


Shurbs and flowers add a home-like touch.

duced in the planning of compact houses; it is the unnecessary space which is to be eliminated. There is no economy in overcrowding; a home that is too small will need to be remodeled at a later time, or a new home built.

Two homes are shown here, of which the general arrangement of the main floor plans are much alike. One is a cottage with two sleeping rooms on the second floor, while the other has a full second story and more service space in the kitchen and pantry, with considerably

living room extends across the front of the house in both cases, with the dining room beyond, connected by a wide opening. In the smaller home the sun porch opens from both living and dining rooms. This room has no fireplace, but the kitchen flue is so placed that a fireplace could be built on the central wall at the minimum additional expense. The stairs are beside the entrance leading from one end of the living room. Under them are the basement stairs opening from the kitchen and having a grade entrance.



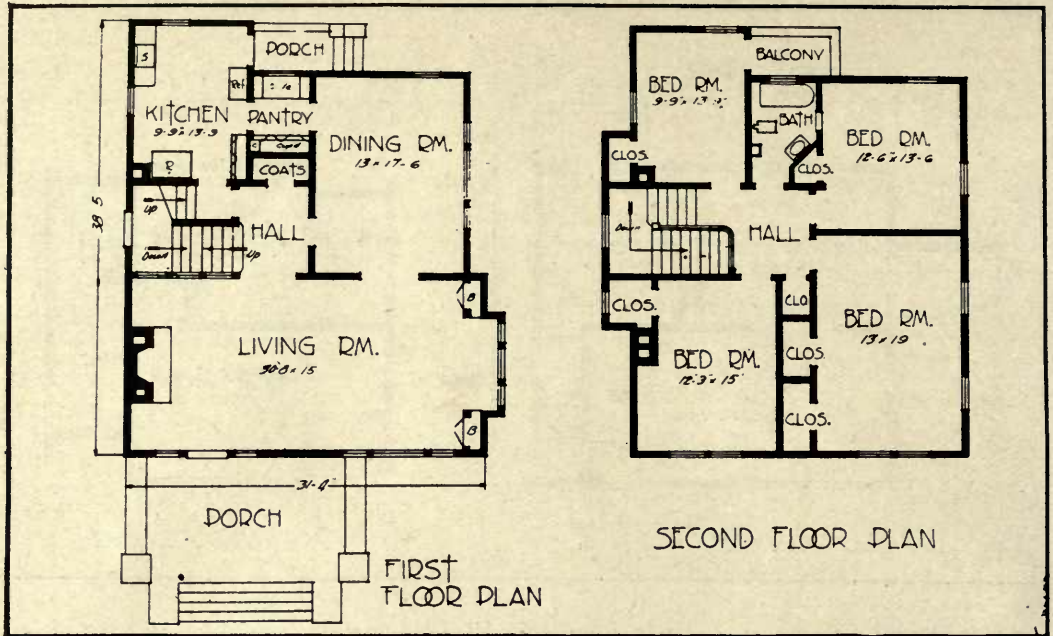
In the larger home the stairs are beyond the living room with a hall which connects the other rooms. The fireplace is at one end of the living room and the

bay of windows and built-in book cases fills the other end.

A butler's pantry stands between the dining room and the kitchen, well



A larger home.



equipped with cupboards. To make this larger home really complete there should be an additional small sink for dishwashing under the window of the pantry. Then dishes from the table would only need to be carried to the pantry for washing and could be placed directly in the cupboards opposite, ready for use again. This would save the housekeeper a trip across the kitchen with every dish to be washed, and back again with every clean dish, to the cupboards. These are things which should be considered in planning the kitchen. With the dishwashing sink in the pantry the baking table and cupboards would be set in the kitchen, which would bring them nearer the range. Where the sink is shown would be a good location, extending the workshelf the full width of the kitchen wall, with the sink perhaps under the window. Such a rearrangement would provide two sinks, one of standard size in the kitchen; the

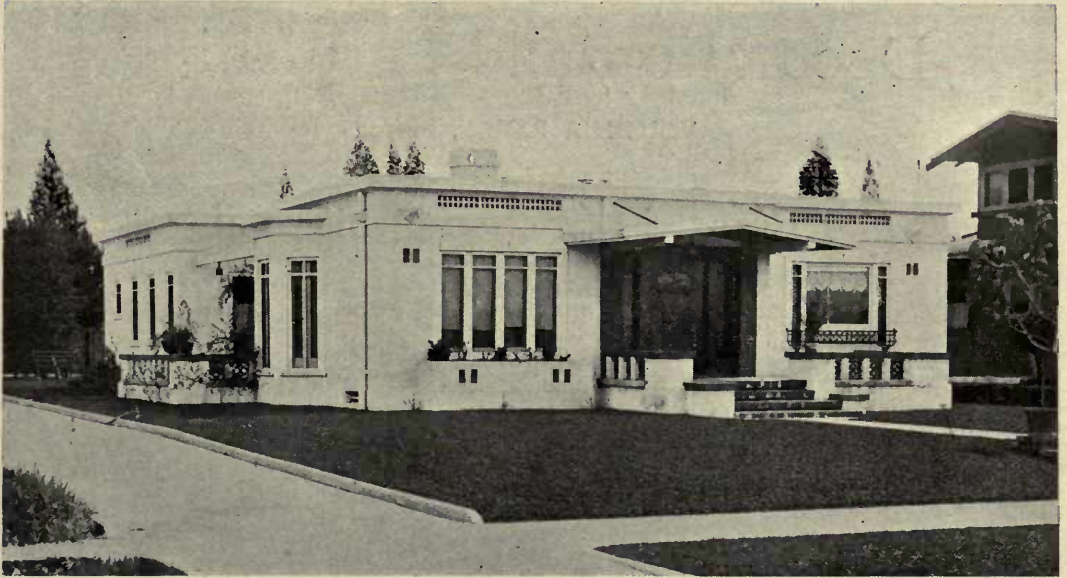
small one in the pantry, used only for washing fine dishes and silver. This small sink could be fitted with a stopper at the drain and used as a dishpan. While this is often a convenience, some housekeepers feel that there is a larger amount of breakage than with a light pan.

This two-story home has four good bedrooms on the second floor, opening from a square central hall, from which the bathroom also is reached. The rooms are all provided with good closets and the larger bedroom has two.

The exterior of this house is stucco applied over metal lath on a frame construction, with the outside trim only a little darker in tone than the stucco. The wide porch gives an attractive entrance.

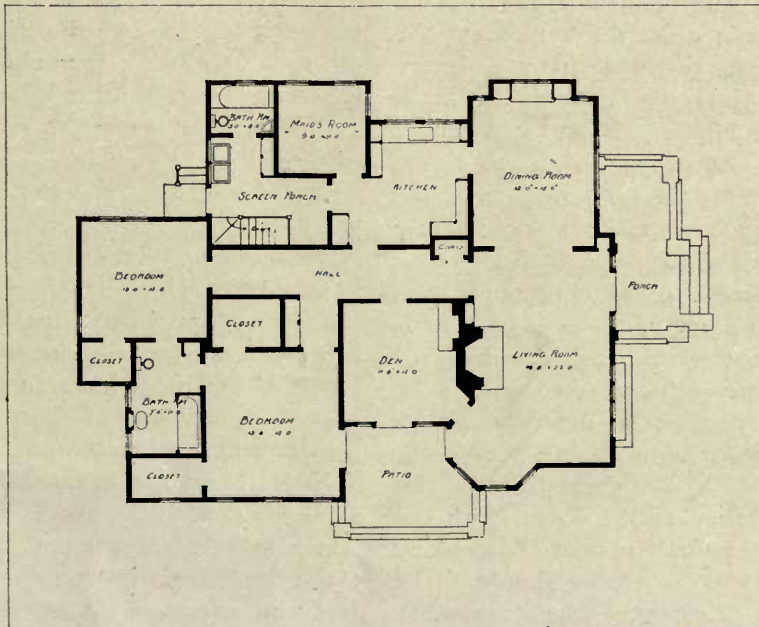
Both homes are of simple, straight-forward construction, attractive in appearance; and each will grow more attractive with the growth of planting and vines.

Portfolio of Interesting Homes



The flat roofed one story home can be made very attractive.

Arthur S. Heineman, Architect.






Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Rooms, Formal and Informal

 HE word "formal" to the average American mind suggests stiffness—due undoubtedly to painful memories of dreadful parlors. Even the word "drawing-room" savors of something so far removed from comfort that the word is almost as unpopular as "parlor." To the traveled American the term is associated with delightful English rooms, full of comfort and coziness and never too fine for everyday use; places where in cool days a fire is always lighted, where fresh flowers are seen the year around, and where tea and chat go hand in hand; quite different from the stiffness of the reception room and very unlike the typical living room, which is, as its name implies, primarily a family room.

Too often the living room speeds the coming guest, revealing the very center of the family life. Sewing tables and toys have been known to congregate here, also other things equally out of place. It is too much to expect that this much-used and sometimes abused room should be made to serve as a sewing room and a nursery, in addition to its other missions. In taking the place of the old-time parlor and the old-time sitting room, with the added features of a library, it fills as many requirements as one room should. The "reception" element, when possible,

should be transferred to a less-used apartment, large or small as the case may be.

The reception room of ten or fifteen years ago is seldom found in the very modern house. It was a stiff and cheerless place, shunned by the family and seldom used except for "first" calls. Fashion decreed that it should be furnished in delicate colors, vapid pictures, and insipid bric-a-brac. It was here that first flourished the insecure gilt chair. Hospitality could hardly exist under such conditions, and the unpopularity of "calling" was due largely to its chilling atmosphere no less than to the frigidity of the old-time parlor. Formality in both cases was reduced to its lowest terms.

A little later a reaction set in in favor of something more home-like. Architects deplored the loss of space, which in a small house was a matter of concern, and householders realized the folly of setting aside a room which benefited no one save the decorator. The living room was a protest against the un-home-like atmosphere of the reception room. We are a nation of extremists. The living room became almost everything but kitchen.

Now there is a reaction in favor of something a little more ceremonious. There is a rearrangement of the floor plan; the living room retains all its comfort and charm—it is too characteristi-

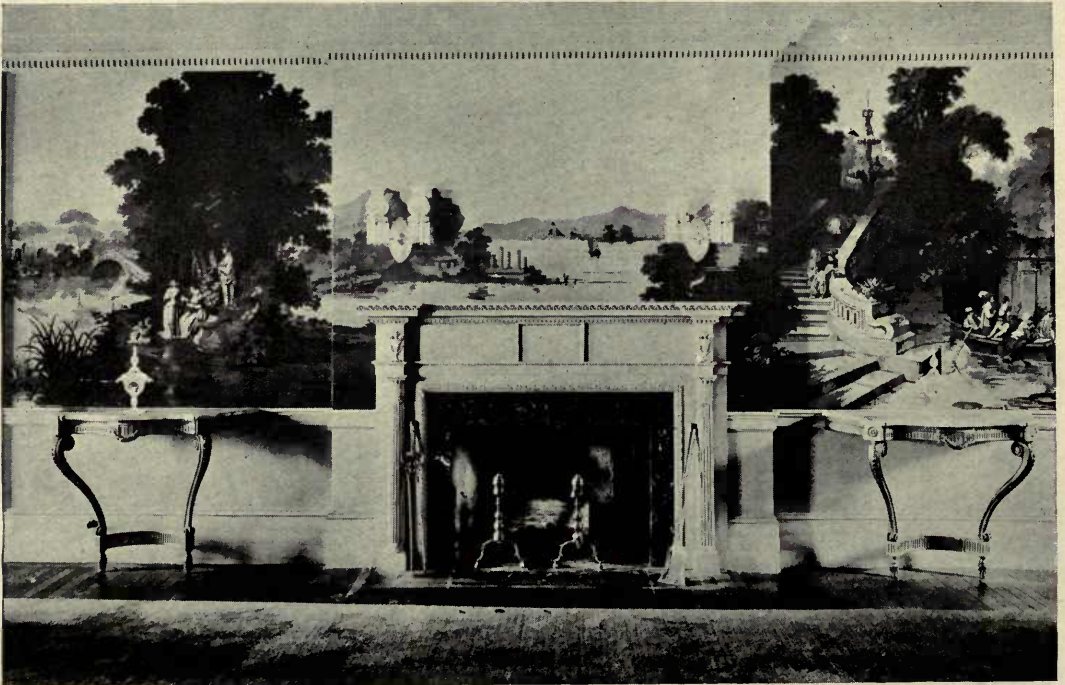


A room of dignity and charm.

INSIDE THE HOUSE

cally American to be parted with; the hall is more a hall, less a room, and somewhere, east, west, north, or south is a room, large or small as circumstances permit, which fills requirements of equal importance with those of the living room.

brary, but, as with other rooms on the ground floor, it must be treated in relation to its surroundings, unless it is so placed that a radically different scheme is possible. If divided from the hall by columns it must be decorated and furnished



Bold landscape paper in a modern Colonial house.

It has none of the gilded stiffness of the reception room, none of the ugliness of the parlor of the mid-nineteenth century. It has the dignity of the old colonial "parlour" with comfort added and is not too fine for daily wear. Drawing room seems as good a term as can be found if we use it in the English sense, which means comfort, charm, and dignity.

When the living room is also the library a drawing room is especially desirable. It can be furnished and decorated in a brighter way than is desirable in a li-

in such a way as to present no sharp contrasts of color or design. If separated by folding doors or a large doorless opening the same advice holds good. The best results will be obtained by a continuation of the trim and general color scheme of the hall.

If the hall is panelled the trim should be stained to match the paneling, and the wall decorated in harmony with it. Many houses have the same trim in all the main rooms. Others, equally well designed, show a greater variety, but the ar-

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chitectural scheme is such that all the rooms are not seen from the entrance. Where the drawing room is so placed that it can be treated independently it is often well to keep it in a brighter key than the rest of the house. Gay effects are sometimes very attractive, making the room a decided contrast to the more subdued living room. White paint, chintz, and wicker furniture suit the drawing room of a country house, and in a city home, if the locality is free from soot, light, clean effects are also admirable.

The drawing room could be made a dainty room if the daintiness is of chintz instead of satin. Many schemes are per-

missible here, which would not be feasible elsewhere, and if well carried out would give both variety and charm to a house. It is a false standard of harmony where everything is too precise and cut and dried, and where everything matches. For this reason a drawing room furnished in a manner quite different from the home-like living room or the retired book room will be found of greater benefit than if made to conform to the rest of the house, but—and we would again give emphasis to the statement—it must not be made a part of a vista. Where a room is a part of a vista it must be a part of the general composition. It can never be



A decidedly home-like and livable room, plain walls and curtains of cretonne.

INSIDE THE HOUSE

made a separate and independent thing.

When harmonious with its surroundings, wood paneling painted white and extending from floor to ceiling makes an ideal wall treatment. As a background for mahogany furniture, particularly of



Cretonne of birds and foliage in gray, mulberry, old blue, black and green.

the eighteenth century styles, it can hardly be excelled. Very little is needed in the way of furnishing, for with such a background charm and distinction are already secured. The necessities are good furniture and rugs—the latter not too strong in tone, curtains, which are closely related to the scheme of the room, a simple, but well composed, mantel treatment, and pictures which are chosen with unusual care, since pictures often spoil a

panelled wall. Colored prints framed in flat gold or mahogany, and so placed that they do not interrupt the panels are usually effective. Gold mirrors also look well in such a room and the brass or fire gilt of candles and sconces add pleasant points of brightness. If the expense of a panelled room is prohibitive, a high white wainscot is a good substitute, with a textile or paper carried to a white cornice. Excellent paper to combine with a high white wainscot are stripes which may be found in countless varieties. One attractive pattern is in two shades of amber, the darker stripe carrying small nose-gays in many colors—pink, green, blue, lavender and gray, but all blended in such a way as to be harmonious. The curtains should be of amber silk, or of amber linen, edged with a cretonne band matching the flower stripe. The rug should have a good deal of soft yellow in it, preferably combined with a number of other colors all subdued. Mahogany could be used in this room combined with enameled furniture, but not in equal proportions. Either the mahogany or the painted pieces should predominate. A good proportion would be a mahogany table, Sheraton or Hepplewhite, two side chairs, one arm chair in harmonious style, two or three cane chairs, enameled white, of eighteenth century design, an English folding tea table of mahogany, a settle of mahogany, and a sofa of cane and enamel.

One small drawing room with a white trim is papered in a gray and white landscape paper. The curtains are old rose linen and the rug of old rose velour. Another room has paneled walls painted gray with silver fixtures and gray painted furniture upholstered in blue and silver brocade. This is in an expensive house but



the color scheme could be repeated in paper and cretonne and be suitable in a simple home.

Wicker furniture painted and combined with cretonne or chintz may be made very effective. One delightful room has a trim painted olive green, a foliage paper in green and cornflower blue, plain blue linen curtains, wicker furniture painted green, cushions and pillows in plain green, plain blue, and copper brown, with one or two in cretonne matching the paper, copper candlesticks and a few good pottery things in Grueby green and Van Briggles blue and a Caledon rug in copper browns. This is an inexpensive room, attractive in color and quite out of the ordinary. Another drawing room has an oak trim stained Austrian gray, a gray textile on the wall and a deep tapestry frieze in gray, green, and orange. The furniture is gray with dull orange leather upholstery, and the rug of continental weave has a gray center and an orange and gray border. This room is decidedly

substantial, fitted well the house in question, which is constructed with large openings and a spacious central hall. By contrast it is in lighter vein than the living room and the book room with high oak wainscots and walls of sand-finished plaster.

In houses of a certain type period styles are suitable. Many drawing rooms are poor imitations of the French styles, reproducing their glitter but seldom their accuracy. The simpler motifs of the Louis XV and Louis XVI periods are appropriate in certain houses. In rooms devoted to gala purposes and used only for entertaining, the light and graceful French styles are in excellent taste. These make a consistent background for evening toilettes and are well suited to a brilliant assemblage. The average house does not contain a ball room and the hostess usually makes use of all the rooms on the ground floor when entertaining.

Moreover the color schemes must be selected for their everyday value.

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.



May is a delightful month in which to shop. Even with gray skies outside the gay displays within suggest summer's approach.

In New York where straw hats appear in February May comes as an anti-climax. In the rest of the world the fifth month of the year is still accorded its rightful place in the calendar. It may come in like a

lamb and go out like a lion. It is still the month of romance and poetry and, coming down to earth, the period in which the amateur gardener seeks the picturesque trapping of his calling. For him the shops have much to offer. There is the garden basket, for instance, of green willow lined with leather, fitted with trowel, fork, pliers, pruning shears, flower-scissors,

INSIDE THE HOUSE

pruning knife, two balls of twine, spool of wire, package of tacks, and brad hammer, complete for ten dollars and fifty cents. A smaller basket for eighty-five of similar willow, but without the leather lining, contains trowel, ball of twine, flower scissors, pruning knife, pruning shears, spool of wire, dibber and budding knife. A combination kneeling cushion and equipment bag, price four dollars, is made of awning cloth in different colors lined with khaki and filled with tufting.

The new war movement—the Woman's Land Army—has brought into immediate use garden paraphernalia of every description. At the recent Flower Show in New York the young women dressed in garden uniforms contributed a picturesque feature. One type of dress is khaki of military cut; the other of blue linen with long smock and high leather leggings.

George Gould's War Garden of Vegetables, which won a medal at the show, formed an excellent background for the young gardeners. But the new army is more than a picturesque feature. It has become a work-



The new "Silvia" rose—a yellow Ophelia

ing reality. Its aim is to replace the farm laborers called to war. Already it has become a vast land employment bureau with a home office in New York and representatives in many parts of the country.

At the big Army and Navy meet in New York the "land contingent" made a splendid showing. Let us hope that all the crops will justify the enthusiastic

planting period.

Naturally the Flower Show afforded an interesting background for garden schemes of all kinds. The arrangement of the exhibits was admirable. The old hit-and-miss way, each exhibitor for himself, has happily passed. The effect on entering the Grand Central Palace was that of a vast estate in which a rock garden, a rose garden, a water garden, a Dutch tulip garden, an orchid garden and many others, made a harmonious and beautiful composition. Not only were the "gardens" themselves of great beauty but the accessories in each case were arranged with consummate skill. Here the amateur could learn how important are walls, gates, arbors, pools, sun dials, benches, etc.



Courtesy J. C. Kraus.

Gazing globe.

INSIDE THE HOUSE

The Dutch tulip display won the Sweepstake cup, and the old-fashioned rose garden, medals and prizes. Every gardener with a hobby for roses should have seen the latter with its glorious flowers, old-time white fence, gates and arbors, walks and sundial. Over the fence grew Dorothy Perkins roses as if it were June in a real garden. Very practical was the rock garden with its special scheme of planting. While the layout of tulips could be copied with good results, much of the charm of the Dutch scheme lay in the little windmill and other Holland accessories, particularly Miss Van Drooge, knitting, in native costume.

Cut flowers of all kinds occupied much space. There was a special day set aside for sweet peas, and the effect was that of tropical butterflies of every known hue.

Orchid day brought to notice the new plant, "General Pershing," and Rose day introduced several novelties. The newest of the new was the thornless "Columbia" of brilliant coloring and vigorous growth. Making its bow for the first time in a large public way was the "Rosalind" of exquisite shadings in apricot and shell pink. It belongs to the "Ophelia" family as does the new "Silvia." To many rose lovers the original "Ophelia" seemed the acme of beauty with its wide range of

color values and delightful perfume. The "Silvia" is sulphur yellow in the bud, changing to creamy yellow as the petals expand, and finally arriving at pure white. Both of these ethereal but hardy roses come from the Pierson conservatories at Tarrytown on the Hudson.

From the Cromwell greenhouses in Connecticut were exhibited the new "Evelyn," the beautiful "Mrs. Charles L. Bell," first grown at "Twin Oaks," the Bell estate, Washington, a worthy rival of "Killarney Brilliant," and the new climbing roses, "Rosiere" and "Elizabeth Ziegler," and the better known but always adorable "Hoosier Beauty," "Mrs. Aaron Ward" and "Radiance."

Lovers of birds could revel in all manner of houses, baths, food tables, etc. The Audubon bird bath impressed the writer as being particularly well designed. It is of "cast stone," the



Courtesy J. C. Kraus.

Wall fountain.

trade name for a composition of Portland cement and other ingredients, and the water depth has been carefully based on long study of birds found in the temperate zone. The maker realized that many baths are too deep, frightening timid birds and poorly fulfilling their mission. The "Audubon" has a graduated depth making possible all kinds of "dips," from cold plunges to a mere wetting of bills and claws. Perches in the pool are so

INSIDE THE HOUSE

constructed that a firm hold may be secured when needed. The National Association of Audubon Societies indorses the bath.

Sundials had an important place at the Flower Show, also gazing globes. Nearly all gardens are made more attractive by

globes and dials, and the simpler designs are extremely reasonable. To watch the shadows in one and the reflections in the other are fascinating alike to the child and the adult. Both dial and globe add a touch of imagination, as well as beauty, and in our work-a-day lives we need both—and never more than at this moment.

Do not diminish for an instant the conservation so vital at the present time, but lay hold with equal vigilance upon the simple inexpensive things which make for recreation and tranquility of mind.

The choice of a sundial motto usually calls into play the resources of the entire family. Some of the good ones, more or less familiar, are: "How long the sunshine, how brief the shade," "Time cannot take what time did not give," "The shadow passeth," "Bowers, showers, I alone remain."

Many of the sundial themes are almost too solemn, recalling tombstones rather than happy gardens. Austin Dobson's well known lines are sometimes used, but Queen Alexandra's motto is more cheerful. The first run thus: "Time goes, you say. O no! Alas, time stays. We go." The Queen-Mother's dial contains the oft quoted, "I mark only the sunny hours."



Courtesy J. C. Kraus.

Audubon bird bath.

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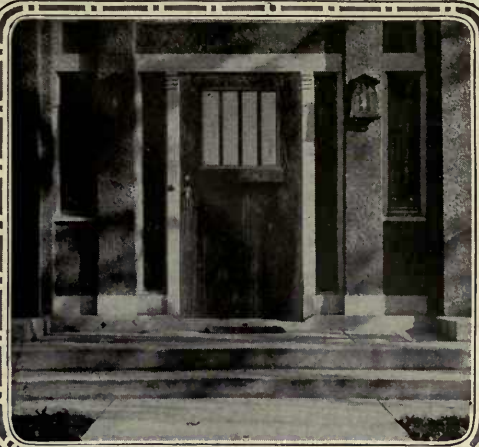
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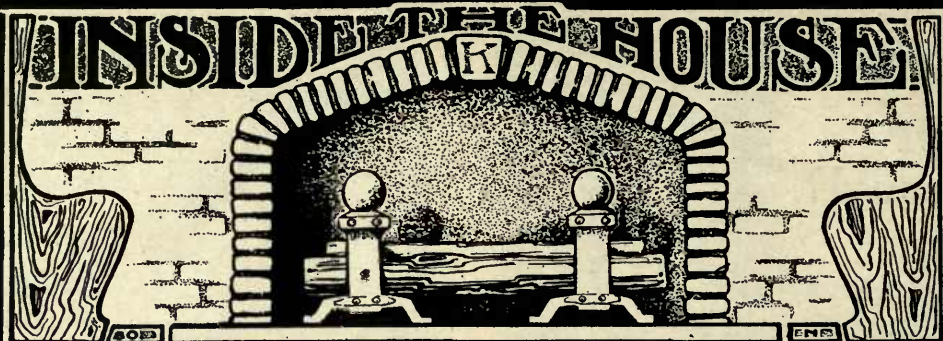
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ANSWERS TO QUESTIONS ON INTERIOR DECORATION.

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Changing the Bungalow Plan.

J. H. O.—Your magazine has helped me so many times, but this time I would greatly appreciate your advice on my own individual case.

I have just purchased a five-room brick bungalow. It is finished throughout in hardwood and dark varnish of the glossy variety—quite a dark brown—which I imagine is some type of golden oak. Is it possible to allow that finish to remain, at the same time selecting a color scheme and furniture to combine which will make up an attractive interior. If not, what kind of finish would you suggest. I have no furniture as yet, so can carry out any suggestions you may make.

I am herewith enclosing a rough sketch of the floor plan. The house faces east. The living room has three windows on the east side—three set close together—the dining room has three windows to correspond, on the south side of the room.

There are no doors,—just a wide opening between living and dining room. Do you think it advisable to have French doors put in here, or is this space best left open on account of the living room being small—I think it is only about 12x14. The dining room is 14x16.

The living room has a built-in bookcase—or rather a built-out bookcase, as it extends into the room. It is a section with leaded glass doors at each side of a mirror, which is full length of the case, coming down to the floor. The dining room boasts of a china closet to correspond, with the exception that the mirror comes

down but half way, underneath which are several linen and silver drawers. Both of these pieces are finished to correspond with the woodwork.

The walls of these rooms are papered brown. I am contemplating repapering. Please suggest an entire color scheme for rugs, treatment of windows, etc. The entrance hall is small. Would it help any to place a half table against the farthest wall, with a large mirror above it? There is no closet space in this hall.

I have been thinking some of fitting out the front bedroom as a den, on account of the small living room. Then, again, instead of doing this, I have been wondering if it would be advisable to tear out the pantry and closet, making the back bedroom that much larger and converting that into a dining room. You see there is an entrance to this room from the present dining room, and the entrance into the pantry would make a kitchen entrance. I would be obliged to utilize some of the present kitchen space for a closet or pantry, but as the kitchen is a reasonable size, I think this could be done.

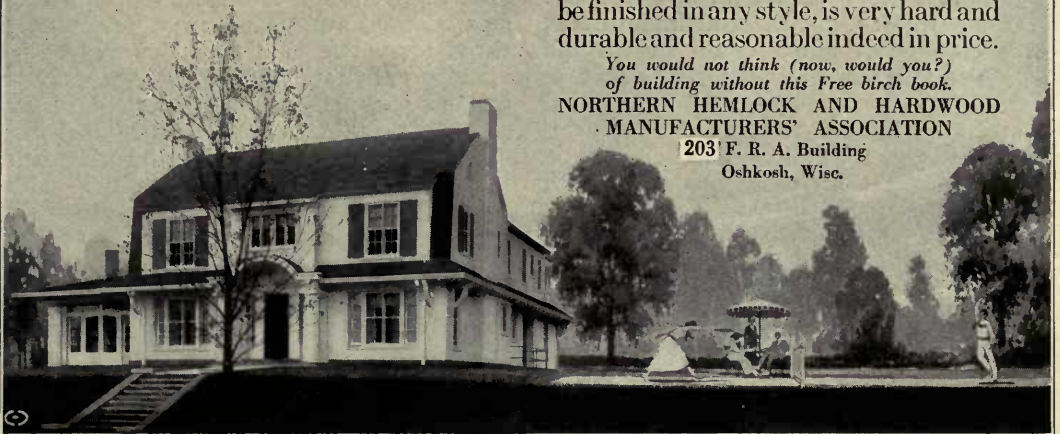
There is a large high attic, and perhaps a little later we could finish off a couple of bedrooms. The bungalow is new and well built.

Ans.—It would improve your plan to change that back bedroom as you suggest into a dining room and thus give yourself a roomy living room, while the attic bedrooms would be an advantage oftentimes.

You would enjoy the house better, I



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imagine, if you change that dark varnish finish. People are quite tired of this. At Liberty's, in London, there was a most attractive room and a color-scheme you could use and like, I am sure. It was in grays. The woodwork a light dull-finished gray. In a rather large wall-space a frame was built like panelling on the wall, so that a picture could slip in and be changed when desirable. The picture was a gray-toned photograph of a noted painting or bit of sculpture. The furniture had the gray stain rubbed down to a dull finish. The walls were covered with a material with a little all-over design in a contrasting color (you could use wall paper), and the rug and furniture covering also showed notes of the contrasting color. I suggest that you use one of the violet tones with its complement for the relieving colors, as

Red violet, complement yellow green.

Violet, complement lemon yellow.

Blue violet, complement yellow orange.

I have before me now a glass bowl, called "soap-bubble" glass, and in it are the gray tones with the high-lights in red-violet and the bright yellow green like new spring shoots. The furniture would be covered with the red-violet (a plum-color) in velvet or satin with pillows of the yellow-green and perhaps one gray one.

Scotch rugs can be made with the colors of the room and no extra charge is made for the color combination. Of course, the floor would be finished in the gray stain also.

The bookcase in the living room sounds very pretty and the china closet could remain in the old dining room to use for books or pewter or glass flower bowls,—or perhaps it could be moved into the new dining room. Using these two rooms as a living room, velvet portieres would be better at the opening than doors in case you ever wanted to separate the two parts of the room. Besides, draperies always soften the effect and carry the color to different parts of the room. The windows should have light silk (green)

or net or marquisette next to the glass with over-curtains of the heavier material.

I hope you are going to have the kitchen a real "efficiency" kitchen with real conveniences to work with—that is, the sink high enough and with a good light so that food and dishes may be properly cared for. The pantry end should be so arranged that the things used constantly can be within easy reach. A place for every little thing should be provided just as a man plans his office or library. And in here there should be pretty washable curtains and pretty colored, light walls and furniture and woodwork.

Brick and Stucco.

E. G. R.—We are contemplating building a house this summer and would like a little advice on several matters.

The house is to be brick up to second story window sills, then stucco above that, the roof is gabled.

We prefer a dark red brick and want to know the best color of stucco to use with it. Also color you would suggest painting blinds—that are to be used on second floor windows.

Inside the house the living room, dining room and front hallway are quarter-sawed oak, brown flemish finish. Will use decorations in these rooms combining mulberry and gold, such as drapes, lamp shades, etc.

What color shall we finish the sun porch?

In dining room on north wall we want a long colored glass window over buffet.

Ans.—As you are using the dark red brick for the lower part of the house I should use a light gray stucco with them, having the blinds and trim a bright blue-green, rather light.

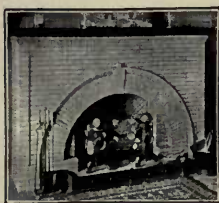
The woodwork in the sun parlor gray, color of the stucco, walls of the light green, with furniture stained gray with green covers on the cushions.

Over the buffet use a colored glass window of varying shades of amber, while the rug in the living room would be good with blue predominating.

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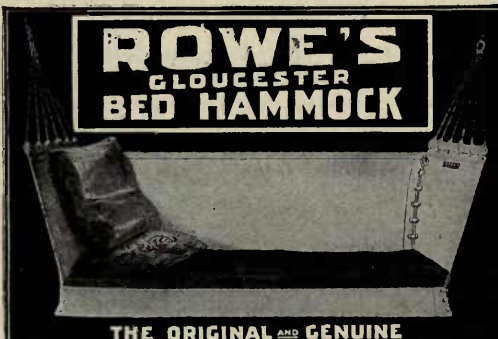
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INSIDE THE HOUSE

HOUSEHOLD ECONOMICS

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Take some pennies with them
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*Change them for a War Stamp,
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You'll get a crisp \$5 bill
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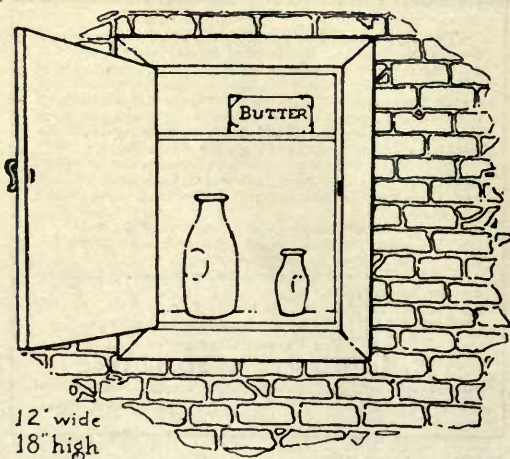
BUT a milk door in your house," advises the Food Administration. This is merely a small cupboard built into the thickness of the wall, generally between the kitchen and back porch, with two doors, one on the outside and one on the inside of the house. The outside door enables the milk man to place the milk in the place provided for it, and when he closes the door, the milk is safe from inquisitive cats and dogs as well as relatively safe from the milk thief. The housewife takes the milk by opening the inside door. The space between the inside and outside

doors is usually about 5 inches. The height of the opening is about 18 inches (inside measurement) and the width about 12 inches. During the winter months the protection afforded by this device keeps milk and cream, and especially buttermilk from freezing, and in summer the food is protected.

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Show the Same Spirit.

If you cannot demonstrate your patriotism by storming German trenches, you can demonstrate it by foregoing another slice of roast beef or what to many people is more of a sacrifice—by eating in contentment a meal in which there is no wheat whatever. Let vegetables take the place of bread as far as possible. Table patriotism is not incomparable with trench patriotism. It is from the same mint and has the same backing. Enough smaller coins will pay a bill as well as dollars.





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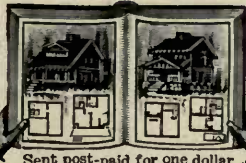
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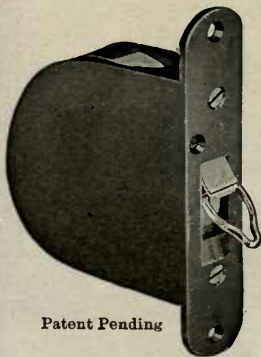
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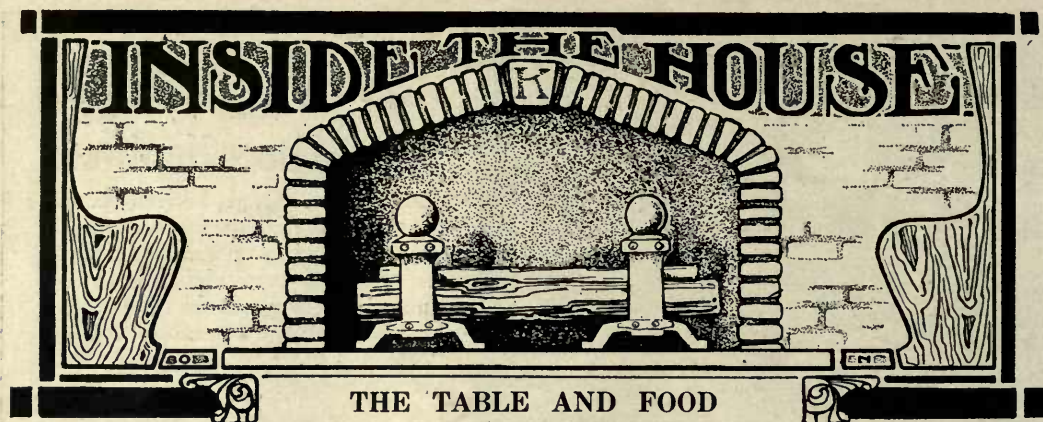
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Vegetables, Their Uses and Preparations

WITH the change in season comes a renewed demand for "green things" in the diet. The almost universal craving for green vegetables is justified by their high dietary value. Both experience and experiments show that green leaf vegetables possess decidedly different dietary characteristics from seeds and roots. The leaves of plants contain two to six times as much total inorganic materials as seeds, and they also contain a liberal amount of the fat-soluble dietary essential lately discovered to be so needful but of which so little is known. So far as known the characteristic property of this fat-soluble substance is not destroyed by the heat in cooking, so leaf vegetables have this value, either raw or cooked.

In the last decade a vast improvement has been made in the quality of green vegetables which are available. This is largely due to the improvement of varieties under the greater care given them, owing to their growth and use out of season. What was begun as a luxury has become a necessity and everybody is benefited, as a result of a more fully balanced ration. This growing demand for vegetables of superior quality is met by acres of glass-covered truck gardens operated ten months of the year, and by the scientific management of outdoor truck gardens. Naturally as this demand for quality becomes more widespread, the popularity of vegetables will continue to steadily increase.

With the wider use of vegetables must come greater knowledge and skill in their preparation. The ability of a cook has long been based on the ability to cook meats and pastry. Almost anyone can broil a chop or even roast a leg of lamb, but when it comes to vegetables,—anything will do.

According to one observer, mashed potatoes gives the real test of a chef. In the larger cities a few popular restaurants make a specialty of vegetables, cooking them scientifically to preserve their flavor. One such restaurant announces:

"Squash, onions, cabbage, cauliflower, potatoes, Brussel sprouts, spinach, yellow turnips, we steam to retain all their mineral food ingredients—natural delicious flavor.

"Carrots, parsnips, lima beans, green peas, white turnips, string beans are cooked in just enough water for serving—and preserve all their food properties."

Potatoes.

For many years housekeepers have argued as to whether vegetables and especially potatoes should be put to cook in cold water or in boiling water. This argument has been strengthened by the fact that there are a few early varieties of potatoes which must start cooking in cold water because if started in boiling water the outside will go to pieces before the inside is cooked. On the other hand, starting anything other than dried fruits or vegetables in cold water does not appeal to the efficient cook.

Isn't it true that we can ALL do more? Not our bit, but no less than our utmost can satisfy us as being our part in bring freedom to the weak peoples in all lands.

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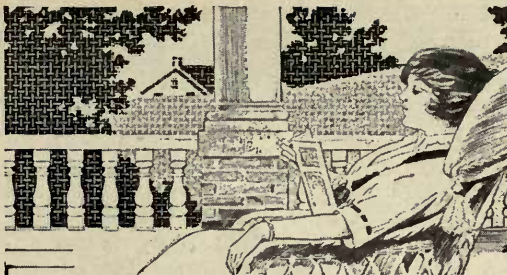
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INSIDE THE HOUSE

When appealed to directly on the subject, an authority on cooking at the head of the department in one of the great Farm Schools says that there is no appreciable difference in the results, whether potatoes and other vegetables start cooking in boiling or in cold water, but that the important point in either case is that the water in which vegetables are boiled should be used. It may be kept in the same way that housekeepers are accustomed to save soup stock. Potato water is invaluable in starting bread and would better be saved from dinner than prepared especially.

When only enough water is kept over vegetables to prevent their getting dry, in a carefully closed vessel they are cooked by steam, which gives a finer flavor while at the same time keeping the food value in the vegetables instead of in the water.

Cooking vegetables by steam is an approved way for their preparation. There are many steam cookers in which several dishes may be prepared over one fire opening, giving fuel conservation at the same time.

Chowders give a very acceptable form for serving both vegetables and any kind of sea food. Vegetable chowders may be successful without any kind of fish. In pre-conservation days we always began chowder by crisping a little bacon in the bottom of the kettle, adding sufficient boiling water in which to cook thick sliced potatoes until they drop to pieces, before adding the fish, which needs to cook only about ten minutes. When the fish is done there should be about half as much as the desired amount in quantity. An equal amount of milk heated to the boiling point in a separate vessel should be added and thick biscuit or crackers may be laid over the top. When this boils thoroughly it is ready to serve. Celery or other vegetables may be added with the potatoes. Vegetable fats may be used in place of the bacon, seasoning and flavoring in accordance.

Nature's Sweets.

Sugar, in the form in which Nature prepares it, is necessary to the system and is

an indispensable element of diet. It is soluble and is easily carried by the blood to the muscles which need it. But sugar, in the form in which we use it today, is not a natural but an artificial product. With the exception of honey, says Alfred W. McCann in Physical Culture, there is no concentrated sugar in nature. Very dilute sugar exists in ripe fruits and vegetables, principally in their juices.

Through thousands of years the confections of the world depended upon honey or were made from honey. Jacob sent honey as an offering to Joseph—the Egyptian ruler. It was a gift sent with other valuable things to potentates. This was three thousand years before a sugar refinery had been built.

Nature has given man a "sweet tooth" but teaches him to obtain the sugar he needs from fruit and fruit juices, vegetables and cereals,—with honey as his confection. But greedy man has learned the trick of concentrating Nature's sugar. He ignores the sugar which Nature transmutates from starch in his system. Today we consume millions of tons of concentrated sugar in confections and sweets of all kinds. This increased consumption of sugar has recorded a fifty per cent increase in diabetic affections in the last generation. "Refined sugar and refined starch have been U-boating the stamina of America." While we have been lengthening life by modern sanitation and by saving infant life, we are, by our habits and diet, killing off men and women in the early forties with diabetes and obesity.

The call for sugar conservation comes to this country not only as an unselfish and patriotic aid to our allies, but as a life-saving measure to the people at home when they shall have reached middle age, in calling attention, forcefully, to the acquired taste for concentrated sweets and its baleful effects on the human system. To the men undergoing intense physical exertion, the heat-giving and food-value of the sugar is most grateful, especially carrying with it, as it so often does, the home thought and association. But the people at home are better off with very little sugar.

Eat one meal a day of vegetables, exclusively. The habit will be good for your health and good for your country.



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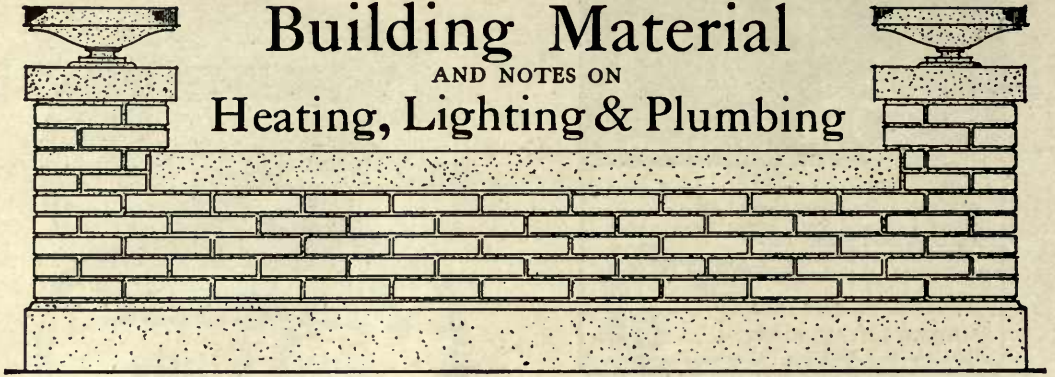
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The Roof of Slate

Pertinent Paragraphs for Those About to Build

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In a snowy clime, slates are a particularly appropriate roof covering, for they

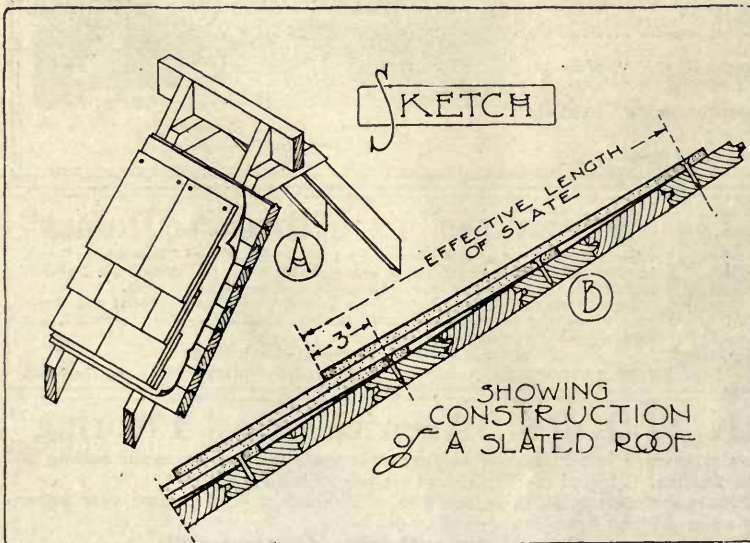
shed snow more readily than either tile or shingles.

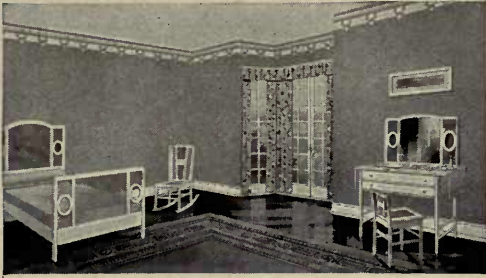
Slate can be obtained in a wide variety of color, ranging from nearly black to light gray, inclusive of purple, blue, green and red. The particular color, or shade of color, is in no way indicative of the quality of the material.

To here give any definite figures as to relative cost would be presumptuous, but it can safely be said that the average unit cost of a slated roof approximates twice that of a shingle roof and two-thirds that of a tiled roof. However, these cursory

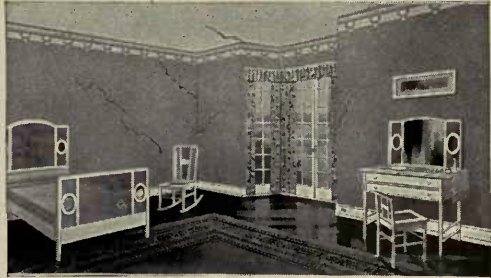
comparisons do not apply to red slate; for this is perhaps twice as expensive as that of other colors. This does not mean that red slate is of an exceedingly good quality, but rather that it is comparatively scarce. Good slates are everlasting and, when properly applied to the roof, require no further expenditure on their behalf. What, then, constitutes a good roofing slate?

1. It should be of a certain adopted thickness through-





The room when new



The same room a few months later

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out. A weather-tight roof can not be laid with slates of variable thicknesses.

2. It should be hard and close-grained, thus presenting a bright and silky surface-luster, and emitting a clear metallic ring when suspended in hand and struck with the knuckles. If soft, it will exhibit a lead-like dullness of surface and give out a muffled sound when struck. Nail holes in soft slate will eventually become enlarged and so render the slate insecure on the roof.

3. The edges should indicate a fibre-like texture, and the surface should show a very fine and straight lengthwise grain. If the edges are friable or splintery, the slate is certainly unfit for use. A brittle slate is easily broken in the process of laying.

4. A straight-edge applied to either side should not be rockable.

5. If, upon breathing upon a slate, a strong clayey odor is detected, the slate should be rejected: it will not withstand prolonged exposure to the weather.

6. A good slate should be practically impervious to moisture. No appreciable increase in weight should result after twenty-four hours' immersion in water. Frost tends to splinter the edges of an absorptive slate.

How Slate Should Be Laid.

The accompanying sketch presents an approved construction for slated roofs. The under-boarding is highly essential, for it not only offers a suitable foundation upon which to lay the insulating membrane of felt, but it lessens the possibility of the slates being blown off the roof. This last statement requires an explanation:

Slates, unlike shingles, are practically inflexible. Also, unlike shingles, slates are fastened to the roof only at their extreme upper ends. Wherefore a powerful leverage is offered to any force acting upon the slates from within. But, you say, wind pressure acts upon the roof from **without**. True enough, under usual wind conditions the atmospheric pressure is greater on the outside. However, a gust of wind unusually strong is followed by a partial and momentary vacuum.

During this brief period the outside pressure is removed and the inside air immediately strives to equalize matters by forcing its way through the roof covering. Hence, momentarily, the ordinary phenomenon is reversed: the most powerful pressure acts from **within**. Now suppose the slates to lie upon open stripping rather than upon compact boarding. They would then be exposed to this reacting pressure and, being unable to resist it, would be forced upward and outward. Being inflexible, they would break from their nailing and then, or by a succeeding flurry of wind, be blown from the roof.

As shown in the sketch, the roof boards should be tongued-and-grooved and not of excessive width. Moreover they should be smooth-surfaced, uniform in thickness and laid with as much care as would be exercised in the laying of a floor. Slates reflect every irregularity of the surface upon which they are laid. This, again, is because of their inflexibility.

In applying the slates, they should be laid in full surface-contact with one another over the entire area of their overlap. Again, they should be laid lengthwise of the grain; so that, if one subsequently becomes split in two, each half will still be held by one nail.

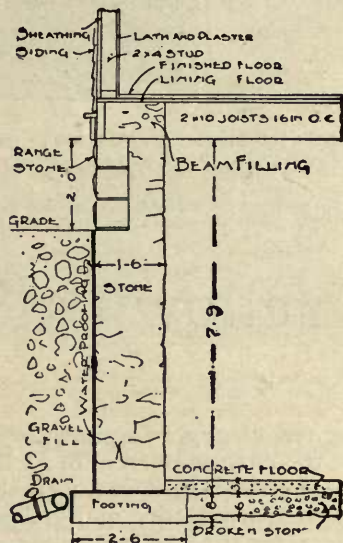
The nails themselves should preferably be copper-clad; the life of a slated roof is the life of the nails.

The nail holes, in the slates, should be machine-drilled and countersunk, for otherwise the slates will "kick up" at their outer free ends and not only mar the appearance of the roof but render it ineffective against the entrance of wind-blown moisture.

Finally, the nails of the first course should be overlapped not less than three inches by the nails of the third following course, and so on up the roof. In other words, the weather-exposure, or "gauge," of a slate is found by subtracting three inches from its effective length, and then dividing the remaining dimension by two. The "effective length," as shown graphically at "B" in the sketch, is the distance from the nail holes to the lower edge of the slate.

BUILDING *the* HOUSE

*A Handbook Every Home-Builder
Should Have*



(Fig. 6)
SECTION THROUGH BASEMENT WALL

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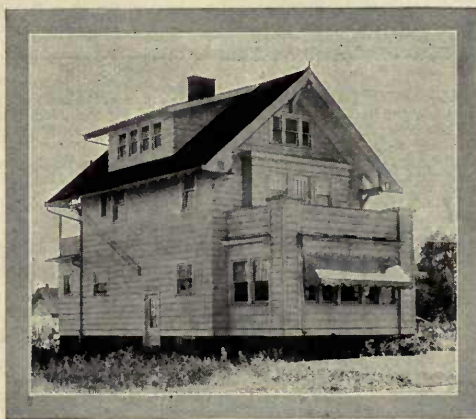
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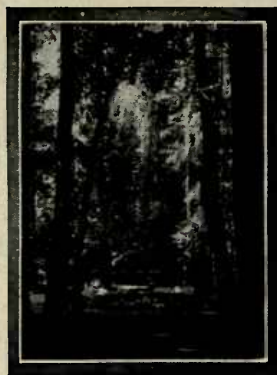
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WOODS

AND

HOW TO USE THEM



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.

Pine and Its Uses—Yellow Pine

Allan White

HEREIN lies the difference between Georgia pine and Arkansas soft pine?" "What is yellow pine?" "Is it a hardwood or may it be treated as a hardwood?" Such questions are likely to be asked, and there is much confusion as to the meaning of the terms because of the wide range in the qualities of the various kinds of pine, and the most excellent service which each gives.

To the builder and especially the home builder woods are divided into two great classes, hardwoods, and others which are soft, but the line of demarcation between the two seems very vague.

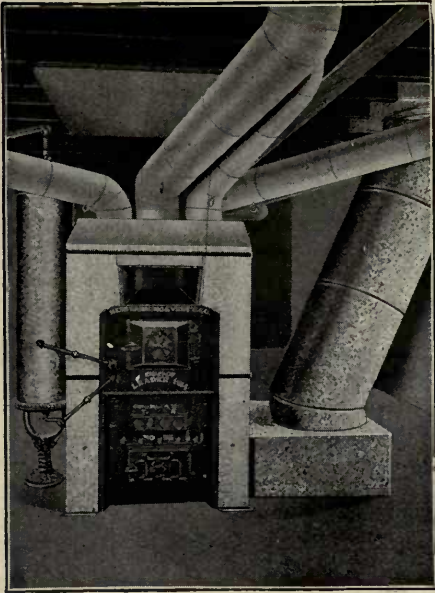
This confusion is, in part, due to the fact the terms hardwoods and softwoods, as used in this way, are really botanical terms, and originated in the tree growth, rather than as qualifying terms for the hardness of the wood itself. As generally used the term "softwood" is given to all trees of the family that the botanists call coniferous; needle-leaved trees, such as pines, cypress, and redwood. The term "hardwood" is given to the species botanists call "broad-leaved," such as oak, maple, birch and walnut. Some softwoods, notably long-leaf pine, are stronger than many hardwoods, and harder than such "broad-leaved" species as bass-

wood or red cherry. Commercially pine is by far the most important of all the soft woods, especially as it includes the two great classes, white pine and yellow pine. The characteristics of white pine were discussed in a previous article.

Yellow pine grows in the southern states from Virginia to Texas. Western yellow pine extends from the Black Hills to the Pacific Coast. Pitch pine occurs both north and south in the eastern states. Among the yellow pines are also Norway or red pine of New England, jack pine of the Lake states and lodgepole pine of the Rocky Mountain region.

The yellow pine group includes what are known as long-leaf and short-leaf pine and loblolly pine. Special or trade names are applied often without distinction of species. Much pine grown in the southern part of the country goes to the market simply as yellow pine or southern yellow pine. The loblolly pine of the North Carolina and Virginia district is called "North Carolina pine." "Georgia pine" is a time-honored term for the long-leaf pine of Georgia. "Arkansas soft pine" is a trade name for the short-leaf pine of that state. Western yellow pine is put under a variety of names.

Long-leaf pine is the heaviest, hardest, strongest, and toughest softwood and in



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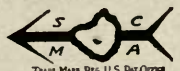
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these properties ranks ahead of some of the hardwoods. It may be finished and treated like a hardwood. The other pines are softer and less resinous.

Finish.

While pine is used so largely where woodwork is to be painted or enameled, it is by no means limited to such use, as many of the pines will take an excellent finish when stained and given treatment similar to that employed with other woods. It shows a wide variety in grain and figure and may be given almost any desired treatment. The harder, more resinous varieties must be given a somewhat different treatment than that given the softer varieties. Good grades of any of the pines are sufficiently hard for a good interior finish and they are more easily worked than the hardwoods. The service department, which has become a notable feature of all the lumber associations, invites questions from the users of their lumber. Each association has prepared literature giving the most satisfactory treatment for the different woods, and is ready to answer special questions.

Grades, and the "Density Rule."

The casual observer is often a little surprised when he finds a technical and business rule which has also general interest. One sees a beautifully finished interior, perhaps a country home, the entire wall paneled or ceiled, and asks if it is hardwood finish. "Lovely, isn't it? That is Georgia pine." Another soft-toned finish, perhaps one of the popular gray stains, proves to be pine from Arkansas or North Carolina, and the beautiful enameled finish, old ivory or a white paint which has carried itself well after years of wear, also proves to be of pine. There is even more confusion where a certain strength requirement is necessary. The strength variation of the pines is questioned as we know that the "long-leaf pines" are the strongest of the soft woods, and that the different botanical species of the pines frequently intergrade. Realizing this difficulty the Southern Pine Association has co-operated with the United States Forestry department and the American Society for Testing Materials in order to find some method for distinguishing the various classes of pines with reference to their structural qualities, rather than from

the botanical point of view, by which they were originally distinguished.

Following a long series of tests and after much careful study, a new classification for structural yellow pine timbers has been established which eliminates the botanical distinctions. The new rule is based on the number of rings per inch and provides two classes of southern yellow pine; dense southern yellow pine and sound southern yellow pine. Dense southern yellow pine includes the best pieces of what has hitherto been known as long-leaf pine, and excludes the occasional pieces of quality inferior for structural purposes and includes dense strong pieces of other pines. The grades, "Select Structural," Merchantable, No. 1 Common, or Square Edged and Sound may be either dense or sound pine. This rule was adopted in 1915 and applies to the species of yellow pine growing in the southern states from Virginia to Texas.

When Virginia was an American frontier, even before Washington and Jefferson were building their now-famous homes at Mount Vernon and Monticello, the Colonial homes of the south were being built, as they were in the New England states, from the wood which was nearest at hand,—the pines of Virginia and North Carolina. Some of these homes, which are among the oldest now standing in the United States, have weathered the storms of more than two hundred years and are still in an excellent state of preservation. They stand as silent witnesses bearing conclusive testimony against accusations of the perishable quality of the house built of wood, notwithstanding the fact that many of these old homes have been abused and neglected, allowed to "run down" for lack of repairs and repainting.

Pine is among the least expensive of woods. It grows in the south, in the west, and scattered all through the timber regions of the country. It is almost a local product in all markets, in the sense that it can be obtained without transportation from great distance. At the same time it is available in unlimited quantities and may be used by the home builder for any part of his work, dimension lumber, exterior, and interior finish, with satisfactory results.



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SPLINTERS AND SHAVINGS

America Must Grow Flax.



HE flax fields of Belgium have been trenched and blown up, and trenched and blown up again. The soil is shot through and through with cement and chemicals. Many years must pass, perhaps many generations before this part of the earth can again grow flax, if it ever becomes fertile enough for such use again. Flax requires black loam with a clay subsoil. The crop matures in ninety days. Such soil is found throughout Michigan, Wisconsin, Minnesota, the Dakotas, Montana, Iowa and Illinois. Flax would grow in all this district, but the growth and handling of flax in the making of linen is an industry which has been carried on in Belgium and northern France for many generations, and the old hand processes have been tested with generations of use of the finished products. Either what is left of the flax workers must be taken to new flax lands or wholly new processes must be developed if we are to continue the use of linen fabrics.

The farmer can plant flax after his other crops are in. The three summer months will mature it. It may be harvested for the seed, from which the indispensable linseed oil is made. The fibre, after the seed has been taken, is used for oakum and for insulating quilts; for a very desirable type of flax rugs; and there are some other by-products. As flax is grown and used for these products, and studied by the growers, the linen industry will have a chance to develop. Michigan is already growing "pedigree flax" for this purpose.

Let Mary Have a Lamb.

It is suggested that little lambs are very picturesque on a rolling lawn. Let Mary have a lamb this year as well as a dog and a kitten. If every summer home with a bit of ground had a lamb gamboling on it this summer, this would have its effect on both the food and the wool supply. Six

months brings a lamb to maturity; makes it ready for food and gives it a good coat of wool which our soldier boys need. Buy a young lamb and try it.

A Home of Your Own.

Are you living in a rented flat,
With hardly room to hang up your hat;
Often too cold, or else too hot,
And without a lawn or a garden plot?

Do you climb the stairs in a darkened
hall
That's the common property of all
The dwellers in the box-like shell,
And that carries every cooking smell?

Does the man above have a horse-like
laugh?
Has the family below a phonograph?
And are the children across the hall
The kind that bawl, and bawl, and bawl?

Do cockroaches climb the water pipe?
Is the garbage can next door too "ripe"?
Do any of your neighbors keep
A dog that barks when you want to sleep?

Then why not buy a good sized lot,
And build a home on your own green
plot,
Where you'll have freedom and pleasant
ease,
And your own back yard and few shade
trees?

You can have a garden and a lawn;
Go to bed at nine, or stay up till dawn;
You will have no neighbors to raise "Old
Ned,"
Under your feet, or over your head.

The money once paid out in rent,
For things that are your own is spent;
It may cost more—a little bit.
But you'll have something to show for it.

—Mississippi Valley Lumberman.

KEITH'S MAGAZINE

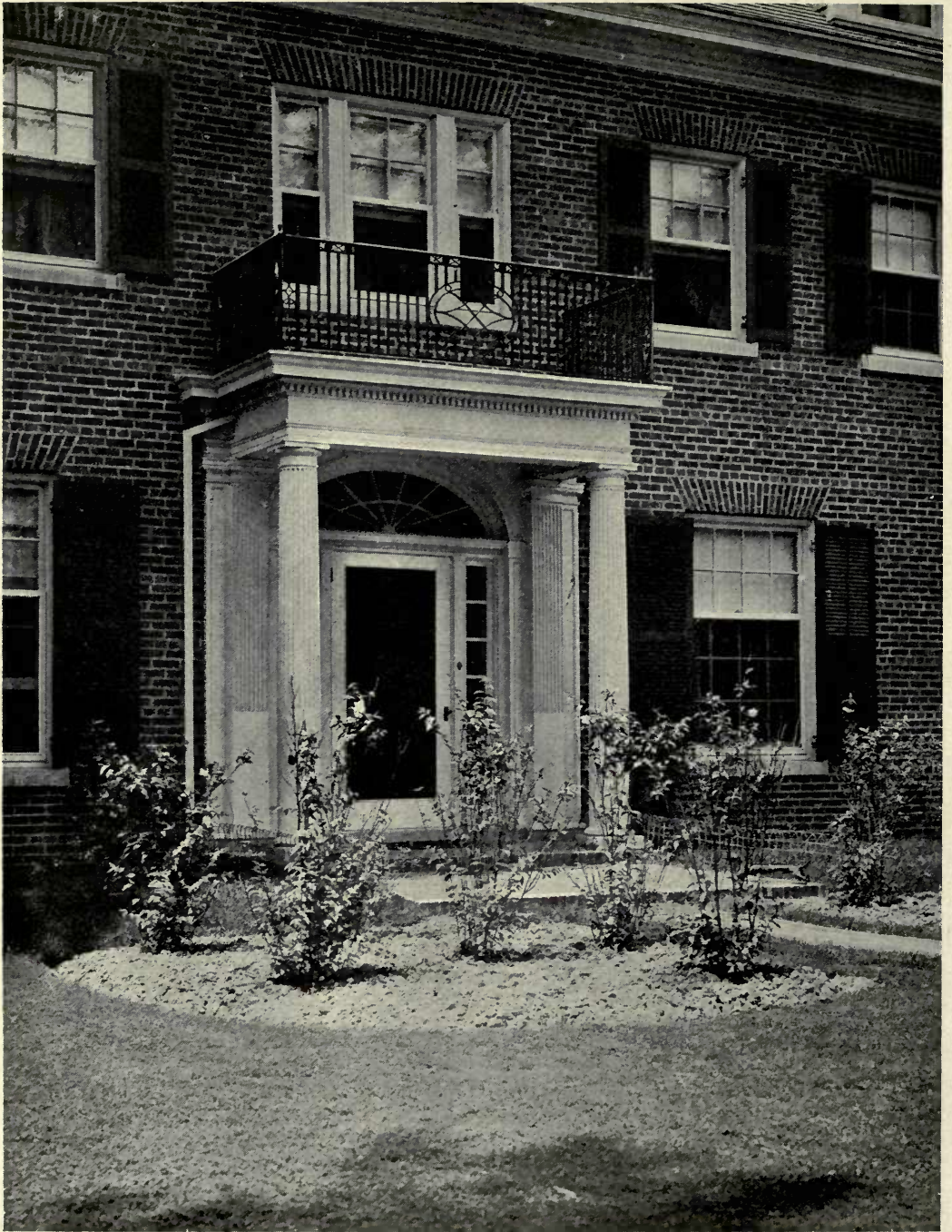
ON HOME BUILDING

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A modern entrance in the spirit of the Colonial.

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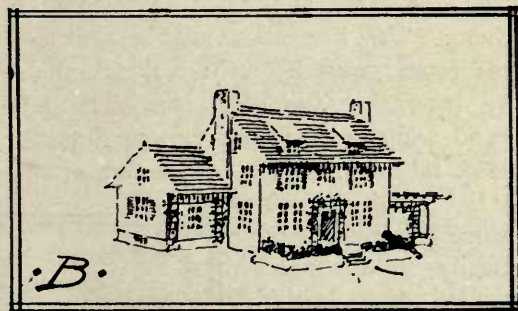
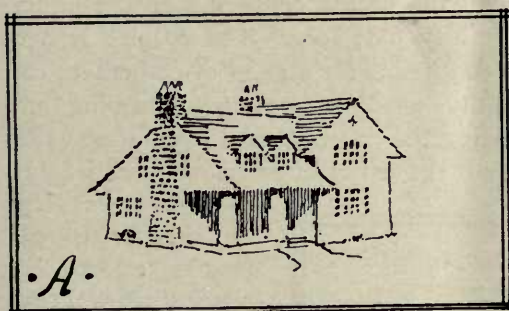
First Aid to the Home Planner

William Draper Brinckloe, Architect



Every professional builder knows, the public has most hazy ideas as to what is cheap or costly about the making of a house. And so I'll try here to render a bit of first-aid to the home-planner; to give some elementary notion of the sort of house one must ask one's architect for, to get a really low-cost home.

things, that took a disproportionate time to cut and fit. Even the material is often underestimated by the amateur; for example, there is a widespread belief that a bungalow is the cheapest type of house. Somehow everyone seems to forget that there is just twice as much roofing on a six-room bungalow as on a two-story house with three rooms to a floor;



Broken roof lines or irregularities are more expensive than simple construction.

Now, two things enter, in somewhat equal proportions, into the building of a house—labor and material. Most folk consider only the second item—"Any seven-room frame house will be much cheaper than any seven-room brick one, because a square foot of brick costs more than a square foot of board," reasons the public. But as a matter of fact, there are plenty of frame houses that have cost far more than neighboring brick houses of equal area; all because of certain bay windows, irregular roofs, and such

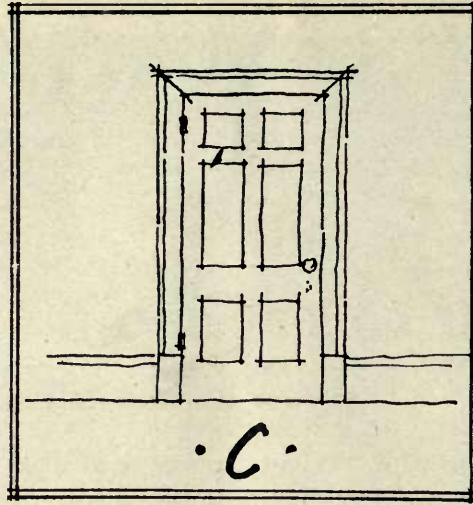
twice as much foundation, too. So, after crediting the cost of a stairway, and debiting the extra roof and extra basement, we find the balance of price is decidedly against the bungalow.

Likewise, most folk firmly believe that a geometrically square house is cheaper than any other shape; because a square has less outside wall than an oblong of equal area. In most cases, however, the small saving in sidewall is more than offset by the excessively long and heavy roof-rafters that the square house re-

quires; besides, an oblong rectangle usually permits a far more economical room-arrangement.

Another fallacy is the re-use of old material: "I'll get enough bricks and lumber from that old school to build my house," declares my friend, cocksurely. But when his bills are paid, he finds that the labor of tearing down and cleaning up has offset the saving; he might just as cheaply have bought new material, in the first place.

As I have just said, the bungalow is usually very expensive; and so is any cut-up, irregular type. Here are two sketches, "A" and "B"; let's compare them. "A" has no available attic; all the rooms must be on two floors, thereby increasing the roof-area. The left-hand wing, with rooms run up into the roof, takes an excessive amount of material and labor, since one must practically build square-walled rooms behind the slanting roof-rafters. The dormer construction, too, is very costly; and the intersecting roofs with their elaborate framing and metal valleys will run the price up. The sketch marked "B," on the other hand, shows a simple straightforward house that can be built for absolutely the minimum

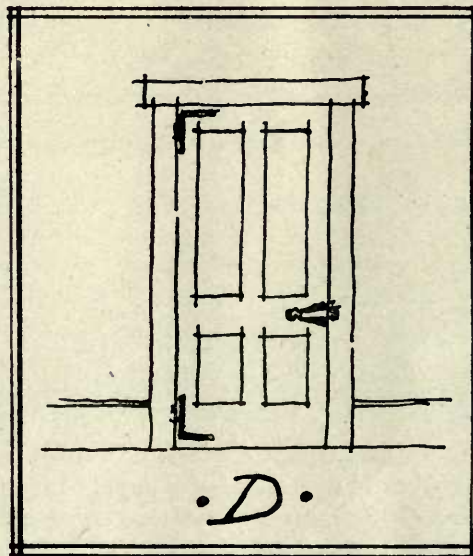


A special door with a mitred trim.

cost-factor per cubic foot. There are no breaks; the walls run right up to the eaves; the roof is perfectly straight, with no intersections or valley-rafters. There are probably two good bedrooms in the third story; this, of course, saves the amount of roof and foundation that would otherwise be required if these two rooms had to be spread out on the lower floors. The dormers are the plain square-topped Dutch type; costing at least \$25 less, each, than the peak-topped dormers in "A."

In general line, "B" is Colonial; but following the simple farmhouse rather than the ornate country mansion of the wealthy old Tory. The cornice is perfectly plain; for a gang of carpenters can easily spend several days framing and fitting the daintily membered affairs that edge the eaves of so many so-called Colonial cottages. It is far cheaper to get one's effects by heavy shadows, than by elaborate detail.

A bricked or graveled terrace out at the front takes to some extent the place of a porch; a border of privet hedge gives the needed color note. More color relief is reached by the cheap lattice work that you'll notice at various spots; when covered with a riot of



A door usually kept in stock.

clustering clematis, these lattices will be wonderfully effective. Vines and shrubbery should always be carefully planned in, thus, beforehand, as actual parts of the house-design; ten dollars worth of nursery stock will often give just as satisfactory bits of detail as a hundred dollars worth of carpenter-work.

When laying out room-sizes, the amateur always takes some even figure; 12 feet, for instance. This means that a 12-foot joist will just fail to span, and the next stock length, 14 feet, will have to be used, cutting off 18 inches or so. Lumber always comes in even foot-lengths; the waste in building an ordinary house may be judged by the huge stack of firewood that the contractor is offering for sale at a dollar a load. And you have already paid for that firewood, at about 5 cents a foot!

Rooms, therefore, should always have their shorter dimension 8 inches less than an even length—9 feet 4 inches, 13 feet 4 inches, and so on. The rafters too, may usually be cut without waste, by taking a little care in designing the slant of the roof.

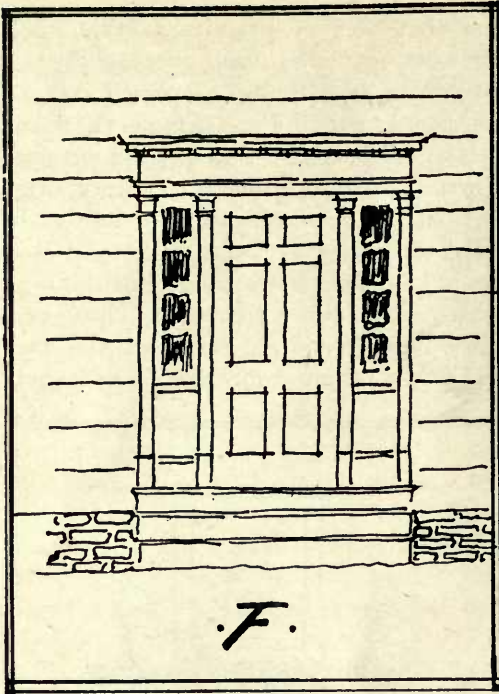
One of the largest single cost-items about a house is the millwork—the doors, windows, stair material, cornices and such. Now, architectural draftsmen are rated (and paid) according to their skill in designing special millwork—quaint little casements, dainty Colonial doorways and mantels, or what not. The architect takes great pride in these “details” of his work; rightly so, too. But special millwork costs nearly twice as much as ready-made or “stock” stuff—just as a tailored suit is double the price of the one we buy across the counter. It's far easier for the architect to sketch out millwork to suit his design, instead of poring over catalogues, perhaps altering the original plan to suit the things he finds, and I shall seem like an anarchist to my professional brethren even to sug-

gest that sort of practice. Still, stock millwork can be used successfully; I have done it, although at much cost of time and trouble. For example, the mantel at “E” is a copy, in its proportions, of a delightful Eighteenth century original; had I detailed special moldings in the ordinary way, the millman's bid would have been about \$25. But this was for my own home; I carefully chose certain stock mouldings and let the carpenter put them together. The whole



Stock mouldings, carefully chosen, on the lines of a charming old mantel.

cost for labor and material was \$6.04; and I am often asked where I bought that beautiful old mantel! Or take the doorway at “F”; this is special, and would cost about \$50 or \$75, depending on the quality of the detail. “You can't get this in stock, for those bargain-counter fellows make the most impossible sidelights!” say my architectural friends. Quite true; but some of the purest Colonial doorways (at Litchfield, Conn., for example) had green blinds covering the sidelights. Therefore we may build the doorway at “G” from strictly stock material; I have carefully figured the cost, and find it about \$15.



A special design.

For interior work, the simple four-panel door at "D" is the best; it will cost something under \$3. The six-panel door at "C" is seldom carried in stock; it therefore would cost at least \$6. The molded and mitred trim on this doorway takes a lot of labor to fit—the carpenter would figure something like \$1.20 for it; whereas the plain flat "farmhouse" trim of "D" can be nailed up in almost no time.

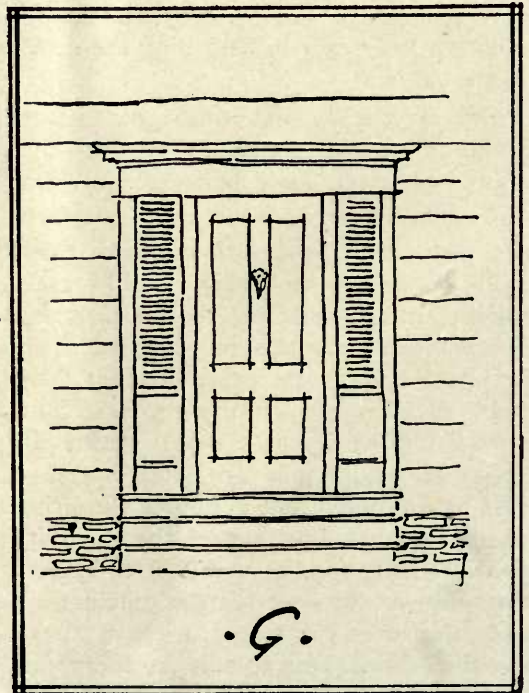
These are just a few suggestions; but when one really delves into a stock catalogue, and picks it to pieces, one can make any number of quaint, low-priced combinations that will suit both house and pocketbook.

"What sort of material should I use?" you will probably ask; but that question is really a specific one, and no general answer can be given. The lowest-priced material is, of course, not necessarily the cheapest; frame siding usually costs less than shingles or stucco, but in a few years repainting and repair bills

have eaten up the saving. That is a personal question, though; for perhaps your present pocketbook will not permit you to consider future economies.

Your local conditions will probably decide the material question for you. Possibly there is a neighboring brickyard that has an unsalable stock of picturesque culls or "arch" brick on hand; possibly there may be a chance to buy a bargain-counter lot of siding-shingles. Therefore very early in the game you had best consult some reliable local architect or contractor, and follow his advice as to the sort of structural material that is least costly.

But cheap material alone will not solve the question of cost. There is another factor, too often neglected, economical planning. Somehow I can't drive it into my clients' heads that a house costs pretty nearly in proportion to its size; that one foot added to the width of an average room will mean \$60 or so, extra.



Many Colonial doorways had shuttered side lights.

In other words the minimum cost per square foot of ground area for a simple two-story house is \$5; remember that, please, when you ask your architect for big rooms, wide hallways, deep closets, and such-like spaciousness. Personally, I think (as most men do) that the ideal bedroom is a steamboat stateroom; but my wife shrieks in horror whenever I advance such narrow doctrine! So I suppose it is hopeless to urge smaller rooms; still, there are other ways of reducing the

area. A dining-alcove at one end of the living-room, instead of a whole separate dining-room; an apartment-house kitchenette fitted with cupboards and cabinets, and taking the place of kitchen and pantry; smaller halls, and a stairway so placed as to serve for both front and back.

But if after all one's efforts, the house still towers above one's pocketbook? Two alternatives, only,—cut the size, or,—find a way to finance the project.

A Colonial Home in the West

Louise N. Johnson

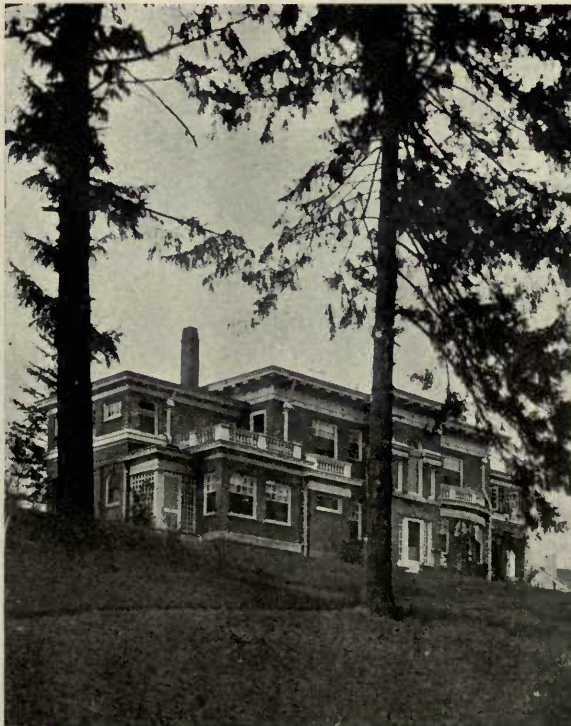
SINCE our forefathers from England built the first homes on American soil, homes plain in outline, but substantial and permanent, and withal having a certain charm in their utter simplicity; the American people have accepted the New England Colonial house as peculiarly their own. Deviations from this type have been many, but somehow the original New England colonial home, square and sturdy in its simple dignity, has come down through the years, and is still faithfully reproduced in present-day setting.

A fine modern example of such a New Eng-

land colonial house is found in the home of H. R. Albee, mayor of Portland, Oregon. It stands slightly back from the street, facing north, the south side of the house overlooking a city park, and to the east is a view of snowcapped mountains,

St. Helens and Mt. Hood. The roomy piazza in the right wing has these three beautiful outlooks.

Boston ivy clings gracefully to the austere walls, which are a warm shade of red brick and relieves the otherwise plain exterior. The home is distinctly interesting with its beautiful formal doorway in the center. All of the trim is painted white in the colonial way.



Reflecting the comfort and hospitality of Colonial days.



The interior of the home is delightful.

dued tone blend to heighten the loveliness of the hall and make it the true keynote of the home.

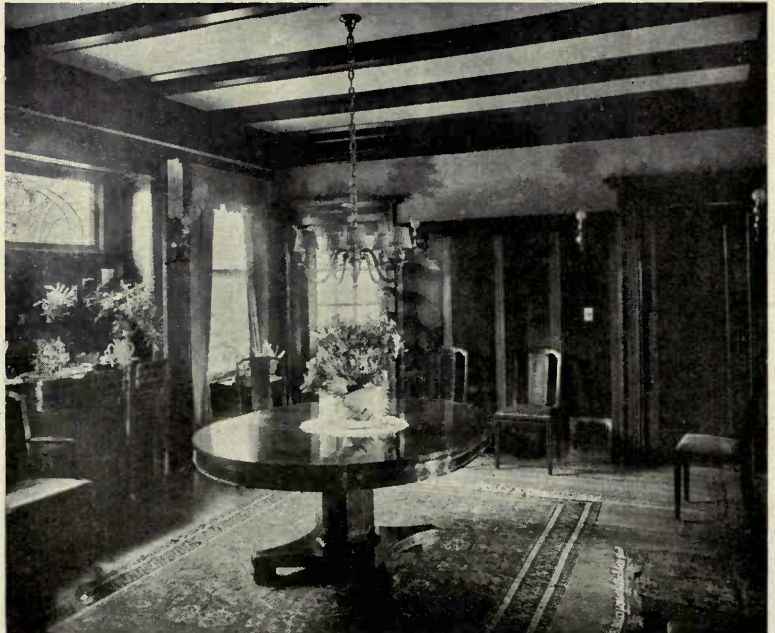
The living room illustrated, with the piazza, occupies the entire east wing of the house. A beautiful old fireplace, always so prized in colonial homes, with white mantel, stands directly in the center of the east wall, with a masterpiece hanging above. Though stately, the room suggests comfort and tranquillity. It has three outlooks, the

A sightly pergola, standing between the house and garage, is artistically placed to relieve the space between the buildings.

The interior of the home is a delight.

The hall is one of those large, roomy halls extending from the vestibule to the porch in the rear, letting in a flood of sunshine and fresh air, when the doors stand open. Midway in the hall is a broad colonial staircase, with balustrade of white and rail and treads of mahogany. All of the trim is white. A cheerful touch, which brings the home very close to colonial days, is the mural decorations on the walls. Artistic rugs of sub-

view into the park from the long windows, tastefully arranged at the end, being particularly delightful. The oriental rug is subdued in color. The bracket



Above the wainscot in the dining room is a frieze showing woods and steam.



A fine modern example of Colonial.

Camp and DuPuy, Architects.

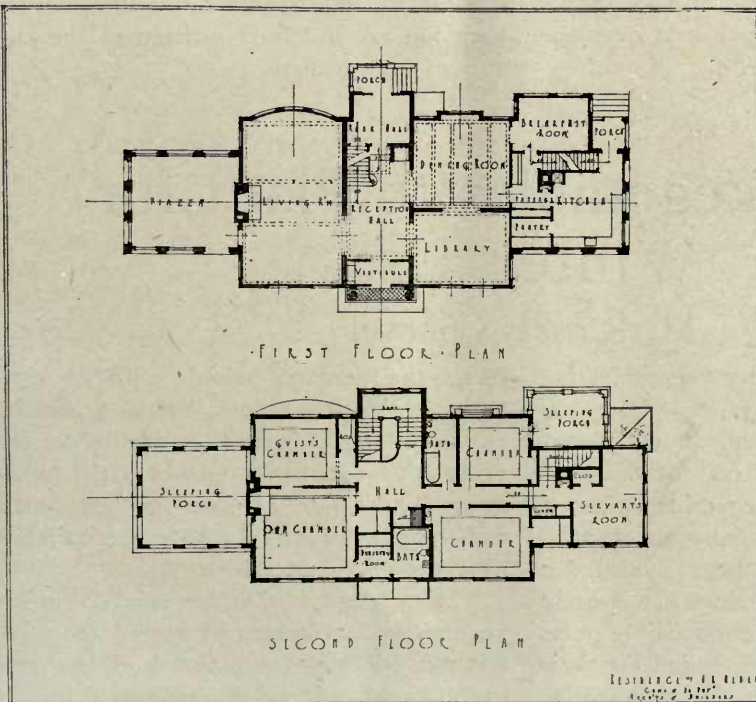
lights on the side show a mellow candle-light, and the lighting above is indirect, keeping the tone of the room subdued. The heavy beams used in the treatment of the ceiling are placed far apart.

The library, a restful study, is separat-

ed from the hall and dining room by glass doors. It is finished in eastern quarter-sawn oak, with paneled wainscot. The bookcases are built in. Bracket lights, with square shades, are placed around the side walls.

The dining room is in mahogany, cheerfully lighted with a table chandelier of cluster lights. The beamed ceiling is very effective. The buffet fits admirably in the little alcove under the stained window. The hand painted frieze is of a wood and stream scene.

The dainty little breakfast room opening from the dining room is entirely in white. The large windows, which cover all the south side of the room, command a wonderful



DESIGNED BY R. B. BISHOP
 CAMP & DUPUY
 ARCHT. & BLDG. EXPERTS

view of the park. There is a little latticed, vine-covered porch opening from it. The kitchen is also in white.

The second floor is entirely in white finish, each dainty colonial room in its individual tint, well lighted and cheery. The servants' quarters in the rear are also well appointed and pleasing. The owner's suite is a delightful retreat, tastefully finished in delicate pink, with flowered colonial hangings. It has its bath, and dressing room, also a cheery fireplace with a white colonial mantel. The dressing room follows the same color scheme as the chamber. Both bath rooms have tile wainscot and floor.

The large sleeping-porch is over the piazza, and is roomy and airy, opening on three sides. Facing the east, majestic Mt. Hood and Mt. St. Helens greet the eye. Can you imagine anything more beautiful when retiring on a moonlight night than a perfect view of these snowcapped mountains enhanced by moonbeams, or in the morning watching the sun peeking over them? To the south is a view of a little lake in the park at the foot of the hill. Another sleeping-porch is over the breakfast room.

The garage is constructed along lines similar to those of the house. A pergola-like passage way between the garage and the house makes an attractive feature, essentially a part of the whole scheme of house and gardens and driveway, very effective against the background of fine old trees.

A delightful arrangement of evergreen shrubs and perennial flowers adds a touch of brightness in front of the home, and the tall trees Nature so abundantly supplied form a charming background. The sloping lawn in the rear has for its only decoration these stately old shade trees.

The whole house is the acme of simplicity and reflects the comfort and hospitality of the old colonial days, and the cheer derived from it by its inmates.

A Colonial home seems a fitting symbol for those early colonists who weathered the hardships of a new country, who were simplicity itself in their home life, but whose rugged and sturdy characters marked themselves indelibly in our history. Their homes seem to embody the spirit of the builders, and, like themselves, they too are indelibly written in the annals of architecture.

What Vegetables to Plant for Winter Use

M. Roberts Conover



ANY of our winter vegetables are planted late in June or later. If planted too early, an early maturity unfits them for keeping to the winter's end. Vegetables planted toward mid-summer usually meet with favorable conditions of growth and can complete their ripening during the early weeks of fall, storing in their edible parts the nutritious elements intended for their self-perpetuation or the dietary of man.

Even the demand which winter vegetables make upon the soil is to a certain extent different from that of the earlier vegetables which we use in early summer. These late growing garden crops use up much plant food not assimilable by the earlier vegetables.

Variety counts when we come to grow vegetables that are to be stored for winter use. We are convinced of the importance of this if we have ever made

the mistake of growing distinctly summer varieties toward this end. Greater size, resistance to decay, and a quality which endures the necessary longer cooking with no loss of flavor are qualifications which our winter varieties must possess.

Certain varieties will follow their definite habit of growth even if planted later. They will mature too early for size and keeping for winter use. For instance, an Early Jersey Wakefield cabbage follows its habit of quick growth and small size even when planted late, but the Savoy, Flat Dutch, Danish Ballhead, and Autumn King will prove entirely satisfactory for winter use as they keep right on growing to substantial proportions.

The late varieties of cabbage want rich soil for good growth. The cabbage worm threatens to a remarkable degree and rapid growth helps to out-distance its ravages. Late cabbage plants should be set out in June, late in the month.

For a late variety of cauliflower, the Large Late Algiers is highly satisfactory.

Carrots for winter use may be planted early in June. The Half-long Danvers used as an early vegetable is satisfactory as a late variety as well. It does not grow as large and is more delicate than the Chantenay, which is also planted for late use.

Parsnips are planted earlier—in late May. The Intermediate Half-long is a good variety. Plant them where the ground is free from stones, to insure a good shape.

Late potatoes should be planted early in June, to be ready for digging by fall. The Late Puritan, Green Mountain, Rural New Yorker and Uncle Sam are good varieties which cook well and keep throughout the winter without sprouting. Remember, late variety, late sprouting.

Winter beets are planted in June at any convenient time. The large smooth Blood Red, the Detroit Dark and Ed-

mand's are good varieties for winter use.

Many people are fond of celeriac or turnip-rooted celery. The large smooth Prague is a satisfactory variety.

Early, spring-planted onions do not keep well through the winter if grown from sets. They are mature too early. For winter use, plant the sets in June. Straßburg or Dutch Yellow, Large Wethersfield, Yellow Globe Danvers, and Yellow Globe Michigan are good keeping varieties.

Squashes for winter are planted by the last of June and running varieties are used because they give the most room on the vine for maturing large fruits. A quick seed germination is secured if the seed are soaked in water a few hours before planting, if they are to be planted under normal moisture conditions. Of course, it is all wrong to put soaked or sprouted seed into a very dry soil. The life germ called into activity will die before it secures additional moisture. It is important to get squash seed into the ground and to get them up before such a condition of drought occurs.

The "tried and true" winter varieties are Hubbard, Boston Marrow, Essex Hybrid, Golden Hubbard, Delicata, and Fordhook.

Pumpkin should be planted near the first of June. The Cheese pumpkin and the Winter Luxury are good keeping varieties. The Winter Luxury is a good variety for a small family as its fruit is not of large size.

Turnips for winter may be sown as late as August 1st, and will mature for winter. It is wiser to sow them early in July, however. This will allow time for growth in spite of dry weather.

The yellow varieties are largely favored for winter keeping. The Improved American Purple Top Rutabaga, the Yellow Globe and the Purple-top Yellow Aberdeen meet all requirements for winter use.

Dining Rooms of Lasting Charm

Charles Alma Byers

THE dining room should be distinctly inviting and pleasing for the time being, and its charm and style should be reasonably lasting. It should be bright and cheery, and, in its whole general appearance, should lean toward the simple and dignified rather than the bizarre or novel. In recent years there has been a somewhat pronounced tendency, especially in respect to houses of the cheap and medium-priced classes, to create interior effects that appear massive in finish, bold in color scheme, or otherwise unique. For living rooms and dens such treatments are often quite appropriate and satisfactory; and they are likewise occasionally permissible even for dining rooms—particularly where the dining room is marked off from the living room by nothing more tangible than a pair of low buttresses,

thereby rather necessitating that the two rooms be of somewhat corresponding style. In brief, novel interior treatments of the striking kind frequently produce very pleasing results, but the charm of the simple and dignified, notably in the dining room, will invariably prove the more lasting,—less apt to become tiresome in the housekeeper's daily routine.

After a more or less temporary vogue of the unusual it is noticeable that the dining room of quiet reserve and old-fashioned simplicity is again coming into quite universal favor, even in the inexpensive home. Moreover, we find it, through modern handling, more charming than ever—more conveniently arranged, more tastefully finished and decorated, and better furnished, with greater attention likewise being given to the matter of window and artificial lighting. Also, it is more

commonly closed off from the other rooms, which the better enables it to receive independent treatment.

Herewith are reproduced photographs of several dining rooms which, for the suggestions they offer, seem especially worthy of notice. They are taken from houses of widely differing styles, sizes and costs, and all are of modern interpretation. The rooms are also variously treated, al-



An all-white dining room furnished in mahogany.

though nearly all of them lean toward the light in finish and simplicity in style. In fact, all of them are finished in white and show some form of the modernized colonial type, the influence of which upon our home building, both inside and out, is again becoming quite pronounced.

Three of the photos are distinctly colonial in feeling, even though some of the detail is quite different from that of colonial times. In the first photo shown the mantel is of marble with an inset of black marble very effectively used. The hearth also is of the two kinds of marble. The broad face just under the mantel shelf has a very interesting treatment.

The over-mantel is finished in panel fashion. A wood cove borders the ceiling, and the walls of the room, which are of pure white, as is all of the woodwork. The walls are paneled to the lower edge of this cove. An especially charming feature of this dining room is its pair of French doors that open into a center court, or patio, and an enhancing and convenient item of its furniture is the corner china closet, which is factory made, selected to match the other furniture. Here again the lighting fixtures, including wall brackets, are of the candelabra type, but are of silver mounting. The floor is of dark, polished oak, and the rug is an Anglo-Persian.

In the next illustration is shown a dining room, which is rather long and proportionately narrow, that possesses a pair of French doors in one end opening

onto a sunny terrace. This room belongs to a somewhat costly home; and, while radiating elegance, it, nevertheless, constitutes an excellent example of the simple and dignified, as well as the bright and cheerful. Like the enameled woodwork, the walls are pure white, save for a sort of French panel effect at either side of a pair of French doors in each end, and the carpet and drapes are of a rich deep blue shade. The room contains a



Colonial cupboards on each side of French doors.

fireplace of simple design, with brick facing and hearth; and in the farther end, as will be seen, are two interestingly planned corner china cupboards, of the built-in kind. The dining table, which is of oblong shape to match the room, and all other furniture, including a corner china closet piece, are of mahogany; and the lighting fixtures are created largely of glass prisms, with silver mounting. The room deserves to be studied in detail.

The next photograph illustrates a dining room that contains an exceptionally interesting fireplace, the over-mantel of which is set with a large plate-glass mir-



With carved Ionic pilasters beside the fireplace.

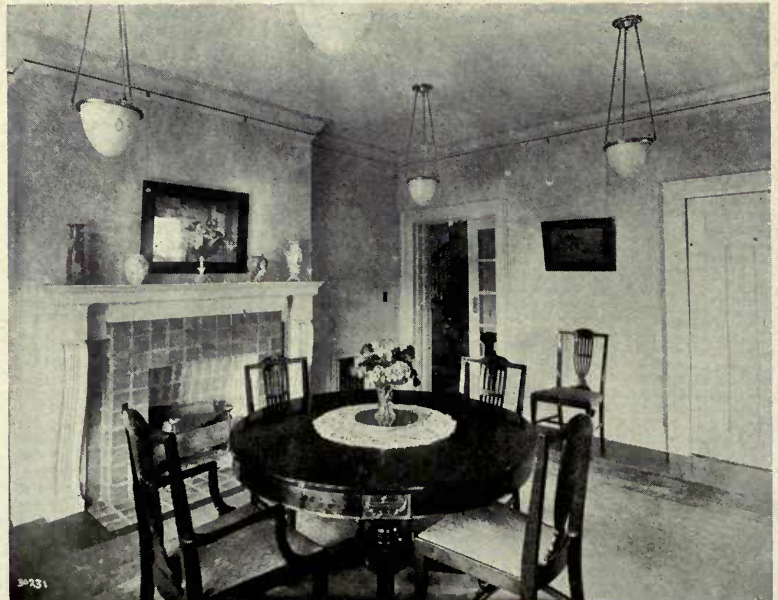
ror. Black-veined marble is used for edging both its opening and its hearth, and around the room also extends a corresponding marble base. The woodwork, with its molded cornices, is intricately and attractively carved, particularly in respect to the pilaster and Ionic capitals on either side of the fireplace, and is enameled in white. The wall paper is marked with alternating white and very light green in stripes. The lighting fixtures are of the candelabra type and including a large center suspension and brackets in each of the corners and at either side of the fireplace, are of Roman gold mounting. The polished oak floor is covered with a Persian rug, and the furniture is of

mahogany, which naturally produces a pleasing contrast to the white woodwork.

The next photograph shows a practically square dining-room that illustrates a rather novel idea in the arrangement of its lighting fixtures. An inverted glass dome, decorated in medallion fashion, is suspended from the ceiling by three brass rods in each of the four corners. This room contains a fireplace,

the facing and hearth of which consist of dull green tile, and the woodwork is enameled in white, while the wall paper is of gray tones, indistinctly figured. A sliding glass door shuts off the room from the reception hall.

In the last illustration shown is a small,



An unusual lighting arrangement.

almost square dining-room, the walls of which are covered with paper of scenic pattern. Paper of this kind, if rightly toned and dignified, not only always lends particular charm to a dining-room, but also helps to create an appearance of greater spaciousness. In this instance, figured quite formally and indistinctly in dull greens and buffs on a creamy white background, it is used very effectively, indeed. The woodwork is principally finished in old ivory, but introduced in the extended top casing of the doors and windows, by which arrangement is created a box-like covering for the curtain poles, is a band effect of mahogany. The doorway portieres and the side window drapes, as well as the tiny shades of the candelabra-like lighting fixtures, are predominantly of a dull shade of dark green, and the room is simply and tastefully furnished in mahogany, while the rug-carpeted floor is of dark toned oak. In every detail, and particularly in color scheme, this dining room is a model of simple and comparatively inexpensive elegance.

It is perhaps worth emphasizing that all of these dining rooms are quite completely closed off from the other rooms of the respective houses, and hence it has

been possible to employ schemes of finish and decoration that are more or less independent of the remainder of the interior. This arrangement also gives greater privacy, and will often the better enable the room to be properly heated.

As previously stated, the dining room should be well lighted with windows, and it may be also suggested that glass doors,



In white and mahogany.

whenever feasible, will naturally assist toward creating the desired bright and cheery appearance. Similar doors, either sliding or opening in the ordinary way, are likewise often used with charming effect in shutting off the room from the rest of the house. A fireplace is another desirable dining room accessory, always affording many delightful possibilities in a decorative way, besides naturally lending to the room a suggestion of cosiness.

A Real Kitchen Which Is Ideal

Edith M. Jones



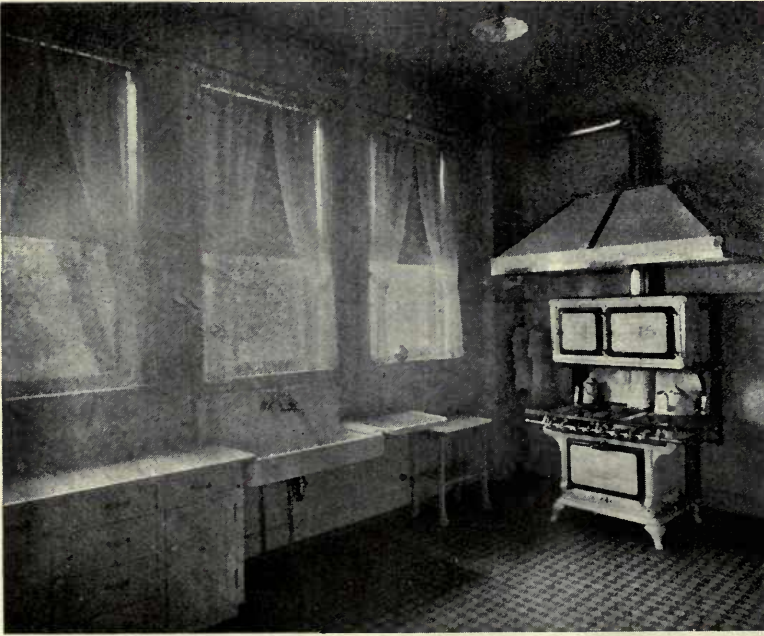
HAT can be said of a kitchen like this? It speaks for itself. The words immaculate, airy, beautiful, suggest themselves immediately that the eye rests upon these pictures—and the kitchen in reality is just as good as it appears.

but far better looking and much more easily kept clean.

The pan closet is especially well planned. The radiator is underneath the cupboard and the floor is perforated. The pans are hung and the heat prevents any possible rust or moisture. The remain-

ing cupboards are planned to hold and distribute the working utensils and are set up from the floor almost two inches. This "toe line" is a great protection for white enamel finish.

The refrigerator is accessible to both kitchen and dining room, thus avoiding the necessity for a second one. The box is finished in the same white enamel and has nickel hardware. The cupboards of the butler's pantry are very carefully planned.



What more can be said of a kitchen than these pictures show.

The carefully laid blue and white linoleum with the curved base, the high white enameled wainscoting and the quaint patterned sanitas on the upper side walls and ceiling make a fitting background for the equipment of the room.

Perhaps the most striking piece of equipment in this kitchen is the beautiful white enamel, nickel trimmed range with the canopy to match. In fact, everything matches, for everything is white enamel and nickel—even the stovepipe is nickeled, which, of course, is not necessary,

There is a place for everything and ample broad shelf room for the serving. There is a double compartment german silver sink with ample drainboards. There are drawers for tea towels and silver. There are drawers with rollers for doilies. There are special drawers for the napkins and long drawers for the large table cloths to avoid the folding. There is a place for the extra banquet top to be rolled into. There is a table board closet and a small closet for the dining room broom, etc. There is a tray cupboard, also a closet

for the platters.

The dish cupboards are arranged with extra shelving so there is little or no wasted space. The especially planned cupboards for the stemmed glasses make it possible to store them compactly and without danger of breakage because any kind of glass can be taken from its shelf without disturbing the others. These shelves are arranged as steps to fit the varying heights of the glasses,—a simple arrangement you say, but efficient nevertheless.

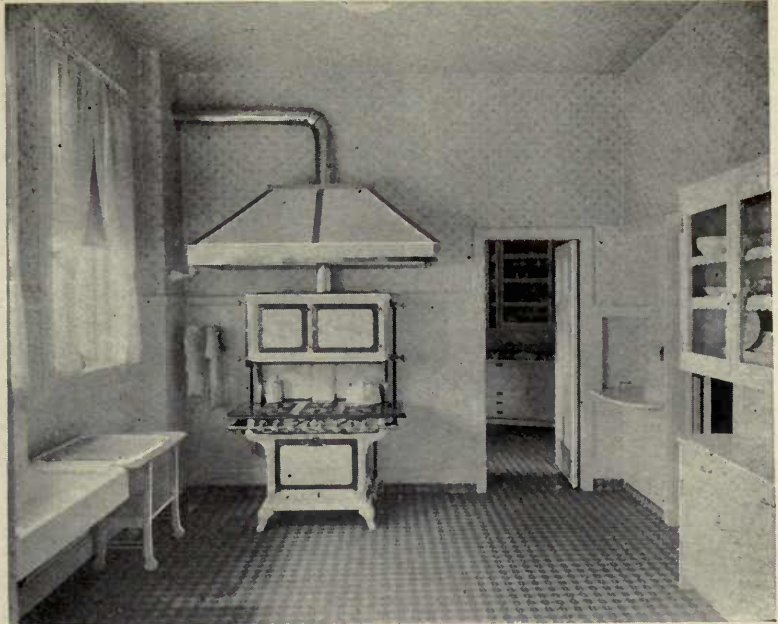
Cup shelves just the right distance to slip in the cup easily, or to remove it, make it possible to care for many cups in a much better way than hanging

them or piling them one upon another.

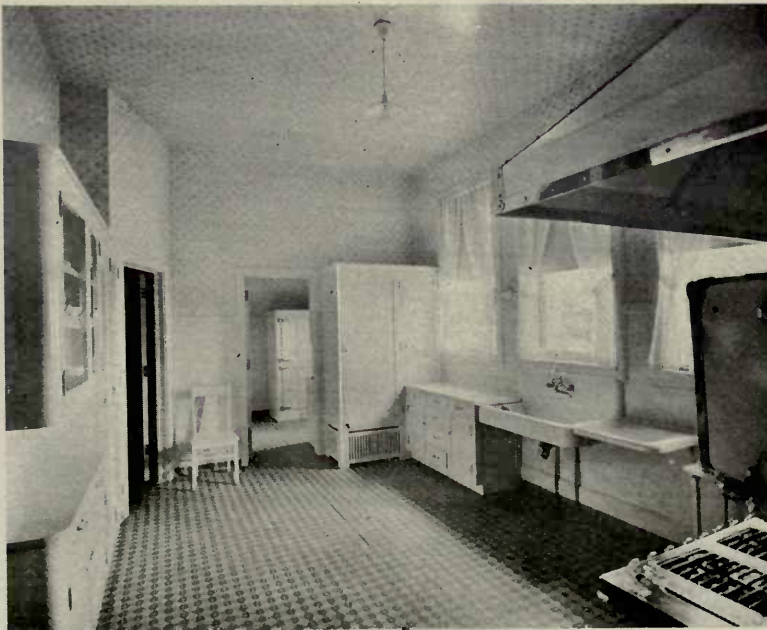
The outlook from these windows is beautiful—gardens, trees, sky and distance make this workshop a sunny, delightful room in one of the beautiful new homes of this progressive city. How

surely the day has arrived when a home is considered from many varying angles and that establishment is indeed considered incomplete that does not reveal a back door and service wing in keeping with the front entrance and the company part of the house.

Perhaps one might say that the use of white for the kitchen has revolutionized the popular thought about kitchens, and about what is to be



The range is all white as well as the woodwork.



The pan closet is over the radiator.

expected in the service wing of the house. Housekeepers have discovered that a paint or a color "which does not show the dirt" is not a thing to be desired in a kitchen. Coincident with this discovery has come many a help in the way of finish and decoration, and also the enameled range, which is a far cry indeed, from the stove of a few short decades ago, with its accompanying stove-blackening, as well as the kettle which was black.

There was a time when the housekeeper asked only for plenty of cupboard space and many drawers. Notice how

this kitchen has drawers designed for the particular things which are to go into them; special drawers for napkins; drawers with rollers for doilies; tray cupboards; and a platter closet. Such planning not only gives a place in which all of these things can be put away, but to a certain degree it directs the management of the work. The careless maid can hardly fail to put things in the place where each should be in order to facilitate the progress of the work. Thus is kitchen efficiency increased and insisted upon, because it is the easiest way.

Business in a Residential District

Monroe Woolley

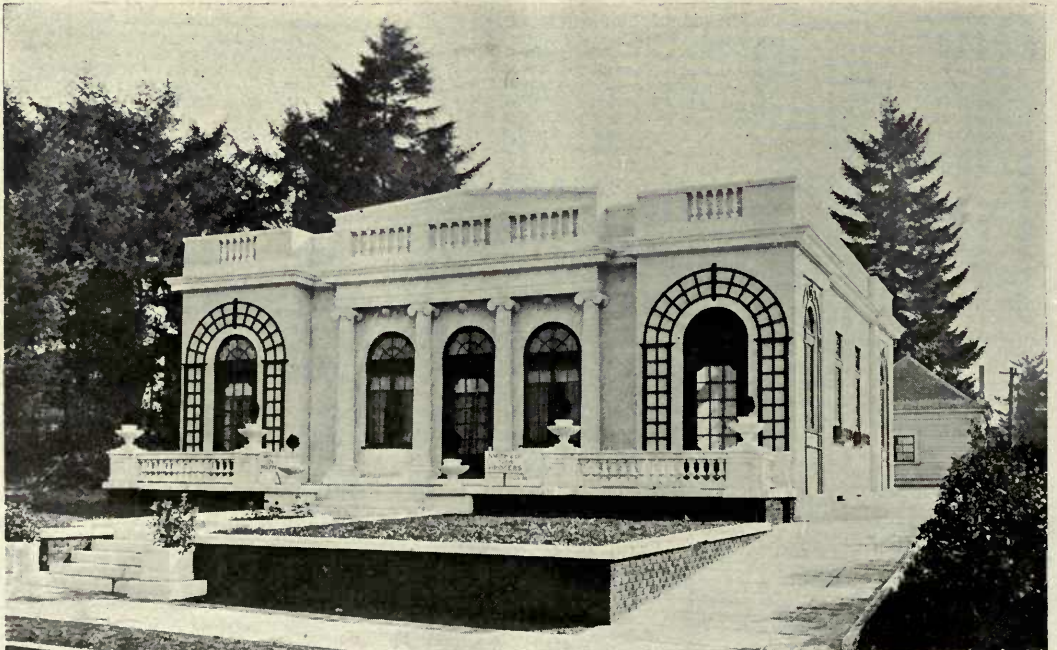


E Americans have always gone in for architectural beauty in homes while we neglected the same attention to places of business.

There is no reason why a store building should not be as attractive from without

as any home. Especially is this true where a building is small and does not aspire to sky-scraper proportions.

Perhaps the most attractive retail store in the country is located in the exclusive residence district of one of our Western



An unusual Grocery store.

cities. The retail grocery building of Smith & Company is a marvel for looks. In some ways it outshines, in exterior appearance, at least, the homes near which it is located. It might be taken for a French bungalow, a public library, or a small city hall.

The residents wanted no shoddy, common-looking stores in their midst, and the Smith grocery building is the outcome of this whim. The building is of cement and stucco and is valued at \$5,000. As a matter of fact, however, due to the fact that the owner was also the contractor

and the designer, it cost somewhat less.

There is a terraced lawn, with a cement walk, in front, and a brick retaining wall. The windows and doors are of the French design, reaching to the floor. There is a broad uncovered veranda or brick terrace across the entire front on which the doors open, surrounded by a pedestaled balustrade. Live plants are given growing ground in cement urns, and a cement drive leads to the garage at the rear of the building.

The windows and doors are tastefully curtained.

An Attractive Little Home



Vines add to the attractiveness.

W. W. Purdy, Architect.



HIS design shows a modest little home of moderate cost. It is such a home as people are building in the outskirts of the cities. The floor space, while small, is so arranged as to give the effect of space and comfort.

The entrance is through a vestibule into the large living room, with its attractive fireplace and built-in bookcases in one end, and French doors at the opposite end, which lead into the sun room. The stairs are semi-open, leading from the

living room, simple yet very effective in detail. A door on the landing communicates with the kitchen in a convenient way.

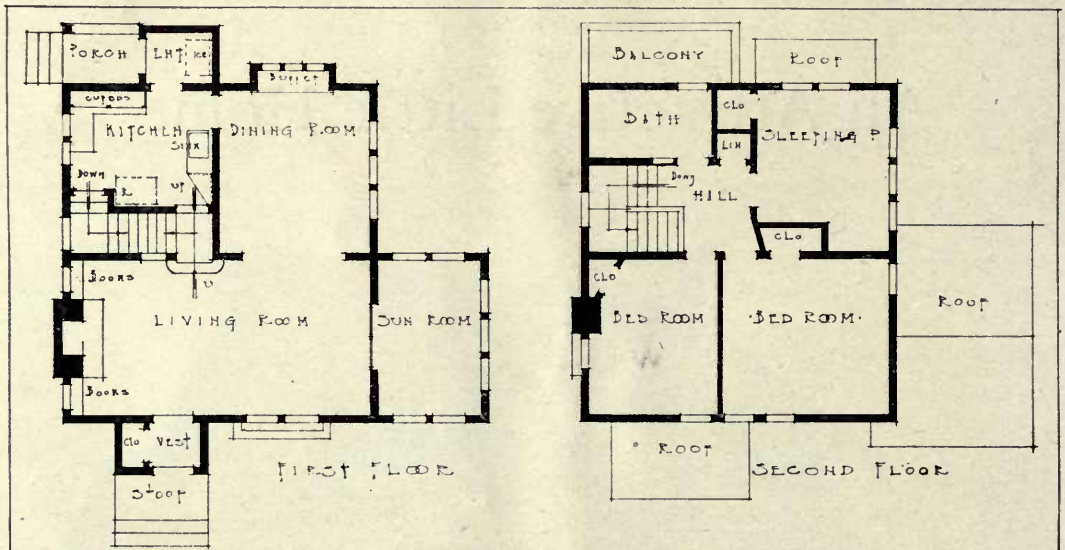
A wide cased opening separates the dining room from the living room, the buffet opposite the opening and the group of windows, together with the French doors to the sunroom, providing charming glimpses from the living room.

The kitchen is provided with sink, cupboards and working shelf. The exten-

ventilation, thus insuring a breath of air if any is stirring. The linen closet opens from the hall. The woodwork of the second floor is finished in white enamel. The floors throughout the house are of maple, with tile in the bathroom.

The woodwork of the first floor is finished in white oak, with pine in a natural finish in the kitchen.

This home is carefully planned to give the greatest available living space within the smallest possible outside enclosure; in



sion of the sink table by the stair door may be hinged so as to be dropped against the wall if desired. The icebox in the entry is so conveniently placed that it is easily accessible either to the kitchen or to the dining room. The basement stairs have an outside entrance on the landing near the grade level. The basement contains laundry, furnace room, fruit and storage rooms.

On the second floor are three chambers and a bath. A balcony, convenient for the airing of bedding is placed over the rear entry and porch, opening from the bathroom. The sleeping rooms are well supplied with closets and each has windows on two sides providing cross-

order to obtain the most economical building. Even though there is a break in the roof and a dormer, to give more height for the windows, yet the roof construction is so simple that it does not require any great amount of time and labor for its building.

The exterior, which speaks for itself, is of cement plaster over metal lath, with trim only a little darker in tone. An up-standing course of brick at the grade level, together with the brick stoop and steps give a color contrast that is pleasing but which does not add materially to the expense. The clinging vines and shrubbery do their part in making this an exceedingly attractive home.



Built on simple bungalow lines.

E. W. Stillwell, Architect.

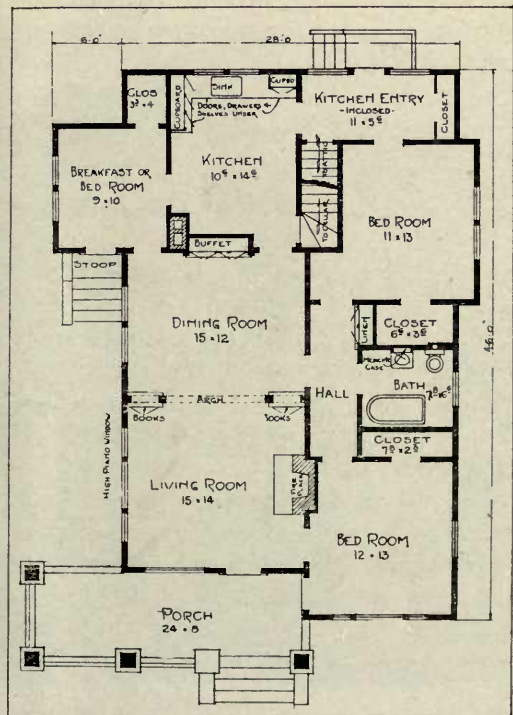
A Bungalow with a Summer Porch



HOUSES are being planned more carefully so as to get the summer breezes, from whatever direction they may come on a sultry day. Most porches are more or less protected by the house, being entirely cut off from one or two directions.

The bungalow here presented has a porch, free-standing at one end. If a breath of air is moving it will be able to reach this, as it is open in all four directions. At the same time it makes a very attractive feature to a house which is well-planned and economical to build. The porch floors and steps are of cement; the retaining walls and pedestals are of brick.

The plan is well arranged and the rooms are of very fair size. The living and dining rooms are separated only by low bookcases, and together make an open space 15 by 26 feet. The breakfast



room is so placed as to make a general utility room in case any emergency should arise. A good closet makes it available as a bedroom if so desired.

The intercommunicating hall gives entire privacy to the sleeping rooms, quite as fully as though they were on a different floor, but without the necessity for stair climbing. Unusually large closets are provided, a good linen cupboard opens into the hall, while the bathroom is easily accessible from any part of the house.

There is a fireplace in the living room and a well-placed buffet in the dining room.

The kitchen has been carefully planned as has the kitchen entry, which is enclosed and has a closet. The rear bedroom opens to this porch, and also the stairs to the storage space in the attic. The stairs to the basement open from the kitchen.

Such a plan as this is especially fitted for a home where either old people or children are to be considered.

A Compactly Planned Home



COMPLETE small home is shown in this design in which are assembled in compact space the conveniences of a larger house. It is planned for strict economy in the use of materials and labor, and the space is closely utilized.

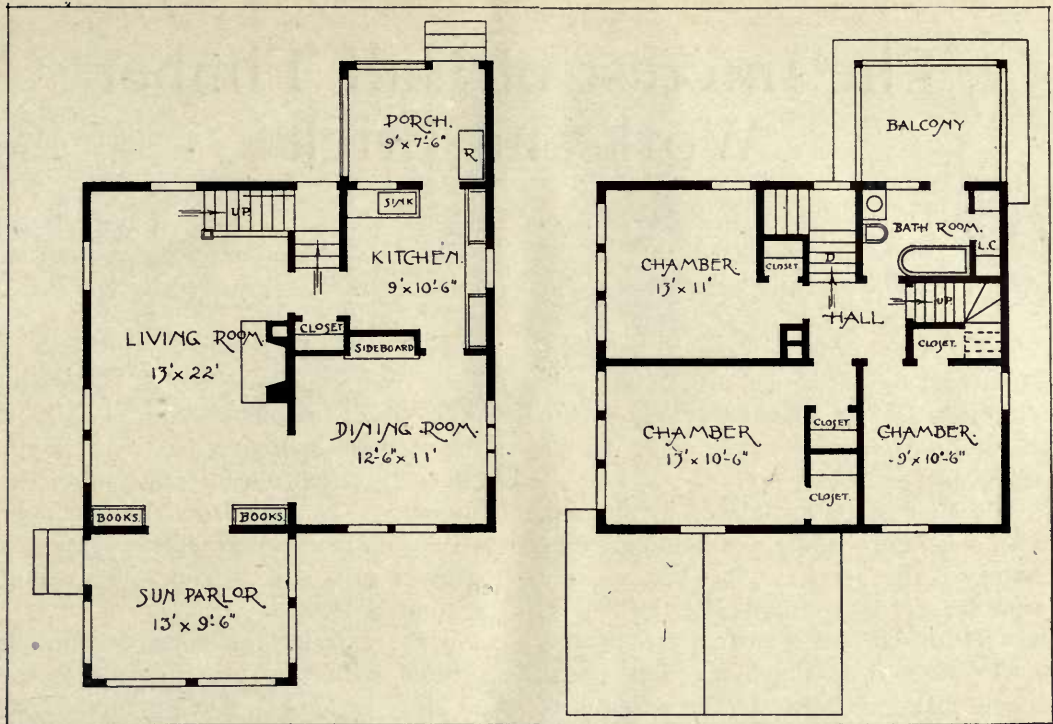
The entrance is into the sunroom, which opens to the large living room with

wide French glazed doors, giving a total length of 32 feet for the two rooms. The stairs lead from the end of the living room, with basement stairs underneath and a grade entrance. The chimney, which is centrally placed, gives a wide fireplace in the living room, which is yet near enough to the dining room to make both rooms comfortable on a cool spring



A practical and economical home.

Chas. S. Sedgwick, Architect.



morning. A built-in sideboard and window groups make the dining room attractive.

The house is planned for an east front with the long side to the south, making a very sunny, pleasant living room. East windows in the dining room give sunshine on the breakfast table, an excellent way to start the day.

The kitchen is conveniently planned, with cupboards beside the dining room door, making the dishes conveniently near in setting the table for a meal. Some housewives might prefer the sink placed under the window between the cupboards as more convenient in carrying out and washing the dishes, allowing them to be put into the cupboard without carrying across the room. Housewives are becoming more thoughtful in the matter of the co-ordination of their work, and its assistance in the placing of the equipment in the kitchen.

On the second floor are three chambers and a bathroom. The groups of

windows in the south chambers convert them into sleeping porches when desired without any duplication of space. The usual sleeping porch means really the building and furnishing of two sleeping rooms, differing chiefly in degree.

A glazed door from the bathroom opens onto an open balcony. Stairs from the hall lead to a fine, large attic, of the old-fashioned kind, where there is room for a playroom or for much storage.

On the main floor the woodwork, which is of Washington fir, is stained brown. On the second story it is left natural. The floors are of birch.

There is a full basement under the house, in which a hot air furnace is installed.

The outside of the house is finished in cement stucco down to the grade line. All of the outside trim, casings, cornices, et cetera, are stained with dark brown creosote. The roof shingles are stained moss green and all of the outside window sash are painted white.

The Interest of Half Timber Work and Brick

WHEN so many tiny home plans are being presented this home, which is a little larger, has an interest of its own. It is of the "central hall" type, always so popular. The living room and den are on one side with the cleverly planned sunporch and the dining room and service wing on the other side.

The main stairs are placed in the hall, with a lavatory under the landing. The stairs of the service wing are entirely separate and go on up to the third floor, where the servants' quarters are located.

The bays from the living and dining rooms make a feature of the exterior of the house as well as of the interior. Beyond the dining room is a pantry, one side of which is filled with cupboards, which connects with the kitchen. A sink with long tables fills one end of the

kitchen. It has a deep closet and a niche for the refrigerator, which can be iced from the entry. A good storage closet opens from the entry.

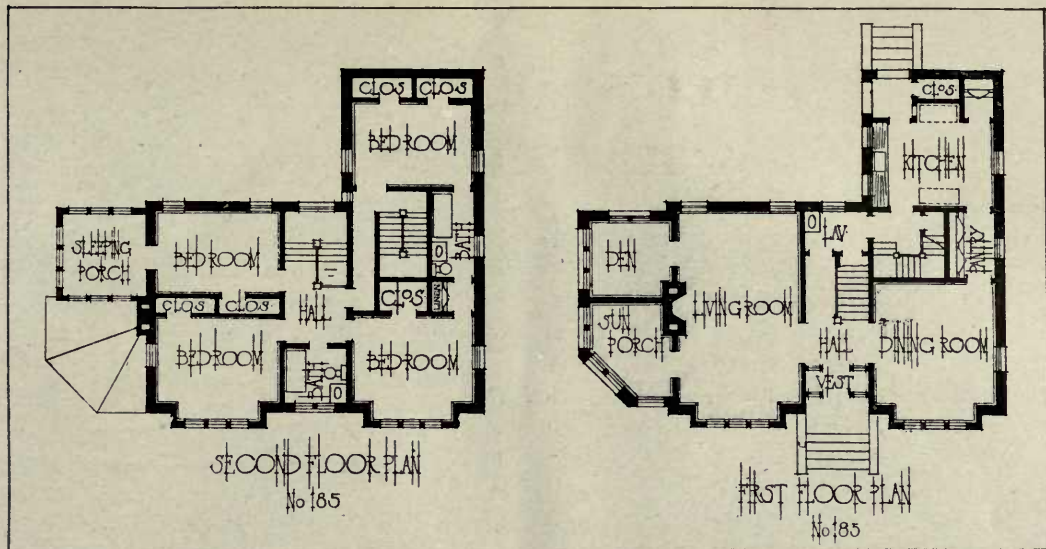
On the second floor the family suite of rooms connect through the bathroom, with a linen closet opening beside it. Each of these bedrooms has two closets. A sleeping porch opens from one of the bedrooms. The bays from the first floor are repeated on the second floor, giving a charming group of windows in each of the front bedrooms.

On the exterior the house is built or veneered with brick to the sills of the first story windows. The porch and buttresses are also built of brick. The body of the house is covered with stucco, with half timber work about the windows and in all of the bays and porches. This gives the effect of a half-timbered house, which



Brick and Stucco with effective timber work.

J. W. Lindstrom, Architect.



at the same time is relieved by larger spaces of simple stucco surface.

The recessed porch at the entrance, while small, has space for a chair or two in the cool shade of the porch. The semi-

octagonal sunporch is extremely attractive with its flower boxes and its awnings to shut out the sun when it becomes too strong in summer, though it is very acceptable at all other times of the year.

One Floor or Two

WHEN planning the economical house there usually arises the question whether it shall be on one floor or two; whether the house shall be made large enough on the ground to give sleeping rooms on the first floor or if they shall be placed over the day rooms. The necessity of climbing of stairs in one type is often the controlling element. Where old people or invalids are concerned the home on one floor is almost imperative. There are many factors which must be considered. In any case simplicity both in design and in construction is the one thing which can most safely be recommended. Broken roof lines and protruding walls and bays always mean added expense.

With modern ways in planning the sleeping rooms of a bungalow may be sep-

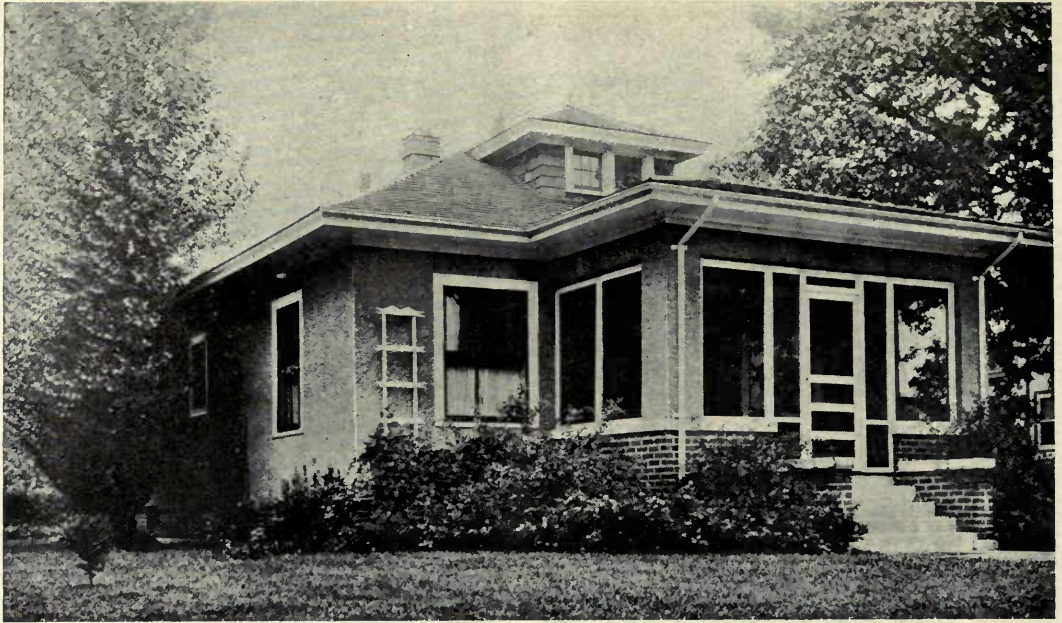
arated from the day rooms so that they are quite secluded.

The first of the group of homes here shown is of this type. The house, which is 28 by 36 feet, has a combined living and dining room 15 feet 6 inches by 20 feet, a good kitchen, two sleeping rooms and a bath. A stairway leads to the attic space where storage space is provided.

A good-sized pantry is shown between the living room and kitchen which, by a little change could well be converted into one of those attractive and convenient little breakfast nooks.

A small hall which opens from the living room serves as a passage connecting the two chambers with the living room, with the bathroom and with each other. Each room has a wide, shallow closet.

The house is attractive, with its com-



An attractive and livable bungalow.

pletely screened, brick walled porch and cement coping and steps. The planting adds not a little to the homelike aspect of

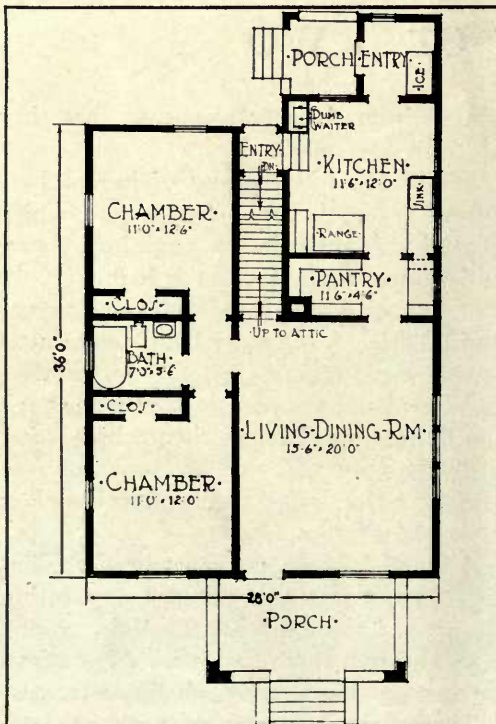
the house. The very simple trellis beside the window is decorative of itself and will become more so when the vines have reached maturity and blossom.

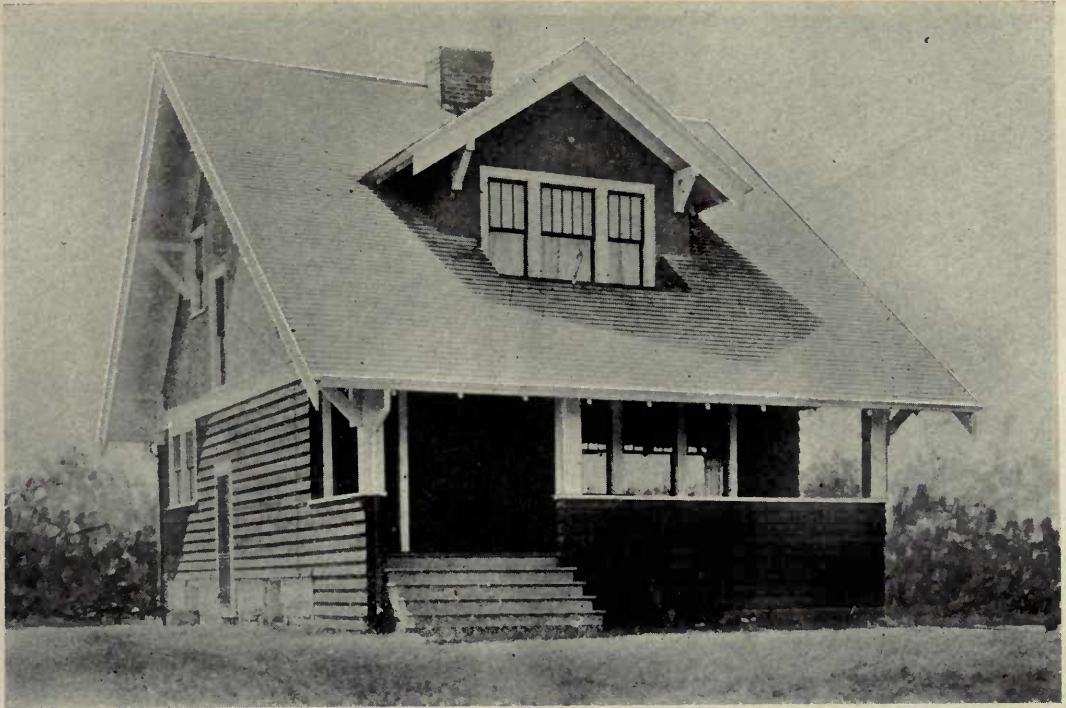
The other home has living room, dining room and kitchen on the first floor and two bedrooms and a sleeping porch on the second floor.

The entrance from the porch is into a vestibule from which a coat closet opens. Beside this an open stairway leads from the living room to the second floor. There is a good fireplace in the living room, with the wide opening to the dining room beyond. The rooms open well together for an attractive interior.

The kitchen opens directly to the dining room. The basement stairs lead from the kitchen, under the main stairs with a grade entrance on the landing.

On the second floor a dressing room opens from the front bedroom. The sleeping porch is narrow, but with a good group of windows, and could be made to open to the front bedroom if so desired. The linen closet opens from the hall. The bathroom is over the kitchen.

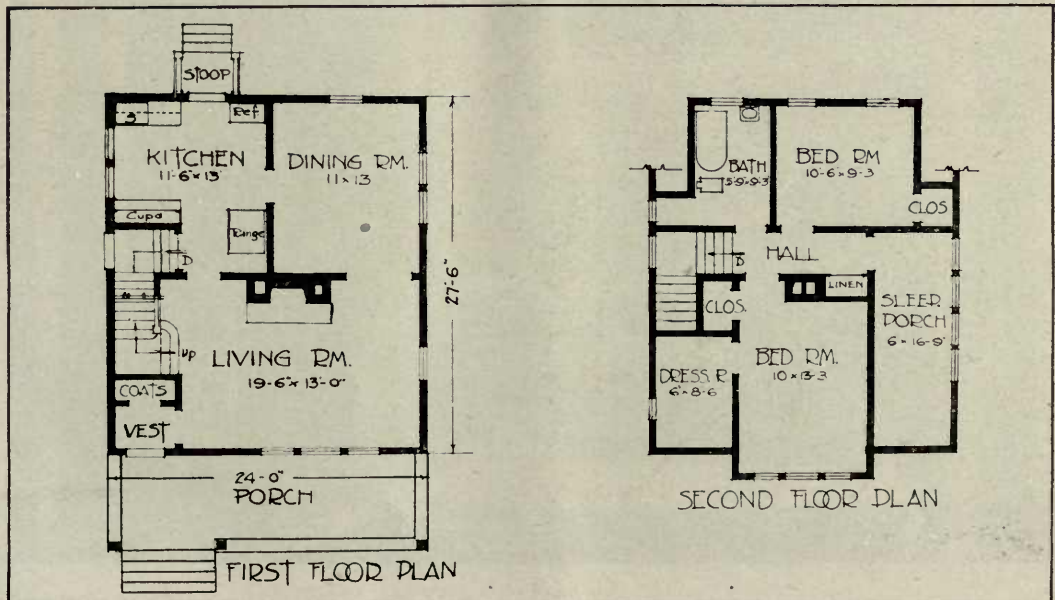


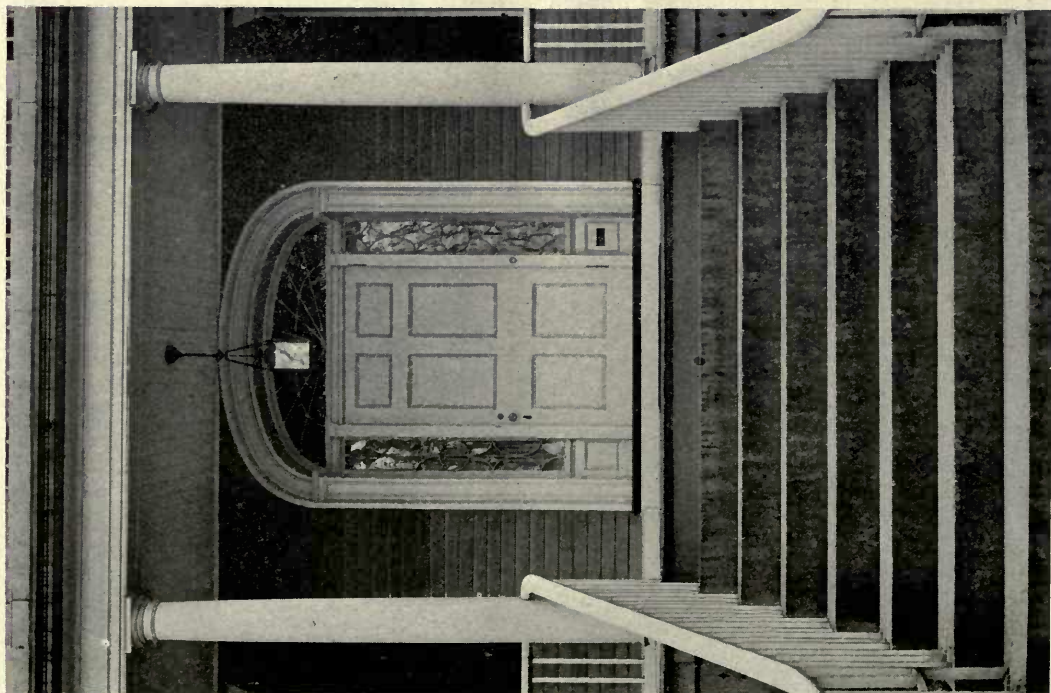
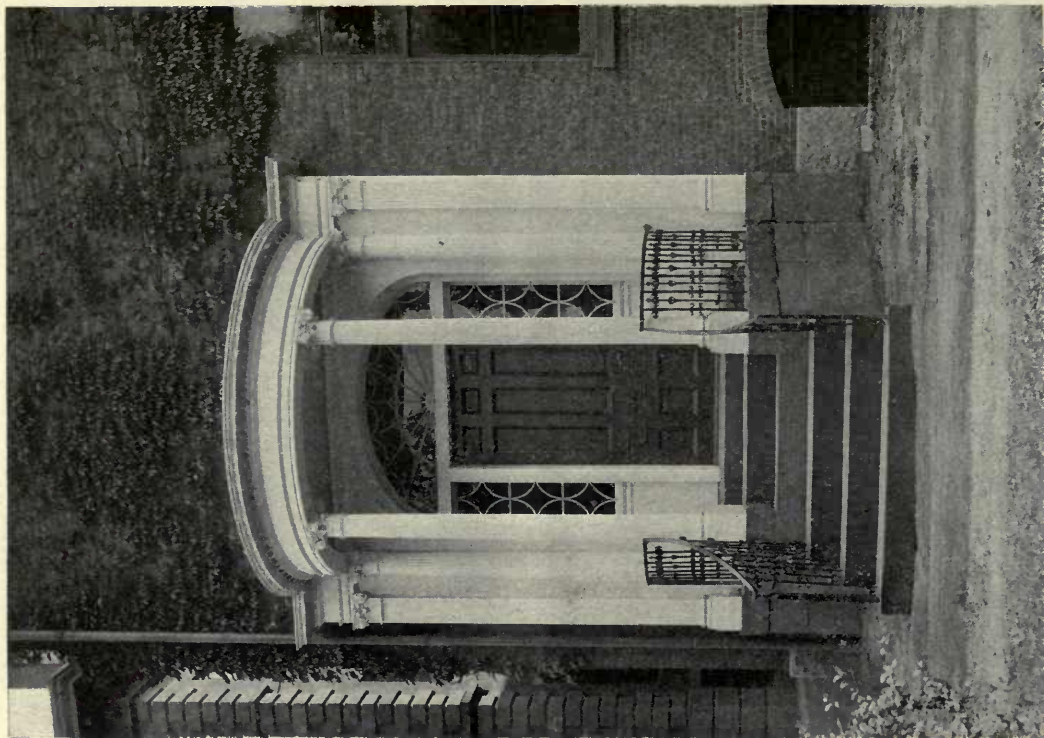


Planned with a second floor.

On the exterior the house is of quite a usual type. It is one of those houses which depends on the individuality of the owner or of the people living in it to make

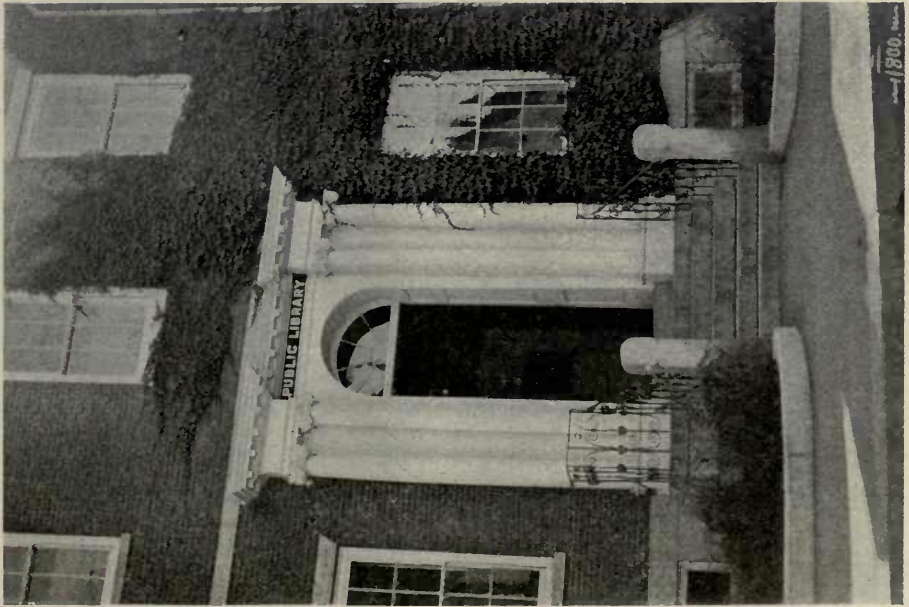
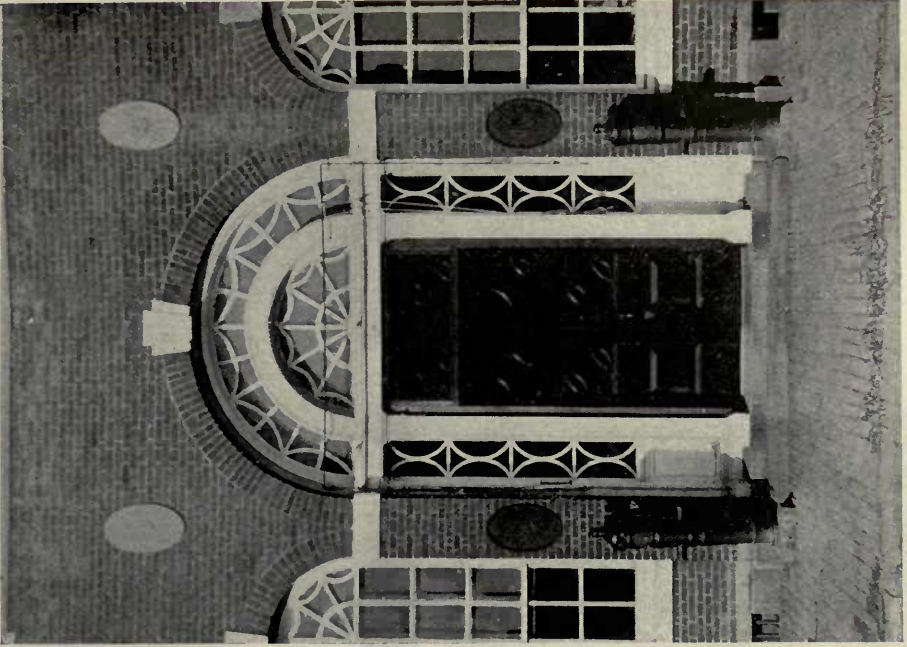
different from other houses in the block. A little thoughtful planting, a few vines and shrubbery makes it wonderfully attractive and home-like.

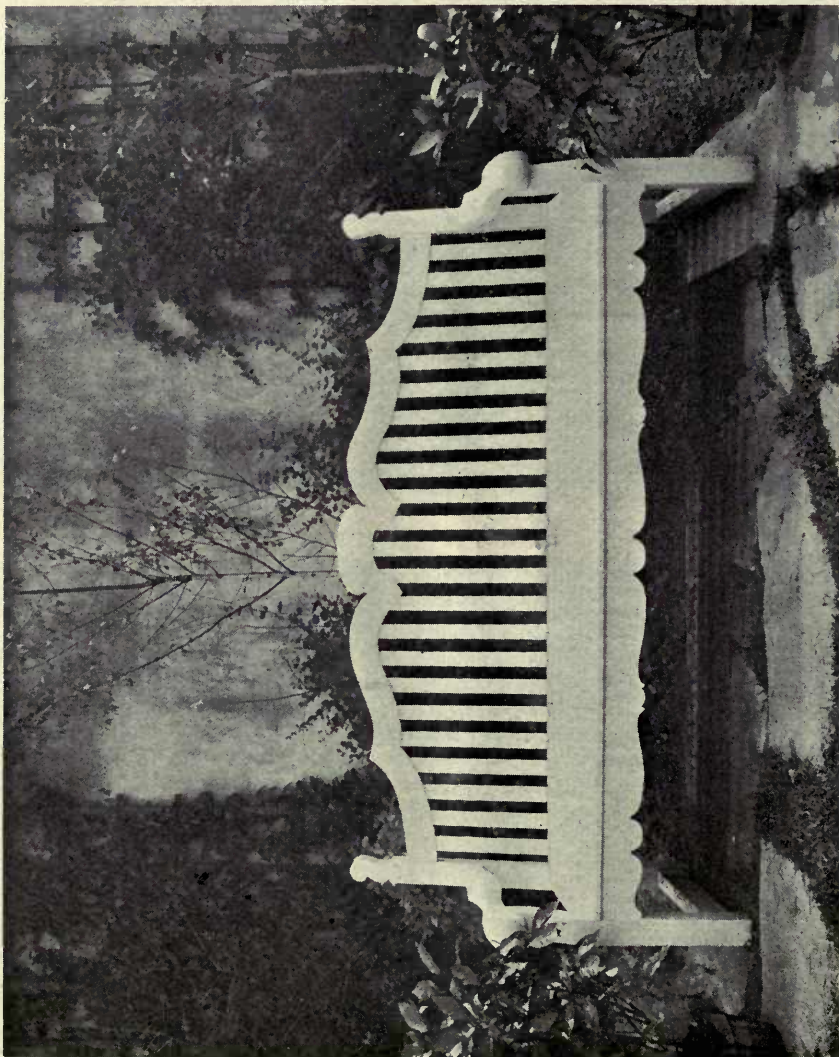




SOME COLONIAL ENTRANCES

BUILT EARLY IN THE NINETEENTH CENTURY





The seat, painted white, affords an objective point for the eye.

INSIDE THE HOUSE

Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Out Door Furniture

SOME one has said that in establishing a home the

out door values must be discovered and those indoor created. But more and more do the outdoor features claim the constructive skill of the home maker. Landscape gardening in the literal sense may not be a possibility, but given a small plot of land and a tree the householder has a working basis upon which many changes may be

run. Small gardens in this age of intensive planting are often objects of beauty, while the many interesting and practical accessories afford the amateur a wide range of properties. Garden furniture is now a subject by itself including such materials as marble, stone, concrete, iron and wood. From Italian seats of marble to simple benches of wood seems a far cry, yet each type in its proper setting becomes a part of the landscape feature.

If we were creating an Italian garden



Well designed group of garden furniture.

with a purse in proportion, all that Italy could offer in the way of consistent adornment would justly claim our attention. Not only garden furniture, but garden architecture and all the allied subjects would take on new life and meaning. Nor would interest stop with gardens. Such books as Mrs. Wharton's "Italian Villas," Lillian Whiting's "Italy, the Magic Land" and many others would suddenly become more fascinating than the "Arabian Nights." The great historic

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families of Rome, Florence and Milan would eventually be studied with the Renaissance as a background. The D'Este gardens near Florence, with their hillside terraces and fountains might beckon on to the very heart of Italian history, political and ecclesiastical. Where indeed would not the old bench of marble lead if leisure and inclination permitted? In much the same way would the English garden, the French and the Colonial open up new paths and vistas. Particularly would the old English and the Colonial touch a responsive chord in many American hearts, for here we have what psychologists call the "inherited tradition."

In our English quest we would find walls and sun dials, formal paths and clipped shrubs, and for embellishments, iron and lead and possibly wood. And the historic background would be just as fascinating as the Italian in an entirely

different way. We might follow Sir Francis Bacon with his erudite advice on the making of gardens, or that old flower specialist, John Evelyn, with his lists of necessary shrubs. Bacon's casual suggestion that a garden best be square of about thirty acres might seem less practical than some of Evelyn's lengthy rules. And if we followed the lure of the English scheme with its "rosary" and herb garden, its stone dial and moss-covered iron seats, truly Sir Francis and his somewhat exacting sovereign, Elizabeth, might live again, as well as Robert Dudley, Amy Robsart, languishing in Kenilworth Castle, and that other far-famed Robert—the Earl of Essex. Possibly William Shakespeare, who can say? There are no limits to the boundary lines of an old English garden.

If we think and plan in the simple terms of Colonial designing we may still touch the garments of Romance, if in a less dramatic way. As with houses and mahogany furniture we still call "colonial" a type of garden which is merely "old-fashioned," belongs. For the small house the "old-fashioned" garden is a better and more fitting kind than the Colonial which, if correctly interpreted, is rather formal.

Given the informal background of the usual small lot with a well planned scheme of planting

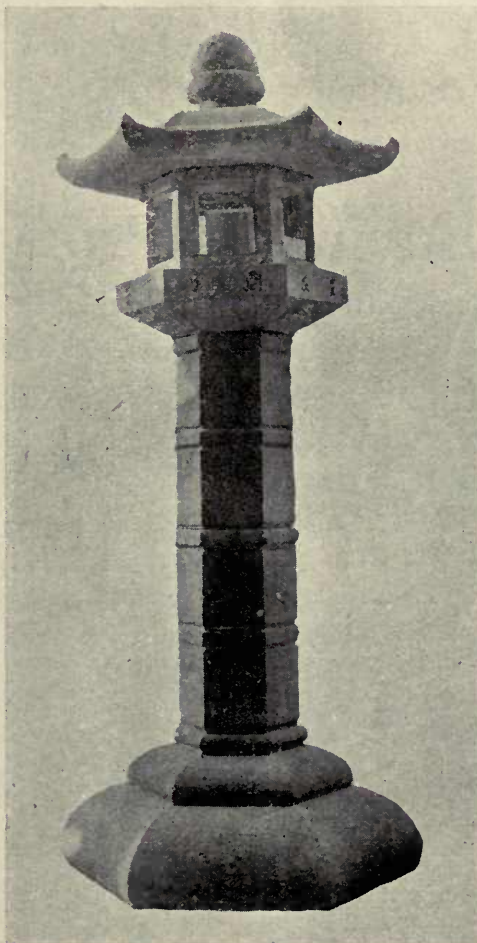


Garden seat, within a trellis for vines or climbing roses.

INSIDE THE HOUSE

the question naturally arises: What can be added in the way of out-door furniture? Without great outlay what may be done to please the eye and add to comfortable existence? A fault of all American gardens is a lack of places in which to sit down. We seldom associate leisure with our gardens. As one distinguished foreigner says, "Americans even rest like fury."

Resting out doors, resting beneath the shade of our own fig tree, resting in a bit of a garden, are comparatively new ideas. Granting that gardens exist largely to be weeded they also have other missions, and it is here that the furniture idea is so helpful. The bench or seat, painted white or in color, affords an objective point for the eye, and serves the more important purpose of providing a comfortable resting place. It may be of the plainest design constructed by a near-by carpenter, or, like the illustrations here presented, hold to simplicity yet expressing beauty of line and proportion. Naturally the furniture idea may be carried beyond the simple bench and chair. Groups of furniture may be assembled in great variety,



Concrete lantern of Japanese design.

but it is well to bear in mind the fact that the garden is a garden, not an out-door room. While porch and garden furniture touch at certain points the arrangement, and usually the type, are quite different. The best effect will be gained when the furniture is related to the background by means of trellis or arbor. Sometimes the trellis is made a part of the seat, as in one of the illustrations, again the trellis is a detached object, but in either case it becomes a part of the garden picture, providing strong upright lines. Garden architecture and garden furniture are too closely related to be easily separated.

In the recent Flower Show in New York the importance of garden adornment was strongly shown. The sun dials, bird baths, etc., have been mentioned in the May number of "Keith's." The furniture now deserves a word. In the old-fashioned rose garden, in the tulip garden and in the simple suburban garden the well placed furniture added greatly to the beauty and the practical value of the exhibits. In the old-fashioned garden, enclosed by a white picket fence, each of

INSIDE THE HOUSE

the gates terminated in an arched trellis over which roses climbed. Each gate was balanced by a bench terminating in an arch, also rose covered.

Several American manufacturers have

studied the gardens of Europe, large and small, and from drawings and photographs produce designs which meet every need of the householder, looking for one or more pieces of furniture for his garden.

Buying by Proxy

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

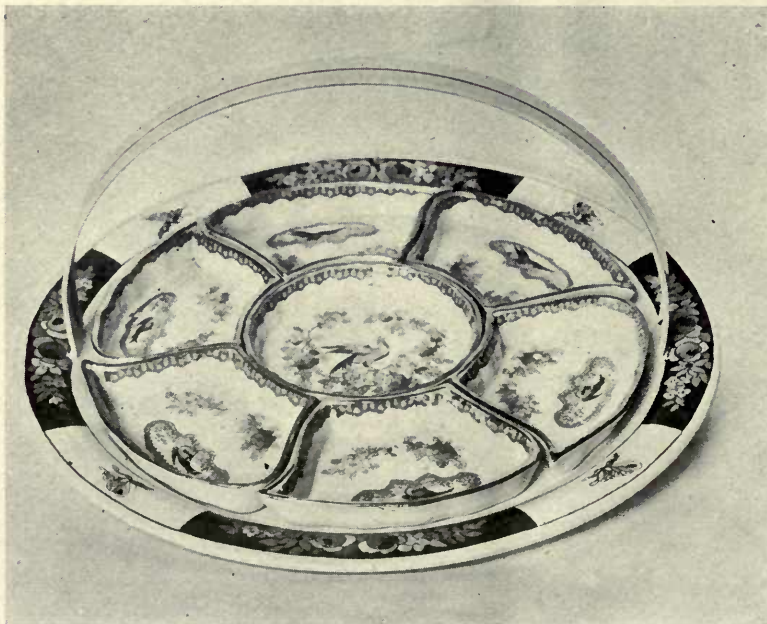
Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration", a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply.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

SPEAKING of old patterns, a decorator in a New England City has a quantity of old paper like the last of the accompanying illustration. Here we see a pleasing variation of the popular basket of flowers and an unusual color scheme. On a gray background a deep yellow and a dark olive

green are combined with a tone which seems to be a cross between purple and solferino. Possibly it is the "Tyrian purple," said to have been lost for several generations. Whatever name it may be called it is colorful, charming and intensely modern. A delightful room could be built around this paper, and for

furniture nothing could be more fitting than painted pieces.

A small house painted gray and white on the outside, with green blinds, has a simple and effective treatment inside. Gray of a slightly brownish tone is seen on the walls of the hall and the living room. Paper in a basket weave has been used and extends from the low baseboard to the narrow wooden cornice. Curtains of scrim of the same gray are seen, enliv-



Tray of English China, with compartments.

INSIDE THE HOUSE

ened by stenciled borders in dull green, blue and lavender. The woodwork is painted white and there is a simple mantel with unglazed tiles in Grueby green. Mahogany furniture is planned for this room, but at present painted furniture is used. It is of the simplest kind, painted white. A couch and a winged chair are covered with cretonne in blue, green and lavender, a crocus design by the way, and there are several "Ragstyle" rugs in which these colors, combined with white, are prominent. The room has nothing expensive in it, yet it pleases by its simplicity and refinement.

The dining room has a wainscot, painted white, covering two-thirds of the wall. Above this, the space is painted white and stenciled in a frieze of old-fashioned flower pots filled with the gayest of flowers; pink, blue, lavender, yellow, and that peculiar bright green which our grandmothers picked out for their patchwork, their embroidery and their "calashes." The furniture is painted this fetching color. The curtains are of the same green, but in a very transparent material. The top of the sideboard is softened down by a Russian crash cover, and between meals the table is similarly covered, the crash fitting its round top exactly. The plan is to paint this furniture, some day, in small flower pots, and to stencil a prim row around the crash covers.

"The first essential of good table glass enables us to see at once that it was made from a fluid material cooled in a careful manner," says W. Shaw Sparrow. This limpidity was valued till the end of the seventeenth century, when the wheel came into play, and with it a custom of engraving glasses. The early efforts were not bad, but when after a little prac-

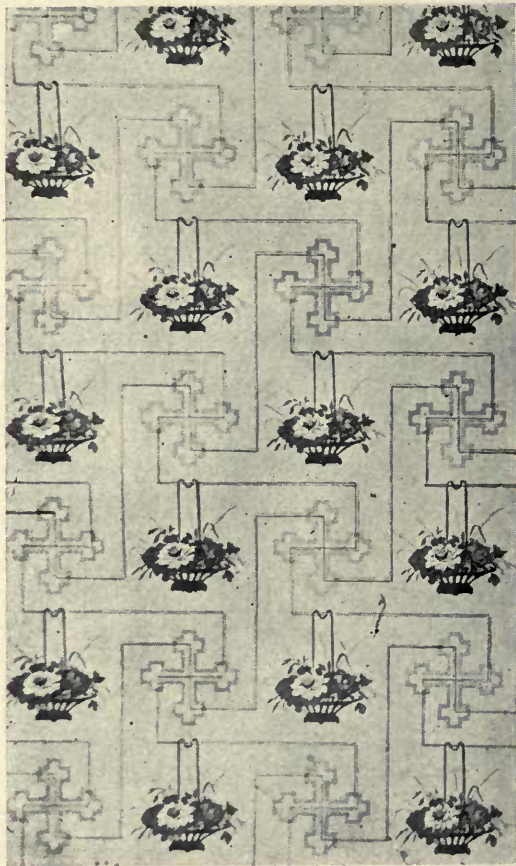


Of Colonial feeling is this latticed cretonne against black and white stripes, roses and tulips.

tice the engraver's hand became delicate in touch, many intricate designs were attempted, till at last the waterlike transparency of table glass was veiled by patterns.

Skill of hand has often been accompanied by a decline of taste; and with glass the decline was rapid and complete. The material was turned out in blocks, deeply cut and heavy; decanters were like huge clubs notched and indented. Shopmen delighted in their bulk. "Feel this decanter, madam! feel its weight; all solid good glass; allow me to lift it, madam, it is much too heavy for you to move without effort." Burglars were afraid of such decanters, and even butlers

INSIDE THE HOUSE



Old fashioned wall paper.

hated them, although they strengthened the wrist like dumb-bells.

The belief that glass was to be valued

by weight, like gold, lived on to the reign of Queen Victoria, when a gradual improvement began to bring into fashion beautiful forms, and this improvement has gone on steadily.

In choosing old glass for our cabinets or new for our tables we seek designs which turn back for more than a century rather than those which by a stretch of the imagination we almost remember. There may be engraving and cutting and even brilliant color, but there is also purity of form, refinement and fitness. If for table use there is transparence, the distinctive quality of glass, never a substance which raises a question as to its composition.

The beautiful opaque pieces now offered for sale in the shops have value for decorative purposes. Their color range is extensive and the designs unusually attractive. But for "glasses" of all types, whether for "plain water," as they say in Scotland, or, for what Artemus Ward called the "more important fluids," the clearest crystal qualities should be expressed. Such pieces may be pure white or ruby red, pale green or dark amethyst, but the limpid characteristics demanded by Ruskin and Mr. Sparrow are conspicuous.



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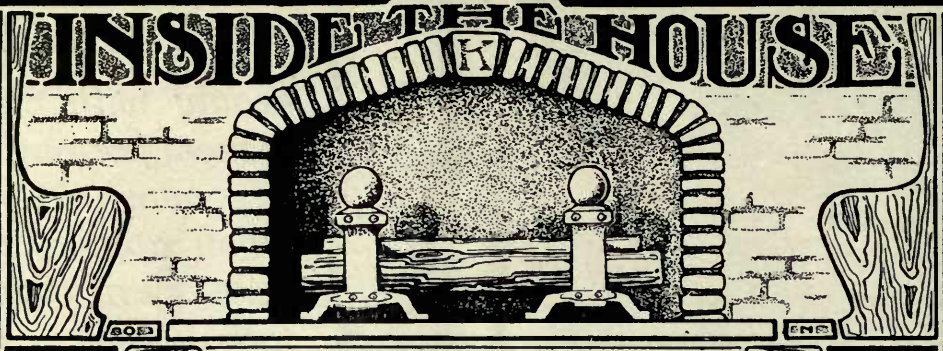
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ANSWERS TO QUESTIONS ON INTERIOR DECORATION.

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.

Cement Tint.

J. D. C.—We are undecided in regard to the color of the stucco to be used in the gables of our new home. In a previous letter you referred to a "cement tint." Kindly let me know what this is. Our painters do not seem to handle it.

Ans.—Color in stucco is secured in three ways, as follows: 1. By the use of a white Portland cement, white sand or light sand and the addition of mineral coloring pigment, which can be obtained from any building supply dealer. It is never wise to use more than 10 per cent of the volume of cement of coloring pigment.

2. By staining or tinting the stucco with a special concrete paint, such as is made by several of the large color manufacturing concerns. Building material dealers and paint supply houses carry or can supply these paints to you.

3. By means of using white Portland cement and warm tone sands, stone chips or pebbles. This last method we regard as the most satisfactory, as the color tones are furnished by the stone or sand and hence there is no question of the permanence of the colors. For securing a cream or buff, a very satisfactory combination is white Portland cement and ordinary light yellow sand.

The Pillared Opening.

J. H. H.—I inclose a crude diagram of the second floor plan of a duplex house I have recently bought and expect to re-decorate. I shall also make a few changes. I would like to paint the woodwork in

all four rooms white. The dining room is the difficulty; first the pillared opening to the living room, then the beams in the ceiling. Are beams ever white, My dining room furniture is Flemish. The porches need new floors. The upper one must be wood, I suppose, though at present it is tin. Is cement incongruous with the colonial pillars for the lower porch floor?

Ans.—You would, I am sure, obtain a better result if you put a wall between the living room and dining room with a single opening. You can span this with sliding doors or portieres or French doors. Then keep your beams and woodwork in the Flemish finish to match the furniture. To lighten the effect you can have a line in all the moulding in gold or a bright color. Then use tapestry paper with birds and flowers and a flame colored gauze silk for over-curtains and valance. Tan net next to the windows.

Couldn't you use brick instead of cement on the lower porch floor or cement arranged with brick or tile effect?

A Japanese Color Scheme.

C. A. M.—Would greatly appreciate suggestions in regard to interior finish of living room, dining room and sun room. Furniture for living room and dining room will be early English upholstered in brown leather. We have two rugs, either of which could be used for dining room; a Japanese rug in blue with tan and black figures, the other in oriental design in tan, brown, blue and green. We will have brick fireplace and mantel. We

INSIDE THE HOUSE

want to furnish sunroom in reed furniture. As it opens into living room with French doors.

Ans.—To begin with the dining room: The Japanese rug in blue, tan and black would make an admirable color scheme. Use a lighter tone of tan for the walls and a shade darker for the woodwork, neither being darker than ecru. Then use blue side curtains with ecru net or marquisette next the windows and French doors. In the sun room use the same color for the walls, or better still, a light gray, with the woodwork in there stained a gray as well as the reed furniture.

The walls and woodwork would be the same in the living room as in the dining room, but you can use a contrasting color for over-curtains, yellow, orange or golden-brown gauze silk.

Furnishing a Bungalow.

O. St. J.—I wish to ask your choice concerning the decorating and furnishing of three rooms in our bungalow. The living, dining and bedrooms are connected with each other by a cased opening and wide door respectively.

Would it be well to have the woodwork of all three in old ivory with a little mahogany trim? Could you suggest another kind of furniture for the dining room than mahogany and give me an idea as to what color might be suitable for the wall tints?

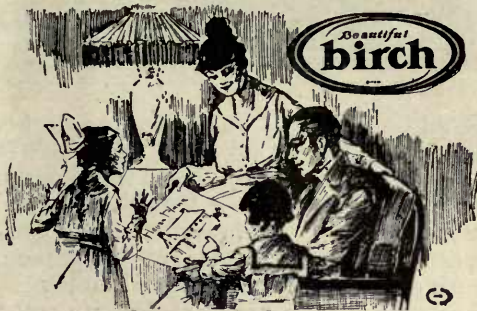
I have studied so many books and considered so many combinations that it seems impossible to come to any definite conclusion as to interior decoration or furnishings. I certainly will appreciate your help and suggestions in the solution of these problems.

Ans.—You can use the old ivory for woodwork in all rooms and the mahogany very sparingly. Old rose seems much too hot for your climate and the blue would be prettier with the mahogany than the old rose. As you ask us to suggest an entire color plan, I am going to start as though you had not mentioned any.

The bungalow should give an impression of unity, just as a good Japanese porcelain or a tapestry does.

For a really cool interior the woodwork

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should be in a light warm gray no darker than the ivory would have been. Then in the living room use all wicker furniture stained a gray one tone darker than the woodwork. On the walls have a gray tapestry paper—there is one quite inexpensive, with white ground and gray leaves and little touches of delicate color. The curtains would be a blue-green high in key with cushions to match and rug of gray and green.

In the dining room you could have a set of painted furniture of a beautiful blue tone and the draperies could be a gray silk with blue bands either painted or applique, and the rug, blue with gray. The bedroom would have either cool toned chintz or plain light Nile green draperies, gray enamel furniture almost white and Nile green Scotch rug.

If you wish, we can send you samples of these fabrics as we have indicated them, with photographs of the furniture, then you could see the realities for yourself as well as read the dream.

Doors, With Ivory Woodwork.

T. H. M.—We are thinking about having our whole house done in old ivory. If we do, is it best to have the doors mahogany or just the enamel? And should I have a wainscoting in the living room and hall or just a base board? We want the dining room paneled up to the plate rail but are undecided about the hall and living room. I would rather have just the narrow base board in all the rooms but the dining room, but my husband wants the paneling in the living room and hall also. Which do you thing will be the best? If paneled, how high should the paneling go? Would you have the ceilings beamed or left plain? The house will face west, throwing the living room with a northwest exposure. How should we treat the walls in this room and what should go in the sunny dining room across the hall?

I certainly will appreciate your helping us out. We have never built before and are in a dreadful muddle. I have your "Interiors Beautiful" and it has been a great help but not quite all we needed.

Ans.—Unless you are following out a definite scheme of colonial furnishings with old mahogany or correct reproductions, we do not advise mahogany doors but rather old ivory with plain, not beamed, ceilings.

There is no wall finish more beautiful than paneling nor one that suggests greater repose and dignity. There is also a permanent, enduring quality about paneling that is very satisfactory as the years go by, justifying the greater cost at the outset. Either plan you have in mind is in good taste; baseboards in two of the rooms and high panels in the dining room, or panels in all the rooms. The only trouble in paneling the hall to the height of a high wainscot is that unless designed on strictly architectural lines there is bound to be an awkward line with the staircase.

Paneling is well adapted to halls and living rooms, but should not be used where many pictures are to be hung. The paneled paper with the vases and grapes is effective in either hall or living room but should not be used above paneling.

A wainscot should never divide a wall evenly. There should either be more or less than a half effect. It should extend three-fourths or two-thirds of the wall. The tree paper of American make combines well with white paint and mahogany furniture and is interesting above a paneled wainscot. You might like that for the sunny dining room with ivory net hangings and over-curtains of the pale green in the paper. With that choice the old fashioned paneled paper in gray and blue would be attractive in the hall, with a plain paper the tone of the warm gray of the crepe paper. Beamed ceilings are not advised.

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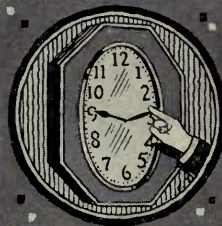
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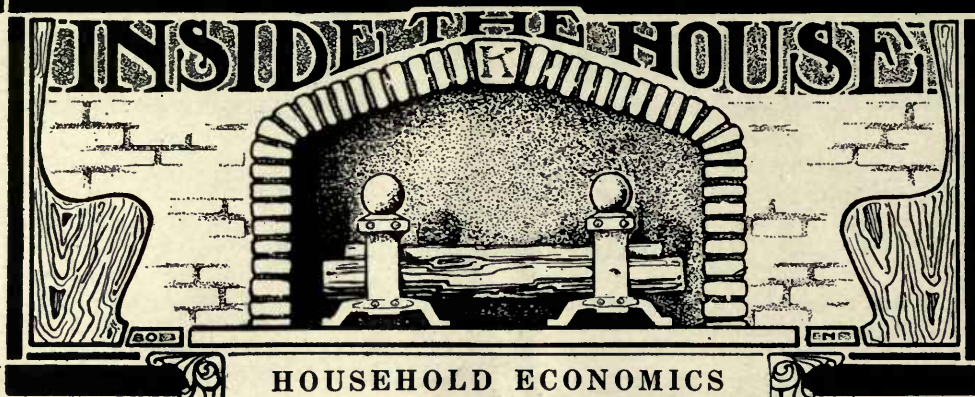
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Waste Is Treason.

WILLFUL waste, at this time, not only brings the woeful want of older times but is now a pro-German measure. It is not only criminal, but it is treason. Two million men have been subtracted from the man-power of the country, chiefly from the most productive man-power of the nation. From being producers they have become tremendous consumers. The vast needs of the world must be met by an immensely reduced man-power and it is up to us in this country, the women who can not go to the front and the men from whom new units are being constantly drawn, to keep filled the larders of the world. What we are not able to produce must be saved from our own stores. We are so used to throwing away a bit here and a bit there that constant reminder is necessary, even to those whose intentions are firmly bent on conservation.

The analysis of the garbage pail gives the final test as to whether there is unnecessary waste.

Banish the Garbage Pail.

Chemical analysis shows a marked fertilizing value in such household waste as banana and orange skins, apple and potato peelings, pea pods, tea and coffee grounds, egg shells, bones and even tobacco. Put these back into the ground, spade them well into the ground to fertilize the home garden, and give it chemical plant food as well.

To Can—or to Dry—Which?

With the coming of the summer with its munificence of fruit and vegetables the need for their preservation for winter

use is vastly more insistent than it was last year, if that be possible. Shall these be canned or dried?

The economic value of the fruit and vegetables which the housewife cans or dries this summer will make one of the war resources of this country. It will not only supply the tables at home, releasing food for the Allies, but it makes a definite addition to the food supply of the world.

The processes of canning is familiar to most households, but what has heretofore been a luxury has now become a necessity. The Department of Agriculture and the National War Garden Commission have each issued bulletins covering in detail, instructions for the canning and drying of fruit and vegetables at home. Even the housekeeper who is accustomed to "putting up" fruit and vegetables will find much that interests her in these bulletins. "Home Canning and Drying of Vegetables and Fruits" will be sent on request by National War Garden Commission, Maryland building, Washington, D. C. This is very up-to-date, being published in 1918, and is very complete. The government bulletins may be obtained free by writing to the Department of Agriculture asking for Farmers' Bulletin 839, home canning by the one-period cold-pack method; Farmers' Bulletin 841, drying fruit and vegetables in the home.

Most housewives are familiar with canning fruit, but the canning of vegetables has been considered more complicated. The farmers' bulletins were published in June, 1917, and by following these instructions last year households all over the country have been supplied with fruit and vegetables through the winter. The

With rising costs and scarcity of labor, the man who builds is quick to appreciate the fact that

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INSIDE THE HOUSE

percentage of loss has been small, as far as it has been possible to get data, and this year the housewife will work in the light of her experience of last year. If her pack was not as satisfactory as her neighbor's she will sterilize it a little longer this year. Large peas and grains of corn are poor conductors of heat and it takes the heat a long time to penetrate them through and through. Only fruits and vegetables picked the day of the canning should be used if possible to obtain such. Peas and corn, which lose their flavor rapidly, should be canned within five hours if a choice product is desired.

Sugar for Canning.

The food administration has announced that special arrangements will be made by which home canners may be able to obtain sufficient sugar to preserve perishable fruits and at the same time place a check upon unnecessary quantities for other household consumption.

There will not be as much sugar in the kitchen this year as last, but this makes little real difference, as if canned goods are properly sterilized they need no added sugar in order to keep them from spoiling. The sugar may be added when the fruit is to be used, quite as efficiently if not quite so conveniently as at the time it is canned. Many a housewife before this has "struck" on a hot summer day, when she was tired or her sugar was gone, canned her fruit juice and made her jelly at her leisure or convenience.

Put Bones Under Ground.

Most people do not suspect the great fertilizing value there is in bones. To the ordinary amateur gardener there is a wide difference between the bone he holds in his hand and the soluble plant food so necessary to plant development. But the fertilizer companies know that bones are the highest-class fertilizers (not counting war prices of potash) except dried blood. Ground bones sell at over \$30 a ton wholesale, when other fertilizers sell about \$20 to \$25 a ton. The scientific farmers use

large quantities of ground bone, even in the growing of such crops as wheat, corn and oats.

Less Soap, Better Health.

Use less soap. Soap saving is not only economy of fats, according to Dr. Samuel Dixon, health commissioner of Pennsylvania, but may be made a factor in cutting down respiratory diseases. Many persons abuse soap by making a stiff, creamy lather in bathing, under the belief that this is necessary to dissolve dirt that fills the pores of the skin. On the contrary, very little soap is required to break up dirt and permit water to remove foreign substances from the pores so that glands may perform their normal function. Excessive use of soap usually fills the pores with fatty substances and results in imperfect action of the sweat glands, which is recognized as a cause of disease, especially of a respiratory nature.

Five Thousand Billion Flies.

The persistent, buzzing fly which annoys us all summer could have been prevented by starting the prevention soon enough. With the first fly is the time to start. If the swatter could get all of the first flies his task would not be so great. It is the numerous progeny of the first flies of the season which make the trouble. One female fly starting to lay eggs in the spring may found a family that by midsummer will number more than 5,000,000,000,000.

Flies are so dangerous because of the hospitality which we extend to them. Nothing else is allowed to touch our food with its feet and fingers; nor it is not possible for any other animal or insect to carry so much filth and disease. Yet the fly crawls over the baby fingers and sometimes over the butter.

Without filth flies could not exist as they would have no place to breed or feed. Remember that one successful swat at the first fly is more "efficient" than some thousands later.

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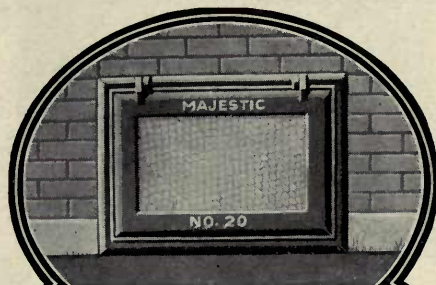
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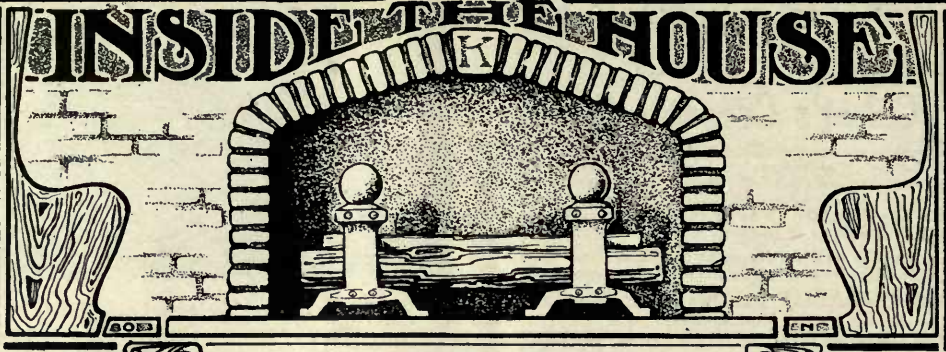
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THE TABLE AND FOOD CONSERVATION

A Message From Mr. Hoover.

That which we have, beyond our actual requirements; that which our Allies need does not belong to us. We are sitting at a common table with them. When there is not enough food to go around it is not good manners to help ourselves to large portions, because we are served first.

The Potato to the Rescue

THERE are about five bushels of potatoes apiece for every one in this country, according to the estimate made of last year's crop. Perhaps there is no other food better able to relieve wheat so acceptably as potatoes.

The necessity for saving wheat has increased many fold since last summer. We are getting to feel that wheat tastes of blood—so great is the need for it “on the other side” and so many other foods have we which are both palatable and nutritive. To the housewife comes the task of finding ways and presenting these other foods so as to be acceptable to her household. That this is no small task the Food Administration recognizes, and bulletins are being issued constantly by the department in the effort to guide and assist her.

We have never given the potato its due. Many housekeepers do not know or realize the versatility of the potato. Mashed potatoes will replace bread crumbs or flour in almost any meat loaf or in little cakes or fritters. In quick-breads potatoes can be used with flour in proportions varying from one-third to one-half. We give a few of these rules and also some for use of raw potatoes.

We are getting to feel that wheat tastes of blood, so great is the need for it on the other side, while we have so many other foods.

Potato Biscuit.

- 1 cup flour
- 4 teaspoons baking powder
- 1 teaspoon salt
- 2 tablespoons fat
- 1 cup mashed potato
- $\frac{1}{2}$ cup water or milk (about)

Sift together flour, baking powder and salt. Work in the fat with fork or knife. Add potato and mix thoroughly. Then add enough liquid to make a soft dough. Roll the dough lightly to about one-half inch in thickness. Cut into biscuits and bake 12 to 15 minutes in hot oven.

Raw Potato Griddle Cakes.

- 6 raw potatoes grated (large)
- $1\frac{1}{2}$ teaspoons salt
- 3 tablespoons flour
- 1 tablespoon milk
- 1 egg beaten

Mix the above ingredients, beat thoroughly and cook on hot greased griddle.

Mashed Potato Griddle Cakes.

- 1 cup riced potatoes
- $\frac{1}{2}$ teaspoon salt
- 1 egg beaten
- 1 tablespoon flour
- $\frac{1}{4}$ cup milk

INSIDE THE HOUSE

Julienne Potato With Savory Sauce.

- 3 cups potato cut in strings
- 2 small onions, chopped
- 2 teaspoons mixed herbs
- 2 tablespoons fat
- 2 tablespoons flour
- 1 pint milk
- 2 teaspoons salt
- $\frac{1}{2}$ teaspoon pepper

Cut the raw peeled potatoes into strings the size of macaroni. Cook them in boiling salted water 20 minutes. Brown the chopped onion and the herbs in the fat. Add the flour, stirring thoroughly, add the milk, salt and pepper, and cook in a double boiler 20 minutes. Strain and pour over the cooked potato. Sprinkle with grated cheese and serve.

Potato Souffle.

- 4 cups hot mashed potato
- 1 tablespoon melted fat
- 2 tablespoons milk
- 1 teaspoon salt
- $\frac{1}{4}$ teaspoon pepper
- Whites of 2 eggs beaten stiff
- Yolks of eggs

Mix all but the whites of the eggs in the order given; beat thoroughly, fold in the stiffly beaten whites, pile in a baking dish and cook until the mixture puffs and is brown on the top.

Armenian Potatoes.

- $\frac{1}{4}$ cup oil
- 1 quart of raw diced potato
- $\frac{1}{4}$ cup tomato pulp
- $\frac{1}{2}$ cup water
- $1\frac{1}{2}$ teaspoons salt
- 1 teaspoon paprika or white pepper
- 1 garlic, separated into cloves and each clove peeled and sliced
- 1 bunch parsley or 1 tablespoon dried parsley

Mix in the order given and bake in a covered dish in a slow oven 40 minutes.

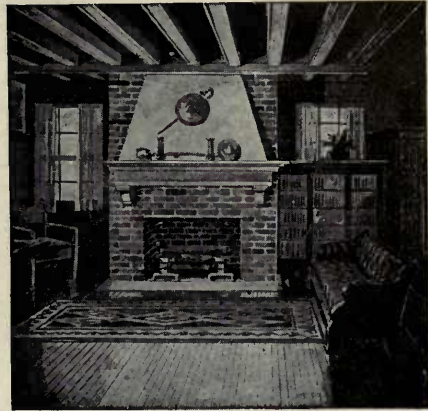
Potato Puffs.

- 2 cups mashed potato
- 2 eggs
- $\frac{1}{2}$ cup milk
- 1 teaspoon salt
- 1 cup grated cheese

Add the milk to the potato and beat until thoroughly blended. Add the beaten egg and salt, gradually adding the grated

INTERIORS BEAUTIFUL

200 VIEWS



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INSIDE THE HOUSE

cheese. Bake in buttered tins or ramekins in a slow oven.

When it comes to desserts, there are some surprises in store for you. This pudding is surprisingly good, and not a bit of wheat flour in it!

Potato Pudding.

- 1¼ cups mashed potatoes
- 4 tablespoons fat
- 2 eggs, well beaten
- ½ cup milk
- ¼ teaspoon salt
- ½ lemon (juice and rind)
- 1 tablespoon sugar
- ½ cup raisins and nut meats

Boil potatoes, mash and add fat, eggs, milk, lemon juice.

Chocolate Potato Cake.

- ½ cup fat
- 1 cup sugar
- 2 eggs, slightly beaten
- ¾ cup mashed potato
- ¼ teaspoon salt
- 1 cup flour
- 1 teaspoon baking powder
- ¾ cup milk
- ½ cup grated chocolate (melted over hot water)

Cream fat and sugar. Add eggs and potato. Add the flour, mixed with the baking powder and salt, alternately with the milk. Add the chocolate last. Bake in layers or muffin tins.

Four Kinds of Patriotic Candy.

It will be welcome news, to many grown-ups as well as children that the Food Administration says it is possible to eat candy and still be a patriot, if the candy is selected from one of these four groups. They contain a minimum of sugar and the ingredients which they contain are wholesome and plentiful. Those of the first group, especially, have high food values.

First—Chocolate coated candies with nut and fruit centers, nougatines and Turkish paste.

Second—"Hard boiled" candies, such as lemon drops, stick candy, nut bars, etc., and molasses candies.

Third—Marshmallows and similar candies.

Fourth—Gum drops, jelly beans and the like.

Sugarless Sundae.

The first prize in a recent contest went to the following sugarless sundae recipe, called "Honey Brazil":

One pint good strained honey, one pint cream, one tablespoon cornstarch dissolved in milk, one-quarter pound butter, one cup of Brazil nuts cut in pieces one-quarter inch or one-eighth inch in diameter. Heat the cream and honey together, add the cornstarch and cook it until it thickens. After removing from the fire add the butter and stir until melted. Serve over a portion of ice cream and top with the nuts, whipped cream and a red cherry.

The Raisin Bun.

Raisins in bread, muffins and rolls make a popular conservation bread not only in the raisin-growing west, but in all parts of the country. Raisins sweeten the bread, so that sugar is not needed. The flour used may be a mixture of rye and rice with the wheat. Shortening is secured by a small amount of corn oil, with the result of a conservation bun which is both delicious and more nutritious than plain bread.

A Salad Dressing Bottle.

Those who feel that a dinner is not a perfect whole unless it includes a succulent salad with French dressing will welcome this most convenient glass bottle, which has an artistic shape, making it at home on a well appointed table. It is marked off to indicate the proportions of oil and vinegar, thus saving time in measuring. A wide mouth makes it possible to insert a fork wherewith to combine the seasonings, although a tightly fitting glass stopper allows this to be easily accomplished by shaking. Any dressing not used can be kept without waste. A real "find" is this, and a nominal price places it in the list of inexpensive wedding gifts.

The crucial point of the war, so far as we at home are concerned is saving wheat for the Allies. Who among us are patriotic enough to select our foods entirely from other than wheat products?

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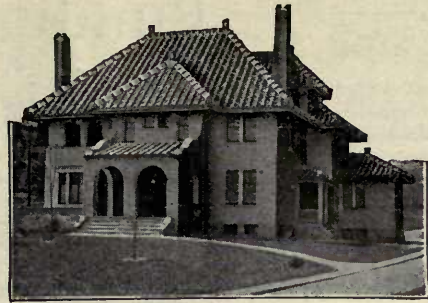
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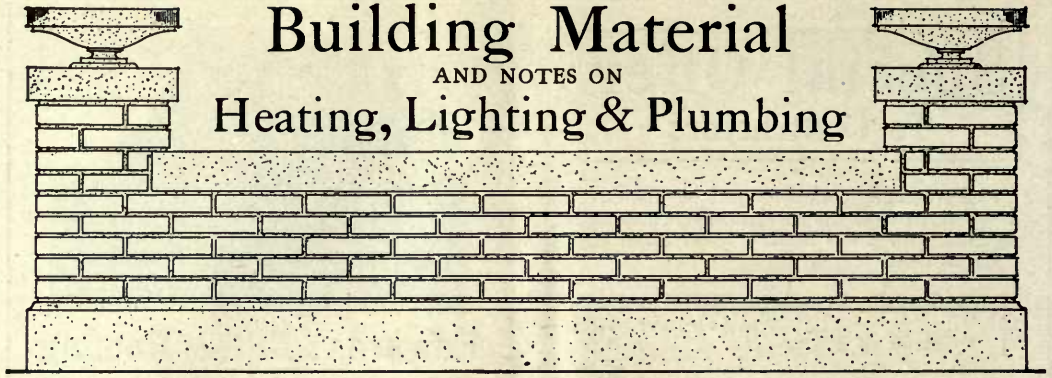
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Repainting the House



WHEN the house or barn are to be repainted, the first thing in estimating the cost is to find out how much paint will be required for the work. If the painter on whom one has depended has gone to war and a new man has to be consulted there is always a satisfaction in knowing something of how he goes about it to figure the job.

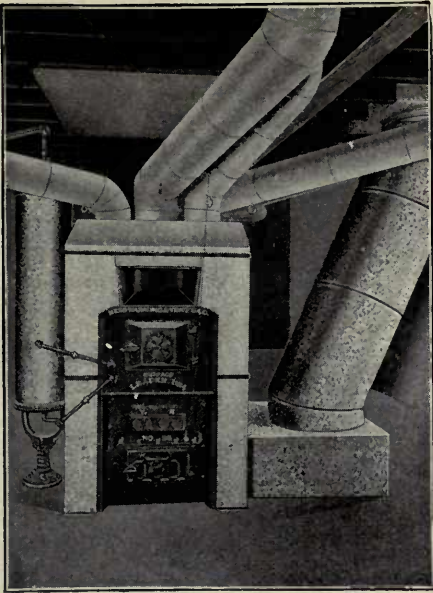
The first thing necessary is to find the number of square feet of surface to be covered by the paint. This is the simple matter of figuring the area of each side of the house and of each projecting surface, by multiplying the length of each side by its height, clear up under the eaves as far as the paint is to go. Where there is a gable, multiply the width of the gable at its widest part by one-half the height at its highest part. Add together the number of square feet in the areas of all of the surfaces to be painted and the sum will give the number of square feet in the surface of the house to be painted. As a gallon of paint will cover about 600 square feet of paint the number of square feet in the surface of the house divided by 600 will give the number of gallons of paint required to paint the house one coat. This, of course, gives an approximate calculation. A building very badly in need of paint will require more material for repainting than a building which is in good condition. Allowing a building to go a season or two when it is in need of repainting is perhaps more than questionable economy.

Condition of the Priming Coat.

In repainting it is found that the most important thing about the job depends on whether the original priming coat was a good job or not. Some people think that "anything" will do for the priming coat, since it is to be covered with two other coats.

As a matter of fact the vital factor of a good coat of paint lies in its penetration into the pores of the wood. It is the first or priming coat which must achieve this penetration, for if the first coat peels off, the succeeding coats can not be retained, no matter how good the paint nor how fine the workmanship put into the later coats.

Wood is porous, and while the tree is growing these pores are filled with sap. The trees are cut and the lumber seasoned until it is dry enough to use. As the sap dries out the pores are left empty. The perfect paint takes advantage of these pores and penetrates them while in liquid form, making when dry a tough coating on the outside of the wood anchored into its texture by numerous little tentacles which are as much a part of the outside film as the clinched nail is a part of the head which remains on the surface of the wood. To secure this hook-like hold in the wood the paint contains linseed oil and white lead. If some cheaper oil is used it will penetrate the pores just the same as water would do, but the pigment, having little affinity, remains on the outside; tough, solid hooks are not



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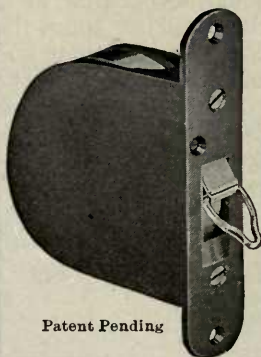
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formed in the pores and the painter says there was no "penetration." It will be easily seen that the "penetration" is impossible to any but the first coat, hence the importance of the priming coat of paint. An authority on paint makes the statement that if economy must be practiced in painting a house, it is better to use the cheaper paint on the finishing coat, even, rather than use a poor paint as a priming coat.

The Relation of Pigment and Vehicle.

There are two essentials in paint, the pigment, which gives the "body" and protection in the paint film, and the vehicle, which holds the pigment to its duty. Water and iron filings would not "paint" a surface because while there may be great strength in iron, there is no affinity between the two. There must be adhesion between the surface of the pigment particles and the oil in order to give a coating of paint. A film of oil may form a coating and so may a film of pigment. The latter has a real value as in the case of whitewash, but neither is a paint. There is a peculiar affinity between linseed oil and the particles of white and red lead which is not found between other substances. Other oils will not hold the pigments so closely. Lead has an affinity for linseed oil so that when mixed together they become practically inseparable when applied to a surface which is in a proper condition to receive it, and not only forms a protective film but penetrates into the pores of the wood and becomes so much a part of it that they can not be separated. The oil gives the nec-

essary elasticity so that it does not crack under expansion of the wood, while the pigment gives strength to the film. Turpentine is volatile and its effect is only temporary, as it soon escapes. It is added to thin paint to an easy flowing consistency while the amount of oil remains so small that the best effect of the pigment may be obtained. Added beyond this amount it thins the pigment film over the surface. It is generally necessary to add a dryer to make it dry hard and quickly enough.

Whenever linseed oil sells around \$1 per gallon or higher, the market is flooded with substitutes. Some of them are cleverly disguised. None of them have the binding and wearing qualities of pure linseed oil, and many are so flagrantly adulterated that they are positively dangerous to use.

The paint troubles common to adulterated oil are: Non-drying, the surface remaining tacky and quickly gathering an unsightly coating of soot and dust; yellowing of white or light-tinted paints; early loss of gloss and chalking due to lack of the binding qualities of pure linseed oil.

There is a simple test to determine whether a substance is really white lead which can be applied by any one with a blow pipe: Place a piece of the white lead under consideration on a piece of charcoal and subject it to a blow pipe flame. If pure, it will return to its native form—metallic lead; if not, it will retain its present form.

Study the Local Market.

At this time, more than ever before, it is advisable for the man about to build or remodel even a small amount of work, to study the local market as to materials which may be most readily available, or most economical under the peculiar local conditions. Other things being equal the local material is always better than one that has come from a distance, in the sense of belonging where it is placed. Local woods, local brick, local stone, have each some of the inherent qualities of the vicinity, and require less adjustment to make them seem at home together; they are more likely to be in harmony with each other and with the surroundings.

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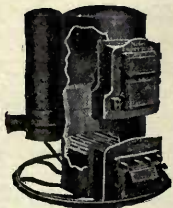
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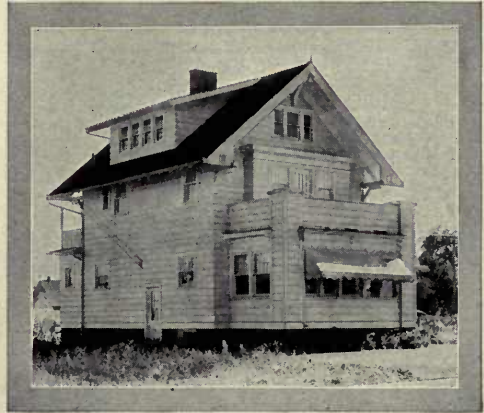
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WOODS

AND

HOW TO USE THEM



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.

Woods for the Home Builder

Douglas Fir

IN studying woods which are available to the home builder there is satisfaction in finding those which will not only serve all his varying needs, bearing themselves well both constructionally and as finishing material, and at the same time growing in abundance in the forests of the country. Many of the distinctly western woods are not so well known in other parts of the country.

One of the most versatile and plentiful of these western woods is Douglas fir, sometimes known as Douglas spruce, or as Oregon pine. It is neither a fir nor a spruce, but more in the nature of a bastard hemlock. Neither does it have much in common with the true firs, since it is much heavier and stronger. The true firs are not now largely used for lumber, the most important being the balsam fir of the northern states and the white and red fir of the West. In some parts of the Northwest Douglas fir and Western larch are usually graded and sold together where the larger percentage of both species goes into common lumber and dimension stock.

Douglas fir may be considered one of the most important of American woods. On account of the wide range of utility in its use and its abundance, both now and

for many years to come, it has been called the future reliance of the nation. It has been estimated that the present stand is sufficient for a hundred fifty or two hundred years. A natural reforestation follows cutting very close, and the tree itself is hardy.

Douglas fir possesses in an unusual degree that combination of strength and durability with lightness which goes to make an excellent wood for any kind of building. It is a wood of great versatility, capable of being used both for structural work and for the finishing woodwork, as it is strong in dimension timbers, and has a beautiful grain and texture as a finishing wood, capable of taking in a satisfactory way any kind of finish usually given to a hard wood.

The heartwood is light red to light yellow, the scant sapwood nearly white. It is nearly free from resin. Lumbermen recognize the red and yellow varieties. The former comes from the younger trees and is a coarser wood, while the latter comes from the older trees and is a finer and more valuable wood. This durable, strong, light red or yellow wood, which resembles both larch and true pine, is used on the Pacific coast in the same way that yellow pine is used in some other parts of the country. It is used for

every part in the building of the house, dimension timbers, exterior work and interior finish. As a finishing lumber it has rather unusual qualities in the beauty and character of figure and grain. Three-ply rotary cut veneers are employed for many purposes. The "watered silk" effect of the flat-sawed grain makes it popular for paneled work and for doors or for any use where the widely varied and beautiful figure in the grain is especially desirable. Douglas fir is very effectively used in some of the handsome paneled interiors in the Pan-American Republics building at Washington, D. C.

The fact that Douglas fir is used in refrigerator cars where dampness is constantly present, in packing house construction, in wharves and docks always subject to the alternate action of water and air, shows its resistance to weather conditions much more severe than those to which it would be subjected in any exposed porch or outside work. The sap growth of the wood is light and firm, giving little opportunity for the fungus of dry rot.

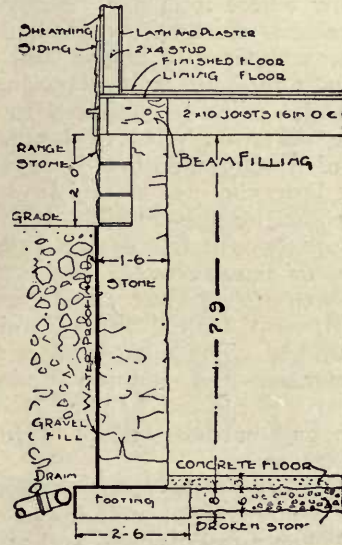
The durability of Douglas fir is such that in the West no other tree is considered its equal from which to take "ship knees" for the great ships now being built. The natural bracket formed by a large shallow root and the stump or trunk of a tree are hewed or sawed to the form of a more or less right angled bracket, for this purpose.

Authorities state that Douglas fir is more plentiful than any other species in the United States. These trees form almost pure forests in Washington and Oregon, and with the exception of Redwoods, Douglas fir trees are larger than any other in our forests. They are capable of yielding timbers of practically any length and size desired. Individual trees have reached the height of 350 feet, and diameters of 12 and even 15 feet. Logs are not uncommon which yield timbers two feet square and a hundred feet long. Single trees have been cut that scaled 60,000 feet, board measure.

Owing to the fact that so many mills are located on tide water this wood is perhaps better known and recognized in foreign markets than in some parts of this country.

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Larch.

Somewhat closely related to Douglas fir, with which, in some parts of the Northwest, it is cut and marketed, is larch, which is a close-grained, heavy soft wood of moderate strength and stiffness. In structure it resembles spruce, and in weight and appearance it resembles hard pine. Eastern larch or tamarack grows in low, wet areas, while the western species grow where it is dry. Many interesting records exist with regard to larch, which was apparently known and prized centuries ago. It was mentioned by Pliny, and Venice is supposed to stand, in some parts on piles of larch. The names of woods mentioned by ancient writers, however, are not always those employed at the present time.

The tall straight trunks are often used for poles or railway ties. Western larch has reached its greatest development in the Northwest United States and British Columbia. The bulk of larch is cut into dimension and common lumber, for structural purposes, since stiffness, strength and hardness adapt it for that class of work.

Experiments by the forest service have recently demonstrated methods of drying larch. When properly dried and seasoned its pleasing grain adapts it to use as a fine finishing wood.

Spruce.

At the present time the most important use of spruce is for aircraft lumber, for which it is specially fitted.

The eastern American species of spruce yield soft, clean, light, close-grained woods that are much valued in general construction. Spruce and fir woods are often confused with one another and with Douglas fir. Red spruce is plentiful in New England. Varieties of Western spruce which are most manufactured into lumber are Engelmann and Sitka spruce. The wood of the spruces is very light in weight, strong, soft, even grained, and easily worked, even exceeding white pine in this respect. Herein lies its value in airplane construction. Spruce is the lightest wood that can stand the terrific strain of flying under modern war conditions. The spruce trees from which airplane stock comes vary in age from a hundred and fifty to five hundred years. Only straight, tall trees which shoot up sixty, eighty, a hundred feet from the ground before the first branch, are sufficiently straight grained, and they may be found, —perhaps one in an acre, or a hundred acres.

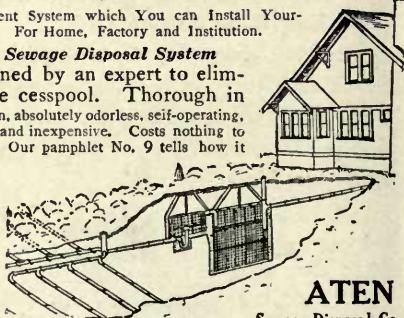
Colonel Brice P. Disque, in charge of spruce production for aircraft, has met and solved some big problems in getting out spruce for this work; such problems as only a lumberman in the west comprehends, in their difficulties. The grain of the wood must be absolutely straight in aircraft stock. The usual commercial method is to saw the trees, which as a rule destroys the grain. Riving, the oldest way of preparing a log for the sawmill, consists of splitting the log by driving wedges into it on the ground where it was felled. This method preserves the grain of the wood. So not only must the individual spruce trees be picked out in the virgin forests, felled and gotten out from the entanglement of the forests, but, in the face of lumber traditions, rived spruce must be produced. After the wood is produced, another problem comes in its proper drying. Colonel Disque has organized the Loyal Legion of Loggers and Lumbermen as an antidote to the I. W. W., which latter have added no small part of his difficulties. His aircraft program calls for 10,000,000 feet of supercarefully selected spruce that goes into airplane parts, every month. And this is only one of the problems in airplane production.

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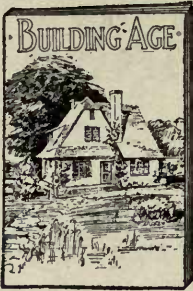
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SPLINTERS AND SHAVINGS

That Lazy Dollar and the Slacker Lot.



HAT lazy dollar and the slacker lot are in the same class as the able-bodied loafer under war time necessity. A dollar is not worth a cent except for what it will do, a piece of lead can be rattled in the pocket; and the vacant lot which lies idle when there are people who could and would make a garden of it, is of use only for the taxes paid on it. Like an idle man they belong to a regime which is past. Keep the dollar and the lot working just as you keep yourself busy with a definite purpose ahead. Uncle Sam has plenty of work for each, and no place for a slacker.

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 1st, 1918.

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:

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Editor—M. L. Keith, Minneapolis, Minn.

Managing Editor—E. Bartholomew.

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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 21st day of March, 1918.

MARCUS P. STARK.

(Seal)

My commission expires Jan. 25, 1922.

BOOK REVIEWS:

Just Behind the Lines in France, by Noble Foster Hoggson, Member of the American Industrial Commission to France; Published by John Lane Company.

"The France I had left five years ago was full of youth, of joy, of contentment. On my return I found her sadly changed. She had suddenly aged. The fiery ordeal had left ugly scars. Where she had lost materially she had gained spiritually. She stands today confident, determined." To quote only a few sentences from the preface gives the outline of the story which he has to tell. In Rheims one out of every four houses had been injured, one out of every ten houses was entirely destroyed. So necessary did he consider the planting of his field that a French peasant plowed it under shell fire from the German lines, saying that if he waited until the firing stopped it would be too late to plant his seed and his crop would be a failure. Thousands of old men, old women and little children gathered from the razed cities, many of them still living within the range of German guns, dream of the time when the war shall be over and they may return to their villages and rebuild their homes and gardens. A few American women have made their homes back of the lines in France and are giving what comfort and assistance they are able to the people about them. The story carries one behind the lines and occasionally emerges on the front line trenches.

* * *

The Kiln Drying of Lumber, by Harry D. Tiemann, in charge of the section of timber physics and the kiln drying experiments of the United States Forest Service; and Forest Products Laboratory, Madison, Wisconsin. Published by J. P. Lippincott Company. Wood in the living tree contains a good deal of moisture, anywhere from 30 to over 200 per cent of the dry weight of the wood. Before it can be used satisfactorily as a building material this moisture must, by some process, be dried out sufficiently that future use in a heated building will not cause it to shrink, warp and open cracks. Mr. Tiemann looks forward to the time when the building specifications will cite the percentage of moisture allowed in the required wood, that it should not be case hardened beyond a certain degree easily determined by a simple test, and other conditions to avoid brittleness. This he says is by no means an utopian idea. No one is better equipped to give a practical and theoretical as well as a technical treatise on the subject. The book embodies many tests made at the Forest Products Laboratory, and in addition much practical and interesting information on the structure and properties of wood.

KEITH'S MAGAZINE

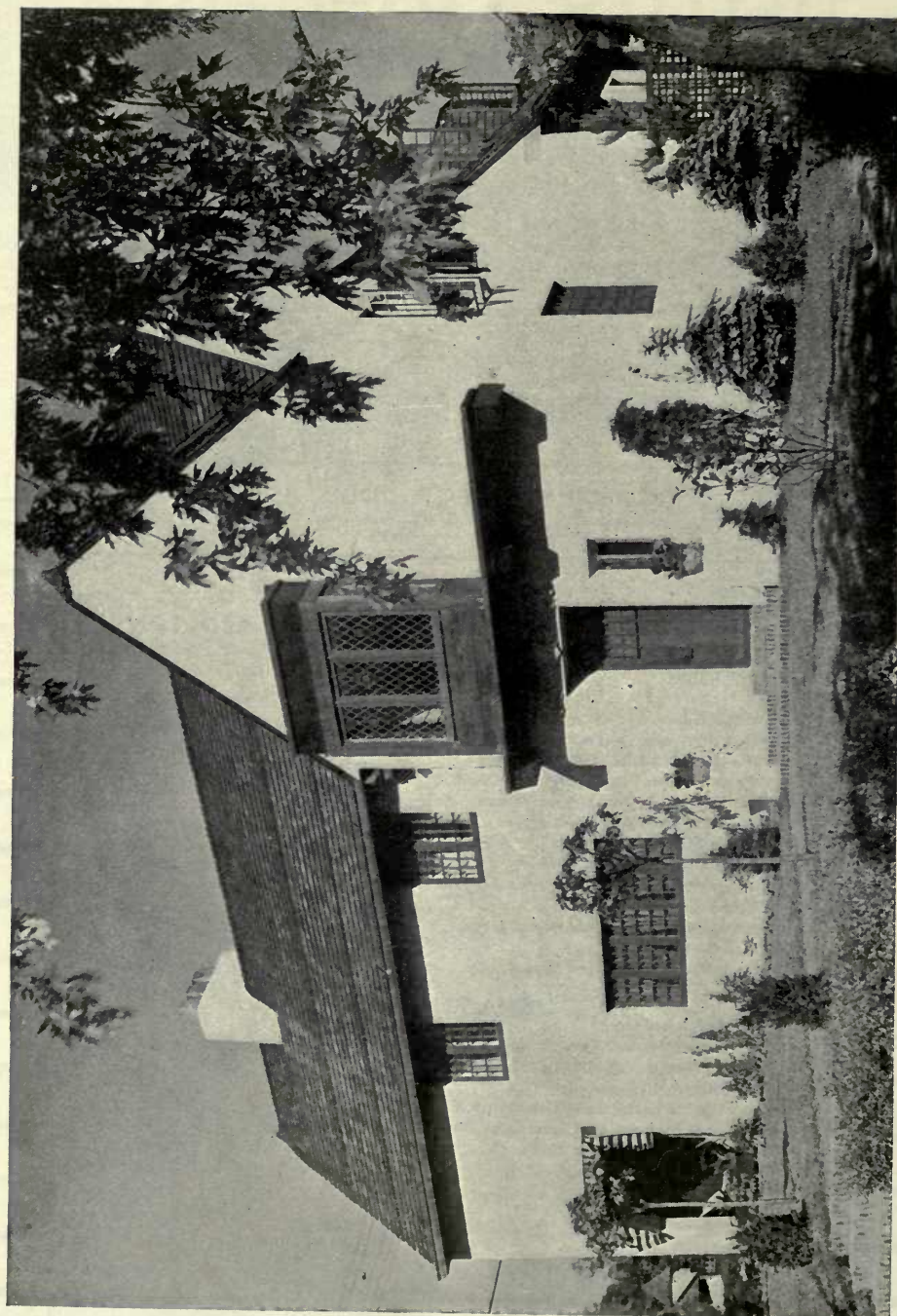
ON HOME BUILDING

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From "The Livable House"

Picturesque in its entire simplicity.

Bloodgood Tuttle, Architect

KEITH'S MAGAZINE

VOL. XL

JULY, 1918

No. 1

The Old Brick House and Its Possibilities

Lilly Johnson

DIGNITY—
C h a r m —
Cheer—these
blend in the
“H o m e” par excel-
lence. Taking what
others would not se-
lect as attractive, and
transforming it into
that which is quaintly
charming can be done
and done admirably.

About fifteen years ago, upon a large northwest corner lot in an Ohio city, stood just such a “possibility” awaiting the “seeing eye.” It was a large, dignified, rambling brick structure which had been built in the middle of the last century. To the average homeseeker at that time it seemed bare, and its possession only to be desired because of the location. But not so to the bride from the Southland, a daughter of a former Chief Justice of Kentucky.

She is of the type which pays reverence to family possessions, holding that those houses and belongings round which cluster the family life, must, of necessity, become



The garden.

enriched by the pervading spirit of striving after the gentle and worth while phases of civic, social, and family existence. This had been the home of her husband's people, it should therefore, be hers. And hers the gladly welcomed task of reviving and enhancing its possibilities and traditions.

Trees of fair and large growth were about the grounds, but the stern facade of the house needed the softening of vines and embowering of flowers. The older varieties of spicy fragrance and brilliance of hue were chosen. Roses were

included as a matter of course; but peonies were made the predominating motif.

At the front, the brick walks are outlined by their stateliness; but it is in the rear where most glows their beauty. Here the peonies are used in circling masses. The photograph shows the landscape gardening plan. The pergola will someday be rose-



Photo by C. Edwin Howard.

The old brick house embowered in vines.

covered. Dignity meets one at the front entrance, the lure of a brick-paved peony-bordered path draws you to the garden, where olden timey delightsomeness walks hand in hand with present daily life.

The garden view was taken from the roof garden over the service wing. To reach this a gable was built over the main stairway. While the grounds are spacious, a more secluded open air retreat was desired; which this open to the sky, breeze-swept, and view-gladened space gives. Such a retreat, under the open sky, is almost always possible to any house and its possession always pays—pays in delight.

A double iron grill of severe lines with the initials A-R inset,

swings hospitably open before the center hall doorway. To the right of the hall, as you enter, is the living room; to the left, the dining room, and breakfast room. Back of these lie the service wing. Upstairs a companion center hall opens upon owner's room, guest rooms, daughters' room, and the nursery. The upper hall is sufficiently large to be utilized as a morning room with desk, couch, easy chairs, and the inti-

mate comradeship every family treasures.

The original wide oak floor boards are in evidence, waxed and polished, and overlaid with rugs. All woodwork is white, which, with the mellowed brownness of floors makes a suitable background for the

**The roof garden is over the service wing.**

various colors in rugs, hangings, furnishings, and wall papers.

A softened sunlight seems to greet you in the hall. The wall paper, first prize winner at the World's Fair in Chicago, is in yellow tones with here and there upon it hanging colored prints of the early American art days when primness and such cheering groups as death-bed scenes predominated as subjects. All are genuine antiques.

Upon the living room walls hangs a most delectable shade of green paper. This is the reverse side of the dark green "oatmeal." To the mistress of the house it seemed impossible to find just the green tint she desired. In searching she noted the "oatmeal" and in the part usually "turned to the wall" discovered what she sought. It is in perfect harmony with white woodwork, brown floors, soft-toned rugs and mahogany heirloom fittings. The room conveys the cheer which the graciously formal can give—the acme of hospitality, for the shedding of all formality can alone be done safely in the intimate rooms of the house.

The dining room is gray and white and brown, the mantel brick-faced, and the furniture mahogany. Upon the dining table stands a silver cake basket once the property of Dolly Madison, of whom the mistress of the house is a collateral descendant.

From this room glass doors open into the breakfast room, which is furnished entirely in oak. In this apartment blue and white china and the gay peasant ware are used.

The dining room, formality fused with hospitality; the breakfast room, cheer; both perfectly fitted to their intended function; this is what the various rooms should always do, for thus their separate harmonies can best be blended into the symphony of gracious living.

Each bedroom carries out the colonial spirit. Each is instinct with personality



A formal yet gracious interior.

and in the color best liked by the occupant. Each is charming as is also the guest room.

While this particular residence has the full flower of age and family heirlooms as its dower, yet it may be possible for the homemaker to duplicate its charm. This requires a well thought-out scheme strong enough to repel side allurements or sales peoples with "This is the *very latest*, madame." For, if madame seeks the spirit of quiet dignity and charm the early days have passed on to us as heritage, she must be willing to shun "*the latest*, madame," and be content only with the "true to type" fitted into an harmonious environment. This done, those she best loves truly realize again, "*East, west, home's best.*"

The General Adaptability of Wicker Furniture

Charles Alma Byers

WICKER furniture has become almost a vogue. Perhaps its popularity is even gradually creating what a future generation will refer back to as a "period." In any case, its popularity today is very real, and is also

paratively or reasonably inexpensive. Furthermore, it is especially capable of wielding a variety of delightful influences upon the home, in the way of brightness, cheerfulness, coziness, and so forth. In fact, instead of constituting a mere furniture



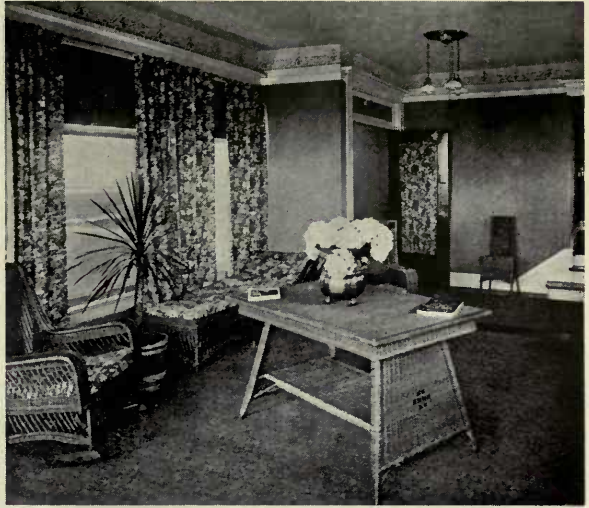
A charming living room, with its wicker furnishings.

well deserved. It is deserved for many reasons. By way of offering a brief summary of these reasons, it may be stated that furniture of this kind, as now manufactured, has real utilitarian value, possesses particularly extensive possibilities in a decorative way, is durable and comfortable in construction and design, and is com-

fad, and quite plainly doomed to be an ephemeral one, the appeal carried by the wicker style of furniture is broad and commendable. It is founded upon a genuine *raison d'être*, in its adaptability to the varying conditions of American life.

Wicker furniture, commonly so termed, is variously manufactured of reed, willow,

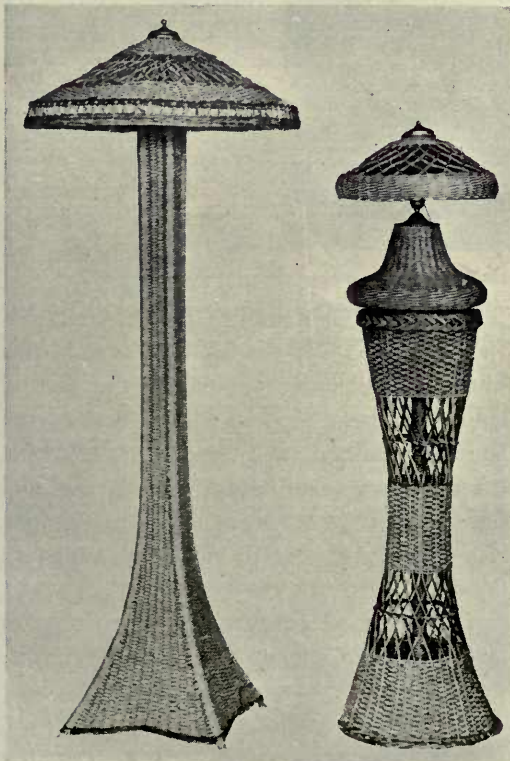
rattan, certain grasses, and so forth. Formerly much of our supply of these raw materials was imported from abroad, but now the most of it is to be obtained at home. In the early stages of its present popularity, our furniture of this kind was of rather frail construction, and hence, being incapable of withstanding constant usage, soon became rickety. It also was often of quite ornate design, patterned with all sorts of useless scrolls and excrescences. The product of today, however, due to the employment of heavier and better joined-together framework and to more scientifically handled reinforcing, is stout and durable, and is quite as capable of withstanding severe usage as any other kind of furniture, while in the matter of design, being generally free from practically all unnecessary ornamentation, it is comparatively simple and yet decidedly artistic and pleasing.



A comfortable sun room.

While a certain quantity is still imported, principally from the Orient, the bulk, by far, of our wicker furniture is manufactured in this country. In fact, its production has become a very important industry, and in nearly every large city there is at least one such factory. It is particularly worthy of mention, in this connection, that a very large part of the work of manufacturing this furniture must be done by hand. Hence, real craftsmanship enters into every piece produced, thus endowing the article with something of the individuality of the maker, or artist, himself. This, as against the machine method employed in the production of most other kinds of furniture, means that each article not only receives personal attention, to insure careful finish, but is also given a kind of intrinsic value in the way of personality.

However, simply because it is largely hand-made, wicker furniture should never be selected without exercising great care. In fact, the method of its manufacture makes carefulness in its selection all the more necessary, for it cannot be expected that every wicker-factory workman is both a trained and a conscientious craftsman, or even that he is invariably supplied with the best materials. In making selections the



Well constructed lamps.

purchaser should see to it that the reed is of straight, clear grain and in long strands; that it is of fairly uniform size, and that it is clean, smooth and perfectly round. It should also be demanded that in the weaving no unfinished ends protrude from the surface to catch the hand or tear the clothes; that seat frames are skillfully doweled and not merely nailed together, to come apart at the first strain; and, finally, that the article as finished presents at a glance a

hour-glass design, for chairs and tables, was especially popular, and remains more or less so today; but perhaps more generally desirable, at least more comfortable for chairs, is some one of the styles that feature the ordinary type of leg supports. However, individual taste may be permitted to govern choice in the matter of design; it is far more important, from the standpoint of design, that the handling of the wicker seem reasonably natural in the matter of

straight lines and flowing curves, instead of appearing tortured into unreal or fantastic shapes.

Wicker furniture also is widely varied in styles and appearances through the character of the weave, the blending together of different materials, and the creation of different color effects. The weave of the reed, for instance, may be either close and compact or in a variety of open-mesh patterns. The combination of reed and grasses of-



Even the dining room may be completely furnished in wicker.

beauty of form and symmetry of outline that stamp it instantly as the hand-wrought product of an artist.

In the matter of design, wicker furniture offers wide latitude for choice. Briefly, it may be had either in plain, straight-line effect or in a variety of styles dominated by graceful curves. Occasionally, to meet the requirements of certain rooms, notably the breakfast room, its lines will suggest severity and rigidity, but more commonly, particularly where lounging and the maximum of comfort are intended, the lines will effect an appearance of sweeping curves and flexibility. Formerly, the Canton or

fers similar opportunities for dissimilarity. In respect to color shades, furniture of this kind is particularly popular in the natural colors of grass, reed or willow, and it may be also stained and enameled. White, cream, ivory, pale gray, dull green and light brown are somewhat usual colors, although there is really no limitation to its possibilities in this respect.

The items of furniture that are now to be obtained in wicker are practically limitless. The following may be named by way of partial enumeration: Chairs of all kinds, settees, couches, sofas, swinging porch seats, tables, desks, sewing-tables, smokers'



A strongly built tea wagon.

stands, tabourettes, bookcases, plant stands, lamp-shades and lamp stands, jardinières, vases, candle-shades, bird-cages and stands, and so forth. It is possible, moreover, to secure sets for practically the complete furnishing of the library, dining room, bedroom, etcetera.

Wicker furniture has come to be used, or can be used, for nearly every room in the home, although it is rarely that one will care to have his home furnished with it throughout. Instead, to the end that sameness may not be too strongly suggested, it is better to limit its use to only a few of the rooms. It constitutes a kind of furniture that seems especially appropriate for the sun room, the conservatory, the breakfast room, and the porch, veranda or other outside lounging retreat. One or more of the bedrooms also may be so furnished to advantage, either wholly or in part. It is one of the charming attributes of wicker that it may be satisfactorily used in direct association with almost any other kind of furniture, without seeming to destroy harmony.

It is also adaptable to use in relation to various styles and colors of woodwork finish, which, with anything like the same versatility in suitability and effectiveness, is really true of no other style of furniture.

Perhaps one of the most admirable things about wicker furniture is its power of wielding, over the room in which it is used, an influence for increasing the appearance of cheerfulness and coziness. Taking, for instance, a room that as furnished in some other style appears dark and gloomy or unduly stiff and cold, by simply changing a few pieces of the furniture to wicker the room's appearance may be transformed into one of marked brightness, warmth and hominess. Incidentally, the need of such change is quite often felt, and it is rarely indeed that it may not be accomplished with pleasing result in this very simple manner. Wicker furniture is also particularly susceptible to a variety of treatments in the way of upholstering, which may range from subdued effects to extreme brightness, and hence, in this way, other charming possibilities for altering or regulating the general atmosphere of a room are afforded. This upholstering may, of course, be done with expensive tapestries, moderate-priced cretonnes, or even quite inexpensive mate-



A comfortable and attractive wicker couch.

rials, and yet, whatever the kind or its cost, the result is always pleasing and usually surprisingly suggestive of richness. At the same time the appearance of a room may frequently be still further enhanced by the use of drapes to harmonize with the material used for the upholstering.

America, in the early days of East Indian shipping; and wattling was even an art in Europe recorded in Roman history. However, its present popularity, for use in the modern home, is of comparatively recent birth, due, no doubt, to its considerable improvement and modernization in design. Today it is used, to varying extents, in

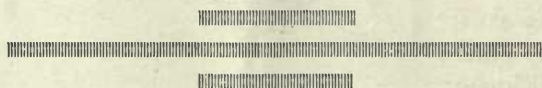


Furniture for the living room.

Wicker for chairs and other seats also unquestionably assure, if the pieces are properly designed, a maximum degree of comfort. This is true not only because the material is so readily weaved into form-fitting designs, but also because of the material's natural flexibility, or springy, resilient tendencies.

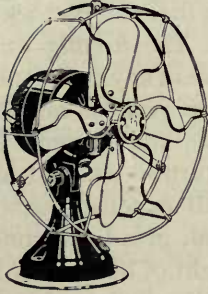
In a sense, wicker furniture is far from being a present-day product. It was probably in the Orient that it had its origin. At least, furniture of this kind is said to have been imported into Europe, and later into

homes of all kinds. In the costly home of interior elegance its use will probably be confined to a single room, like the conservatory or sun parlor, or to the porch alone; in less elaborately appointed residences it may be used in a number of rooms, perhaps including even the living room, and in still humbler homes it is sometimes used for furnishing the rooms throughout. At least, it is always especially adaptable to the secluded, outdoor-inviting porch, and is likewise excellently suited to the seashore bungalow.



Woman-Power Plus Electricity

Edith M. Jones



RECENTLY while waiting for an interview with the vice-president of a large banking institution in one of our eastern cities. I took occasion to notice the splendidly equipped offices. The furnish-

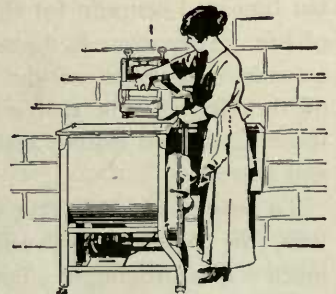
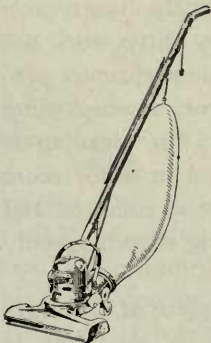
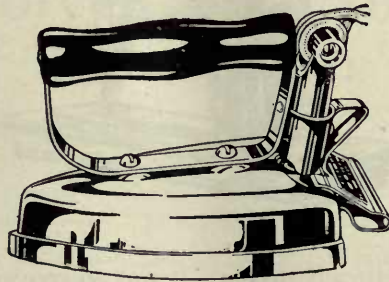
ings were in perfect taste,—good mahogany, good rugs, good colorings, etc., but what interested me most was the fact that every modern mechanical device for saving time, money and labor was, as a matter of course, provided. In fact, it seems to be an established fact that no up-to-date business in the man's world is thought possible without efficient machinery, and a man rarely hesitates to change his methods of business or fails to install new equipment; nor is he balked by the expense if only he can be made to realize that such changes or such equipment will bring about increased efficiency.

As I sat waiting, my thought traveled from the man's world of business to the housewives' field of activity and I found myself wondering how many homes of America were equipped for carrying on the necessary busi-

ness of the home with up-to-date appliances. Modern methods of saving, not only time, but energy, must now as never before be conserved for the many important and much needed demands made upon the women of a country already in war.

I was reminded, also, as I sat waiting, of a conversation which I had recently listened to between a husband and wife. The wife was having some difficulty to retain a much-valued cook because she had been offered a place of service where a laundress would relieve her of the laundry work. She had been in the family a long time and was willing to stay if an electric washer and wringer could be

provided. The husband felt this to be an extravagance, in spite of the fact he had recently bought a Hudson Super-Six because he insisted his business demanded it. It was hard for the wife to understand why a man's business should require an expensive machine (when a Ford would have covered the ground) and a woman's business seems so unimportant that she must lose a valued em-

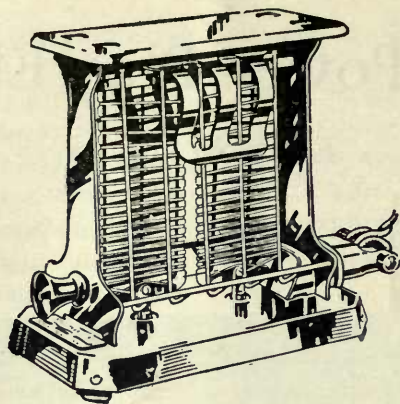


ployee because efficient equipment seemed unnecessary and extravagant. This is only one example of mistaken viewpoints but the signboards say "business is business" and time will adjust these inequalities through the modern process of reason and commonsense and efficiency in the home will soon be a foregone conclusion.

Speaking of washing machines reminds me that to many people electricity means only a system of modern lighting, but electricity has really a much wider field than this. It is indeed a veritable good fairy whose power, by the mere pressing of a button, has not alone flooded the darkness of night with noon-tide brightness but it has completely transformed labors of modern life.

For instance, few inventions have done more to lighten woman's work in the home than the electrically-driven washing and wringing machine and the mangle for the ironing of flat pieces. No wonder the maid I have just spoken of wanted to be freed from the heart-breaking drudgery of rubbing clothes to cleanliness. Women have done this for so long, and indeed many are still doing this hard labor, but these machines do save not alone energy but time and courage for the bigger things of life. They even do more than this, they actually save much of the wear and tear of the clothes, and this is no small item these days when clothes are very expensive and scarce.

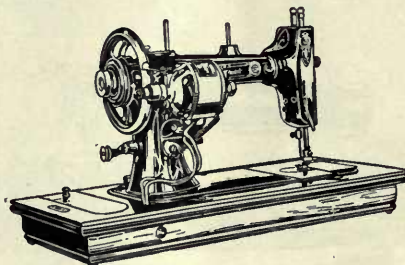
To anyone who has ever used an electric iron, the contrast, between the old-fashioned way of ironing in a hot kitchen over a



hot stove and the dragging of heavy irons to and from the stove and ironing board, leaves little to be said. With the electric iron there is no walking back and forth, no hot fire, and no backache. The ironing can be done in any room and the iron remains hot so long as the current is kept turned on, and at a small expense. And

just here I want to speak of a little convenience not often thought of but which I can testify to as being quite worth while.

While visiting recently in a beautiful home which affords many carefully planned details, I found in my room fastened to the closet door a small hinged ironing board and on a shelf at a convenient distance a small sized electric iron. I spoke of this to my hostess who explained, that gowns so often needed just a little pressing and



it was so convenient for the guest to have an iron when she unpacked her trunk. This may be a suggestion for other guest rooms which I am sure any one might find useful.

Another great blessing is the electric vacuum cleaner. Sweeping has always been a necessary but extremely disagreeable task. It is hard and very dirty work but the various kinds of vacuum cleaners provide an ideal method for accomplishing this work in the home. The cleaning is done more thoroughly and in a far more sanitary way for the dust is collected and carried out instead of being stirred up only to settle again.

Another back-breaking piece of furniture that has been eliminated by electricity is

the domestic sewing machine. This new appliance, no bigger than a typewriter, can be easily moved or carried about and can be attached to any electric socket or outlet. Every disadvantage has been overcome,—no pedalling and no backache,—but instead better work done in less time with practically no effort.

On every side we hear it said "this is truly a woman's age," and well it may be called just that—for what would the world be today were it not for the reserve force of its women. Would England have given suffrage to her women had they not proven themselves so worthy and so deserving through these last three years of unflinching devotion and sacrifice? Have they not proven themselves equal to greater things than they were once thought not capable of? Could the war go on in England, France, or

even in our own dear land were it not for the strength, courage and labors of the women?

And then I ask you is there not grave need for every home to be equipped as far as possible with labor-saving devices that women may be more and more released for the greater service which every moment of the day demands in this epoch-making stand for universal democracy. Now as never before must we conserve the brain and hand power of the nation's reserve force—for more and more we shall realize the truth of that line in Robert Service's poem, "There's big work to do and that's why we're here." This is indeed reason enough for women to weigh their fetters—namely expense and tradition—in the balance and lay hold of the things that make their highest and most efficient service possible.

The Porch—An American Institution

Anthony Woodruff



HERE are two things in our building in this country which are essentially American. The skyscrapers in our cities and our big, livable porches. Each of these have been developed to fill a definite and pressing need.

Probably no one thing adds a greater element to our comfort in summer living than our roomy screened and protected porches. It is the requirement of screens which has given the direction in which this development has taken.

In Southern Europe the houses are built around their gardens and we call them courts. These give a beautiful outdoor living space. Passing along the streets of the cities, no sign of a garden is visible, only square stone or maybe white-washed buildings, abutting on the sidewalk. Occasional glimpses through an arch or carriageway, left open for a few

minutes, is a revelation to the passing tourist as to the possibilities of the entirely enclosed garden.

The American way is to build the outdoor living space outside of the house in the form of a porch, generally enclosing and protecting it.

As a matter of fact, climate is the controlling element in the matter of porches. The English house has no porch in the American sense of the term. It may have a protected entrance, a stoop, a terrace, or even a portico; but the difficulty of incorporating a big, luxurious porch into an English type of house has been found by those who have wished to transfer a charming English home to American soil.

It might be interesting to trace the development of the porch from the early stoop or portico, through the all-enveloping porch, to the well designed entrance which may or may not incorporate a beau-

tiful little portico; with the porch idea developed into a sun parlor, removed from the front entrance and placed on the airiest corner of the house, or where it will get the finest view. As people are becoming more sufficient to themselves, and less dependent on the neighborhood and its gossip, the feeling for more seclusion is growing. Full view of the street and the people passing is less necessary, a garden view is more important, and the sun porch is built at one side of

a way that the whole space may be opened as desired, the porch is more completely useful, for it can be quickly closed at the approach of a summer storm. This protection from storm allows the porch to be furnished in a dainty yet practical way; and willow and rattan furnishings, and chintz and prints of various kinds are specially designed to make the sun porch a charming rest spot.

In those parts of the country where screens are not essential, a much wider latitude is given to porches and to porch furnishings. A southern California porch is shown in the illustration which is a veritable sun porch as well as outdoor living room. It is pergola covered, with only the rafters overhead, which may, or may not, eventually be covered with vines. The awning overhead has rings attached to the edges, and these metal rings slide on wires beneath the pergola beams.



A porch which becomes a real sun room when the overhead awning is drawn.

the house instead of always at the front. Nevertheless, the charming little porch incorporated under the main roof and extending across the front of the house is always a popular one. As much of a screen as desired may be obtained by the planting of shrubs and vines.

Probably the simplest and least expensive type of porch is screened for summer, with storm sash set for winter use, where on mild days the porch is a delight, while in severe weather it gives protection from wind and storm. If the windows are glazed permanently, but in such

These are so arranged, either by cords or otherwise, that the awning can be drawn over the porch when the shade is preferable to the sunshine, or the porch left open to the full sunshine on the cooler days. For this reason vines will not probably be allowed to cover the porch in such a way as to exclude the sunshine.

Wicker chairs and table and the big porch seat make this a comfortable retreat after a strenuous set of tennis in the nearby court.

Some porches seem to "happen," others seem to belong where they are placed.

and are an essential part of the house, not an after-thought. Even a porch which is added later should have this quality of "belonging."

One of the most popular forms of porch is that which comes under the extension of the roof either at the front or the rear of the house. There are various ways by which to bind it into the scheme of the house as a whole, if the thought is kept closely in mind. Verge boards in the gable ends, exposed rafter ends, and brackets to support the wide projections of the eaves are often very decorative in effect, giving strong spots of high light and interestingly broken shadow lines, while at the same time they are constructional features.



A porch incorporated in the house.

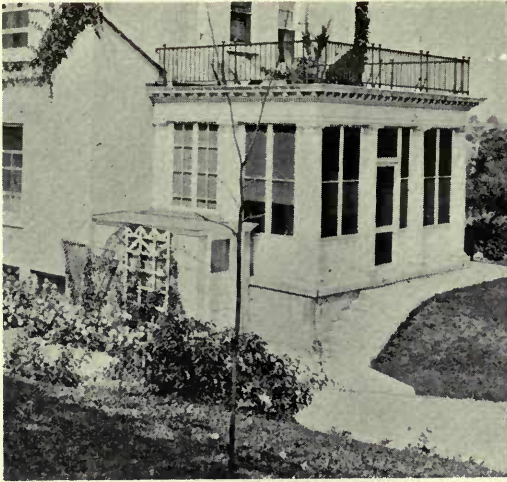
The various forms of Venetian blinds and shades give a certain amount of real protection from the weather in a simple and inexpensive way, when it is not practicable to glaze the porch.

The sun room at the end of the living room, and which may also open into the dining room, is a very favorite placing,

especially if it is to be glazed so that it becomes an intrinsic part of the house, both as to the arrangement of room and on the exterior. It is given the same treatment as the body of the house and roofed separately or perhaps treated as a balcony from the second floor. Whether this porch shall have an outside entrance depends on the location of the house and perhaps even more on the size and garden aspect of



The popular porch across the front of the house.



An open balcony over the porch.

the grounds. On a narrow lot the outside door often is not practicable, but when it can open on a garden the porch itself is doubly charming.

Next comes the matter of the sleeping porch on the second floor and its treatment with relation to the porch on the main floor. Many people are loath to



A two story porch.

give up entirely their open veranda on the second floor for the sake of the sleeping porch. One solution of this problem leaves an open balcony around the sleeping porch, making it some three feet smaller each way than the downstairs porch. A French door from the house opens on this balcony. With this smaller porch on the second floor the roof may



There is a balcony around the sleeping porch.

be more simply treated. Something like a pergola treatment may be adopted, with projecting rafter ends, and a screened ceiling, if it is desired to sleep under the open sky, similar to that shown over the open sun porch in the first illustration. Canvas awnings and curtains may be arranged to give protection in case of rain, although in the case of a heavy storm withdrawal is likely to become necessary, even to the greatest lover of outdoor living.

Sleeping and living out of doors has brought renewed health and vigor to so many people that planning for outdoor conditions in the house is likely to expand in many ways. The stuffy little "sun porch," which has been added to the commercially built houses in response to the demand for outdoor living conditions, has not tended to increase in popularity. These, however, have added a few more windows to the house and can be incor-

porated into the body of the house by the elimination of partitions, in the conditions where they do not prove to be as livable as they were originally intended to be.

The popularity of the sleeping and sun porch have added greatly to the sum of comfort in living conditions, and they will probably develop along widely differing lines as they are made to fit more definitely into individual needs.

Garden Philosophy

Ruth Fargo



ALWAYS knew that Isabelle Ostrander's sense of beauty was largely responsible for the attractiveness of the places in which she lived. For a long time she and Tom rented, but passers-by never suspected it from outside appearances, so perfectly kept would be her cottage home.

"Of course, it is some work," she said to me once when I marveled at the effort expended on other people's property; "of course, it is some work to keep up a lawn, and flower borders, and vines. But what of it? Outdoor work is reported to be an antidote for doctor's bills." She surveyed me with a twinkle in her eye. Then: "Besides, don't you suppose we get the benefit, Tom and I, of this pretty lawn all summer long? And think of the flowers I can cut, for myself, for the church, for my friends! Why, just giving away a few bouquets is worth twice the price of the seeds—seeds cost so little; all that nasturtium bank for the price of an ice cream sundae! Flowers are more sightly than weeds. Besides—" Isabelle looked at me shrewdly, "Tom and I wouldn't be half as desirable people as you think we are if we were content to settle down in a place unkept and unkempt—merely because it is rented prop-

erty! Don't you know the place you live in reacts upon you? A pretty home, rented or owned—no matter,—gives one a sense of personal power. And personal power brings success in business. And success in business—"

After that, I ought to have known just what to expect of Isabelle Ostrander; but she usually surprised me: Her philosophy of life ran quite outside the conventional rut. But it was the year I was gone from Breitenbush that Tom and Isabelle bought a lot in a new suburb and built. That did not surprise me; I had always surmised that some day they would own a home of their own. "It's as flat as a pancake, out here," wrote Isabelle, "and all sorts of vacant lots and weeds waist high—weeds everywhere! But there is a background of trees that is a delight; the view from my kitchen window is superb."

I smiled as I tucked the letter back into its envelope. I know if there was a pretty background anywhere, Isabelle would be sure to see it, and pick on the particular lot which exploited background possibilities best. But I was surprised when, late in the summer, I returned to Breitenbush and hunted up my friend. I had not expected to find the house snuggled back

in a half-acre of dahlias—dahlias, dahlias everywhere!—great, beautiful, blossoming clumps! I gasped. Isabelle was just giving a bevy of girls an arm-rod each. "For the church—to decorate," she said. "And you can't tell that I've picked a one! Aren't they beauties?"

They certainly were. "But," I said, "I had no idea your lot was so large."

"It isn't," laughed Isabelle; "it is only sixty-foot frontage. But nobody wanted this vacant land next so I got the use of it for the asking. With a long hose Tom irrigates it all that it needs from our own lawn faucet. We had it plowed—this new land will raise anything, I think,—and set to dahlias. Each hill is given plenty of space—that's why they have made such an enormous growth. The bulbs cost me nothing—except the drayage. When we first bought, the State Hospital—you know what long dahlia hedges they have—were digging and sorting their dahlia bulbs. I think they threw away a wagon load. Anyway, they gave me all I wanted, and I stored them

for future use. It is a solution of the vacant lot problem—the vacant lot that lies just next, and is so apt to be an eyesore," suggested my friend. "And it is worth all the effort we put into it—just having such a lovely half-acre to look at."

More and more have I pondered Isabelle's philosophy,—and considered the people who are content to live in homes "unkept and unkempt"; and more and more have I come to the conclusion that the kind of a place one lives in does react upon those who live in it. And if a pretty environment means personal power then—?

The Dahlia Garden was a pre-war story. When I visited my friend a few days ago the dahlias were still there, or some of them were, but now they form only borders for the war garden, and hedges between the different vegetables. While the blossoms are not so numerous now that a church can be decorated without missing those cut, with the intensive cultivation given the whole garden the blossoms are larger and finer, so that the actual beauty is not less.

Home Atmosphere

Louise N. Johnson



THE something that we seek in making our house a Home; that elusive quality that suggests just merely home and comfort, was caught by the planner of the room which is here illustrated. It is the living room of a Portland architect. Since modern building of smaller homes is confining itself so largely to bungalows where only one living room is possible, it is essential that no effort be spared to pervade it with cheer and the serene atmosphere of home. The individuality of the homemaker in each instance will suggest what she wishes to achieve, but a room such as the one shown and following these general lines

makes an artistic setting for a wide range of furnishings.

This room is located centrally in the house, under a gable roof, with the rafters exposed. The walls are of fir panels, stained, the only plaster used being the strip over the mantel and the panels in the ceiling between the rafters; just enough to relieve the room from appearing somber or of too much sameness. The hanging of the chandeliers from the central beam gives a pleasing effect. The harmony expressed in every detail of the room is perhaps the keynote of the designer's art. The furniture is of no special period, but its simple placement, also

the blending of colors in carpet and hangings, gives it a distinctive atmosphere. The fireplace is easily the most attractive feature. It was designed for this particular home by Bachelder of Los Angeles, and is of handmade tile, in a very soft tone of gray. Over it hangs one of the favorite pictures of the architect. The cover of the lounge is handmade, and throughout the room handmade cushions and pieces are used. The ample windows covering almost one side of the south

wall let in a plentiful supply of sunshine and fresh air and overlook a well laid out garden. This room is a splendid suggestion for one who is in doubt as to where to place this or that piece of furniture, and is open to endless possibilities of individual touches.



A. L. DuPuy, Architect.
The ceiling is plastered between the exposed rafters.

There is a peculiar comfort in feeling you are right beneath the rafters with their honest construction in full view and no attic or space between, and there is the added feature that this style of ceiling gives more space and makes an airy and pleasant room.

A Small Stucco Finished House

THE placing of the sun room often gives the key to the plan of the house, in these days when the porch or open-air living room is given such importance.

In the home here shown it is pushed out from the living room to get the air and the views at the front of the house. While it does not connect with the porch, it helps to protect the entrance in days of storm.

The living room extends across the full width of the house and so will catch the breeze from whatever direction it is likely to take; especially as the dining room windows give openings from the fourth direction.

At one end of the living room is the fireplace with high windows on either side.

The stairway is partially open to the living room, yet connects directly with



The sun room at the front to get the air and the view.

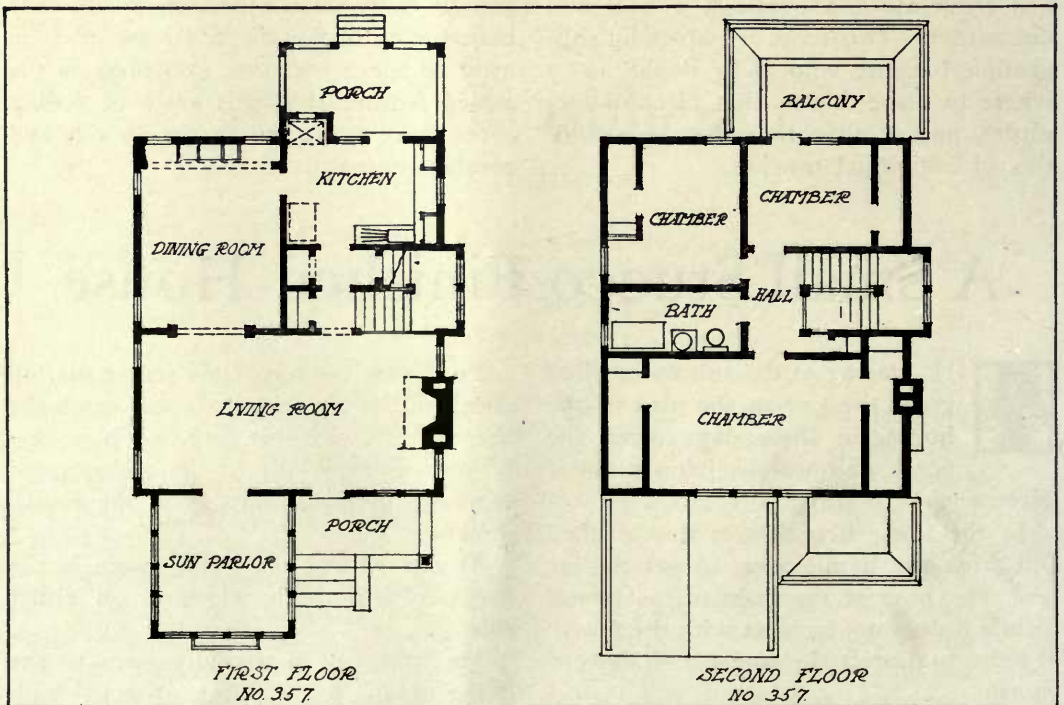
J. W. Lindstrom, Architect.

the kitchen. Two closets open from the passage-way opposite the stairs.

The dining room has a wide opening to the living room and a built-in buffet

between the windows closes the vista.

The kitchen is well equipped with cupboards, sink and work tables. The refrigerator is placed in a niche from the



kitchen and is iced from the outside porch.

On the second floor are three chambers and a bathroom. The space under the roof at the sides of the room is utilized for closets giving unusually large closet space and good hanging room, while at the same time it gives full height to the walls of the room.

There is a balcony over the rear porch, opening from one of the chambers.

There is a full basement under the

house. The exterior walls are covered with stucco, and the trimmings and cornices are of white. The chimney is built of dark brick and the roof is of tile. The photo was taken in the first days of spring when the planting had only the promise of what the summer would bring. There are trellises over the porch which will cover it with vines and blossoms when they have had a little more time. Ivy is already gaining a growth on the stucco and brick work.



A home built on one floor and with room enough for the old people.

E. W. Stiltwell, Architect.

Making a Home for Grandmother



NOTHING is too good for the people who have lived through the years of arduous toil, who have guided their families through the period of growth to maturity and self reliance, and who have reached the time of well earned rest. How shall people of advanced years be made care

free, and yet be under no constraint in the homes of their children. Grandmother must be able to close the door on noisy children and open it to childish grief.

A house built on one floor, with eight or nine rooms can be arranged with one or two rooms, convenient to the bath

room, which can be set apart for the old people.

The home here shown fills these conditions. An eight room house is usually a two story house, but here the space is arranged on one floor, with a connecting hall which separates the sleeping room from the rest of the house. The attic space is reached by a stairs from the dining room and is 8 feet high at the center, so that it makes really an old fashioned attic where the housekeeper who loves to save things can put them all away, or where the modern home keeper can have

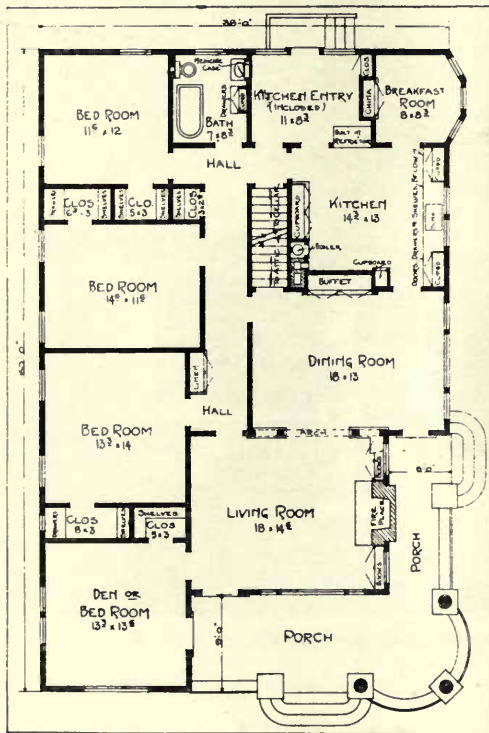
dormers built in to make a play room for the children.

The corner bed room, overlooking the garden, while it is small will yet make a good room for Grandmother, if she likes a cosy airy little room. A second door in either of the closets would throw the two rear rooms together and being so near the bath room would make a very comfortable suite, making one a sleeping room while the other would be a sitting room.

The arrangement is convenient for the woman who does most of her own house-keeping. The kitchen entry is screened, or completely enclosed. The breakfast room is attractive and convenient. The kitchen has built in cupboards and sink. The range boiler is enclosed. There is a built in buffet both in the dining room and in the breakfast room.

There is a good fireplace in the living room with book cases on either side. The porch arrangement is noteworthy, as part or all of it may be screened. The side porch affords a certain privacy. The dining room entrance eliminates the undesirable use of the living room when there are small children running through the house to the kitchen.

The permanently glazed kitchen entry is large and might be used for laundry purposes. The concrete basement occupies the space under the rear two-thirds of the building. It is divided through the center. The furnace room occupies one part, the laundry and storage rooms the remainder.



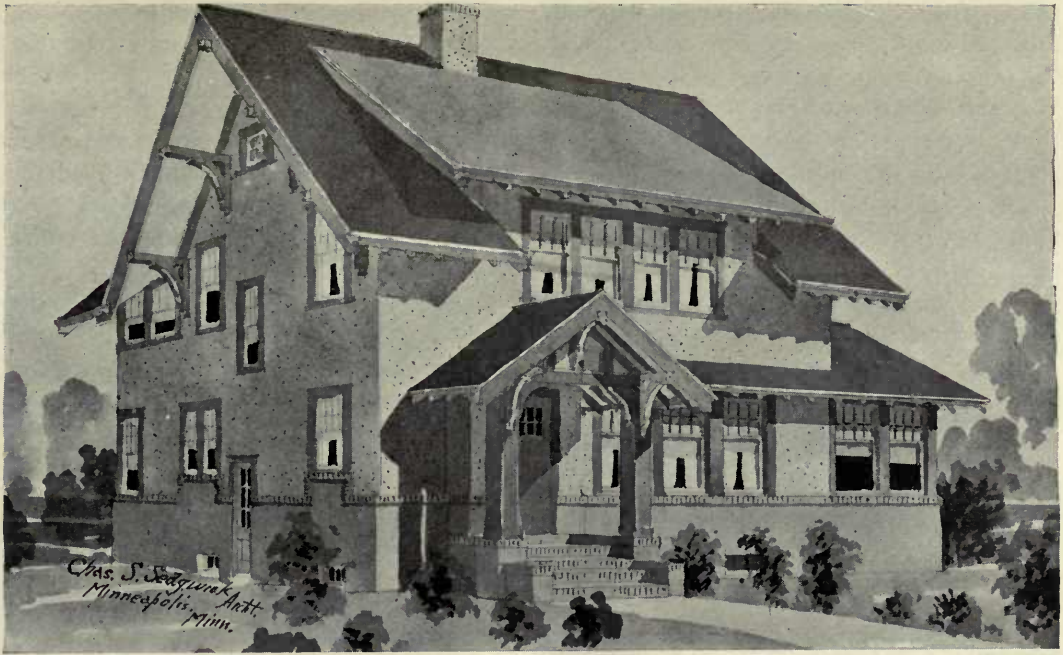
Economical Construction



ELL arranged living space is one of the requisites of comfortable and satisfactory living. Rooms that open well together, yet may be closed off, and which are conveniently

placed with reference to each other give satisfactory living conditions.

The up-to-date home here shown is economical in construction, well arranged and good looking. It is frame construc-



The roof is raised to give light above the windows.

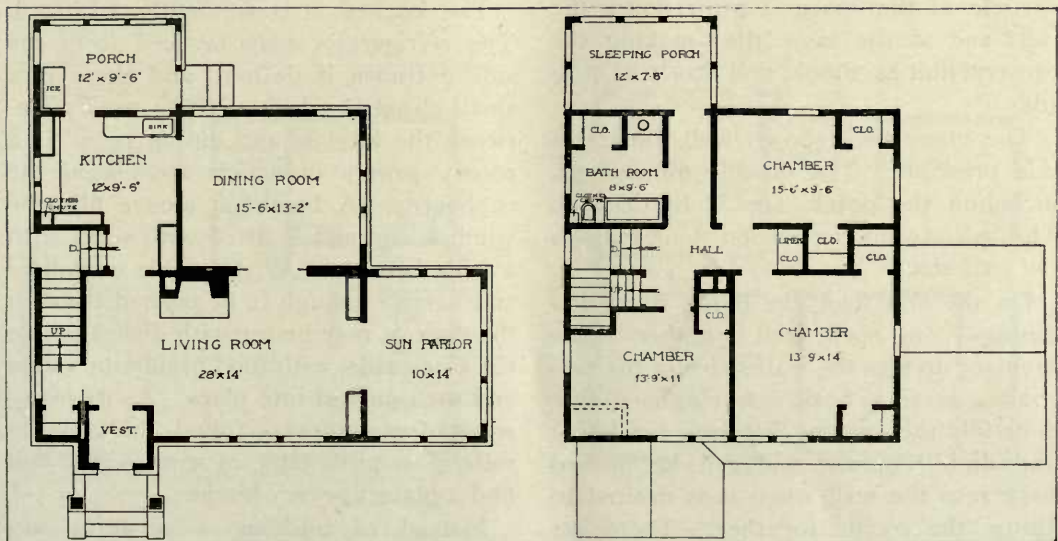
Chas. S. Sedgwick, Architect.

tion with a brick veneer to the sills of the windows of the first story and cement stucco above. All outside trimmings are stained brown and the sash painted white. The roof is shingled and also stained brown.

The entrance is through a vestibule at one end of the living room. Beside it is a closet for coats and wraps. A door

which slides into the wall when not in use closes off the stairs, so that in extreme weather the living room may be free from draughts. This door does away with one of the objections to the open stairway in one end of the living room. The rooms on the main floor are finished in hard wood.

A central chimney provides for the fire-



place in the living room and the kitchen flue. Sliding glazed French doors allow the dining room opening to be closed. The sun parlor connects with the living room by a wide opening, with book shelves on either side in the living room.

The kitchen is conveniently arranged. Space is arranged for the ice box on the rear porch. There is an entrance at the grade level, on the landing of the basement stairs.

On the second floor are three chambers and a sleeping porch over the rear entry. The bath room is rather larger than is

usual, and is provided with a closet. Over the main stairs are stairs to the attic space.

The roof is raised over the windows to give full height, while space under the lower part of the roof is utilized for closets, giving good hanging space.

The second story is finished in white enamel with birch floors.

There is a full basement under the house, equipped with heating plant and laundry, fuel and storage space.

Brick steps lead to the pleasing entrance, with timber work in the hood.

An Attractive and Economical Home



Figuring the cost of building a house the ground area which the house is to cover is the matter of first importance. Figure it any way you will, the space which is to be enclosed and roofed and finished may be computed at a unit cost and any increase in the space will add proportionally to the cost. The way to reduce the cost is to make the general dimensions smaller, with the house so planned that every particle of the space is utilized to the full; and at the same time making the construction as simple and direct as possible.

The home here shown well illustrates this principle. The outside dimensions, including the porch, are 32 by 26 feet. The balcony on the second floor reduces the roof size.

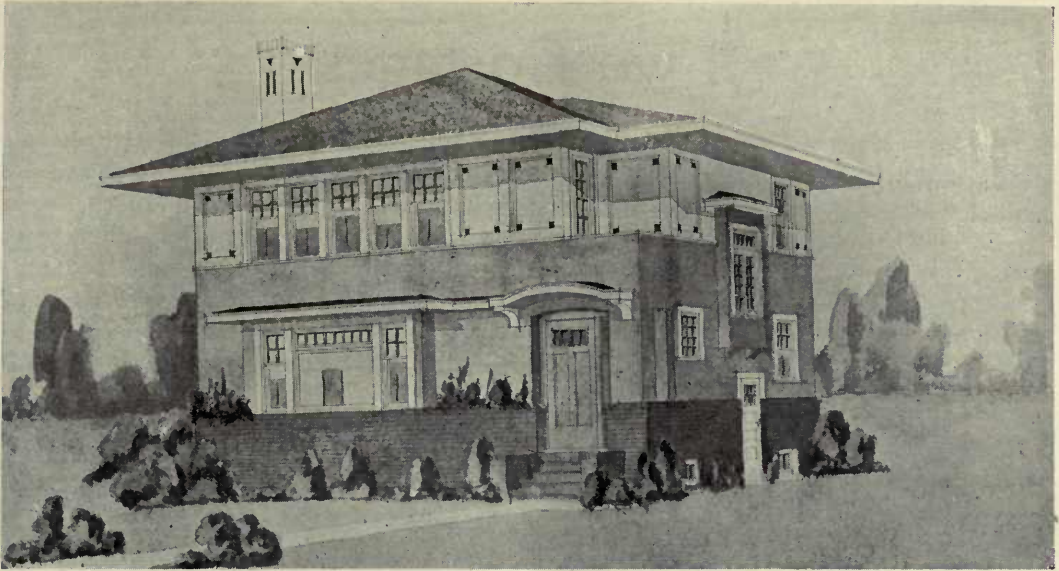
On the first floor the living room and dining room open well together. The fireplace divides the wall space of the two rooms, serving both. A single sliding door fills the opening between the living and dining rooms, and can be pushed back into the wall when it is desired to throw the rooms together. There are

bookcases under the windows on the living room side of the fireplace. The projecting bay at the front makes place for a wide seat.

A sliding door separates the hall from the living room in the same way. The main stairs are in the entrance hall, with the basement stairs under, in the standard and approved way, with an outside door on the landing at the grade level. The coat closet is in this rear hall.

The kitchen is conveniently arranged. The refrigerator may be iced from the side entrance if desired, and there is a small closet beside it. In the pantry, between the kitchen and dining room, is a roomy pantry in which are placed the cupboards. A breakfast alcove fills the window end and is fitted with seats with a table between. With a table on rollers and narrow enough to be pushed through the door, it may be set with dishes beside the cupboards, with food beside the range and then pushed into place. As its many ways of usefulness is found, the table on rollers,—a push table of some kind—will find a place in every kitchen.

Instead of building a separate sun



Built of brick and stucco.

W. W. Purdy, Architect.

porch or dining porch the dining room has windows filling two sides of the room and may be converted into a more or less open-air room.

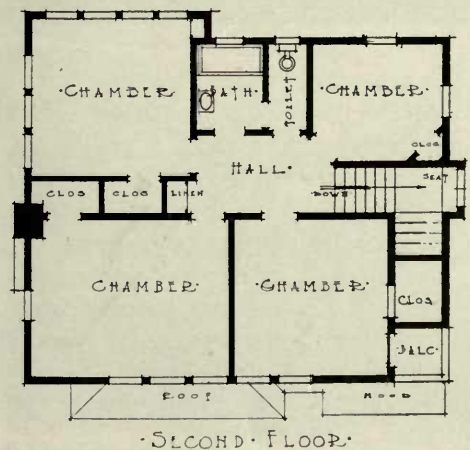
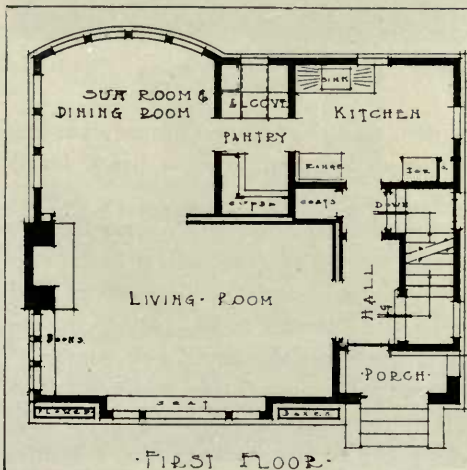
On the second floor are four bedrooms, and unusually good bath and toilet arrangements. The chamber at the head of the stairs is small, but all of the others are good sized and very pleasant rooms. Two walls of the chamber over the dining room are filled with windows, while all of the rooms have windows on two

sides which gives a good cross ventilation.

The second floor is finished in white enamel with mahogany doors; the bath and toilet are tiled.

The first floor is finished in oak in a silver gray. The kitchen and pantry are in white enamel with linoleum on the floors.

There is a full basement under the house. Brick work is carried to the sill course of the windows with stucco above. The second story windows and paneled corners make a frieze under the eaves.



Two Cottages

THE shingled cottage, with its stain of brown or gray or some woodsy tone links itself with the landscape, and makes a pleasing home. The white painted trim and finish is effective.

The first cottage shown makes a small compactly planned home. The main por-

The corner fireplace gives its heat and cheer to the dining room as well as to the living room. A wide opening is between the two rooms. The kitchen connects directly with the dining room.

An open porch connects with the dining room and makes an attractive feature of the exterior with its planting



A gray shingled cottage.

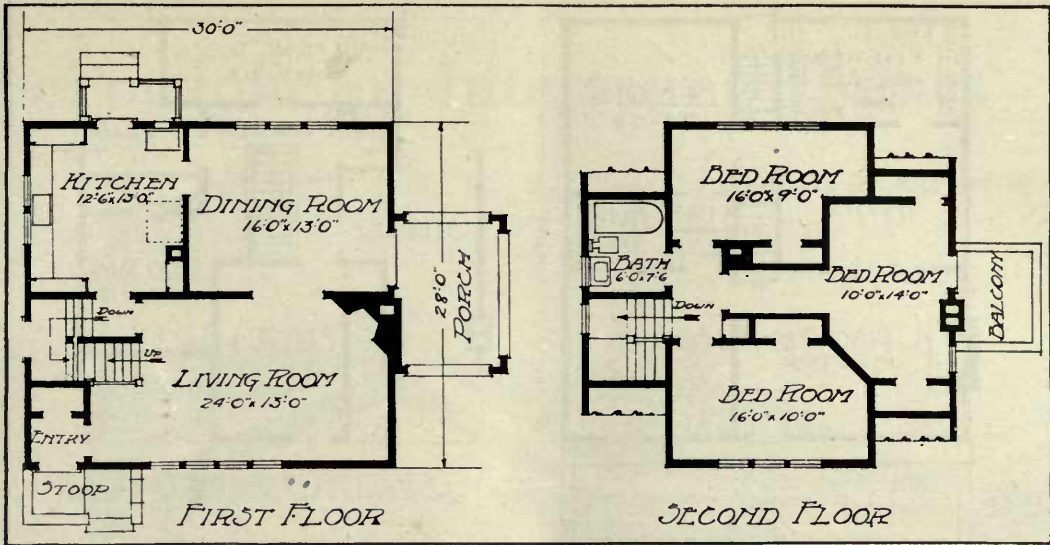
tion of the house is 28 by 30 feet, with the porch added at the end. A projection of the eaves over the group of windows at the front gives them protection, while the entrance is hooded over the stoop.

The entry is at one end of the living room, with a coat closet opening from it. Beside it are the stairs and beyond the basement stairs, connecting with the kitchen, and opening to the outside by the entrance on the landing.

and vines. The fireplace chimney carries the furnace flue and gives a brick faced wall on the porch.

On the second floor bed rooms fill the front and rear dormers, with a bed room in the one gable and the bath room and stairs in the other. A balcony over the porch opens from the small bed room.

The cottage is very attractive with that peculiar inviting quality which one always seeks to incorporate into a home.



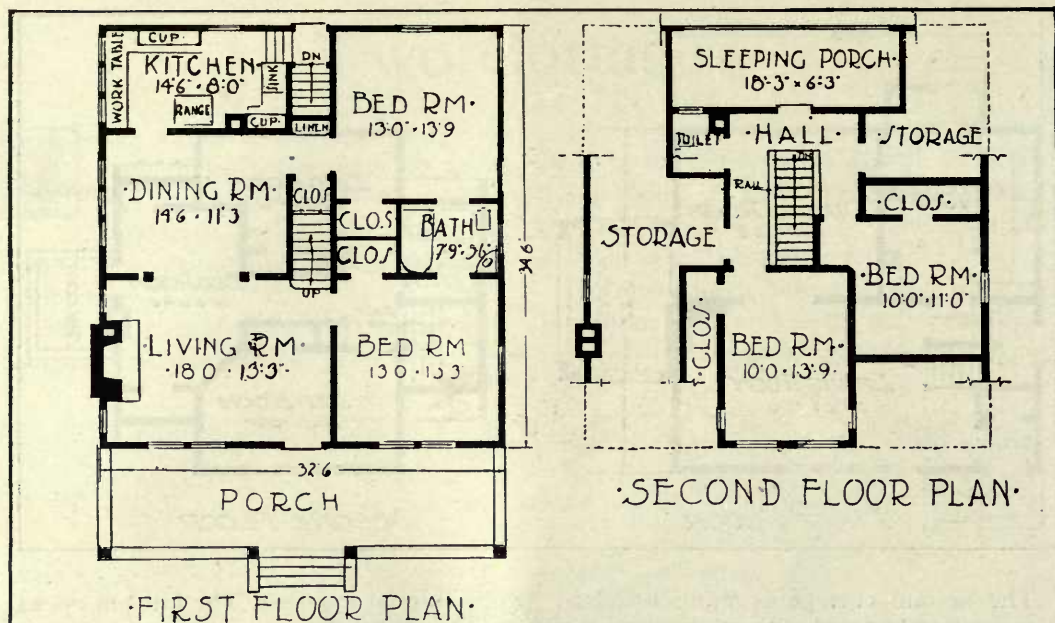
The second cottage is more usual in general lines and gives living accommodation for a larger family. There is a porch across the full front of the house and bed rooms are placed beside the living and dining rooms. The stairs open from the living room. A wide opening allows the dining room and living room

to be thrown together. The kitchen opens beyond the dining room. The kitchen is long and comparatively narrow, giving a large amount of wall space for the kitchen equipment with a small amount of floor space to be kept clean,—one advantage of the smaller kitchen.

There are stairs to the basement from



The white trimmed porch extends across the front of the house.



the kitchen with an outside entrance.

A tiny passage way from the dining room which connects it with the rear bedroom has a closet on one side and a linen cupboard on the other. The front bed room opens from the living room. Both bed rooms open into the bath room,—a very convenient arrangement, but with the disadvantage that the bath room

can be reached only through one of the bed rooms. With a toilet and basin on the second, as in this case, it makes a very livable arrangement with the family rooms on the main floor. Both bed rooms have good closets.

On the second floor are two small bed rooms and a long sleeping porch, with plenty of good closet and storage space.

A Thrift Suggestion

Andrew H. Hepburn, Architect



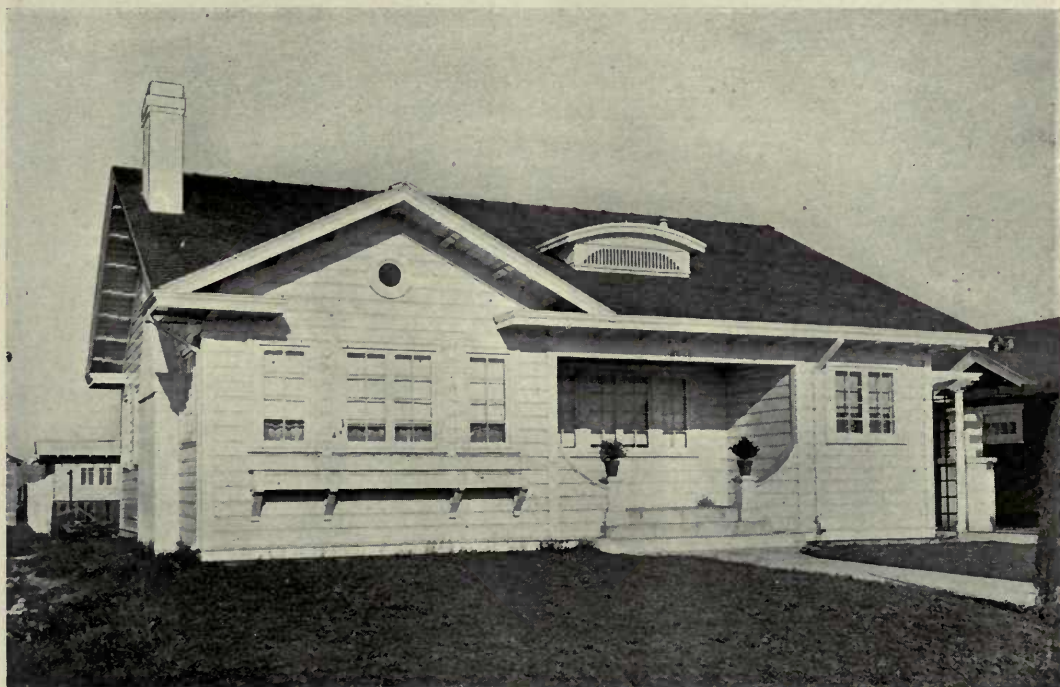
MOST of us realize that the cost of a house is in direct ratio to its size. In an inexpensive house, which will give a family what every family has a right to demand—convenient, comfortable and attractive surroundings at low rent—it is vitally necessary to eliminate all waste space. I contend that, for a low rent house, a separate dining room is not only unnecessary, but is an absolute disadvantage. I believe that this fact would be appreciated by tenants if the proper means of presenting alternatives were adopted.

First, we must consider the elephantine dining room "set" of furniture. Bought because of a custom established by those

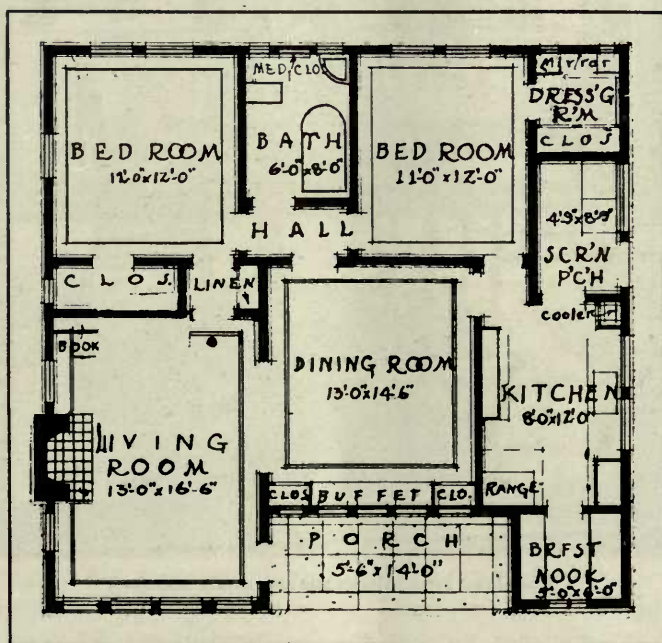
who sell such things, it has become necessary to build a room expressly to hold it, a room usually not large enough for the furniture and the family at the same time, but the room, nevertheless, is there and the furniture is there. That which causes an increase in size and therefore in cost of the house must, of course, increase the rent.

Would it not be better to supply inexpensive but attractive and suitable furniture for a room which could combine the purposes of both living and dining room; gate-leg tables, for example, which could be set aside when not in use, a sideboard like the old one in the kitchen in Mount Vernon; the possibilities are infinite.

Portfolio of Interesting Homes



Bungalow, with a plan of unusual interest





A breakfast porch suitably and attractively furnished.

INSIDE THE HOUSE

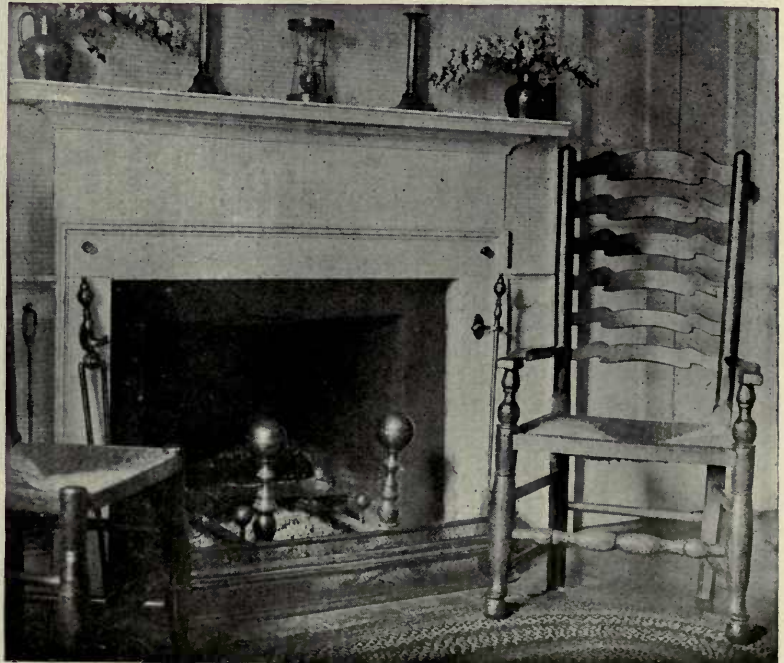
Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Porch Furnishings

THE porch of the country house is now considered as important a feature of the ground floor plan as the hall or living room. It is recognized by architects as a distinct problem and one quite as worthy of their talents as the interior. The porch of today is in reality an outdoor room where a large part of the family life is spent. It often serves as an informal breakfast-room, and as a convenient place for an impromptu luncheon.

The great advantage of the porch over the piazza is its seclusion. The piazza faced the street or driveway, so that privacy was impossible. The publicity of the piazza has been a theme for cartoonists at home and abroad. It has been associated with all that was ostentatious in American life, and with American high voices and bad manners. The porch is so situated that passers-by are unaware of



A New England high backed wooden chair.

its existence, and where callers may come and go and never catch a glimpse of it. The piazza is a purely American institution, the porch we have borrowed from our English cousins. It is a preparation for the English garden wall and several other things that will come in good time. It shows a growing reverence for privacy and for the home life.

There are porches and porches—those of country mansions and those of inex-

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pensive summer cottages, and those that range between the two. The floor may be covered with oriental rugs, the furniture may be of teakwood, and the jars that hold shrubs and flowers be of rare bronze and porcelain. The porch may contain all these and yet be simple. On the other hand, it may have the cheapest furniture—cast-off chairs from the rest of the house, discarded cushions and pillows, and be anything but simple.

It goes without saying that this outdoor room should not be cluttered; that it should contain nothing that does not have a reason for being there—nothing that cannot be put to use. Satin cushions, insecure chairs, tables with uncer-

tain legs, rugs that threaten to blow away with every breeze, are inexcusable. With the rise of the porch has come into existence a variety of furniture designed especially for it; chairs of rush, willow, raffia, bamboo, rattan, and rustic hickory—firm tables for magazines and books, especially designed cotton stuffs for cushions and pillows, and inexpensive washable rugs. Reed, willow, raffia, etc., are pleasing when supplemented with a few pieces of heavy furniture to give them tone.

In order to give stability to the furnishings it is well to have several wooden chairs. Nothing could be better than those early designs, the Windsors. Another excellent style is the colonial high-back chair with rush seat. These old types are now so well reproduced that one need not hunt up old ones for the porch. They have the merit of being inexpensive. Settees and settles have their place if the outdoor room is a large one. A long seat of reed may be found, finished at either end with a receptacle for canes and golf sticks. This is a picturesque and convenient addition to the porch. A high settle with an adjustable back may be made to serve several purposes. The back may be dropped, and a table provided for an informal luncheon. There should be a firm table for magazines and books, and whatever else in the way of furniture that is needed for the comfort of the people who use the porch as an outdoor sitting room—a smoking table, a writing table and possibly a sewing table. There are long hours in the morning when the cool shady porch is an ideal place for sewing.

Obviously, the porch is not the place for the department of the entire house-



One of the many Windsor types.

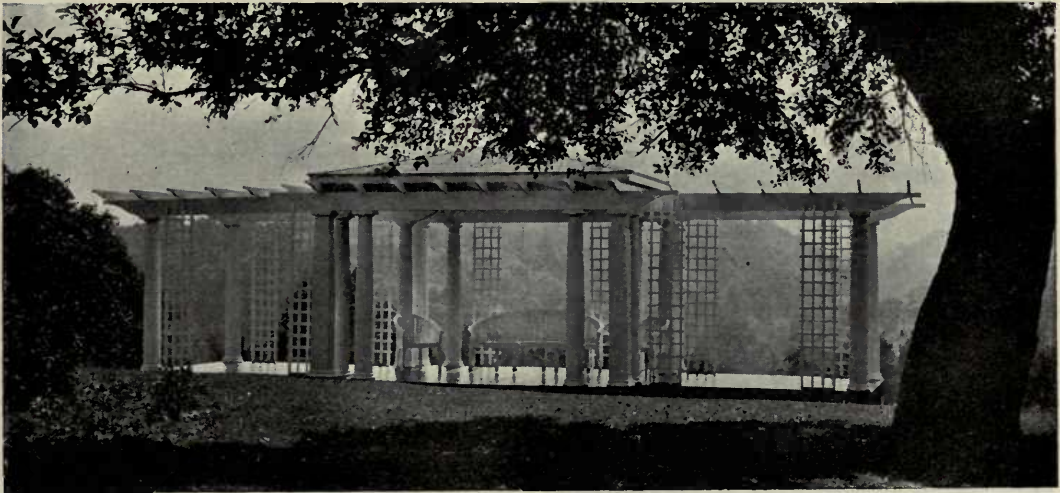
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hold furniture. To keep its character intact is no easy task for the mistress of the house, who may succeed admirably with the interior of her summer home, and yet fail lamentably with the porch.

The objection may be raised that the porch is often over-furnished and thus defeats its own ends. The answer may be made that there is no part of the home from the kitchen to the garden that

out of tune on the loggia of a big country house designed on formal lines.

There should be no furniture which would be injured by sun and moisture, and nothing which could not be moved without difficulty in case of high winds or sudden downpours. Slight showers or gentle breezes should not necessitate any removals, for there should be nothing easily blown or disarranged.



Pergola having the character of a detached porch.

is not sometimes overdone. This is the day of specialization, and in the multiplicity of things made for all parts of the house and its surroundings, it is not always easy to hold to simplicity and sanity. An over-furnished porch offends far more than a crowded living room. The very fact that so many things are designed for the porch leads to a confusion in the minds of many housekeepers as to what they should select. It would be folly to place classic marbles on the porch of a frame house—even if they could be afforded. Reproductions in staff would also be out of place. On the other hand, simple rustic furniture would be equally

The porch as devised by the modern architect and approved by his client is designed for privacy and usually away from the main entrance. This arrangement has many advantages, not the least of which is the added light given to the front of the house. The piazza roof when it extended across the entire frontage, often across two sides, robbed the main rooms of a great deal of light. The enclosed porch, planned at the side of the dwelling, occasionally at the rear, cuts off little sun and never interferes with the architectural beauty, which cannot be said of the piazza.

If the porch needs awnings, the domi-

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nant color of these may be taken as the basis for the general color scheme. Red, while attractive for many outdoor effects, is often over bright for the porch, particularly for awnings, which should look cool. The bright western sun shining through red is neither cool nor restful.



Effective porch cretonne.

There is a green stripe which is admirable for the porch, and there are other combinations more or less adapted to the purpose. After the awnings are selected, the rugs and porch cushions may be purchased. Usually the porch is given an exposure other than western, and in that case awnings are often superfluous. The morning sun, no matter how bright, does not have the glare of the afternoon sun, and few porches with an eastern expos-

ure have awnings. There are also porch curtains of many varieties.

Of porch rugs there are many kinds: fibre rugs and all kinds and styles of "rag." Now that rag rugs are woven heavier than at first, they lie flat and do not annoy by rolling or curling up, or by forming a menace to the lives of those who tread on them. Crex rugs are good and wear well and have a pleasant outdoor appearance. The Japanese weaves are always attractive, and the well-known but always popular blue and white varieties hold their own with newer styles.

When it comes to pillows, there is such an endless variety of stuffs that choice is made difficult by the abundance of the material at hand. Porch pillows should have an outdoor quality and not be too fine or dainty for hard wear. Silks should not be used—nor anything approaching satin or velvet. Cottons and linens and kindred fabrics are well suited to the purpose. Gingham, particularly in the Scotch plaids, make a pleasant change, and chintz and cretonne need a passing word. But the latter must be brave and strong in color and not at all dainty in pattern.

Yellow and orange are usually good porch colors, but sometimes neutral things look better, and when that is the case very bright effects should be avoided. There is a heavy cotton in a small check in two shades of stone gray, every other square carrying the Greek key pattern. This material was seen to great advantage on an enclosed porch, where it was used for flat cushions on a big settee. There was a good deal of orange in the rest of the furnishings.



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.



SCREEN is a porch necessity.

There are many days when the magazine reader or the letter writer finds his favorite seat a trifle breezy, when the living-room is not to be thought of, but when for real comfort, some slight protection from the wind is necessary. The porch screen has lagged, but it is now here, and it is well worth the waiting. It comes to us from Japan. It is light and firm—Japanese characteristics—and, it goes without saying, that it is good. It is not made for the American market, and is of a type highly valued by the Japanese. An importer of rare intelligence has realized that the simple, beautiful things made by the Japanese for their own use are more interesting to Americans than the articles made for this country. The screen in question is well adapted for the interior of the house. It may be used in several places, but it is on the porch that it "meets a long-felt want." It comes in several varieties. Type one is of plaited cedar stained green and headed with a bit of simple carving. Another style is of fine bamboo reeds in nat-

ural colors set in a frame of dull green cedar. At the top is a band of plaited work of the same tone. Another style is of heavier reeds, stained golden brown within a frame of green. All are charming, durable, and inexpensive.

Although flowers and shrubs may grow in profusion about the porch, it is desirable to have a few jars and pots of cut-flowers. Wild-flowers are the best. Garden flowers are a little out of tune, and hot-house flowers are not to be thought of for a moment. They are as out of place as satin pillows. Jars of coarse pottery and stoneware, pots of brass and copper make charming receptacles for flowers.



French design now reproduced in American cretonne.

INSIDE THE HOUSE

Stone crocks from the kitchen are not to be despised. If the porch is a large one, and furnished in a manner to warrant such decoration, small bay-trees are charming, placed here and there. Merri-mac garden pottery and Italian terra cot-



Unglazed chintz.

tas hold these "vegetable sentinels," as some one has called them, with admirable effect.

When it comes to cushions and pillows, there is a bewildering choice. There are, first of all, the Morris cottons, which ought to be as well known as the Morris papers; next, glazed chintzes, cretonnes, Java prints, India and Japanese cottons, Chinese linens, American prints, denims, homespuns, pina and khaki, canvas, and gingham. There are all sorts and conditions of stuffs, and they range in price

from twenty cents to two dollars a yard. The porch pillow should not be beruffled or bedecked. Elaborate embroidery is quite out of place here. Simple cross-stitching is permissible on coarse canvas. The pinetree pattern is as good as anything for out-door decoration. Plain linens, in strong colors, are always acceptable, and wear exceedingly well.

American dyes are well worth experimenting with in order to furnish the porch with inexpensive, serviceable materials. A ten cent packet of dye will go a long way and, if directions are carefully followed, results will be unexpectedly good. Green, yellow, orange, tan, brown, blue and other desirable out-door shades may be secured with little effort. Fabrics worn and faded may be given a new lease of life by means of the convenient dye pot.

If one is looking for sets of china, there are many designs in blue and white which always look inviting on the summer table. "Spode Tower," made by the Copelands, the medium-weight "Onion" patterns and the coarser varieties of "Indian Tree" are always pleasing. "Spode Tower," with the deep blue decoration and white border, is particularly effective.

A well-known decoration is the poppy—printed in orange-red and green on white. This pattern continues in popularity, although its freshness is past. A conventionalized four-petaled rose, better in design, but having much the character of the poppy, is a little newer. The flower is a deep old pink—quite removed in color from the pale prettiness of china roses in general. More in tune with the situation are the rather heavy cream white plates carrying a splashy pattern in blue and deep pink—blue leaves and pink flow-

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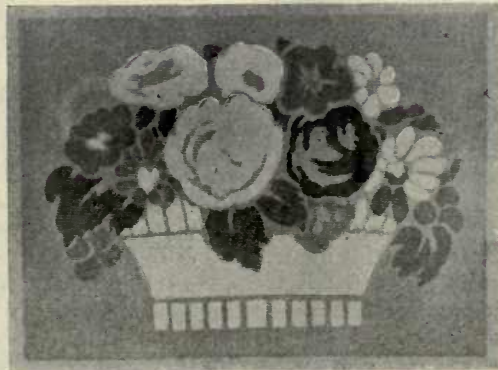
ers of an unknown botanical variety. They vary in price from five cents, according to sizes, to fifty. Just at present all wares are higher than before the war.

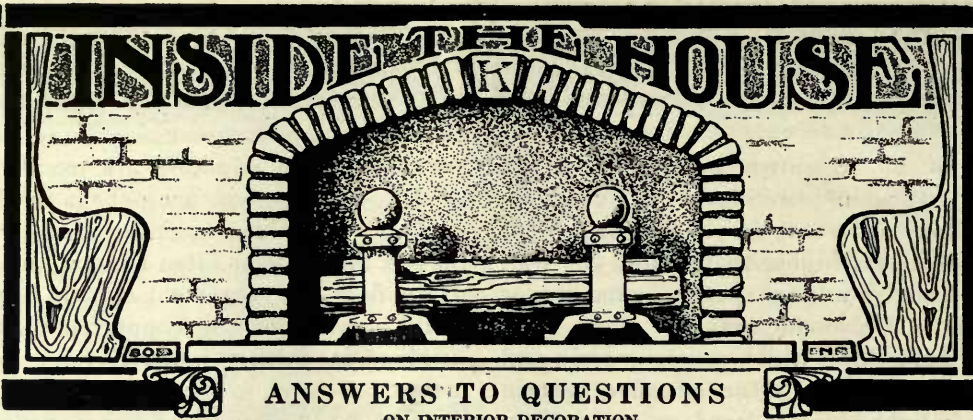
Attractive and inexpensive curtains for summer bedrooms may be made from casement cloth, which comes in plain and figured material. One effective pattern has a light coffee-colored ground with a four-inch border in dull green, old blue, and light brown; another shows an all-over decoration in blue meadow flags on a cream ground; a third consists of French flower baskets in pink, pale green, pale yellow, and lavender, also on cream color; while a fourth has a thickly massed border of yellow roses on a pale olive ground. Much ingenuity is shown in making up these curtains, the borders being used across the horizontal edge or sewed in lattice fashion over the entire curtain.

Casement cloth has long been popular in England. Most casement windows in the old country are curtained with a val-

ance. As such windows are usually in groups, one long valance only is needed, with side curtains sometimes coming to the sill, but quite as often hanging almost to the floor. A "casement flax" in oyster white is much seen in country houses in England, a thicker material than casement cloth—and, as its name indicates, of linen. Glazed chintz also enjoys a popularity there unknown here—one excellent reason being that there are many drapers who restore the gloss. It is laundered in a special way—a way which has not been imported along with English chintzes. Perhaps that is one reason why we like cretonnes over here so much better, or at least use them more.

While the shops are full of glazed chintz remnants, importations are slow and uncertain. The process of glazing is too laborious for the women who now replace men in the factories, and most of the English cottons which find their uncertain way to this country are without gloss.





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.

With Walnut Finish.

R. M. H.: What color of shades should be used in a dark red brick house, with black mortar between bricks?

What color scheme would you suggest for walls, draperies and lights for a dining room (north and east exposure) and a living room (east, south and west exposure)? These rooms have a ten-foot opening between them and are finished in American walnut.

Ans.—Use cream colored shades for your red brick house. The dining room with its north and east exposure, and walnut finish would be lovely with deep cream walls and orange curtains and the living room with tan walls, blue tapestry furniture covering with brown, orange and tan figures, while the curtains should be blue gauze silk. Thin net or soft marquissette hangs close to the glass with either scheme.

Japanese Prints.

S. O. H.: I am enclosing a rough sketch of the home we are building and would very much appreciate your valuable advice about decorating walls and what kind of brick to use for fireplace. Most of the furniture for living room is mahogany finish and dining room is mission old English finish. Floors and wood-work first-floor to be oak.

Ans.—A brick of tan color would be good for fireplace, and on the walls a tapestry paper with good colors—blue predominating—with plain curtains to harmonize with wall-paper colors.

In the dining room use a rich brown

Eltonbury fibre paper and hang Japanese prints with their decorative colors in the panels, each side of the window groups and each side of the door. Over the side-board hang a horizontal panelled print. The frames should be the dark oak color about an inch wide with mats about five inches wide top, and six inches wide at bottom and three and one-half inches at the sides, of silk the color you will use for your curtains, say orange color, for example.

These prints can be obtained for about four or five dollars and they are very decorative.

The Hanging of Pictures.

B. T.: I am a faithful reader of the Keith's Magazine; it would be hard to decide which department I enjoy the most. But I'm keenly interested in decorations and furnishings.

Some time ago I was visiting a friend who has a beautiful home with decorations which showed good taste and harmony. But I was not satisfied with the way the pictures were hung, and so I'm going to ask a few questions regarding hanging of pictures.

Is it necessary to hang all the pictures in a room in line? To me that is monotonous. Would you advise hanging a large picture in a small space when, by a little study, this could be avoided?

In the dining room there was no plate rail, but it was papered in the two tones. There was a 2½-inch dividing strip about 5 feet 6 inches from the floor, and every picture in the room broke that line.

INSIDE THE HOUSE

Would it not have been better to hang pictures higher and thus leave that dividing line unbroken?

I believe I rehung every picture in my friend's house, in my mind, and I've thought so much about it that I am asking you these questions.

Ans.—You are quite right about the hanging of the pictures. The large picture should have breathing space around it and not hang in a small space if avoidable. As to hanging a number in a noticeably straight line, it is advisable only when the pictures are being used for some frieze-like or panel effect.

When the artists hang an exhibition they spend a long time and serious study upon each wall, selecting pictures that harmonize to hang in juxtaposition. One is used as a central motive and then those which effect a balance in color, line and size are grouped at either side, making a complete composition.

As to the strip cutting into the pictures in the dining-room you are quite right. The walls of a room make a picture as a whole. Anything which spoils this picture is unfortunate. There are some walls which do not require pictures, and there are others which compete with the pictures placed upon them. When it is necessary to hang pictures too high to meet the eye properly it is often advisable to use some other form of decoration for the wall rather than to force pictures into unfortunate positions. However, it is difficult to convince the owner of a house of such details until she may be ready in her own aesthetic appreciation for the change.

A Colonial House.

F. G. L.: Would like your advice about decorating a house which I am remodeling. The house is strictly colonial, two-story frame house with slate roof, faces the west, front well shaded, front door and windows have colonial hoods. The veranda is at the side of house. How should the exterior be painted? Please suggest a color scheme.

Ans.—The house should be painted a cream white outside. The embossed

paper in the hall would better be painted a deep oyster-colored tan. Next the glass of the windows you should use a fine plain net and over-curtains to draw across the inside blinds at night of silk or brocade or chintz having the colors of the room summed up.—Olive green, brown, tan.

The hall should have gold sunfast curtains and you can have the burlap touched with gold showing the green through. Library walls would be good in a tapestry paper—woodwork tan, gauze silk curtains.

Dining room would be lovely with gold woodwork and rich blue-green walls. In sun parlor paint the wood and walls a soft gray and curtain the windows with plain changeable sun-fast.

Placing Furniture and Pictures.

F. S.: I want a new color scheme worked out in the living room, using what I have with new drapes and a few new pieces of furniture. I am fond of the golden browns, mulberry shades and rose, but do not want a brown room. Could these be combined harmoniously? I was thinking of the mulberry window drapes and divan, also the door hanging. Please work out a good color scheme with my lamp shades in mind. I have rose candles in brown mahogany candlesticks. Could I use these on the fireplace mantel? I also have two hammered copper vases and one bronze bowl. How shall I arrange these? Please place furniture and pictures for me.

Ans.—you cannot use mulberry color with your rose silk. We are sending you an unfadeable material in which the brown and rose are combined. This can be used as divan cover, chair cover, portieres, etc. We would use the gauze silks as curtains to go clear across the window, and they would be very pretty on the stained glass windows as they soften the colors and yet show them in a very attractive way, even if the glass is not good in itself.

I should dispose of the brown divan cover and use new material for the curtain at door going into gray hall. The

INSIDE THE HOUSE

hall side should have gray to harmonize with the paper there.

Brass tongs, etc., are best for fireplace. I should not use copper with the rose as it is an orange tone and very inharmonious with pink.

Put your copper in the dining room and add copper tea-kettle, chafing-dish, candlesticks, trays, to stands on the buffet, and a copper tea-set, tea-pot, sugar-bowl and pitcher to stand on the tea cart. The fumed oak and leather chairs do not seem to harmonize with the mahogany furniture, so why do you not dispose of these and complete your Adam set? I have made a rough sketch of furniture in living room on your sketch. Use your candlesticks either on the table or on the mantle, and the bronze bowl with flowers in it on the table. You will have to put the bookcases in the hall as there is no room as you say in the living room.

We make covers for the living room table just the size of the table top and of the material used for the upholstery, or of harmonious velour. In the dining room use deep cream or drab colored linen for table, buffet serving-table and tea cart covers, either stencilled or embroidered with a simple conventional design that is in keeping with the rest of the room. Or if you use chintz in here you can have the covers made of this with some fringe or braid as a finish.

The "Home-keeping hearts" should hang in your bed room over sewing table. "The Roman Forum" over the desk in living room. The Gleaners in the space over the arm chair between the window and

the door to the hall. If the Alladin, is the one by Maxfield Parrish, hang it over the bookcase in the hall where it will be the first thing people see on entering. Hang the Cathedral over the mantle. Put the Hanging of the Crane in the guest room over the table.

The Walls.

C. G. H.: We are building a new brick home and the question of plastering has come up. I am quite prejudiced against the white coated plastered walls as I think them glaring and ugly and I do not like to endure them until we are ready to decorate.

Our woodwork will be plain sawed oak finished in dull flemish weathered finish and with notes of color introduced in the furnishings. Kindly suggest a treatment for the walls.

Are drop ceilings now in vogue?

Ans.—Why not have your walls finished ready for papering and then put on a cheap tinted paper over all just for the color. There are papers which are very cheap and then your walls would be pleasant till the time when you want to put on expensive papers.

Are you sure you want the woodwork finished in so dark a color as the flemish? With new wood you could have gray finish and give yourself an opportunity for unusual and very distinguished furnishings.

The drop ceilings are used when the rooms are so high as to call for this treatment, otherwise the ceilings end where the walls stop, thus giving the greatest height possible.

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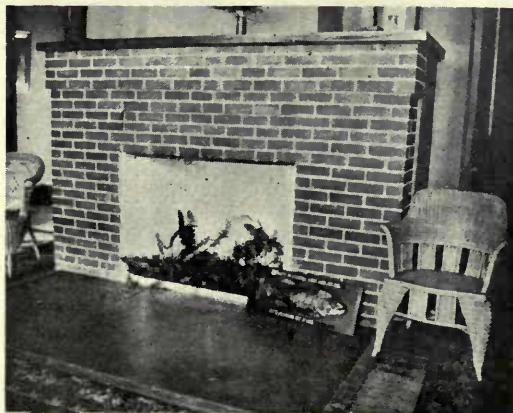
INSIDE THE HOUSE

HOUSEHOLD ECONOMICS

The Fireplace in Summer.

Felix J. Koch.

 T Rhylands, Kentucky, a number of Queen City folk, chafing at the confinement of the city, have organized a great Country Club. Each puts up his own cottage as he wills, and lives for the summer the rural life. The club house is rustic in type and is



A fern garden in the fireplace.

the center and rallying place. In the big fireplace of the club house some fern-loving member has devised a woods-garden which makes the fireplace a center during the hot season as well as on cool evenings when a blazing log fire gives comfort.

In the floor of the fireplace has been fitted a pan of galvanized iron, with strong handles. This is filled with earth, taken up with the fern roots from the nearby forests. These lovely wild ferns of the woods are put to grow in this

congenial place. The sitting-room is cool in summer and the cubby of the fireplace is just sufficiently dank and dark enough to let the ferns feel quite at home. Attendants, as they clean the room, water the ferns every day. Few adornments to a fireplace, when it is not in use, are so attractive as that of the pseudo-fern garden.

Should it grow chilly and a fire in the fireplace be needed, it is but the work of a minute to lift out the tray of ferns and flowers and put the fire irons in place, ready for the logs and the blazing fire.

Fire Loss.

Since we have become accustomed to talking in big figures perhaps the annual fire loss in this country may have more meaning to us. Taking first what might be called the "overhead expense"; the cost of maintaining fire departments in the United States, is estimated at \$100,000,000. Premiums paid to insurance companies, after the amount paid back in fire losses has been deducted is estimated at \$141,000,000. These show an annual expenditure of \$241,000,000 on fire prevention. In addition to this the annual toll paid to the fire demon in treasure and in life would go far toward carrying our part in this great war, tremendous as it is. Year after year this fire devastation has gone on with no strong and concerted effort to put an end to the unnecessary losses.

Personal Responsibility.

When you go home this evening go out and take a look around your own premises. See if there is a pile of dry grass clippings left against the garage, or papers around the garbage pail where

INSIDE THE HOUSE

the pipe of a workman or the cigaret of a boy might start a fire. Take a look in the basement, too. After looking over your own place make a little investigation about your place of business, and get the habit of looking around.

Untidiness and carelessness are given as the chief cause for the fires in the United States. Fire Prevention Day, on the anniversary of the great Chicago fire, keeps in mind the story that the Chicago conflagration started when the cow kicked over the lantern. Rubbish makes fires possible by feeding the flare of the match. When each man and woman takes a personal responsibility for his own abiding places the fire loss in this country will be reduced to the European figures, which as compared with our own are almost a negligible matter.

F. O. B. the Pantry Shelf.

Bearing in mind Nelson at Trafalgar, let us remember that America expects every gardener to do his duty, since every garden is a munition plant. Mankind longs for new worlds to conquer. None are so great, nor in a sense so new as the one under our feet. Every community that feeds itself relieves the government of food transportation. In so far as a household produces and prepares the food for its winter food supply it relieves the community.

It was estimated that last year the households of America created a winter supply of canned goods amounting to not less than 500 million jars. This year they should double this. "To Food Production F. O. B. the Kitchen Door must be added a Winter Food Supply F. O. B. the Pantry Shelf."

The Relative Advance in Prices.

In a talk on present prospective cost of building materials a member of the Ohio Builders' Supply Association gave some interesting figures. From 1914 to the present time there has been an increase of 133 per cent on coal; 350 per cent on steel products; 100 per cent on canned goods; 34 per cent on all labor; 100 per cent on woollens.

You now get for a dime, a loaf of bread you can put in your vest pocket. The

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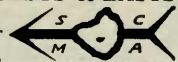
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INSIDE THE HOUSE

paper the merchant wraps his groceries in has advanced 82 per cent since 1914. Beans—always standing on the cheap lunch counter—now are way up amongst the luxuries and 75 per cent higher than you ever heard of them being before. The gasoline for your flivver costs you 70 per cent to 100 per cent more than it did when common brick was \$7.00 per thousand. A dollar at market attracts about as much attention as a boy scout would at an army mobilization camp. Still there is a panic because builders' supplies average an increase of about 30 per cent.

The Drudgery of the Household.

Is household drudgery passing? Will the time ever come when the "new woman" will "do her own work" and yet feel "free"? How far is it possible to eliminate the drudgery of household work?

Drudgery readily falls into two classes; the work which is really hard and wearying physically; and that which, through any number of causes is distasteful or disagreeable. Work that it is a pleasure to do in the cool of the morning when the housewife is rested and physically fit is sometimes unbearable when the kitchen has become hot and the worker is ready to drop with weariness. Planning the work fully will help when this has not already been done, but more must be done through elimination, and by labor-saving devices.

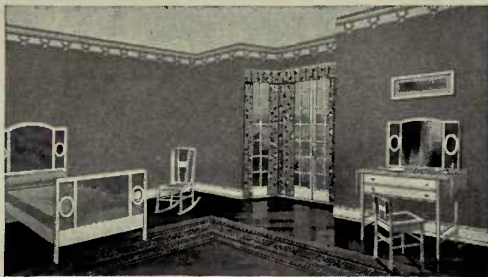
Much drudgery comes through the more or less general belief that drudgery is absolutely necessary, and the traditional fear of "what the neighbors will think" if usual things are omitted. The vacuum cleaner has taken the trouble out of the broom handle for many a tired woman, but a drawer full of smoothly ironed, glossy, starched muslin garments is something of a fetish to many a "good housekeeper" to which she is ready and willing to slave certain days in the week. Here is one woman's way of simplifying the family ironing, and the same principle may be applied in many directions:

My Easy Ironing.

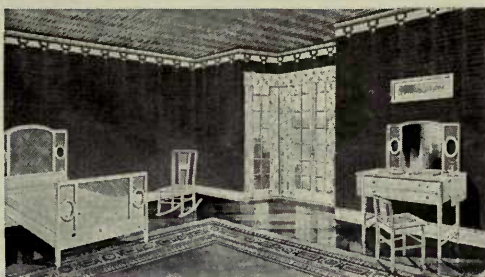
In the first place I do as little ironing as possible. All clothes have to be washed, but many of them do not need to be ironed. I say need, for most housewives think that every article must be pressed. I disagree with that attitude. Stockings and knit underwear if hung carefully on the line and folded smoothly when removed are ready to be worn without any use of hot irons. Dish towels can be folded when taken from the line and put away. The ordinary night-gowns and shirts, if dried smoothly, may be eliminated from the basket of clothes to iron. If your neat soul rebels at this, just consider the fact that these clothes are not worn for ornament and even if pressed carefully remain so only a few minutes after they are put on. Thus I eliminate all that I can from my list.

Next I make what ironing I have as easy as possible. I make all clothes that I can of material requiring little or no pressing, and I also use patterns that will simplify the labor of ironing. Ordinary white underwear made of crepe or seersucker is dainty and needs neither starching nor ironing. Wash petticoats for myself and play petticoats for the children, as well as rompers and my morning dresses, are all made of seersucker. All possible garments, such as long clothes for the baby, work aprons, and even waists and dresses, are made by the popular peasant or kimono patterns, which iron flat.

My third method of simplifying this work lies in the arrangement of the necessary paraphernalia. I place my folding ironing board at right angles to the stove, pull my clotheshorse to form the third side of the square, put my stool at the right spot between the three, and with the basket of clothes on a chair within reach I do in a very short time and with little expenditure of labor what is to many women a time-consuming, back-breaking task.—Gertrude Houghton.



The room when new



Showing ordinary lath stains a few months later

Streaked walls can be prevented if the plaster is applied over metal lath

Discoloration of plastered walls makes frequent decoration necessary.

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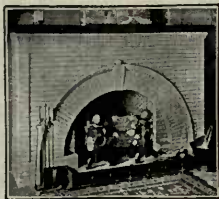
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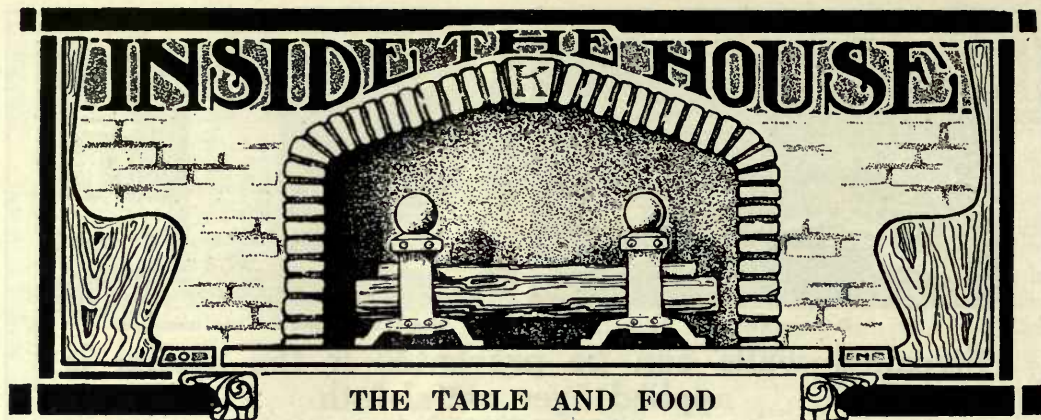
sides of the building—sidewalks—lawns, etc., from coal smudge and damage, and adds to the appearance of your property.

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Majestic Coal Chutes are sold by building supply and hardware dealers. If your dealer cannot supply you—write to us for catalog and prices.

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Until the Next Wheat Harvest

MANY patriotic people are pledging themselves, and many others without making a pledge are arranging their diet to eat no wheat until the coming of the next wheat harvest. This means a complete revolution in all things culinary. The Food Administration and the household economics departments of the schools and colleges have given "first aid" to the housewife, but it is necessary for her to take the initiative in the matter and through her own experience work out menus satisfactory to the individual tastes of her own household. Many are hobbling along on substitutes since bread—the staff of life—is needed as a bludgeon to cudgel the enemies of Democracy.

If we are to feed the Allies wheat must be saved from our own rations. We have our war gardens—green vegetables, galore. We have cereals in plenty—rice, oats, barley, and corn. We have fruits, delicious and fresh—what is more appetizing for a summer diet. We have poultry and eggs and milk; even cheeses are coming to be known and used in this country. The habit of bread-eating is strong, but surely a patriotic people will not allow a habit to hamper our boys, fighting in France. Eat all you need of the right kind of food and then stop. Eat the perishables, save the non-perishables. Eliminate waste in food preparation. Eat home grown products.

During the summer months it is easily possible to plan the menus so that at least

one or two meals a day may contain no wheat at all.

Baking Powder Loaf Breads.

Quick breads, such as muffins and corn-breads may be baked in a loaf, and served in slices, either plain or toasted. One housekeeper, in making muffins for dinner stirs up twice the required amount. After the muffin pans are filled she puts the remainder into a bread pan and bakes it with the muffins. The loaf is sliced and toasted for breakfast and served plain for luncheon.

Corn Bread.

Corn isn't one food. It's a dozen. It's a cereal. It's a vegetable. It's a bread. It's a dessert. It's nutritious; more food value in it, dollar for dollar, than meat or eggs or most vegetables. Best of all, it's plentiful and it's patriotic.

- 2 cups corn meal
- 2 cups sweet milk (whole or skim)
- 4 teaspoons baking powder
- 1 tablespoon sugar
- 2 tablespoons fat
- 1 teaspoon salt
- 1 egg (may be omitted)

Mix dry ingredients. Add milk, well-beaten egg, and melted fat. Beat well. Bake in shallow pan for about 30 minutes.

Baking Powder Loaf Breads—Using No Wheat.

When quick breads are to be baked in a loaf instead of as muffins more baking powder is required and it is better to add more fat and more syrup, as may be seen

INSIDE THE HOUSE

from the following, which are tested rules from the experimental kitchen of the Food Administration. These breads may be made from a variety of flours in combination without materially changing the rest of the rule.

- 1 cup liquid
- 2 to 4 tablespoons fat
- 4 tablespoons syrup
- 2 eggs
- 6 teaspoons baking powder
- 1 teaspoon salt
- 1¼ cups (5 ozs.) corn flour
- 1½ cups (5 ozs.) ground rolled oats
or
- 1⅞ cups (5 ozs.) rice flour
- 1⅞ cups (5 ozs.) barley flour
or
- 1⅞ cups (5 ozs.) barley flour
- 1½ cups (5 ozs.) ground rolled oats
or
- 1¼ cups (5 ozs.) corn flour
- 1 cup (5 ozs.) buckwheat

Method of Mixing: Mix the melted fat, liquid, syrup, and egg. Combine the liquid and well mixed dry ingredients. Bake as a loaf in a moderately hot oven (205° C. or 400° F.) for one hour or until thoroughly baked.

Nuts, raisins, or dates may be added, making the breads more nutritious and very palatable.

Corn Flour Sponge Cake.

- 1 cup corn flour
- 1 cup sugar
- 4 eggs
- 2 tablespoons lemon
- ⅓ teaspoon salt

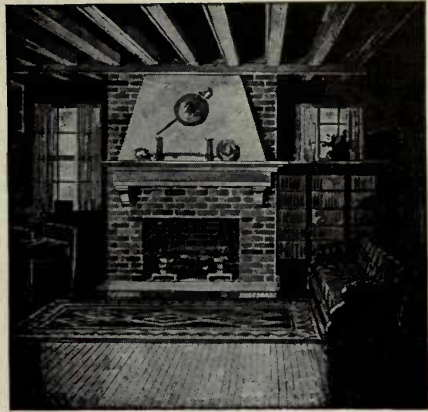
Separate whites and yolks. Beat the yolks until thick and light lemon color. Beat sugar into the stiffened yolks, and add the lemon juice. Fold in alternately the stiffly beaten whites and flour. Bake in an ungreased pan for 35 to 40 minutes. Start in a moderate oven, and when about half done raise the temperature to that of a hot oven.

Savory Rice is a good food and takes the place of bread.

- 1 cup rice with boiling water to cover well
- 1 teaspoon salt
- 1 piece green or red pepper
- 2 cups tomatoes
- 1 small onion

INTERIORS BEAUTIFUL

200 VIEWS



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

742 Metropolitan Bank Bldg., Minneapolis, Minn.



Milk and Cheese.

We are beginning to realize that cheese is a real food, which has not been given the important place which it deserves in the menus of American homes. This is equally true of cottage cheese which is essentially an American food, and is so easily made that any housewife can make it if skimmed milk is available. It may be used in any part of the meal; in soup, sauce, meatlike dishes, salad or dessert. More muscle building material is available in a pound of cottage cheese than in the same amount of either meat or eggs. Cottage cheese dishes are given in Circular 109, issued by the Department of Agriculture, at Washington, D. C.

Hashed Brown Potatoes with Cottage Cheese.

Chop cold boiled potatoes fine and season them well with salt, pepper, and onion juice. Mix with them enough milk to help them brown when turned upon a hot frying pan lightly greased with savory fat, and cook the potatoes slowly without stirring till they are browned next the pan.

Meanwhile soften a generous amount of cottage cheese with cream or milk till it will spread easily. Mix with it any desired seasoning such as chopped parsley or pimentos, a little leftover ham or bacon, chili sauce or piccalilli, and spread it over the potatoes. Let the mixture stand long enough to warm up the cheese and soften it; then fold over the potatoes, like an omelet, turn it upon a hot platter, and serve at once.

Many persons enjoy the slight acid flavor of the cheese with this dish. If desired, however, the acid of the cheese may be neutralized by adding $\frac{1}{4}$ teaspoon or more of soda for each cup of cheese.

Suggested Supper Menu: A little cold meat thinly sliced; hashed brown potatoes with cottage cheese; salad; tea or coffee; warmed-up corn muffins; apple or berry pie.

The Lunch Basket.

The very sight of a lunch basket makes one hungry; the long trip into the coun-

try makes one hungry; the unwonted exercise, and relaxation which is perhaps equally unusual, makes one hungry. It is no wonder that the hamper must be filled to over-flowing, with substantial foods; fried chicken, baked beans, potato salad, sandwiches without number, cake, cookies and fruit, and over the top a layer of "goodies," and still the inner man is hardly satisfied.

Every one has her own special picnic dishes, and the variety in sandwiches is without number, but I am going to tell you of a sandwich which is both meat and cake. Use any kind of bread though brown is preferred. The filling is made of dates and figs cooked together into a soft paste. There are no fixed proportions, it can not fail to be good. Add raisins, dried currants, any kind of nuts that are convenient, or orange peeling. Spread one side of the bread with fluffy fresh butter and the other side with this soft paste. Dates or figs, taken together with nuts makes a perfect food, we are told by food experts, and will take the place of bread.

SANDWICH FILLINGS.

Peanut Butter.

Soften peanut butter with a little salad dressing or milk and add chopped olives.

Date and Nut.

$\frac{1}{2}$ cup dates

$\frac{1}{4}$ cup walnut meats, hickory nuts or other nuts locally grown.

Put dates and nuts through a food chopper. Moisten with salad dressing or milk. Raisins or figs may be substituted for the dates.

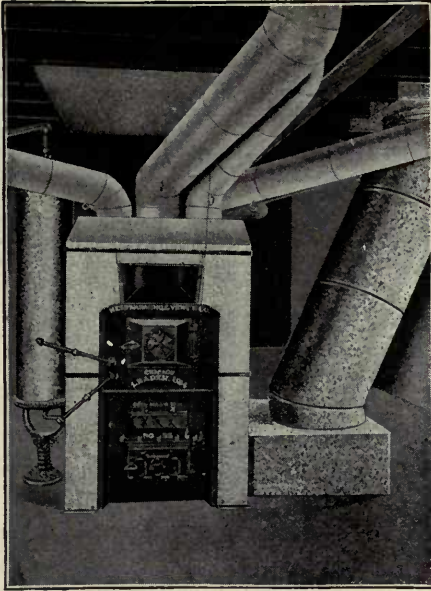
Honey and Nut

Mix honey with finely chopped pecans, hickory nuts, black walnuts, or other nuts locally grown.

Honey, nuts and cream cheese also make a good filling.

Marmalade and Nut.

Mix $\frac{1}{4}$ cup of orange marmalade with 2 tablespoons of chopped nuts. Jelly or other kinds of marmalade may be substituted for the orange.



A HESS Welded Steel Pipe Furnace showing hot air pipes, air supply and tank heater. We make pipeless Furnaces also.

Next Winter's Fuel

You are up against a fuel problem. The Fuel Administration requires that you use one-third less of hard coal than usual; that you omit entirely the use of smokeless or eastern soft coal; that you use western soft coal from the nearest source; that most of the coke produced shall be taken for Government purposes.

This means that you must take such fuel as your dealer can supply you, whether it is adapted to your heater or not.

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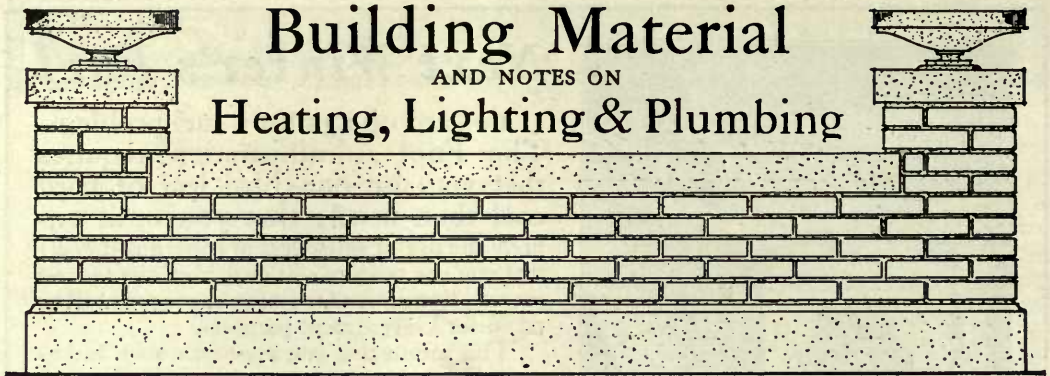
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How to Keep Cool



A YOUNG woman just arrived from India created a sensation on a hot day in a New York hotel by asking the bell boy to put a "thermantidote" in her window. She expressed her surprise that New York, the city which stands for American progressiveness, should not make itself comfortable in the summer time. The thermantidote, she explained, is an apparatus for cooling the air which is fitted in the windows. "In India we have the trough set in the window and filled with water; a simple wheel revolves in the water with bunches of sweet grass attached to every spoke. As the air passes through the dripping grass, the whole house is filled with cool fragrant air. It would be so easy to fit them in the windows here where you have only to attach an electric cord to make them go. We darken the house from ten to four and we have thermantidotes in the windows and frames of wet grass in the doors. The door frames will cool a room while the window apparatus will cool an entire house. I cannot imagine why New York does not make itself comfortable in hot weather as we do in India."

A Practicable Way.

India prepares for the hot season as America does for the cold season. Nevertheless there are many simple ways in which the air of the house or the office may be tempered on a hot day. The use of the electric fan in the down town office has been taken as a matter of course,

and sometimes one is placed in the living room or the sleeping room of the house. A fan in the kitchen gives an even greater percentage of comfort. Scientists tell us that it is motionless air, stagnant air that gives discomfort, rather than its temperature. That the same air in motion allows one to work in comparative comfort. There seems to be a relation, if not a cohesion between the particles of air and the surface of the skin which becomes unbearable.

With electricity in practically every building the electric fan certainly adds to the comfort of living during the hot season, by keeping the air in motion, and it is quite possible to lower the temperature by blowing the air through a wet screen or over a basket or bag of cracked ice. It would be necessary to keep the screen saturated. A frame fitted to the window openings in the sleeping room, and covered with cheese cloth, if saturated with water when the heat begins to become oppressive in the morning or on retiring at night would materially lower the temperature of the room if any air is stirring. Such a screen, put in place while the morning is yet cool and left there during the heat of the day, would require all heat entering the room from the outside to do its day's work by evaporating the moisture in the saturated screen before it could enter the room. In the late afternoon when it is removed the room would have no opportunity to be saturated with "the heat of the day."

It would be very easy to place a wire basket containing a bag of cracked ice where an electric fan would blow the air over it. A drain arranged so as to siphon the water from the melted ice back over the bag containing it would keep the top of the bag wet and evaporate most of the waste.

A device which has been put into successful operation, according to Professor J. R. McColl, heating and ventilating engineer, is the turning of refrigerating brine, such as is used in artificial ice plants, directly into the pipes and coils of a steam heating system. In this case arrangements have to be made underneath the coils to care for the drip that falls from the thawing frost.

Householders have become accustomed to a considerable financial outlay to keep the house comfortable in the winter time, but they are not looking for summer comfort, even at a much smaller outlay.

Much is being done in the way of electrically driven refrigeration units for residences, and these can doubtless be either modified or extended to produce home comfort in the hot weather whenever the householder feels that it is of sufficient importance to justify the cost. As with so many other things this will doubtless begin as a factor of business efficiency and later be extended to home comfort.

A big business office in Detroit installed a cooling system which reduced the temperature by forcing the air over ice, and which maintained a temperature of 73 degrees through the hottest days, with the humidity not above 66 degrees. It is roughly estimated that perhaps from \$15 to \$20 worth of ice was used daily in cooling the offices where 200 people were employed, but so greatly was the efficiency of the entire force increased that the management considered it a highly paying investment.

It is up to the ingenious housewife to work out for herself that which will add to her convenience and comfort. Let her help solve the problem of keeping her home, and her kitchen, so comfortable that the highest efficiency will be maintained.

Brick Waste and Roofing.

Among the proposals for building construction recently asked for by the Navy Department was one for a cottage and



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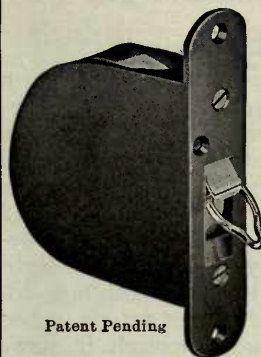
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garage of frame construction which holds more than passing interest because of specifications in regard to the roof. The specifications call for "pitch and crushed brick roofing." Composition roofing has been making great progress the past few years and an important item in much of this class of roofing is the face finish which is made up generally of pitch or asphalt and crushed stone or sand. Here is an instance where crushed brick was asked for, presumably to get a more desirable color. It may be assumed that any well burned clay, whether it be in the form of brick, pottery, sewer pipe or drain tile, when crushed will make a good roofing material for use in this way.—Clay Worker.

Careful Work Necessary in Stuccoing Old Walls.

In applying stucco to old brick walls, the most important point is that the old surface must be thoroughly cleaned; if coated with paint this must be scraped or burned off, and if uncoated, the surface must be washed with a solution of muriatic acid, mixed in the proportion of one part commercial muriatic acid to five parts of water. The wall should be scrubbed with this solution, then thoroughly cleansed with clean water.

The joints between the brick work should be picked back from the face of the bricks to a depth of one-half inch to three-quarter inch, so as to form a key for the plaster. Immediately before applying the plaster, the surface of the walls should be thoroughly soaked with water, for, on account of the porous nature of the brick, water would be absorbed from the plaster, thus injuring its strength, unless the brick were thoroughly saturated beforehand. After this the work does not differ materially from ordinary stucco construction.

Glass as Decoration.

Working in glass was practically a dead, if not a lost art, when in the seventies of the last century, John La Farge undertook a window for Memorial Hall at Harvard. The first window which was made did not satisfy him and he would not allow it to be put in place, but destroyed it. Casually studying the light which he caught filtered through a bit of glass in an ordinary toilet article, when the light was sending through it some

transforming rays, he divined the possibilities of opalescent glass, which he has since succeeded in developing to a wonderful degree.

Those who know the romance of the development of glass since that time, in this country even more than in Europe, the government recognition given to La Farge for his work with glass, the Tiffany work, know how it all has effected even the simple windows which the home builder can afford to put in his new home, as well as the glass mosaic used for mantels and wonderful bits of decoration.

Lighting Fixtures.

The attention now given to the lighting of houses has resulted in a multiplicity of designs for lamps. Some are good; some show that no other phase of arts and crafts work has been carried to such extremes. The absurdities found in lamps are unequaled by any other articles in pottery and metal. Every fantastic scheme, from seashells to bunches of grapes, has been utilized in providing illumination. There is scarcely anything in the animal or vegetable kingdom which has not offered material.

A Good Stucco Wall.

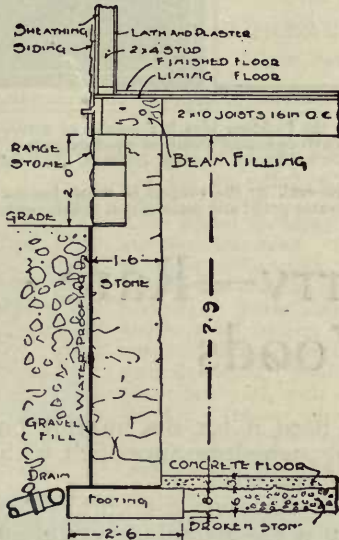
The secret of producing a good wall when stucco is applied over lath, either metal or wood lath, lies in giving sufficient space for the stucco to be pushed through or between to the back of the lath, keying it well into place and protecting both the lath and the stucco. If nailed directly against sheathing the lath deteriorates in time, giving all sorts of trouble. The lath should be furred out five-sixteenths to three-eighths inch, either with wooden furring or by stapling it over round rods. The stucco is then put on with some pressure and spreads out on the back of the lath.

All wooden stud walls should be carefully fire stopped at each floor to prevent draughts through them. In case of fire an unstopped wall acts like a flue with a strong draught feeding the fire. In this way a fire in the basement will go straight to the roof through this "flue."

If interior walls are wainscoted, the plaster should be carried down to the rough floor and the wainscoting put on over the plaster, like other finish.

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(Fig. 6)
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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.

Walnut and Cherry—Rare American Woods



IT IS unfortunate that the vogue of black walnut furniture came at so unpropitious a period in the matter of the popularly accepted ideas in design. At the same time it is possible that the dark color of walnut and the fine satiny finish which the wood takes, inviting handsome, rather formal and imposing effects, may in itself, have had its reaction on the design in which it was used. There is nothing light or trivial about black walnut. With the dark finish in favor at the time, it was somber and almost depressing in its effect.

At any rate the furniture which some of us can remember in the stately old houses in which we visited as children, still holds us in awe and almost dread.

Now that walnut is coming in vogue again and an occasional imposing big bed or dresser brought down from the attic may attain the semblance of modern things if the imposing superstructure of the head piece be taken off, allowing it to stand under our lower ceilings; but there is something uncanny about the way that the piece of furniture itself seems to resent such decapitation.

Half a century ago the pioneer farmer who built his homestead in a partially wooded country, cut black walnut from his own "wood-lot," let it dry in the open

air and used it for the interior finish of his home; which he furnished with black walnut furniture.

Black walnut is not only a beautiful wood but it has a combination of qualities which is found in no other wood. It is light and strong; it does not splinter or crack,—even when struck by bullets; it does not shrink after it has once been properly seasoned; and it has a high degree of resistance to the shock of explosion, making it especially good for war uses.

With older methods it had required something like three years to properly season black walnut lumber by exposure to air and sunlight. Attempts at kiln drying had resulted in a large percentage of waste. When the war broke in Europe the well known and available supplies of black walnut were exhausted, almost overnight. The United States Forest Service went to work on the problem at once. In its forest products laboratory a method was devised by which black walnut is successfully seasoned in kilns in from two to three months with very little waste. This new method made immediately available supplies of green wood, and a country-wide canvass for black walnut trees is being conducted.

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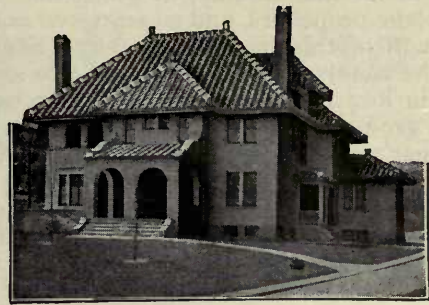
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use in the manufacture of gunstocks and airplane propellers, and so scattered is the growth of this tree that the Boy Scouts of the country have been called into service in locating, for government purchase, the groups of black walnut trees in the farmer's wood-lots, where much of it is to be found.

Black walnut and the butternut or white walnut grow in the United States, while English or Royal walnut is the principal species in Europe.

Circassian Walnut.

Circassian walnut is the same, botanically, as the English, Royal and European walnut. English walnuts are an important commercial product, and when the trees are grown for the nuts we know it as the English walnut tree, while Circassian walnut is the name usually applied to the wood when it is made into lumber.

The English walnut was introduced from Asia into Greece and Italy, and through these countries, into others. It is cultivated in the United States, but principally for its nuts. The appearance and desirability of the wood differ with localities. Pieces cut from English trees are said to be paler and coarser than those cut from Italian and French trees. Ordinary pieces exhibit large open figures, with waves and streaks of gray and yellowish white, while exceptional excrescences known as burrs, which are sometimes two or three feet across, yield figured woods of great beauty. Circassian walnut is very valuable, and is now used almost exclusively in costly decorations, piano cases and high-grade furniture. No other wood is better for gunstocks, and until the battle of Waterloo the demand in Europe for this purpose was so great that as much as six hundred pounds sterling is said to have been paid for a single tree.

Finishing Walnut.

Black walnut is valued for its rich color, fine figure and susceptibility to high polish. In finishing walnut as with any fine wood, care must be taken that the naturally fine color of the wood be not lost or deadened in the finishing. The skilled woodworker knows his wood, and treats each to bring out its own peculiar merits. When wood is in veneer it must receive special treatment on this account.

Some of the most prized effects in walnut are produced by the manufacture of veneers from the burls and apparent deformities of the tree. Fine woods of this character are sometimes so valuable as to be sold by the pound instead of by the ordinary measurement.

The householder sometimes expresses the wish, when the new home is nearing completion, that the finishing wood might remain in its natural state, since the finishing so often seems to give it a different character, losing some of its individuality.

"I wish I could keep it just as it is," said one lady as she came into the living room of her partially finished home just after the black walnut finish had been put in place, "I should like to feel that it is real wood, and not just 'finish.'" In accordance with her wish thus expressed, the architect changed his specifications and directed that the walnut be finished in such a way as to protect the wood, only, and so that the color and appearance of the wood be changed as little as possible. A coat of white shellac was applied, no filler was used and no stain, it was given a dull finish—no gloss—and the treatment gave a beautiful result. As the owner had wished it looked like the wood in its natural state.

Cherry.

Many fine pieces of old furniture were made of cherry, which gives much the effect of mahogany and is almost as beautiful. In fact, cherry took the place in the home market that mahogany did among imported pieces. Cherry is one of the most decorative and popular woods of the American forests. It is strong, hard, and its marked red color grows darker and more beautiful as the wood ages. It is close grained, does not require filling, and is capable of taking a high finish.

The wild black cherry tree supplies the cherry wood of commerce. It is somewhat lighter in weight and a little softer than beech and birch, it is nevertheless a dense, strong hardwood of excellent wearing qualities, with a color and figure which makes it highly prized in the manufacture of exceptionally fine furniture and interior finish. The supply is not large and nearly all cherry is used for high grade work. It is one of the most beautiful of the American woods.



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In Flanders' Fields.

In Flanders' fields the poppies blow
Between the crosses, row on row,
That mark our place, and in the sky
The larks still bravely singing fly,
Scarce heard amidst the guns below.
We are the dead. Short days ago
We lived, felt dawn, saw sunset glow,
Loved and were loved, and now we lie
In Flanders' fields.

Take up our quarrel with the foe.
To you from falling hands we throw
The Torch—be yours to hold it high;
If ye break faith with us who die,
We shall not sleep, though poppies grow
In Flanders' fields.

Capt. John McRae.

The Rendezvous With Death.

I have a rendezvous with death
At some disputed barricade,
When spring comes back with rustling shade
And apple blossoms fill the air—
I have a rendezvous with death
When spring brings back blue days and fair.
Alan Seeger.

* * *

Blow out, you bugles, over the rich dead.
There's none of these so lonely or poor or old,
But, dying, has made us richer gifts than gold.
These laid the world away; poured out the red
Sweet wine of youth; gave up the years to be
Of work and joy and that unhopéd serene
That men call age; and those who would have
been,
Their sons, they gave their immortality.

Rupert Brooke.

Carry On.

It's easy to fight when everything's right,
And you're mad with the thrill and the glory;
It's easy to cheer when victory's near,
And wallow in fields that are gory,
It's a different song when everything's wrong,
When you're feeling infernally mortal;
When it's ten against one, and hope there is none,

Buck up, little soldier, and chortle:

Carry on! Carry on!

Things never were looming so black.
But show that you haven't a cowardly streak,
And though you're unlucky you never are weak.

Carry on! Carry on!

Brace up for another attack.

It's looking like hell, but—you never can tell:

Carry on, old man! Carry on!

* * *

Carry on! Carry on!

Fight the good fight and true;
Believe in your mission, greet life with a cheer;
There's big work to do, and that's why you are
here.

Carry on! Carry on!

Let the world be the better for you;

And at last when you die, let this be your cry:

Carry on, my soul! Carry on!

Robert W. Service.

Souvenez-Vous?

O love, do you remember
As you tread the fields of France
Where the orchard met the meadow
In a cloud of brave advance,
Where the sunlight kissed the shadow
As it gaily, gaily danced?
Oh love, do you remember
As you tread the fields of France?

O love, do you remember
The plum trees white as snow,
The apple blossoms falling,
The thrushes calling, calling
In that spring so long ago?

Oh, the silence and the distance,
Oh, the heavy, heavy hours,
The paths your steps are treading.
Are red, but not with flowers.
How can I hear the calling
Of the thrushes in the wood?
How can I bear the falling
Of the blossoms where we stood?

Henrietta Keith.

Tennyson's Prophetic Vision.

From "Locksley Hall," written in 1842.

For I dipped into the future, far as human eye could see,
Saw the vision of the world, and all the wonder that would be;
Saw the heavens fill with commerce, argosies of magic sails,
Pilots of the purple twilight, dropping down with costly bales.
Heard the heavens fill with shouting, and there rained a ghostly dew
From the nations' airy navies grappling in the central blue.
Far along the world-wide whisper of the south-wind rushing warm,
With the standards of the peoples plunging thro' the thunder-storm;
Till the war-drum throbbed no longer, and the battle-flags were furled
In the parliament of man, the federation of the world.
There the common sense of most shall hold a fretful realm in awe,
And kindly earth shall slumber, lapped in universal law.

KEITH'S MAGAZINE

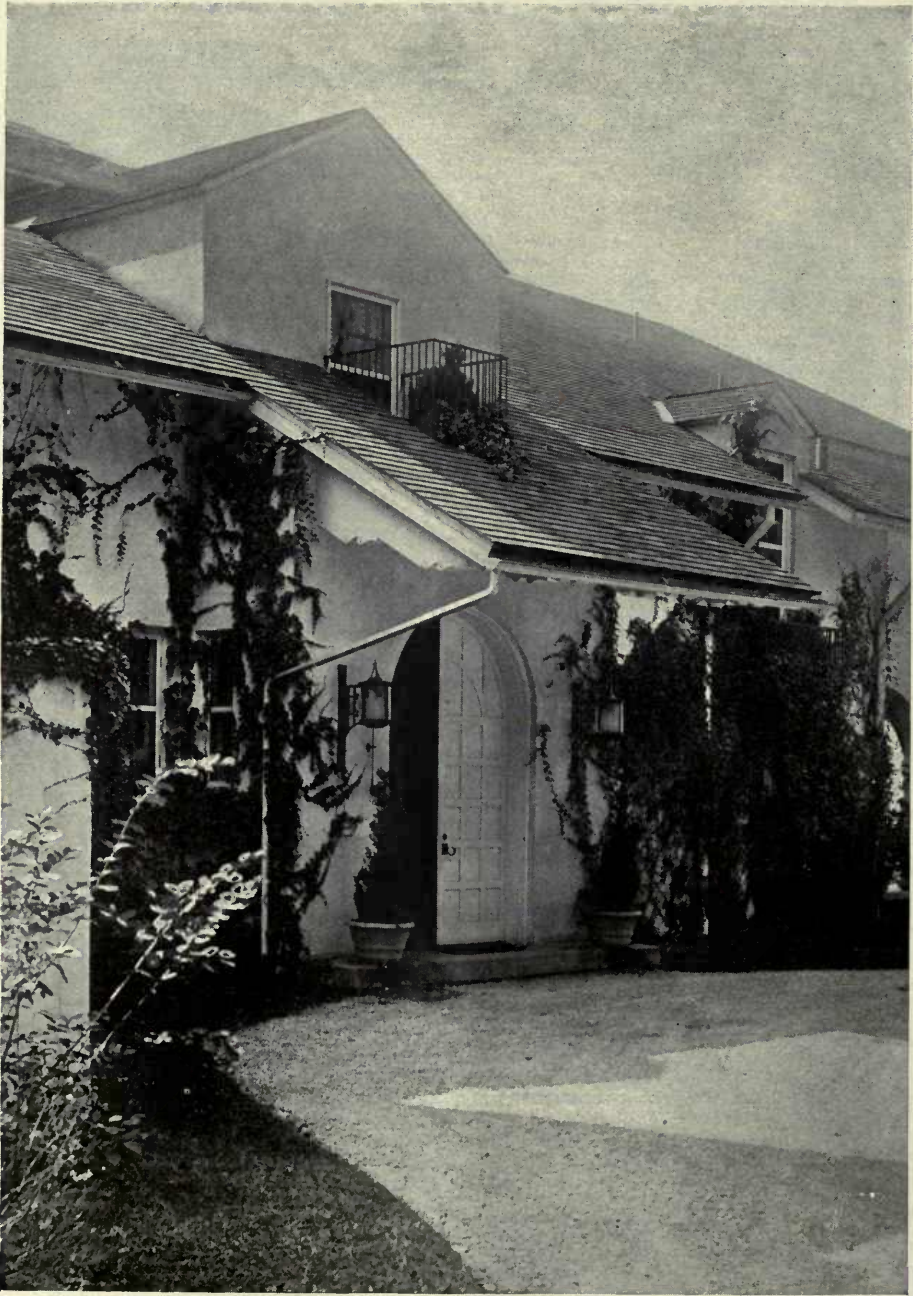
ON HOME BUILDING

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Courtesy Moffat Yard and Company

Janssen and Abbott, Architects

A charming doorway following English precedent

KEITH'S MAGAZINE

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No. 2

Domestic Architecture for the Farm

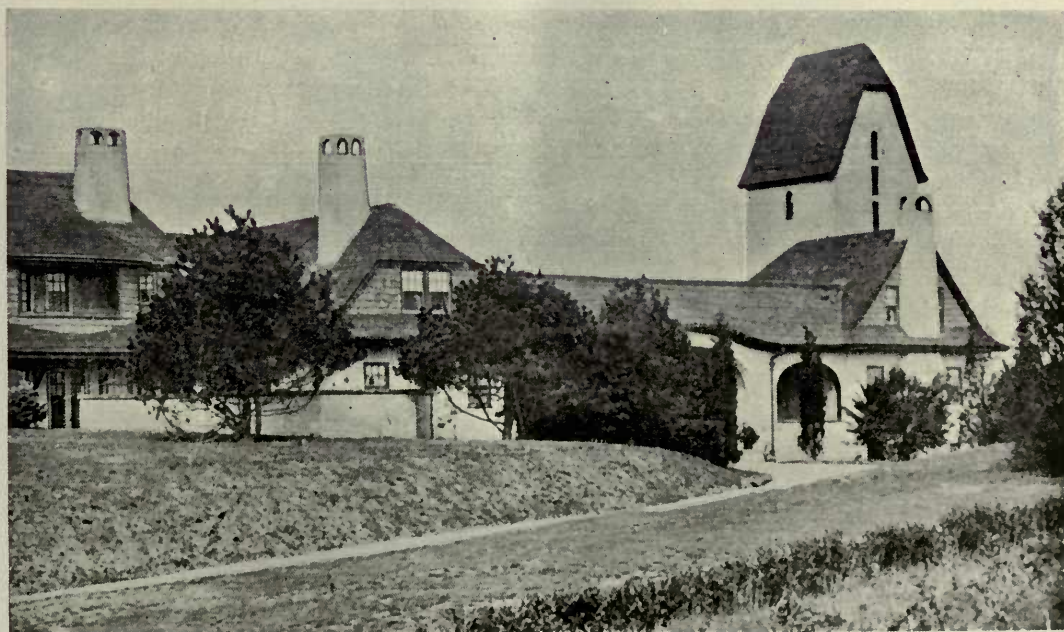
Anthony Woodruff

THE farm has been the genesis of civilization. When man began to till the soil he proclaimed the power of mind over matter. He was no longer a creature subservient and powerless, living under capricious and unknown laws in the midst of a Nature which he did not understand. He became a ruler, co-operating with the "Powers that Be", putting those immutable laws to work for him.

During the progress of time the great land holder has shared with the great warrior the choicest fruits of civilization.

In any great crisis a country is brought sharply to the realization of its actual dependence on the soil, and the prime importance of the man who tills it.

For almost a century, just passed, conditions have been allowed to become very hard for the man who tilled the soil and his family, isolated from urban interests and from many of the activities of urban life, by the great acres which he had gathered about him, which required great toil and left little time for relaxation and recreation, either for himself or for his family. His city brother who might be



Water tower at Shinnecock Hills, Long Island

Grosvenor Atterbury, Architect



A farm house in Illinois

a comparative pauper in this world's goods, lived in luxury, in comparison, giving his children advantages impossible on the farm.

Happily, this state is now a thing of the past. The farmers' bank account has usually been well able to pay for any advantages which he thinks really worth while, and in his conservative way he is now building for a wonderful future. His blooded stock and his great crops have always been well cared for. The rural telephone and rural postal service has eliminated space, and rural isolation is a thing of the past.

A very real architecture for farm

buildings, what we might call Domestic Architecture for the Farm has been carried much farther for farm buildings other than for the farm homes. Every great country estate is more or less of a farm

and has some of the farm conditions, though the owner may not depend on its productivity for any part of his income.

In these the farmer's house and the gardener's cottage have been more or less incidental, while the water tower and plant, the big garage, the stock barns, the dairy, and even the poultry houses have been given full importance, and are all designed to be in keep-



Thos. B Lippincott, Architect
Local stone work and a picturesque roof

ing with the great country house.

This, together with the specialization on the great farms, has been the means of giving much more thought and study to the farm buildings than to the home of the farmer to whom the farm is his life as well as his living, and that of his family.

As water is one of the first requirements of living so the water system is one of the first problems of the isolated dwelling which is beyond the reach of that urban beneficence—city water. In many conditions the elevated tank is the most practical storage for the water supply, and its treatment one of the difficult problems.

An excellent solution of the water tower problem is that of a home at Shinnecock Hills, Long Island. The tower not only fills its office in an excellent way, but at the same time adds a most attractive feature to the group of buildings of which it is a part.

There is a strong tendency for the smaller farmhouse to follow more or less along Colonial lines, with the use of boulders or stone found on the farm wherever stone work is used. Colonial building has a quiet dignity and a simplicity which fits into the ideals of the farmer, and which at the same time accords with his older traditions. At the present time the feeling for the Colonial seems to be very strong in the middle west, where the farm house shown is built, and even in the extreme west, along the Pacific coast, where it has a great popularity.

The present trend of thought and conditions calls especial attention to the use of local materials as far as possible. With building materials this has a peculiar importance which does not apply alone to these days when necessary transportation can hardly be taken care of and all unnecessary transportation is absolutely cut off.

There is always a harmony among the things which nature has brought together

that can seldom be achieved arbitrarily. The stone which crops out from the soil of the farm sets naturally into the landscape with out a jarring note and with a sense of fitness. In addition to this, the comparative isolation of farm buildings renders necessary the greater precautions



W. Stanwood Phillips, Architect

This is not a farm house, but might be one

against the danger of fire which is given by masonry buildings.

So logical a thing does the Illinois State Board of Agriculture consider the masonry farm house that a competition was lately instituted asking for designs for a low cost well designed masonry farm house. The winning design from this competition is given elsewhere in this magazine, by the courtesy of the Illinois Board of Agriculture.

Nothing has greater possibilities for the picturesque than lies in the use of stone



A garage built of Pennsylvania stone and stucco

Thos. B. Lippincott, Architect

work, possibly laid random, as it comes. It can be so built as to be perfectly dry and with so good a wall that little heat is lost through absorption from without. With the present coal shortage all over the country the well constructed house pays good interest on the investment in the smaller amount of fuel necessary to keep it comfortable.

The garden side of such a house is given showing the picturesque stone chimney and the upper windows hooded under a picturesque roof. This house is built of local stone in Pennsylvania. The garage of the same house is also given,

with the same picturesque window and roof treatment with stucco in the wings.

The next illustration is not a farm house, yet nothing would be more logical or appropriate for a farm home than such a house built of stone from a ledge on the farm itself. The photograph shows the simple entrance from the driveway with the porch beyond overlooking a fine distant view. This looks as though it might be a farm home or manor house in England which had perhaps been added to from generation to generation to fill changing needs, rather than a country home in New York.



Poultry houses

Grosvonor Atterbury and Stowe Phelps, Architects

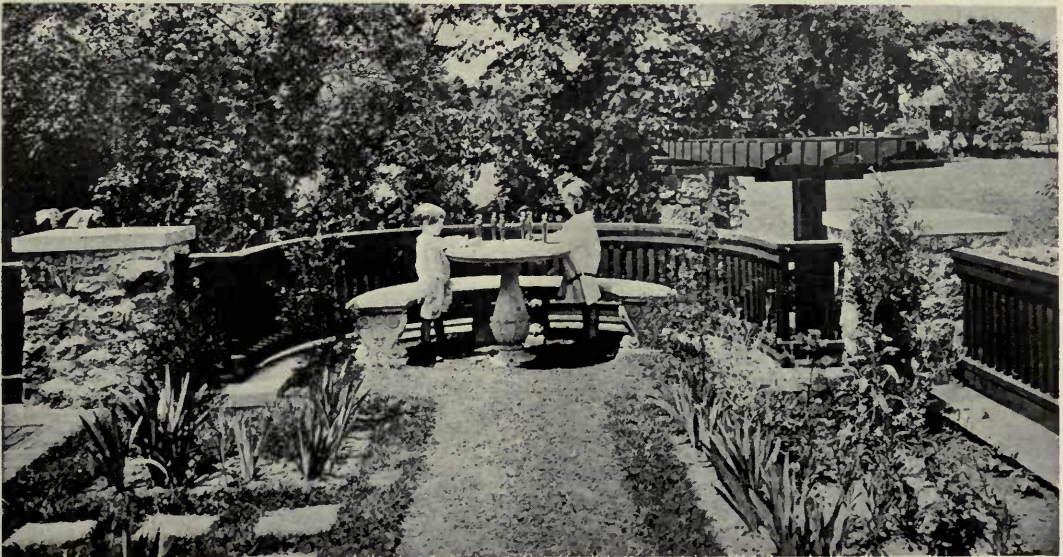
Furnishing the Home Garden

E. I. Farrington



N former days anyone who enclosed his garden with a high wall or hedge was likely to arouse the animosity of his neighbors, or at least to excite their criticism. It was thought to be adopting the customs of England to an extent out of keeping with

full view of the neighbors, or of strangers who pass in the streets. The high brick or stone walls of Europe have not come into great favor with us. Stone walls, however, as high as a man's head can hardly be improved upon for shutting in a garden enclosure. They make an ex-



A garden play room

the democratic tendencies of the new world. Fortunately, a different feeling is now being shown. The fact is being realized that a garden may be as intimate a spot as the chosen room in one's home, and that garden privacy is something to be encouraged rather than otherwise. The garden really ought to be a part of the home, a sort of out-door living room, to be used regularly and most of the time by all the family.

Naturally a garden which is to fit into the home life in this way must be hedged in. No one can be expected to live his life, even during the summer months, in

cellent background for shrubs and perennials, and are delightful when covered with climbing vines. Moreover, they quickly shed their appearance of newness. One always likes to think of a garden as long established.

After all, though, stone walls, like brick walls, are rather expensive. Accordingly, hedges or screens of trees and shrubbery are more commonly employed. They serve their purpose almost equally well, and if a proper selection of shrubs is made, will keep color in the garden throughout the winter months.

It is just as easy to overfurnish the gar-



The garden gate

den as it is to overfurnish the rest of the house. Restraint brings a feeling of repose and simple luxury. Moreover, the character of the furnishings should naturally conform to the nature of the garden itself. In a simple home garden enclosure, rustic furniture can be used with satisfaction, and will be in good taste. Of course a large formal garden will require marble or stone. Marble, however, would look affected and out of place in a little family garden plot. The formal garden, too, will have its fountains and its statuary, both of which are not suited to small estates.

Rustic furniture is not always good or always suitable. Sometimes it is better to have simple pieces made up from plain lumber, with a preference for cypress, white pine, oak, or

chestnut. Perhaps the home maker himself can fashion sturdy satisfactory benches, chairs and tables on good though simple lines. It isn't necessary to have a cabinet maker for such work, and the catalogues sent out by the manufacturers of garden furniture will suggest designs. It isn't even necessary to have these simple garden pieces painted or stained. They will take on a beauty of their own, as they weather. Indeed, they will become more and more a part of the garden picture as years go on.

Iron furniture has the merit of being substantial, but as a rule has too strong an individuality to make it adaptable for gardens in general. The garden pieces made of carefully dressed lumber, and painted white are much more desirable. They seem to fit into almost any garden, giving it a homelike atmosphere and a feeling of friendliness which is most desirable. Such furniture can be purchased ready made, but the expense is not great when it is designed and constructed to fill a special niche. When such furniture is used, a wooden gate painted white at the entrance to the garden is a good supplementary feature.

One point of importance is that the chairs and benches should be comfortable.



Set a bird bath in the garden for the bird neighbors

A fault of many rustic pieces, especially those of local construction, is that they are not at all inviting for actual use. Garden furniture ought to be quite as reposeful as that used indoors, if the garden is to be a real out-door living room.

The place to put the seats and tables is where they will command a pleasant outlook, or a sequestered nook which makes privacy doubly private. If there is a pool or a fountain, of course a seat should be placed close by. Moreover, if there happens to be a particularly attractive flower border or bed, that will be a good place for a bench, where one may linger in comfortable admiration.

If the family plans to spend its evenings in the open air, or to dine out-of-doors, it will be desirable to have a covered summer house or arbor. If the garden adjoins the house, which is by all means desirable, it is still better to have a broad porch practically on a level with the ground. Such an arrangement binds the house and garden together in a most delightful way. This plan, however, is not always possible. The opportunity may be presented, though, for using a pergola in the most approved manner. A pergola standing by itself and without any apparent mission is an anomaly. If covered with 'climbing roses or other vines, some excuse for its existence may be found. But the true purpose of a pergola is to form a connecting link between two buildings or garden enclosures. If used to cover the walk from the house to the grounds, it is wholly legitimate, and may serve as a real embellishment to the garden, as well as giving an architectual finish to the house. Even so, it should be covered with a heavy growth of some kind. With a long, substantial pergola, grape vines, Wisterias or Bignonias are especially desirable. The grape seems to have a special affinity for pergolas, and few vines are more decorative than some of the ornamental grapes.

No garden is really complete unless it contains a little water, or at least its suggestion. In some gardens which I have visited a well-curb has been the central feature. It may not have been at all pretentious, and the bucket may not really have dropped into any well, but its ornamental value has been undeniable. Per-



A well curb may be made an ornamental feature

sonally I do not like shams of any kind, but cannot answer for other people.

Perhaps the most delightful water feature of any garden is a simple little pool such as can be made at very low cost. A pool three feet deep, cemented and with a brick or concrete curb can be kept filled by means of a garden hose, the water being syphoned out two or three times during the summer in the same way. Aquatic plants set in boxes of earth will add to the garden's charm.

Fountains are best left to the wealthy man with an elaborate formal garden. By all means keep clear of the fantastic, not



An out-door living room

to say heathenish, cast iron fountains which can be obtained ready made, and which some people delight to display on their lawns. Pray don't have your garden disfigured by any bronze newsboy with his toes sticking through his boots and an umbrella over his hatless head to shed the few weak streams of water descending from the ferrule.

How much better it is to have a simple bird bath! Bird baths are being used much more generally than ever before, because we are coming to have a new appreciation of and more friendly feeling for our bird neighbors. It is an event to be watched for daily when the bluebirds or the robins come and disport themselves in the bath which we offer them. It is better to have a bird bath on a pedestal rather than one set into the ground, because the birds are better able to escape the raids of stray cats. Bird baths are inexpensive, and it is not a very difficult task to make one, with the aid of

cement, sand, and a wooden mold, but care must be taken that they are kept shallow.

Bird houses have come in the wake of bird baths. Some of the newest are ornamental, although it is a question whether the birds themselves do not prefer the least artistic because least conspicuous kinds.

In days gone by a sundial would have been mentioned among the first of the garden accessories. Of late years, however, the sundial has received less attention, perhaps because bird baths have been substituted. The sundial, however, seems to belong in a garden, and sometimes can be provided in a highly ingenious way. I remember one garden in particular where a large boulder, which seemed at first highly objectionable, has been made to serve the purpose of a sundial pedestal, the combination being one which is much admired.

Don't make the mistake, though, of tucking away a sundial under the shade of a tree or in the lee of a house where the sun will seldom strike it. In such a place it is obviously a misfit. Likewise, do not establish a wide bed of roses or other flowers so closely around the base that the dial cannot be read. The supposition is that the sundial will be used.



Sun dial base covered with English ivy

At the same time the pedestal may well be covered by some climbing vine like English Ivy, or in the north the hardier *Euonymus Radicans*. When a walk can be left immediately around the dial a bed of baby ramblers outside may be used advantageously. Roses and sundials seem to go together, and the baby ramblers have the merit of blooming most of the summer.

Occasionally one may introduce an interesting and unusual feature, as in the Bar Harbor garden which is shown in the illustration. The garden is laid out on two levels, with a retaining wall between them, with three steps between the levels. At the path three old millstones have been utilized for the steps. The effect is unique and interesting. The garden makes a wonderful setting for the millstones with the little thread of tradition and story which hangs around anything which has passed beyond the ken of the growing generation. The old millstone steps will be held in mind long after the beautiful growing things have been forgotten, and give an individuality to the garden.

Of course no one can lay down hard and fast rules about furnishing a garden, any more than about laying out the gar-



Old mill stones used for steps

den itself. The point is that a more general use of American gardens as real outdoor living rooms might well be made. It isn't necessary to spend a large amount of money, if one uses good judgment and exercises the same good taste that is shown in furnishing one's home.



"I Am the Cook"

Edith M. Jones

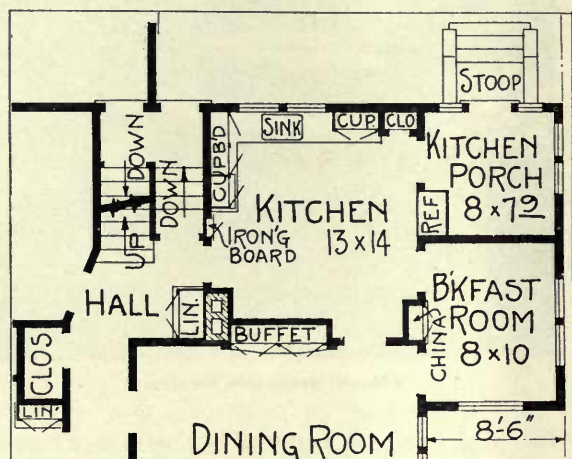
AT a recent biennial meeting of the General Federation of Women's Clubs in Boston, in response to the question, "What can we do to make practical living more interesting to the home maker?" Mrs. Clara Bradley Burdette said, "We must cease home-

practical living. Differentiate between the essentials and the non-essentials and then pray for the courage to eliminate the non-essentials. The ability to simplify calls for intelligence *plus* courage, which sum will equal interest and supreme joyousness in homemaking.

"Classify means to be executive and administrative, to eliminate irregularity, set in motion the machinery that has time for everything, a place for everything and a justified reason for everything, then oil the machinery with kindness of insistence and the finished product will be one of the most interesting contributions to your homemaking.

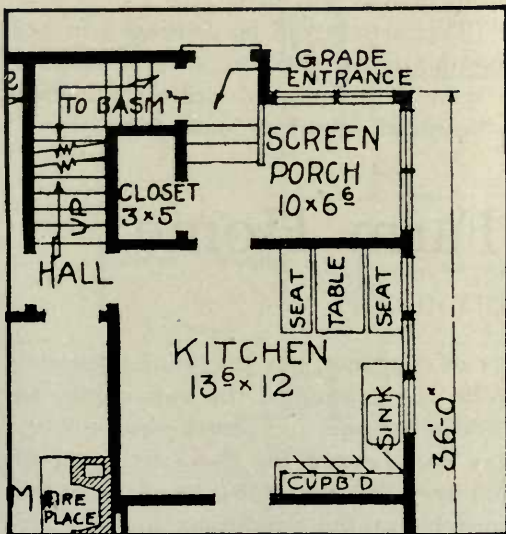
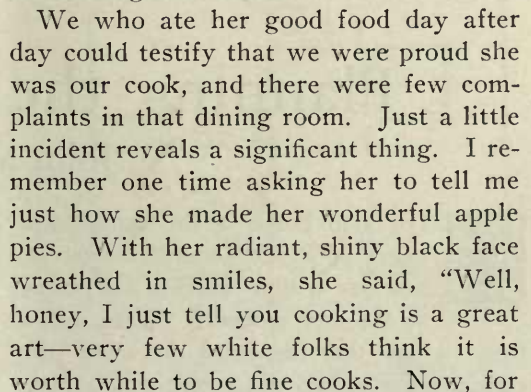
"Jollify is the singing-at-your-work spirit that eliminates worry. One might be immensely interested in the day's practical living were its sun not eclipsed by the morning fog of worry, the noon-day cloud of

worry, and the eveningtide shadow of worry. It is doubt and uncertainty that cause worry; make yourself master of the practical things, know your ground, be able to say, if others cannot do the things necessary to this homemaking, I do know how to do them and I am independent, and the worries will be turned into gladness, there will be a song in your heart, a cheer in your voice, and a radiation of sunshine in your life and home." And lastly she says, "Glorify means to idealize your work of common living—to eliminate drudgery. Do not look upon homemaking as a fate to which you are doomed, but a high privilege to which you have been called. Never consider the practical things as onerous things; though often burdensome they are of

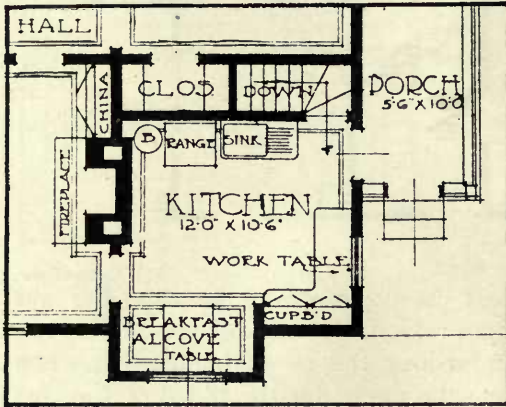


making by traditional and hearsay methods. So long as women are satisfied to consider homemaking just as their mothers, their grandmothers and their great grandmothers did they will not find it particularly interesting or inspiring. When they realize that the ideal home and the method of evolving it has advanced with the generations, as has everything else in the world, and prepare themselves, artistically, scientifically and economically to oversee the creation and maintenance of it, they will have solved the problem how to make homemaking interesting." She gave the four points of the the homemaker's compass—"Simplify, classify, jollify, glorify,"—and further defines *simplify* as "the means to be independent and scientific in your work of

It has always seemed to me two of the most important activities in the world were those carried on by the cook and nurse. We all recall the Chinese custom of paying the doctor for keeping his patients well and fining him when the pa-



instance, I just make apple pies like anybody else but, honey, this is the secret, *I just love to make apple pies.*" This was only one of the secrets that I learned from this splendid woman, who, indeed, exemplified what Mrs. Burdette says, for she surely glorified her job by having a stand-



ard for her work, and through loving her job lifted it above commonplace drudgery.

It has always seemed to me that environment had much to do with one's attitude of mind,—and I can easily see how a workshop would have a great influence on the quality of work done there. For instance, on a recent trip in the east I had occasion to visit a large publishing house. Connected with one of the publications printed by this concern, is a man whose editorials are considered by the thinking world as most remarkable. In talking with the welfare worker employed

in this establishment I was interested to have her tell me that she was always most particular to impress upon the woman whose duty it was to care for Mr. ———'s office that she had a most important job because, as she said, "If his workshop is not in order, the world might not get so clear a message because his thought would be disturbed." This recalled to me the importance of workshops, whether in the great walks of life's activities or the simple rounds of everyday living. In fact, after years of close observation I find this is especially true of the workshops in the home, and the kitchen that is carefully planned, well equipped and beautifully ordered brings a return far out of proportion to the investment. For a long time, especially since the advent of the automobile there has been a great desire to get away from the city and build one's home in the suburbs where the children and gardens can have more air and sunshine. But one of the great drawbacks to this ideal living has been the question of getting help and one of the objections has always been that the kitchens had no gas for cooking. To be sure there are substitutes such as blau-gas, blue-flame, etc., but until the electric range made its appearance the problem was not solved.

(This article will be continued in next month's issue, showing several views of a splendidly equipped electric kitchen in a beautiful suburban home.)

Planning the Farm Home

John Morton

THE farm home is the center and heart of a very complex system, and one which remains a mystery to the city worker. There was a time when the disparity between the farmer's barns and his house was a mat-

ter of comment, but that time is passing. With the coming of the automobile, the rural telephone, and postal service, a new day has dawned for those living in the country. The general farm plan depends entirely on the conditions under which

the farm is operated, and these must, to a certain extent, influence the planning of the home itself. While the details of the plan must vary widely, yet there are certain fundamental conditions which must be met in some way in order to make the farm home the center of comfort and convenience which shall give the same efficiency to the lives of the farmer's family that is given to his blooded stock and to the food which he produces and on which the world is depending for its food supply.

The first problem is that of the water supply, which must start with a healthful source; generally spring water, or from wells, dug or driven. Next must be considered the power which shall be

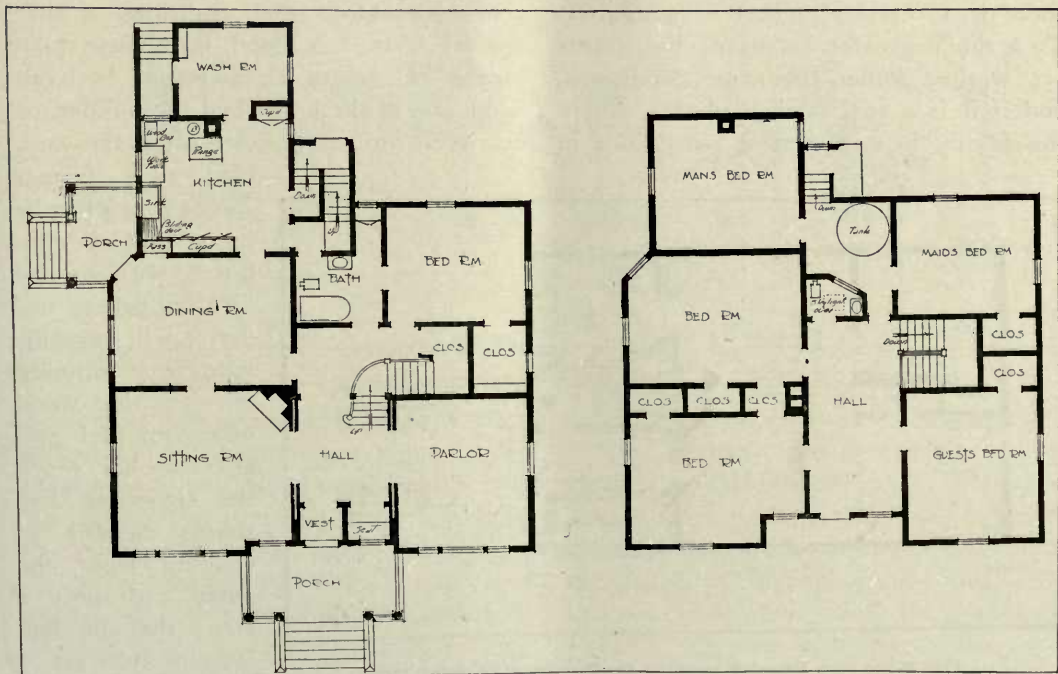
utilized for bringing the water into the farm buildings. This question will probably include that of other power driven machinery. If electricity is used for power it also settles the matter of lighting as well as that of power for household appliances. Then comes the matter of hot and cold water in the house and of the plumbing, which involves the matter of sewage disposal, probably by means of the septic tank. The heating of the

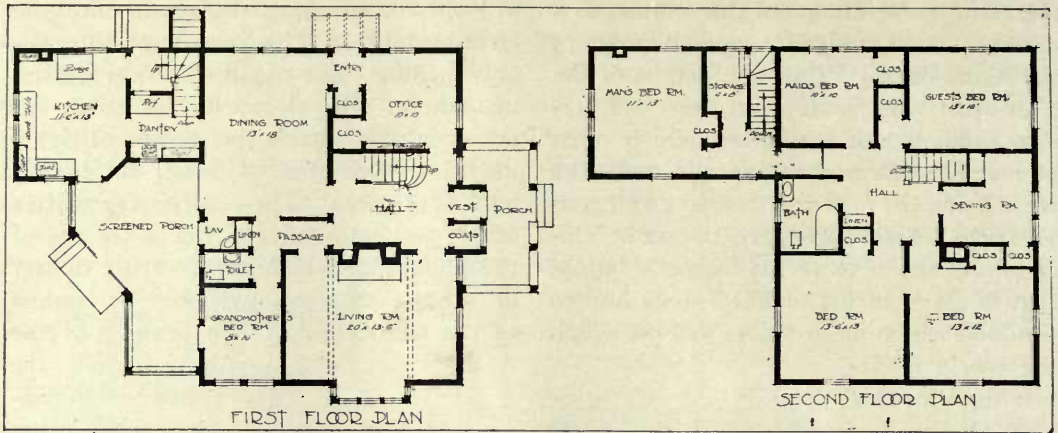
house and the matter of refrigeration are other important problems.

The farmer who is building a home for himself wants "to do the thing right." There is nothing small about the farmer when he starts to do a thing. At pres-



A farm home in Wisconsin



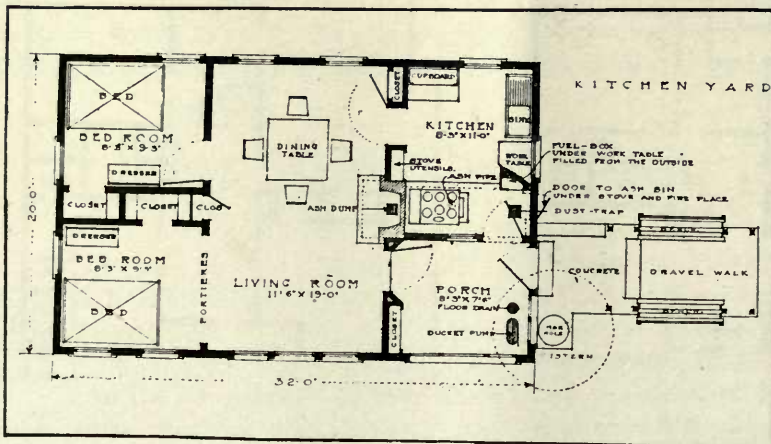


ent there is little precedent to guide him in the matter of planning the farmhouse to save labor and time for the housewife. No two homes have just the same requirements, yet among city homes of the same class there is a certain amount of similarity. To a much greater extent no two farms are worked under the same conditions, and if it is a real farmer's home, where the family is co-operating with him in



A farm home in Iowa

the work, the service part of the house must be planned in detail for the work to be done. What makes the matter more difficult, the planning must be done by some one who knows the technical part of working drawings and who also understands the conditions of that special farm. A good farmhouse plan means the close co-operation between some one in the home and the builder, or else it means, as is more often the case,



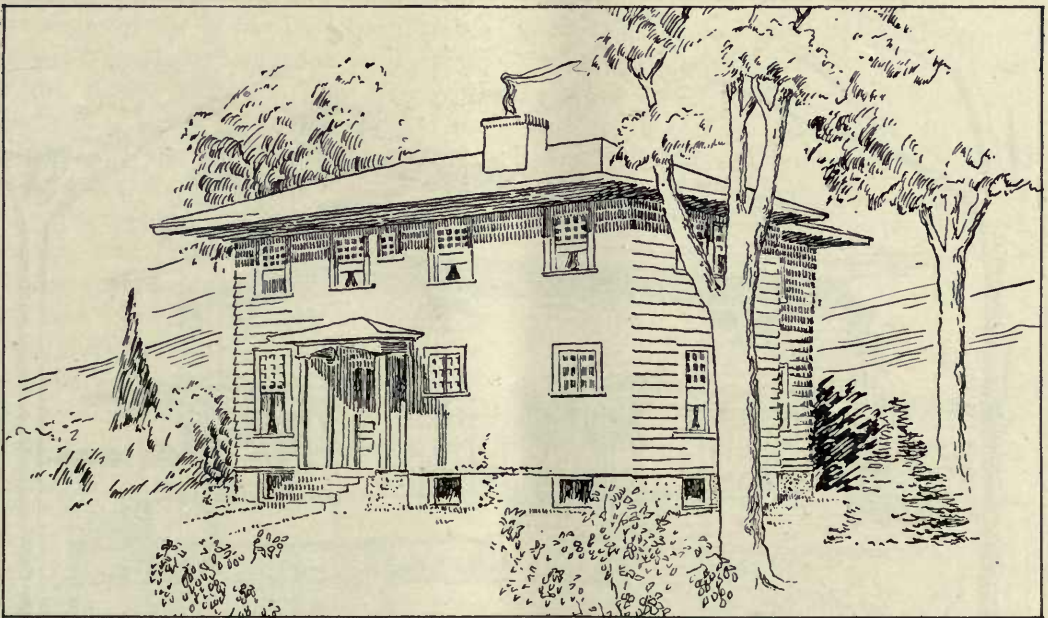
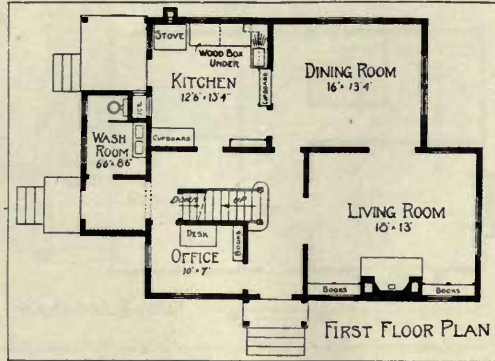
Plan of the farm bungalow issued by the Department of Agriculture

that the farmer builds it in when he finds that a cupboard, with a wood box on rollers under it will save his wife from running out to the wood house for fuel, and also let her reach the seasoning and things needed in cooking from the stove with only a step; that he had laundry tubs set in

the most convenient place on the porch, with covers to close over them; that he got or had made a little push table or tea wagon so that one trip would carry the food and the dishes between the dining table and the kitchen. Possibly the housewife can attend to these details herself, and in the course of a comparatively short time she will discover that even though her home may be an old house, that her neighbors are coming to study her arrangement before

ing porch, and perhaps some other conveniences have been added later. The house itself is dignified in appearance, with some good detail in the porch. It is so well planned that in its community it serves as a model in many respects.

The house is very livable in its arrangement, with doors sliding into the walls when not needed, so that the rooms may be thrown together or closed off as desired. There is a bedroom and connecting bath room on the first floor. The



Prize farm house, competition instituted by the College of Agriculture, University of Wisconsin

building a new home. This sort of planning must go on for some time before these conveniences become sufficiently standardized so that they are available to everybody who wishes to use them.

The first farmhouse shown is not a new house, but it was well built and very well planned when it was built; and a sleep-

dining room opens to the side porch.

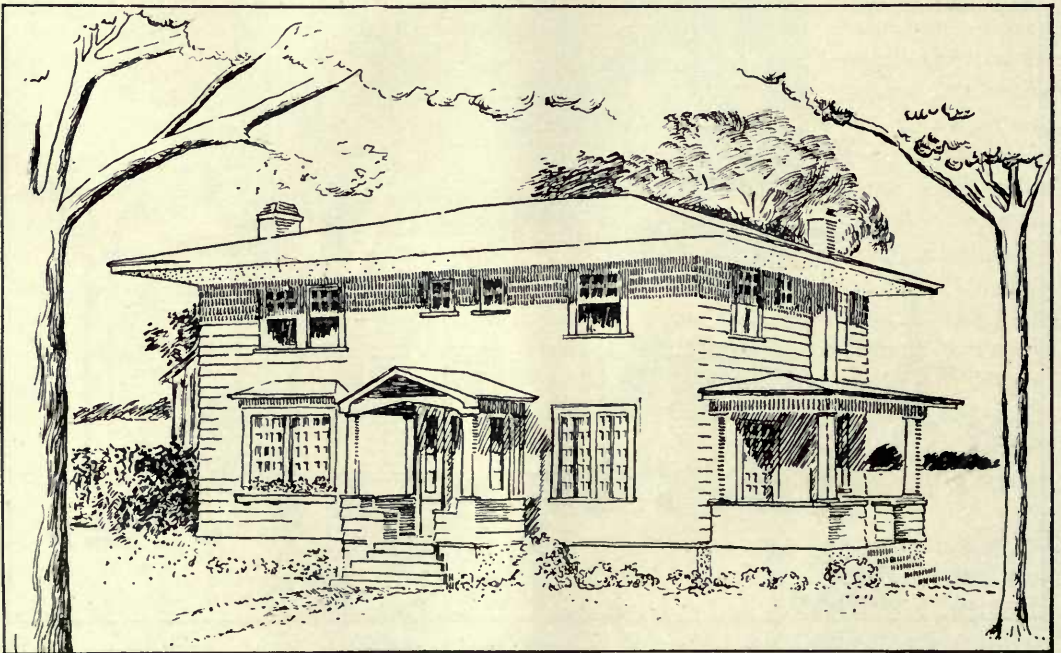
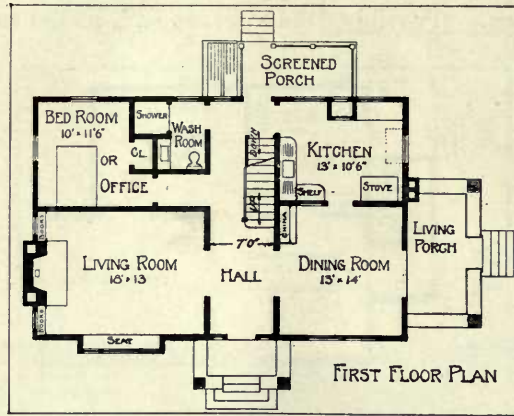
The kitchen arrangement has been planned with special care. A sliding panel in the back of the china cupboard for the dining room allows the dishes to be put into it from the drain-board of the sink in the kitchen where the dishes are washed. Anyone who has carried every

dish from the work-table by the sink into the dining room three times a day will realize what this one sliding panel means in time and steps to the housekeeper. The wood box is under the window from the entry and can be filled from the outside.

The second farmhouse is one that has been remodeled from an old rectangular house, the kitchen, rear stairs and screened porch having been added, and the partitions

entrance at the side of the house.

In the pantry is the dish sink and cupboards so that the dishes from the table are not taken to the kitchen at all. They are washed and put away in the pantry. The big refrigerator is in the pantry and is iced from the rear in the entry. In the kitchen is good working space and sufficient cupboard room. The baking table is under the windows, convenient to the range, which has a

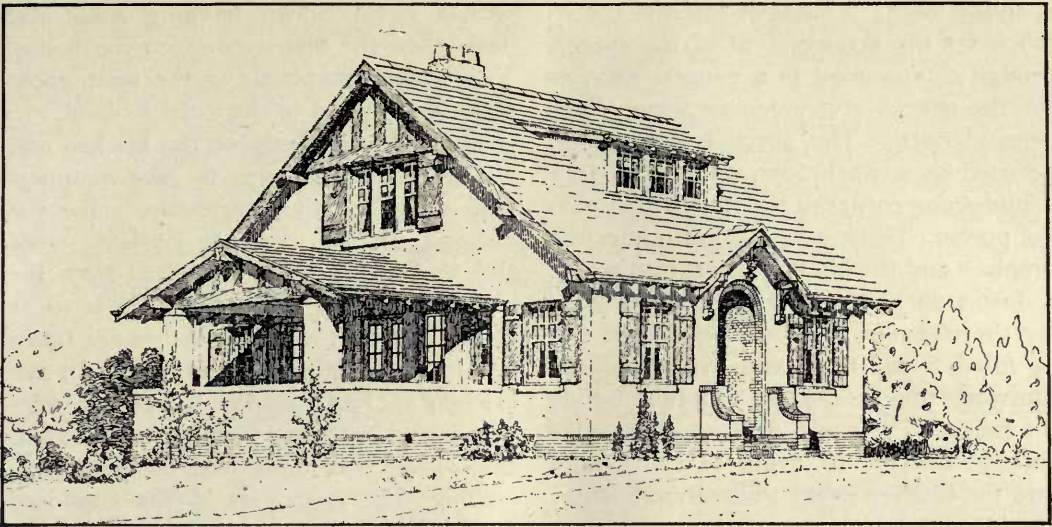


Farm home receiving second prize in the Wisconsin competition

changed in the old part of the house to make larger living and dining rooms, a generous hall, convenient living quarters for grandmother, who insisted that she wanted her room to be small, and an office which is accessible from the living parts of the house and which has its own

hood over it to carry away steam and odors. The wash room or lavatory for the men opens both from the dining room and from the porch.

During the summer season the screened porch is perhaps the most useful room in the house, as it can be used for either din-



Masonry farm house—first prize, Illinois competition

Designed by A. Thomson Thorne

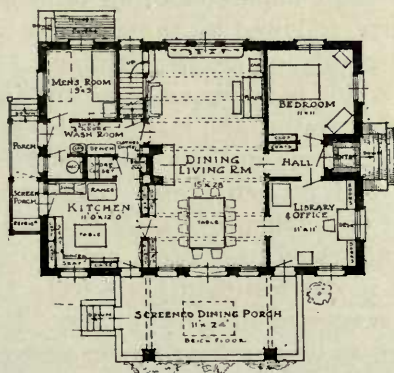
ing or living porch. As it is in a south-east angle of the house it is comfortable through a good portion of the year, except for the severe season. The housewife says that if she were building again the only change she would ask would be a fireplace in the dining room.

On the second floor the room which connects directly with the rear stairs and out side entrance is the hired man's room. The door between the hall and the rear stairs gives access to it, but allows it to be closed off from the rest of the house.

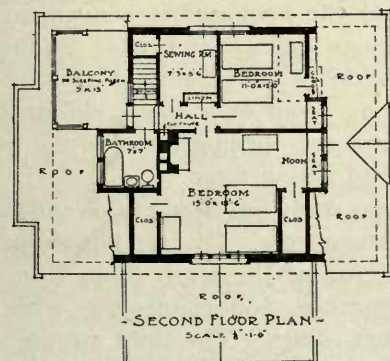
When the house was remodeled the siding was furred and plastered with a

good coat of stucco. The laundry was placed in the new part of the basement under the kitchen, and the tubs set out two and a half and three feet from each wall so that they leave room all about them. There is ample fruit and vegetable storage and a fruit cupboard. There is a workshop under the dining room and a workbench under the area windows at the north. A system of vapor heating was installed.

A few years ago, under the title of An Inexpensive Farm House, the department of Agriculture issued an excellent little bungalow plan for a farm house which



FIRST FLOOR PLAN -
SCALE 1/4"=1'-0"



SECOND FLOOR PLAN -
SCALE 1/4"=1'-0"

is shown here. This is of interest not so much for the arrangement of the rooms, though this is good in a general way, as for the special conveniences which have been planned. The porch is planned to be used as a washroom, and the cistern is under one corner of it with the pump on the porch. There is an ash bin under the fireplace and the kitchen stove, into which a dust trap opens, with an outside door for the cleanout. A fuel box which can be filled from the outside stands under the work table. The pot closet is beside the range. The porch floor and the walks are of concrete to avoid carrying mud into the kitchen every time any one steps outside.

Since this plan was issued there has been much thoughtful work along these lines, with some excellent results. Among the most notable is the home planning contest instituted by the College of Agriculture at the University of Wisconsin, which was open only to people who were living or had lived on farms.

The prize winning design and the plans which were awarded second place are shown here by the courtesy of the School of Agriculture through Prof. A. W. Hopkins.

The location of the office is one of the notable features of the prize winning design. It opens from the front hall and also to the side entrance and wash room. The desk is placed to receive correct lighting, and the bookcase is convenient for the files as well as for books. Sliding or French doors may be used to shut off the living room or a single sliding door may close the opening between the living room and dining room.

Special study has been put on the kitchen arrangements. Of first importance is the placing of the wash room from the side entrance, and connecting with the basement stairs. The door to the side entry is presumably of glass to light the room and one side of the entry is filled

with a hat rack for hanging coats and hats when the men come into the house. Two basins are placed in the wash room and a door opens to the toilet beyond.

The cupboard between the kitchen and dining room is planned to save innumerable stops for the housewife, since the dishes from the meal are washed at the sink and put into the cupboard from the kitchen side and when the table is to be set for the next meal the dishes are taken out from the dining room side. In the kitchen the sink stands beside the cupboard, and we should suggest the extension of the sink table past the cupboard, making the lower part of the cupboard deeper than the dish cupboard above. The wood box stands below the work table under the windows. The ice box is recessed from the kitchen and may be iced from the rear porch.

In the second set of plans the extra room, which may be used either as a bed room or as an office, is not shown with an outside door, as it connects directly with the hall both front and rear. The wash room is well placed and contains a shower,—a most excellent suggestion.

The living porch in this design adds to the livable qualities of the plan. French doors connect it with the dining room.

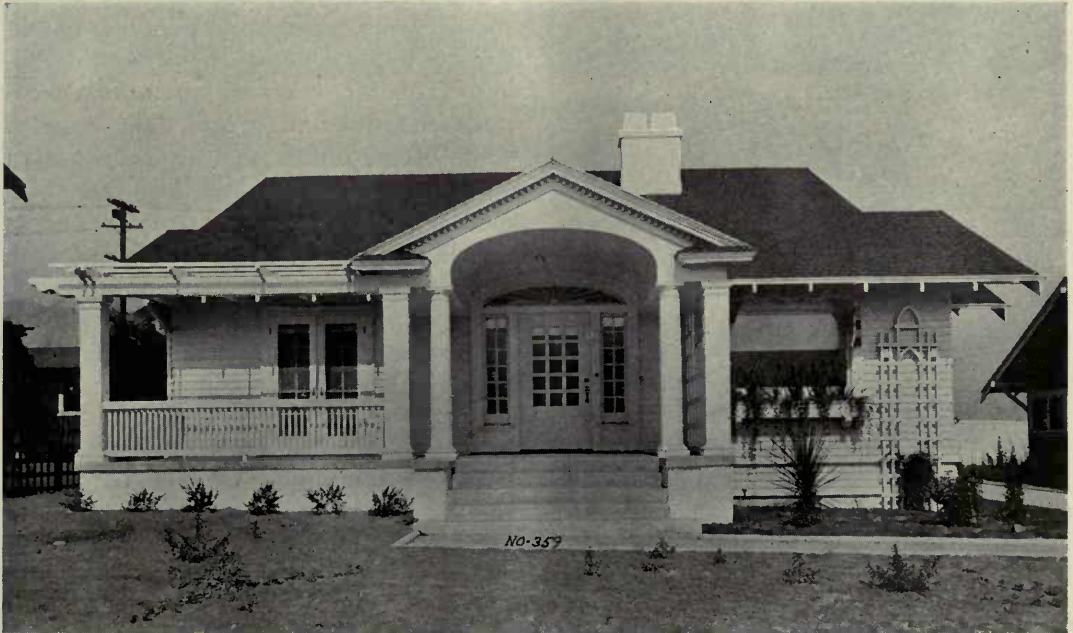
Almost without exception the women who submitted plans gave hard and soft running water connections in the house as the most important of all farm home comforts, followed by furnace heat, sewage disposal, and electric lighting. Nearly all would have dining room and living rooms separate. The majority also seemed to want built-in china closets and bookcases, and in some cases cupboards as part of the equipment. Only a few of the women seemed to desire a small kitchen—that is, one less than 12x14 feet. Only three suggested 9x14 feet or less. It yet remains to be seen how far the desire for a larger kitchen is a matter of tradition or whether, as may be the case, the con-

ditions of the farm kitchen can not be concentrated into the smaller space without unnecessary disadvantages.

The prize winning design of the Masonry Farmhouse competition, instituted by Illinois Board of Agriculture, together with the Illinois chapter of the American Institute of Architects, is also shown. This widespread interest in the subject of more careful planning for the farm home

foreshadows improved living conditions on the farms, as this same critical interest has so changed urban dwellings in the last several years. In undertaking the problem of industrial housing the government is being given the co-operation of all these interests which all over the country have been making for better home conditions in every kind of environment.

A Bungalow With Colonial Details



A home on one floor has its advantages.

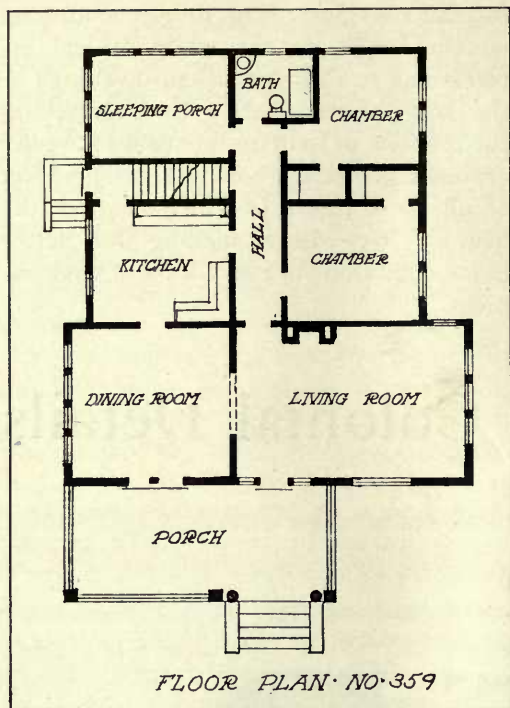
J. W. Lindstrom, Architect.



home on one floor has its very decided advantages, especially where there are old people or invalids to be given especial consideration; and also where there are small children. The time is coming when a two-story house will hardly be considered complete without some kind of a lift or elevator, or at least a dumb waiter in the house, and its cost will be charged, as has already been done with heating and

plumbing to the "increased cost of building."

This bungalow is very compactly planned and is very complete. Living room and dining room, with French doors between, fill the front of the house. These two rooms are finished in gum wood, given a brown stain. The specifications said "stained brown mahogany," but we should prefer to say simple stained brown, for gum wood is in itself a beauti-



ful wood. It is one of the woods in popular use and will serve in its own right, rather than as an imitation of mahogany or any other wood.

The rest of the house is finished in pine given an ivory enamel; and this change in the finish gives a different atmosphere to the chambers and the kitchen. A hall gives convenient access to these rooms

and to an attic stairway. Except that it is without a closet the sleeping porch is really a third sleeping room. Additional cupboard space for linen could be secured from the hall if desired.

Basement stairs lead from the side entry beside the kitchen, with the stairs to the attic over them.

All of the doors are of gum wood, stained brown, giving an interesting combination with the ivory finish in the rear of the house and continuing the gum wood finish of the front rooms.

The living room and dining room have special Colonial finish; a fireplace in the living room with bricked fire opening and carved wood mantel and over-mantel extending to the Colonial cornice at the ceiling. This is a composition cornice decorated in gold and green. The paneled walls of the dining room are finished in ivory, combined with the brown stained gum wood. There are hardwood floors throughout the house, except the bath room, which has tiled floor and wainscot.

The exterior of the house is sided in the Colonial way, with Colonial details in the porch. The chimney and the porch floor and steps are of white cement.

The planting about the bungalow has been considered in the planning of the house with the flower box under the wide window and the rose trellis beside it.

A Home of Simple Construction



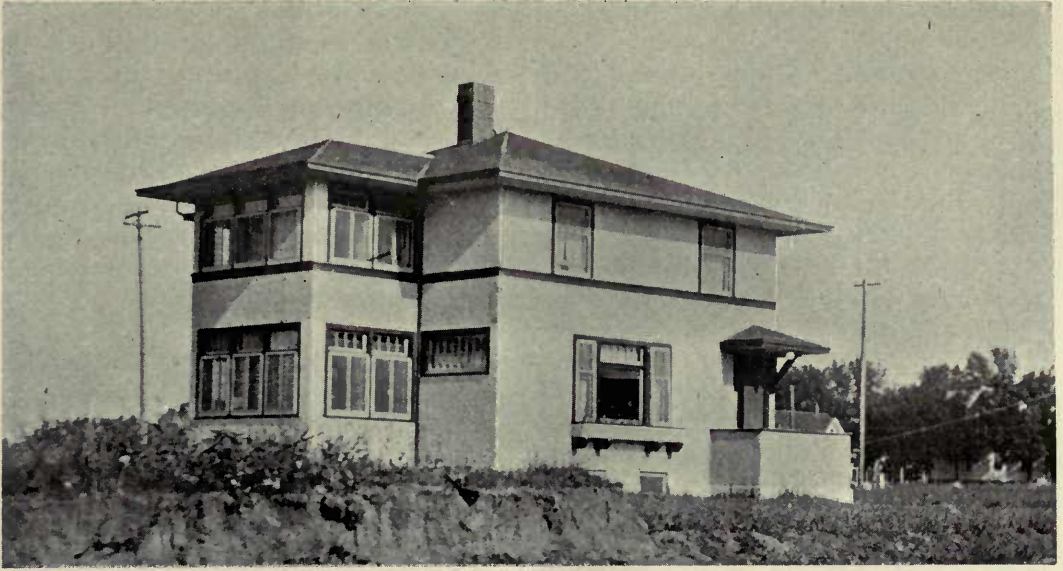
HE stucco-coated house, emphasizing the horizontal lines, with a roof of simple construction, makes an economical and attractive design.

The home here shown is economical in arrangement and well planned to make all the space available. On the first floor, living room, dining room and sun room open well together. There is close com-

munication between the kitchen and the living room.

The entrance is through a vestibule at one end of the living room, with the stairs beside it, and the basement stairs underneath, with an outside entrance at the grade level. The coat closet opens from the passage way between the living room and kitchen.

The kitchen is thoughtfully arranged



A stucco coated house emphasizing the horizontal lines

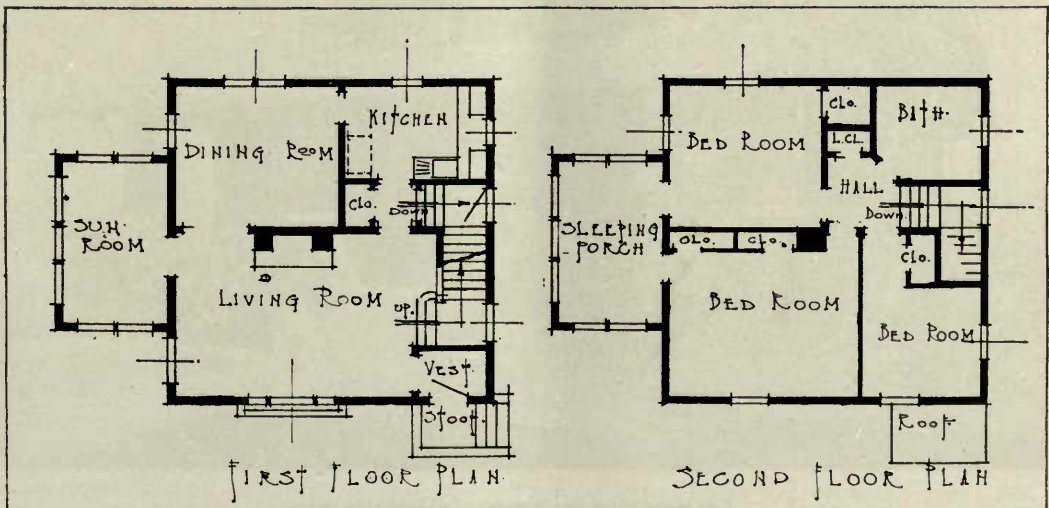
W. W. Purdy, Architect.

with sink and work tables convenient to the cupboards on either side of the window. Even in a kitchen as small as this a tea cart or push table which can carry all the dishes needed for setting the table at one trip, and that can bring back all the dishes to be removed after each course is more than worth its price to the housekeeper. Any solid little table which has been put on rollers so that it moves easily will serve this purpose very acceptably, and at a practically negligible expense.

On the second floor are three bedrooms and bath. The sleeping porch is accessible from either of the two larger chambers, and makes a charming suite of family rooms. The larger bedroom has the advantage of two closets.

The bath room is over the kitchen and the linen closet opens from the hall at the head of the stairs.

The house was planned and built under the stress of present times and every possible economy, both in construction and



materials, which is consistent with good construction, has been sought and utilized in the building of this house. With straight, square walls and a simple hipped roof, all possible labor has been eliminated in its construction, yet the house is very attractive, and no comfort has been sacrificed in the planning. Living, for this family, has been reduced to its simplest form and then adequately planned

for in the home as it was built.

The trim is of pine stained, and the floors throughout the house are of maple.

In the basement is installed a hot water heating plant with the necessary rooms for fuel storage. The laundry is under the kitchen.

The sun and sleeping porches are entirely enclosed and glazed with casement sash and transoms.

Another Bungalow Arrangement



ORE than with any other type of house the appearance of the bungalow is dominated by its roof. While the roof which forms gables may require a little more material than one which is hipped and has no gable, yet the gable roof is always a favorite. When unbroken or with well-placed dormers, it gives a satisfying sweep. The wide span gives head room under it and windows in the peak of the

wall give ample light, and cross ventilation from the dormers may be secured.

The roof shape of the bungalow here shown is probably the most popular of all the bungalow styles. Having but the one dormer, it presents straight unbroken lines, which indicates great economy of labor in building.

A special advantage is the fact that the roof span gives considerable height in the attic, even in rather a small plan. This



This is one of the most popular of all bungalow styles

E. W. Stillwell, Architect

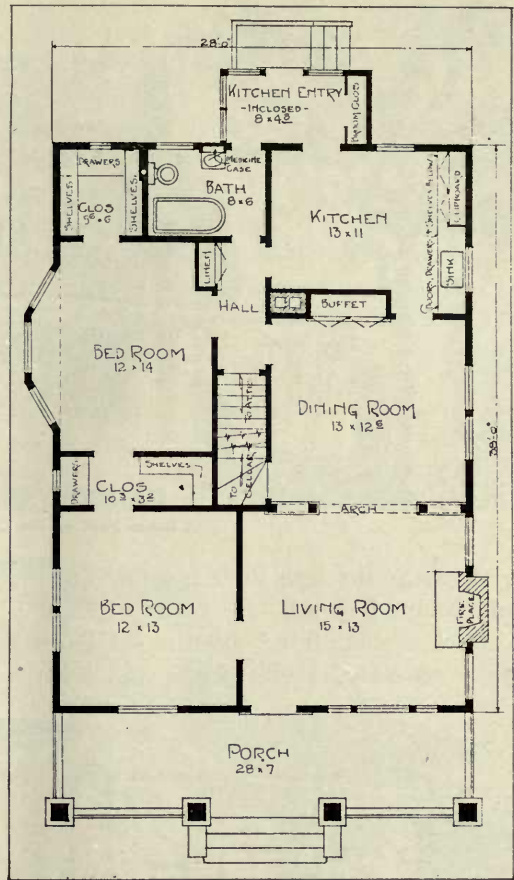
appeals to many people. If, in the beginning, the plan is laid out to include a conveniently located stairway, as this one does, the future finishing off of the rooms is made possible.

The time to consider attic rooms is before building. Too many bungalows are ruined by later attempts to provide more room and the cost is usually excessive. In this case, the plans called for a somewhat higher roof than the picture indicates.

With the expectation of using the attic for rooms later, the roof supports were set to form also the future front and back walls, with a height of 6 feet to the rafters. Thus, side gable rooms are formed which are 10x13 and 13x13.

The entrance from the long porch is into the living room and the dining room is back of the living room, with a bedroom or den opening from the living room. A suite of rooms fills one side of the house, connecting through a well equipped closet which opens into both rooms. The front room has windows on two sides, the rear room has a bay of windows which will catch a bit of air or sunshine from any direction. A large, well-planned closet or a dressing room opens from the rear bedroom. The bath room is reached through the hall, and also connects with the rear entry.

The kitchen cupboards extend to the ceiling. The built-in buffet in the dining room is recessed and flush with the wall. The fireplace in the living room is built of pressed brick.



The basement has concrete walls and floors. It is about two-thirds the floor area and has a heating room, vegetable room and laundry with outside stairs.

The exterior walls are of siding. The porch is of brick and cement. The attic is left unfinished, but has windows and partitions set for two bedrooms in the gables and a store room in the front dormer.

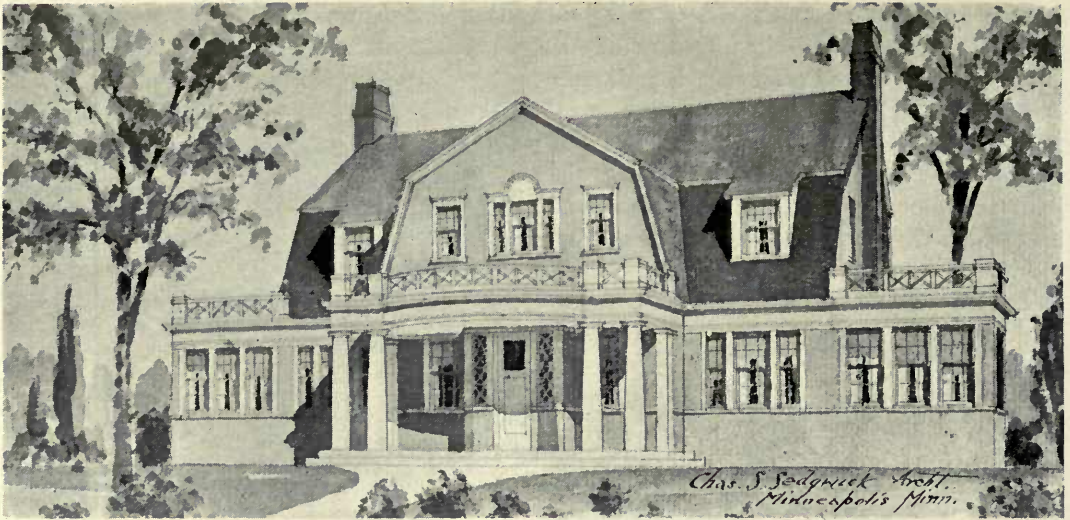
A Dutch Colonial Residence



very roomy home is here shown with ample halls and passageways. The house is symmetrical in design, with the main body of the house 45 feet wide by 36 feet deep,

with sun room wings at either end of the house.

A central stairway and passage beside it meets the eye on entering. The living and dining rooms are on either side and



A house built on the lines of the Dutch colonial

give vistas through wide openings to the sun rooms beyond.

Back of the dining room is the kitchen with separate service stairs and with a

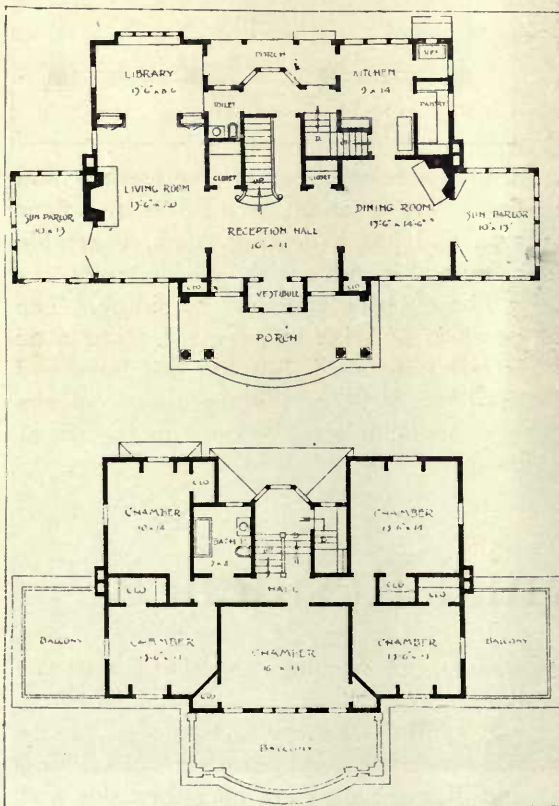
roomy pantry and refrigerator room opening from it. The rear entrance is on the other side of the kitchen from the porch. A toilet is placed under the main stairs and closets on both sides of the main stairs.

Beyond the living room is the library, opening to the rear hall and porch. There is a wide fireplace in the living room, and a corner fireplace in the dining room.

The ample reception hall might recommend this design for a club house near golf links, or for a country club. Tables could be set in both dining room and the adjoining sun room. The house is such that it will appear particularly well with a wide sweep of lawn and in a setting of fine old trees.

On the second floor are five chambers, with balconies at front and sides. The finish through the house is white enamel.

The house is of frame construction. The exterior is covered with heavy shingles and given a soft gray stain. The trimmings throughout, the cornices and balcony railings and porch details are painted white.



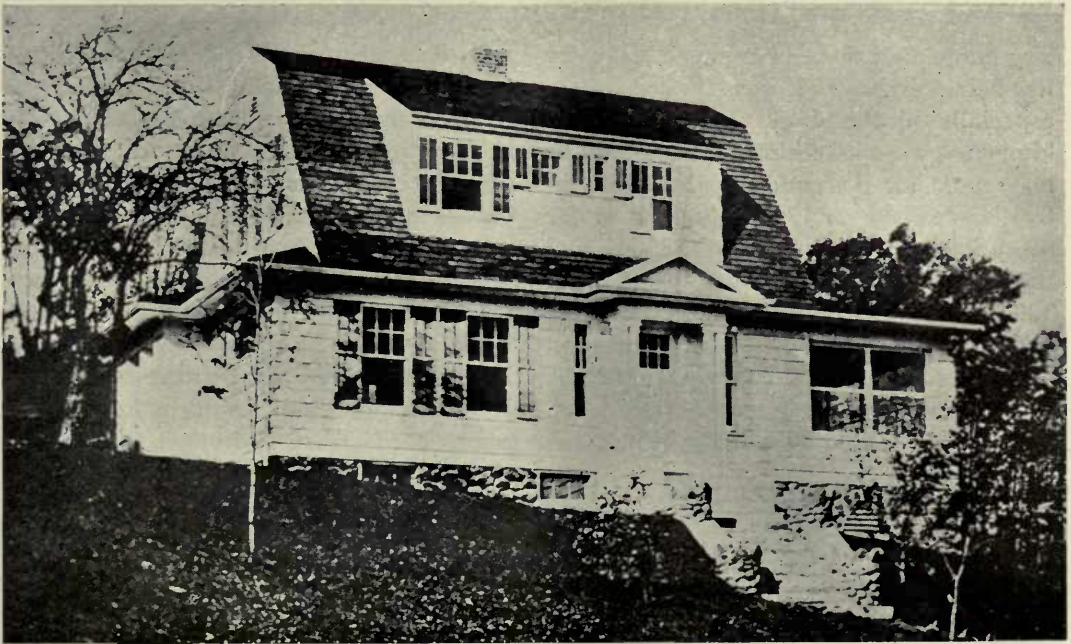
Two Farm Homes



A good plan is even more important for the farm home than for the city house, if one may so state it to lay greater emphasis on the necessity for convenient, labor-saving arrangement for the farm, because the housekeeper on the farm has as a rule more work to do—work which often includes many other duties in addition to

house must be planned in the light of these activities.

Aside from this special planning, which may be largely a matter of equipment, there are other features which are almost universally required. Whether father and the boys do most of the work on the farm or there are "hired men," a wash room is necessary where the men can



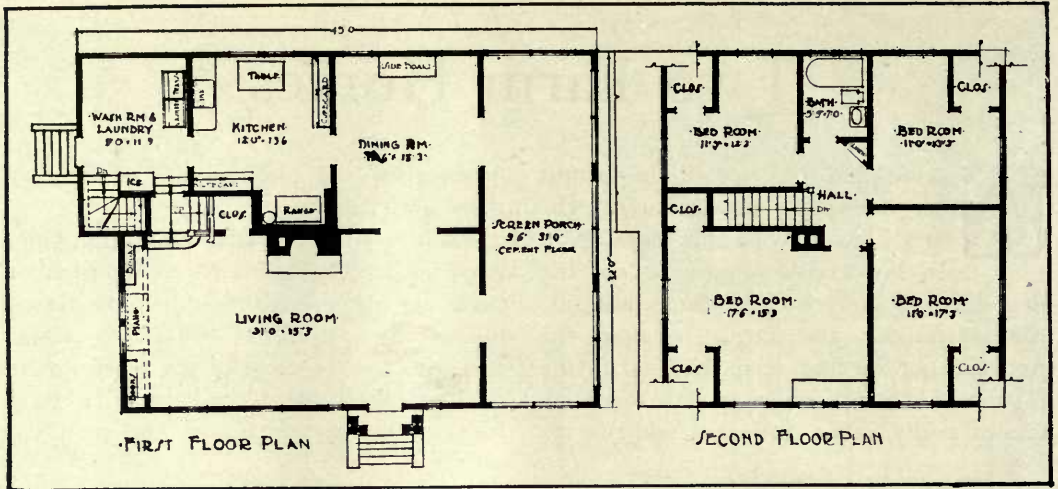
An attractive home, for the farm or in town

the care of the house itself. For this same reason the planning of the kitchen should be a matter of first consideration in planning the home.

It is in the planning of the kitchen that one notes the first difference between the city house plan and the farm house. In the farm home the kitchen is the work shop,—not only for the life providing activities of the home, but also for many farm activities, and the efficient farm

come in from work, hang up their work coats, wash and come in to dinner feeling fresh and moderately clean. This room may also serve as a laundry on wash days, with the set tubs covered to make a table at other times, or provision may be made for serving meals to the men at a separate table than that of the family.

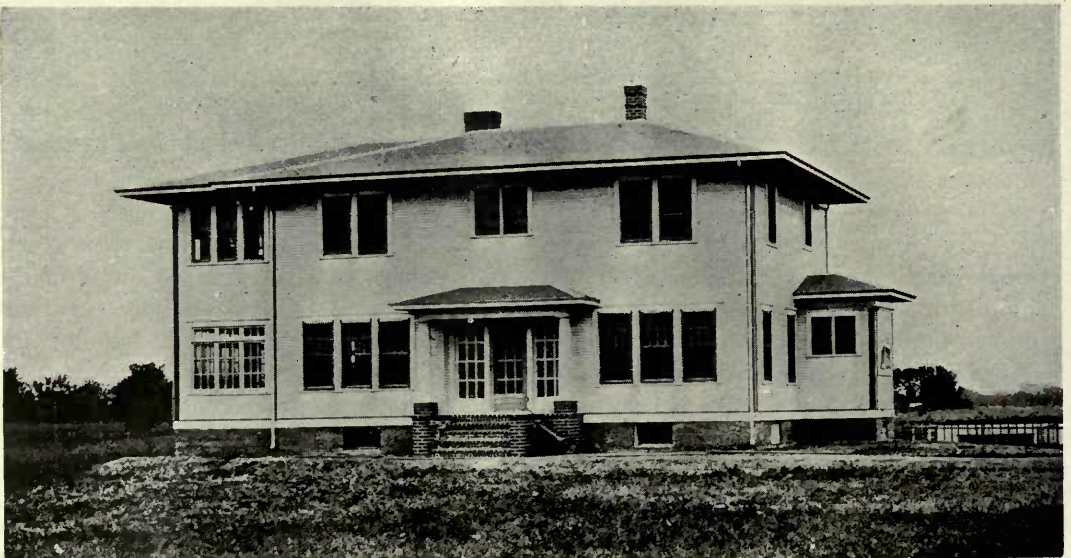
A larger kitchen is generally required or desired in the farm home than in the



city home, and there is greater reason for its being light and airy. Very often, especially in the small farm house, the kitchen is used as dining room as well as play room for the children. Where winters are severe and the plumber is far away it is advisable to have the sink and the plumbing stacks on an inside wall. There should be a toilet near the wash room. Provision for fuel storage in small quantities should be convenient to the kitchen, and if possible on the same level. In fact, "if possible," should be eliminated

and the necessary effort made that there should be no steps for the housewife to climb if she must bring fuel from outside the kitchen. A raised platform is much cheaper than convalescing from a breakdown in a sanitarium, or than funeral expenses, for that matter.

The old custom of having a spare parlor, closed except for company occasions, is giving way to a utilization of the space which shall mean more to the family in a larger living room. A farm house generally needs more bedrooms than a city



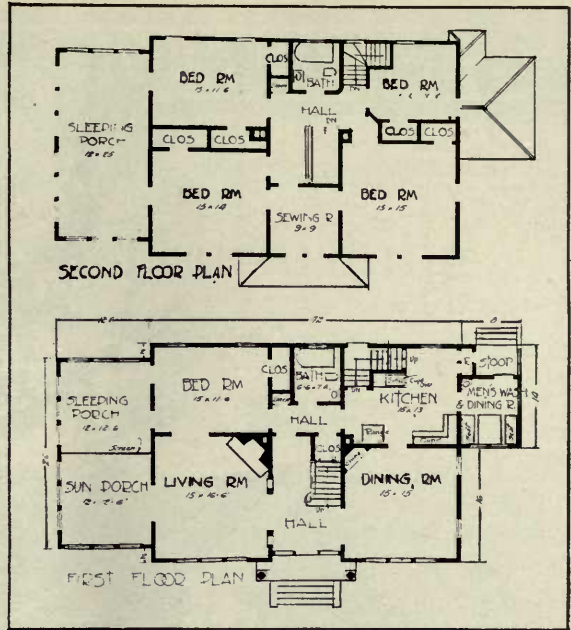
No labor was wasted in building this home

house, and if the farm workers sleep in the house, the men's quarters should be reached by separate stairs and entrance so that they can come and go without disturbing the family. Where much help is required especial provision must be made for the maids, to give them satisfactory living conditions.

In the two homes shown either of them could be used for homes in the city but they have the essentials of the farm home. The rear entry of the first is through the wash room and laundry. The kitchen is large. The range is set in a bricked recess. The ice box is in the wash room and steps from there connect with the main landing of the stairs.

There is a long enclosed porch across the width of the house, one end of which could be fitted as an office if desired. If more sleeping rooms are desired they could be built over the porch, extending the main house roof. A passage way between the bedrooms would give direct access to these rooms.

The second house is of the rectangular type, with a bedroom or office on the first floor. Opening from the kitchen is the men's wash room with builtin seats and table for a dining room for the men. Rear stairs from the kitchen give access to the second floor. The basement stairs are under these with an outside entrance



on the landing, at the grade level.

The main entrance is into a central hall with a wide opening to the living room and French doors to the sun room. A screen separates the sun room from the sleeping porch. There is a bath room on both the first and second floors.

The exterior is sided, with brick and concrete to the water table. The planting has not yet been set. The farmer has so much in growing green things about him that sometimes he does not seem to realize how much vines and shrubbery add to the appearance of his home.





Interesting example of modern country house

Aymur Embury, Architect



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Summer Decorators' Notes

SLIP covers, broadly speaking, may be divided into two classes; those used merely as a protection from dust and sun, and those serving a more decorative purpose. The first, made of brown Holland or something similar, are suitable only for the town house, closed in summer. The second are equally desirable for country or city. Nothing can so transform stuffy upholstered furniture, purchased in a previous epoch of household art, as fresh covers of cretonne or chintz. Nothing can so apparently cool the atmosphere as these gay, crisp slips. To the town housekeeper, planning an inviting living room for July and August, they are an especial boon—for they enable her to obtain charming effects at a small outlay.

Several of the new wall hangings are accompanied by cretonnes and chintzes in the same pattern, and where the room is planned from the beginning, many charming schemes may be worked out. The usual condition is the selecting of new chintz or cretonne to be used in a room papered at an earlier date.

The patterns are bold ones; many are repeated only once in a yard and a half, and to be seen to advantage must cover large surfaces. For davenport and high-back chairs these striking designs are often very effective. They are not so well

adapted for smaller pieces of furniture. Some of these decorative chintzes are reproductions of old designs and when placed in a colonial room, are highly satisfactory. One design, a copy of colonial "patch," shows a mass of dahlias in glowing reds and yellows which equal in brilliancy the colored illustrations in a seed catalogue. The leaves are twice the size of nature and are printed in queer blue-green, as antiquated as the flowers. In a room with white paint and a striped green paper this quaint dahlia garden would be interesting. On a wing chair the daring flowers would be seen to great effect. No other figured stuff could be used in the room.

Another chintz, equally striking, but more in tune with modern rooms, has a solid background of green rose-bushes, with bunches of pink and crimson roses at intervals. This design may be found also in cretonne, which many housekeepers prefer. The colors of the latter material are usually softer, and ivory-white is used instead of clear white. Another attractive material is linen taffeta which usually has ecru background with a blended pattern. The surface is rougher than cretonne and a little heavier.

Bird patterns are still extensively used. One is a new American print decidedly gay. There are bluebirds and green

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leaves and scarlet flowers—all worked in the flat without shading. Less striking but equally decorative is the bird and cherry chintz, which has as many colors as Joseph's coat. The blues, greens, yellows, and English pinks are so harmon-



New "Ragstyle" rug in old design

iously blended, that the combination is not unpleasantly brilliant. Another bird design is American, quaint and attractive. The colors are old pink, olive-green, and faded blue. A more conventional treatment is found in a blue and white cretonne, which is well adapted to a blue-and-white scheme. It is too pronounced for the average room, but very telling with the right surroundings.

In many households it is the custom to cover a dozen or so of the chairs in attractive chintzes and distribute them through the house, possibly a small rocker with Scotch roses in one bedroom, a big wing chair with gorgeous hollyhocks in another, a lounge with green oak leaves in another, and a work chair, with narrow flower stripes, in the sewing room. The designs are chosen to harmonize with the walls, adding a touch of freshness and newness to rooms used all the year. With this plan remnants may be utilized, and a variety of designs selected. Nothing brightens up a room more successfully, and nothing adds a crisper, fresher touch, than such a transformed rocker, armchair, or couch. Under the new cover may be faded rep or plush, but it is hidden from sight and thankfully forgotten.

The trellis and lattice papers, popular for several years, are still in use, but the effect is less flowery. One bedroom planned for a country house has a lattice paper of green over which green rose leaves are climbing. A rose "crown" was designed for this, but discarded in favor of a lattice paper of leaves and pink roses. The green lattice covered the walls to the white cornice, and the green and pink lattice was used in the ceiling. The room had the effect of a bower with a rose canopy. On the floor was one of the new

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Bird and cherry chintz

Japanese mattings in natural fiber color, over which at intervals were green disks with leaves and flat pink flowers. The rugs were of matting with green borders. The windows, which were long, were curtained in printed cotton in plain leaf-green. The furniture was white enamel of plain design, the low dressing-table covered with cretonne in a pattern like the ceiling, over which was fitted a top of plate glass. A screen of three panels in rose-pink linen with white frame completed the furniture.

Another bedroom was quite Japanese, having a paper in white plum blossoms on a blue ground. At the windows were white muslin curtains with hangings of plain blue cotton crêpe. There were blue and white rugs on the floor and portieres of plain blue at the doors. The bed had a counterpane of plain blue, and there were plain blue slips for the pillows. The screen was of Japanese reeds and the washstand set of blue Japanese pottery.

These bedroom schemes were inexpensive, the object being in each case to have the rooms cool and in-

venting. Many people object to outdoor effects in the house. Spending a large part of the time with real leaves and trees, they do not care for paper trees and leaves in the house. There is an argument on both sides. Much depends on the kind of house, the kind of setting, etc. The old-time floral papers were seldom satisfactory. But the attractive new papers are so unlike these old-timers that the question has an entirely different aspect. Where a plainer effect is preferred a two-toned paper

in a grayish shade of green is usually satisfactory, the tones being nearly of the same intensity.

One country hall was made interesting by a foliage paper in maple boughs, the furniture being covered in English glazed chintz of the same pattern. Curtains that hung against a long staircase window were of net upon which maple leaves cut from cretonne had been applied. The result was quite unusual. The window



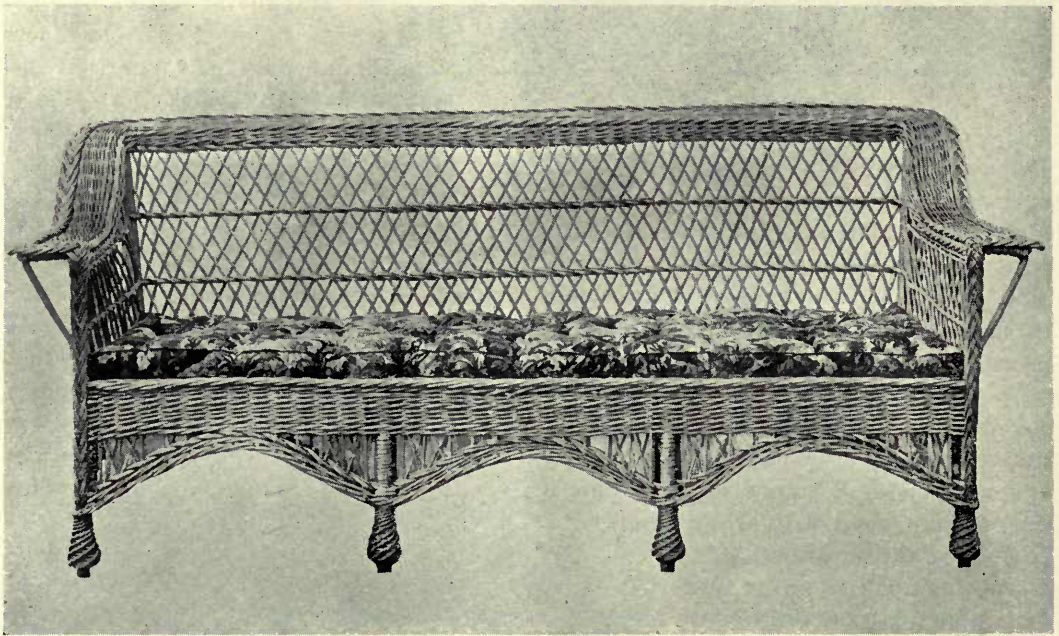
Elliott book table

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with its leaf decoration had the effect of maple boughs. Everything was green and white and cool looking. This was a summer house in a locality where the temperature frequently remained in the "nineties" for days. In winter this hall had so completely the outdoor feeling that it gave one the shivers, in summer it

freedom. It matters not whether the house embodying these attributes be an "estate or a cottage"—the goal has been reached. The estate represents the combined efforts of architect, landscape designer, and decorator; the cottage oftentimes the work of one heart and brain.

How can the desired results be ob-



The Whithall sofa of willow

was charming, and seemed to lower the thermometer fifteen degrees.

There is something in the term "country house" which suggests cool, simple effects and an absence of stuffiness. The transition from life outside the house to that within is gradual. The outdoor feeling is continued in the interior, and this quality is what makes the country house a success. And by "outdoor feeling" is not meant rustic furnishings, necessarily, but simple, broad effects, air, space, and

tained when the talents of the decorator and the skill of the landscape designer are not at command? How can the inexpensive house express the necessary atmosphere? Do not model your summer home on your winter one. Do not transplant city luxuries to the country. Do not feel that bric-à-brac and pictures are necessary. Let the scenery be your pictures; and flowers your bric-à-brac. Unless the summer outing covers four or five months take few books. One hour

INSIDE THE HOUSE

spent in the woods is worth three with a book in the house. But provision should be made for rainy days, and if there are children, a special selection made for them. A simple text-book on wild ferns will prove a great blessing. A day in the woods becomes both pleasure and profit if there is a beloved book to consult on the return. One new wild flower will serve to mark the occasion as a red-letter day. Books on astronomy are seldom

considered in connection with the summer library, yet "Astronomy with an Opera Glass," by Garrett P. Serviss, and "Half-Hours with the Stars," by Richard A. Procter, may be made of absorbing interest to older children. A summer porch at night is doubly enjoyable when an acquaintance is made with the constellations. The house mother will find that the long school vacation will be robbed of many of its perplexities if a small library is formed for the children.

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.

BATH-ROOM furnishings are of vital interest to the housekeeper—for a well-equipped bath-room is the hallmark of respectability.

If expenses must be curtailed in other parts of the house this room, at least, should be as comfortable and attractive as the family purse can make it; not necessarily marble walls and sunken tubs, but a place where light, air, and cleanliness are secured. Light and air are supposedly within the reach of all, yet from the way we shut them out



One of the many bird papers

from our bath-rooms they might well be within the reach of millionaires alone. We put a premium on sunshine and use air as gingerly as if it were weighed in gold.

All the books on sanitation, all the lectures on home economics, are as naught, so long as we fail to put into every-day use the a b c's of sanitary living. The bath-room is a good place with which to begin the crusade. The question of the tub need not now be considered, nor the floor, although these are important.

The tub and its various

INSIDE THE HOUSE

appliances are often provided by a previous householder. The floor is likewise in place. The general arrangement of the room is often beyond changing. But the walls, often the most perplexing feature for the room are ready for treatment.

Fortunate the housekeeper who can tile her bath-room walls. She can obtain such cool, clear effects and rest secure that no amount of splashing can mar the

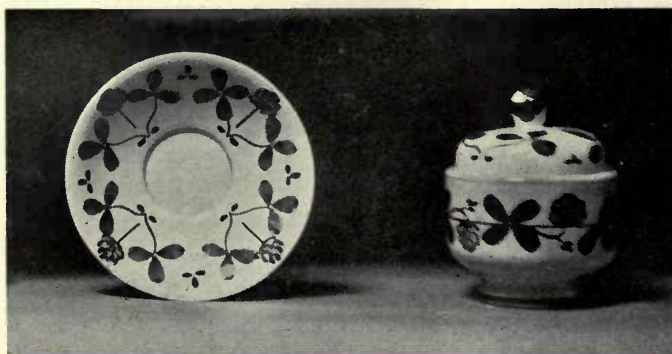
It is surprising to see how effective many comparatively uninteresting designs become when coated with glaze.

Where tiling is used, an "all white" bath-room is most desirable, but where paper is preferred, color has its place.

Among attractive bath-room papers is a pond-lily design, as cool and watery as a lily pond. Another effective pattern is the wild iris with long straight leaves.

Good effects may be gained by trellis and lattice papers. These are especially effective when hung above a wainscot and carried over the ceiling. The main thing is to choose a simple scheme and stick to it.

The small fitments for bath-rooms now seen in the shops are both convenient and attractive. Glass is the best medium particularly where the shelves are glass.



Copenhagen Faience

surface, no steam penetrate the glaze, no sun fade the colors. Where tiles are impossible, there are many attractive substitutes. Tiled papers are not of this class. They are more effective in kitchens than in bath-rooms. Glazed papers of various designs are made especially for bath-rooms and these are excellent for one year's wear. Where there is a high wainscot, paper will wear longer. The principal thing is to protect the walls where the wear is hardest. This is sometimes attained by tiles, sometimes by paint, and again by a wainscot. Where paper is used from baseboard to ceiling, it is well to treat it to a coat of white varnish. Glazed papers will not need this at first, but those of usual finish should be varnished as soon as they are in place,

Large square bottles with the name of contents stamped on the glass prevent mistakes and help in maintaining order. Some of these articles are very decorative, showing narrow bands of color either side of the label. A wall-cabinet painted white with narrow shelves within is always found useful. Simple remedies may be kept on hand proving convenient "first aids." If there is a bath-room for guests a similar cabinet should be installed—not so generously supplied, but containing a half dozen or so bottles. A good family selection consists of camphor, bay-rum, hydrogen-peroxide, listerine, witch-hazel, charcoal tablets, bicarbonate of soda, and bromo seltzer.

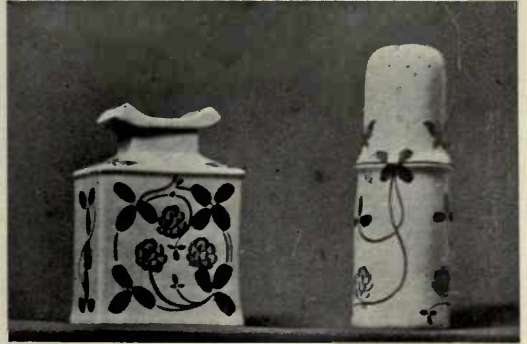
An expert in kitchen economies gives the following list in a lecture:

INSIDE THE HOUSE

"Glass doors enclosing china cupboards slide on rails back and forth; they never swing out on hinges in a practical pantry." This may be questioned by the house-keeper where the cupboards are high,—not less than 16 inches above the lower cupboards to allow an open serving space. It must be admitted that with the poor workmanship so often found in the inexpensive house, imperfectly fitted sliding doors may give more trouble than the same class of swinging doors.

"White celluloid labels, lettered in black, indicate the places designed for everything belonging in the pantry. They are readily cleaned and compel order. Shelves for china and glass thus marked prevent displacement. The practical pantry has no crowding. Six plates or saucers in one pile is the safe rule. Round pieces of flannel placed between fine china plates are a great protection against breakage. A grocery cupboard, planned for tea, coffee, sugar, crackers, salt, pepper, oil, vinegar and whatever must be near the dining-room—also has every place labeled. A total stranger could, without delay, find anything required or distribute new supplies in their customary places, according to the label indication.

The practical pantry never lacks a bountiful supply of hot water. Sink basins and drainers, in height to suit persons of average stature. The basins are broad and shallow to admit only a few dishes at once. When all are visible un-



Useful articles of Copenhagen

der the water there is less danger of breakage. Wooden drain boards with wide center bevel, rather than grooved, carry off the drip without endangering dishes. During dish-washing the drainers are covered with canton flannel which catches some drip, facilitates drying and protects against breakage.

Canton flannel towels for drying silver are more expeditious than linen. Towel-bars, strong and roomy, occupy available place within reach, but not in any one's way. Useful articles in constant demand hang in full sight, readily reached and quickly put away.

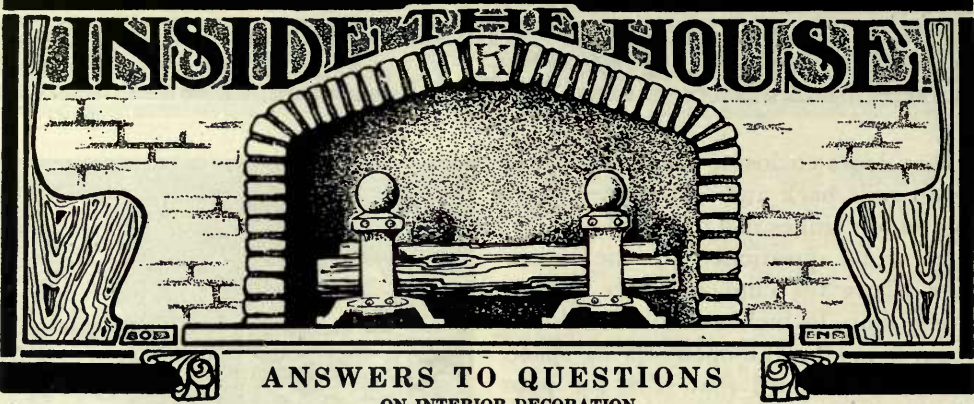
Rubber mats at the sink and under the garbage pail are easily kept clean and therefore more sanitary than others, while their elasticity prevents great weariness from long standing. Drawers, for holding pantry towels, are divided into compartments that serve to keep the piles in place; the same plan is carried out in drawers for silver-cleaning things."

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.

A Pretty Home.

Our home is to be thirty-two miles from San Angelo, Texas. The house is of wood. It is to be finished on the interior with beaver-board, so walls will be painted or tinted. The house faces the southwest.

Our dining room furniture, consisting of table, chairs, china closet and sideboard, is golden oak. Our twenty units of sectional book-cases are golden oak. We have a lot of oak rockers, rather an incongruous mass. Our grandfather's clock is cherry with mahogany panels. I think it is a Westminster clock. At any rate, it is very handsome and keeps good time. Our piano is mahogany and our Victrola is brown mahogany. I once thought of buying mahogany furniture for our living room but have decided that fibre furniture would be more suitable. What must I do with my book-cases? The book-cases are in perfect condition. I could probably trade them and pay difference for new ones or might paint them, but do not know how that would look.

All our furniture is golden oak except some walnut furniture. I have a very handsome old-fashioned set of walnut I expect to put in front bedroom. The back bedroom will also be furnished in walnut. The middle room for our daughter, who is a young lady, will be in old ivory. I saw in Keith's that a dull yellow is a nice color for a room furnished in walnut. Will you send me the shade that should be used?

Our floors are to be of choice pine. Filled and waxed.

The Wilton rug on our living room is pretty. It is of oriental design. I saw a prayer rug in the "House Beautiful" that strongly resembles ours, only it was much smaller. The colors are soft and dull. It contains blue (torquoise, I suppose, as it has a greenish cast), rose, brown (very dark), several shades of tan, green, a light gray or maybe it is ivory or bisque. It is hard to say what shade it is. Our dining room rug is a very light tan (mingled tan and cream). It contains black, green, yellow and rose. It also is a very pretty rug. We have a very handsome Navajo and a pretty little hall rug.

I would rather not buy new dining room furniture for the ranch for I expect some day to have a nice home in San Angelo. Do you think I can use the furniture? If so, how would you suggest having it finished? The shelf over the brick fireplace will be either white stone or cement.

I have thought of gray walls and old ivory wood work because you say it is restful and beautiful. Would you have living room, dining room, hall and kitchen all the same color. We have no rug for daughter's room. Expect to buy a handsome set of old ivory furniture for her. She is rather fair. The French door and window in her room are shaded by a gallery.

We have enjoyed reading Keith's this year, and I also had the pleasure of looking over last year's issue. We feel that we will have harmony if you will make suggestions as to color of walls, wood-



**An Attic Room
like this
is worth
\$100
a year**

YOU might not care to rent your attic after finishing it with Carey Wall Board but the point is this: If it can be so transformed that one room is worth \$100 annually to a renter it certainly is worth that to you in the comfort you and your family will get out of it. Thus, this economical improvement is justified in these conservation days.

Carey
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is nailed to the partition framework and rafters on convenient sized panels. Requires no experienced labor. It is fire-resisting, moisture-proof, permanent. Comes in five finishes. Its use is not confined to the attic—it finishes beautifully and cheaply dining room, living room, kitchen and bed rooms. More sanitary than plaster; more quickly applied. No muss.

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INSIDE THE HOUSE

work, furniture, upholstery and hangings, and some suggestions as to arrangement of furniture, as I am a pleased subscriber.

Ans. Your letter is so interesting that I hope we can make your house as lovely as you picture it.

The fibre furniture finished in gray would make a very distinguished room and then you can use gay chintz cushions and curtains. Then paint the book-cases gray, too, and give them little soft silk curtains of the color you like best in the chintz. Then as the piano and victrola are mahogany, oh, yes, and the clock, their color must appear in the chintz.

The dining room would be beautiful in orange tones, walls cream like woodwork and draperies of orange, either plain or self-figured unless the rose in the rug is too prominent, then use the furniture in its golden tone.

I am sending several shades of yellow that would be good with walnut. I am also sending cuts of ivory furniture for the daughter's room, and a sample of a wonderful silk for her room. It is flame color, the color of her cheeks intensified, and gold, the color of her hair in the sunlight, and it will brighten her room. Keep the wall cream and then you can buy a Scotch rug in the colors of the room.

Color With Mahogany.

W. M. F. I am writing for suggestions as to color scheme for my bedroom, size 13½ by 13 feet. It is in the northwest corner of the house, has one large window and one small one. I have pretty dull mahogany furniture. I would like to make it as pretty as possible. I was thinking of having it in old rose; curtain, hangings, etc. If so, what should I have—walls, woodwork and rug? I have also thought about yellow. I first wanted lavender, but have given that up, for fear it would not be pretty with the mahogany furniture.

Ans. In using old-rose with mahogany, two things must be carefully considered. First, the color of the mahogany—that is—whether it is brown-golden or red-violet, and second the tone of the

old rose, for with the brown or orange the tone of the silk should be rather terra-cotta, and with the red-violet it should be a mulberry shade.

The woodwork is best in old ivory and the paper a little darker, or you could have a flowered paper and keep the draperies plain in tone. The Scotch rugs which are woven to match your rooms' colors are best to use.

The yellow or orange would be lovely with brown or golden mahogany, and the lavender provided it is the right shade is good and delightfully modern, if used with the right mahogany.

Old Ivory With Mahogany.

H. M. C. Will you kindly give me some information on the following questions.

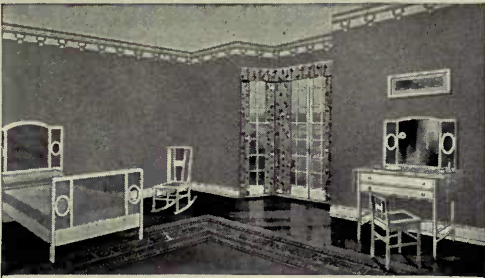
We are building a "Dutch colonial" cottage, size 26x30.

The hall, living room and dining room are finished with white and mahogany. Should it be old ivory and mahogany? All the furniture for these rooms is mahogany, except sofa of black haircloth, which is not old style enough to be called colonial, and it is walnut. I want to use this sofa in my living room, for the present at least, if it can be made to harmonize.

Ans. Old ivory is better with mahogany than white, because of the warmer tone of the former. The sofa of walnut can be covered with a slip cover and the same material used for curtains and cushions and the wicker chairs could have a tone of mahogany and cushions of the material used for curtains and slip cover. Use these curtains at each end of the group of windows, hang them straight from the rod and connect them with a valance, then against the glass and on the French doors use marquissette, gauze silk or any thin transparent silk.

For the woodwork you can use birch stained with a silver gray water stain and as it is very warm in effect and very beautiful it would do with either maple or mahogany.

The lamp-shade in the living room should be of the same color as the curtains.



The room when new



The same room a few months later

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You need have no fear of falling ceilings if you use metal lath.

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sides of the building—sidewalks—lawns, etc., from coal smudge and damage, and adds to the appearance of your property.

Locks automatically—absolutely burglar-proof—glass door affords ample light to basement.

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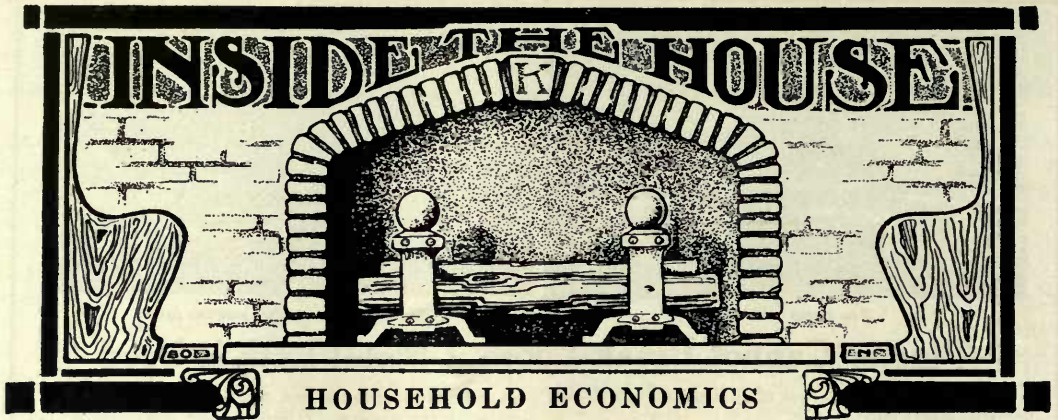
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We want to send you some tangible proofs in the shape of a set of little panels of "Beautiful birch," showing different finishes. We'll send our book about **birch**, too.

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Suggestions in Home Equipment Especially Applicable to the Farm.



N efficient system of artificial lighting, with well placed units as well as plenty of well placed windows.

Running water, hot and cold; with the hot water tank enclosed, if it is placed in the kitchen. Where gas is not practicable a small coal water heater in the basement with the hot water tank beside it gives hot water all the time at the cost of something like a shovelful of coal a day.

Make all of the stairs in the house, including the basement stairs "easy" and without winders.

The "man's room" should have a separate entrance, or be easily accessible from the side entrance, and shut off from the other rooms.

Have heat in the kitchen as well as in the rest of the house.

Make all floors easy to care for. A general consensus of opinion seems to favor linoleum as the most satisfactory and practical floor covering for the kitchen.

The work table, covered with a plate of vitrolite,—a white glass, is easy to keep clean, but should not be used for hot things. A zinc covered shelf by the range is a great convenience.

Have a good stove for the cooking, one that is dependable and efficient.

A fireless cooker, used intelligently, gives a great saving of time and fuel.

Laundry tubs are some times more convenient on an enclosed rear porch than in the basement. A power washing machine and wringer helps, also an ironing machine for flat pieces. The clothes chute should not be omitted.

There are several good types of built-in ironing boards, with provision for an electric iron, showing automatically when power is on. There are several types of flat iron which do not require a hot stove.

The dumb waiter as a step-saving device has not been given its due in the usual small home. Where food is kept in the basement it may be closely enclosed with screening and the food allowed to remain in it, or in one compartment. It has been suggested that such a screened dumb waiter be lowered its own depth below the basement floor into a concrete walled excavation prepared for it, as a means of keeping food without ice.

Running water may be piped through the ice chamber of the refrigerator or a receptacle for drinking water may be arranged in the ice chamber with a faucet outside.

A bread mixer saves both time and labor.

Put a telephone extension in the kitchen.

With a breakfast alcove and electric appliances breakfast becomes a very simple meal when the family is small.

Slidetite

(PATENTED)



GARAGE DOOR HARDWARE

CONVENIENT. Because simple to install, easy to operate. Accessible adjustments equalize effect of settling building walls and bulging floors.

ECONOMICAL. Saves heat. Saves space. Prevents damage from doors banging against car. Doors can't sag, can't swing in the wind. First cost reasonable. No aftermath of unexpected expense.

ORNAMENTAL. "Slidetite" hardware is installed inside the building out of sight and out of the way above the doorway. Gives opportunity for ornamental doorway corresponding with architecture of residence.

Adapted to any Garage, private or public.

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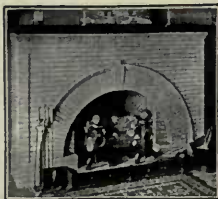
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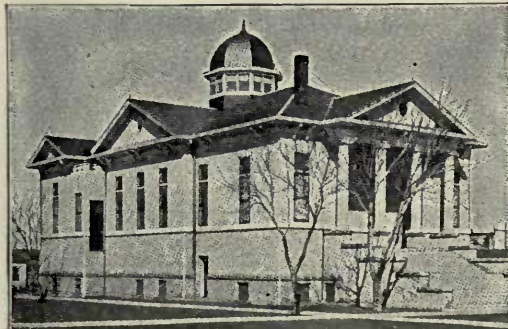
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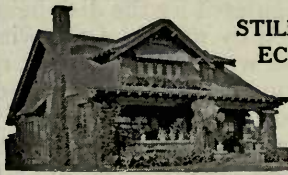
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Send \$1.50 for all 3
books and get book of
75 special plans, **FREE**
also Garage plans

Money back if not satisfied

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You will find "Keith's" Advertisers perfectly responsible.

INSIDE THE HOUSE

A small push table on rollers, of the type of the tea wagon, but with shelves under, giving more carrying room, saves many steps.

There are practicable dishwashers on the market. A rubber plate scraper prepares dishes for washing. A stiff brush will clean pots and kettles without getting the hands in the water.

Doilies and Japanese luncheon sets save heavy table linen and are much easier to keep in good condition.

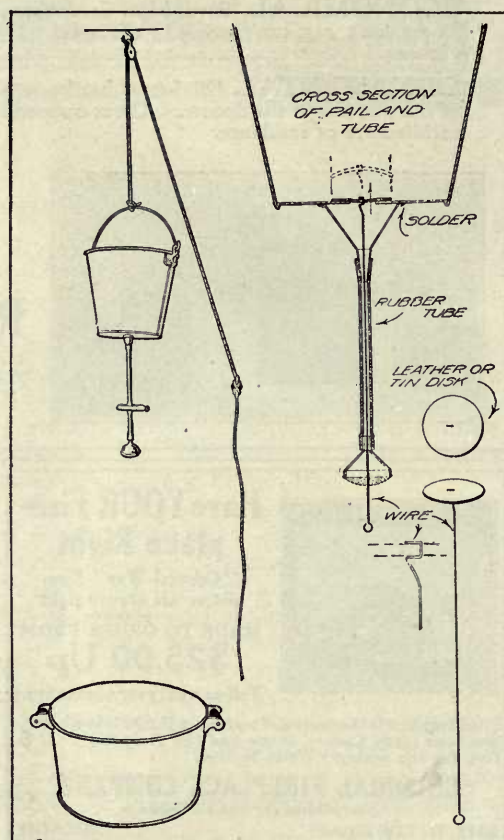
A Shower Bath Without a Water Supply.

Nowhere, perhaps, is a shower bath more of a necessary luxury than on the farm or in the vacation home, whether it be a hunting lodge or a cabin in the woods. Farmers' bulletin 927 gives directions for a device which is practicable anywhere, as only a tin pail of water with an opening in the bottom, a piece of hose and spray nozzle, a clothespin, and a strong hook on the ceiling are the necessary equipment.

In order to construct this shower "a hole is cut in the bottom of a 4-gallon bucket and a piece of pipe 2 inches long soldered in the opening. Rubber tubing 4 to 6 feet long is attached to the pipe and a nozzle is fitted on the end of the rubber tubing. A sprinkler from a watering can may be used instead of the nozzle. The bucket can be raised or lowered to suit the convenience of the person taking the bath, by a rope fastened to the handle of the bucket and run through a pulley which is fastened with a staple to a joist in the ceiling. The end of the rope is looped over a hook, which is driven securely into the window or door casing, or into the studding in the wall.

A clothespin closed over the rubber tubing serves as a stopcock to cut off the water as desired. The shower can be better regulated by using a device such as is shown in the second illustration. The end of a piece of No. 12 or 14 wire is fastened to a disk of leather or tin, or a cap of a tin can, by making a hole in the

material used, running the wire through and looping the end. This disk is placed over the hole in the bottom of the bucket and the attached wire extends through the rubber tubing and the nozzle. The



Two types of shower bath devices

shower can be regulated by the disk being raised and lowered by means of the wire. The weight of the water in the bucket on the disk will form a sufficient seal when no flow is desired.

A large tub is placed under the shower, in which the bather stands. The tub and bucket may be given two coats of white paint and one coat of white enamel."



HESS WELDED STEEL FURNACES

are giving perfect results with hard or soft coal, coke, wood, lignite, or any other fuel that is available. This is possible because of its air tight construction, all seams being riveted, and because of its very large grate area, and rectangular brick lined fire box.

If you are not able to get the kind of fuel you want, and are accustomed to, the

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will satisfy your needs, for you can use in it any kind of fuel your dealer can obtain. Send for illustrated catalogue.

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That Bungalow

which you intend to build next Spring will need the soft, artistic tones of

Cabot's Creosote Stains

to make it complete and harmonious.

Paint doesn't suit bungalows. It forms a hard, shiny coat that is foreign to their character and "atmosphere." The Stains produce deep, rich and velvety colors that harmonize perfectly with the style of building and surroundings. They are 50 per cent cheaper than paint, and the Creosote thoroughly preserves the wood.

You can get Cabot's Stains all over the country. Send for free samples of stained wood and name of nearest agent.

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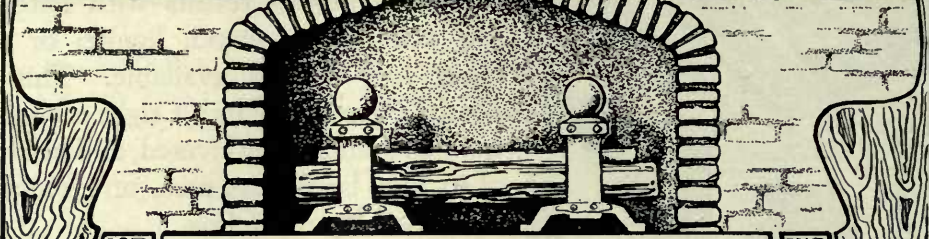
These designs are up-to-the-minute in detail and arrangement and incorporate the new features in home building, such as sleeping porches, sun rooms, built-in conveniences, etc.

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INSIDE THE HOUSE



THE TABLE AND FOOD CONSERVATION

Eat Green Vegetables

EVEN the pampered taste which has green vegetables all the year, thanks to the hot beds of his own locality or to transportation facilities from some point farther south, realizes the difference when these vegetables are really in season; especially when the same care is taken in the selection of varieties for the home gardens as that taken by the truck-gardener.

A knowledge of variety in vegetables, and recognizing at a glance whether vegetables are freshly picked are of the utmost importance when the housewife is doing her own marketing and wishes to give the most satisfaction possible to her family. If she knows that the little yellow ears of corn, which may look to her like field corn, are the famous "golden bantum," she will not choose the large white ears of corn unless her family prefer them. Nevertheless even the variety is not so important as that they be fresh picked.

It has been suggested that the large dealer in potatoes should have facilities for testing the different varieties, and that this should especially be practiced at food shows. The cooking test used by Prof. C. L. Fitch, the Iowa potato expert, consists in taking about five specimen potatoes, cutting them lengthwise, boiling one-half of each tuber in one of the small sauce pans provided, tagging the handles, noting length of time each takes to cook through, and whether the outer layer is cooked off. After cooking, the potatoes are drained, riced, covered, and held warm until all are ready, when the odor,

grain, color, and flavor are examined. With practice, one can distinguish odor, grain, color, and flavor points in such samples.

Savory Stews to Conserve Meat.

Savory stews and meat pies make meat go a long way. They are so varied that a different one can be prepared each day. In this way a small piece of meat will make a hearty dish which is delicious. The rules which follow will serve five people.

Hot Pot of Mutton and Barley.

- 1 pound of mutton.
- $\frac{1}{2}$ cup pearly barley.
- 1 tablespoon salt.
- 4 potatoes.
- 3 onions.

Celery tops or other seasoning herbs.

Cut the mutton in small pieces, and brown with the onion in fat cut from meat. This will help make the meat tender and improves the flavor. Pour this into a covered saucepan. Add 2 quarts water and the barley. Simmer for $1\frac{1}{2}$ hours. Then add the potatoes cut in quarters, seasoning herbs, and seasoning, and cook one-half hour longer. Many people prefer adding the water a little at a time.

Beef Stew.

- 1 pound beef.
- 4 potatoes cut in quarters.
- $\frac{1}{4}$ peck peas or 1 can.
- 1 cup carrots cut up small.
- 1 teaspoon salt.

Cut the meat in small pieces and brown in the fat from the meat. Simmer in 2

The use of sugar is not necessary in fruit preservation. Can your fruit unsweetened, and add sugar to taste when the fruit is used.

INSIDE THE HOUSE

quarts of water for 1 hour. Add the peas and carrots and cook for one-half hour, then add the potatoes. If canned peas are used, add them 10 minutes before serving. Serve when potatoes are done.

Stews may be varied by using any kind of meat. Use the cheap cuts, flank, rump, neck or brisket. The long, slow cooking makes them tender. Rice, hom-

if raw meat is used, add it and stir until the red color disappears. Add the tomato and seasoning. If cooked meat is used, add it with the tomato and seasoning, after the onion is browned, and heat through. Grease a baking dish, put in a layer of cereal, add the meat and gravy, and cover with the cereal dotted with fat. Bake for half an hour.

Suggested Conservation Foods.

Breakfast.

Cereals, other than wheat
Baked apples, prunes, dried apricots
Grape fruit, cantaloupe, melon
Fried apples
Omelet
Fish balls
Creamed or scrambled eggs on toast
Fried corn meal mush, honey or maple syrup
Buckwheat or corn griddle cakes, corn syrup
Potato cakes
Muffins, corn or rolled oats
Coffee, cocoa, milk

Luncheon.

Cream soup, tomato, corn, spinach
Spanish rice
Escalloped or creamed potatoes
Escalloped fish, turbot
Baked beans with catsup, brown bread
Omelet with creamed peas
All fresh vegetables
Baked banana with chopped nuts, lemon juice
Salad, any kinds of fruit or vegetables
Cottage cheese
Toasted cheese sandwiches
Celery, pickles, olives (ripe or stuffed)

Water ices
Fresh fruit, oatmeal fruit cookies
Milk puddings, fruit sauces
Tea, chilled fruit juices

Dinner.

Baked fish, dressing, sliced lemon
Fried or boiled fish, creamed egg dressing
Chicken, fowl, Belgian hare
Nut or cheese or fish loafs, tomato sauce
Fish timbales or soufflé, fish chowder
Baked or stuffed potatoes
Hashed brown potatoes with cottage cheese
Glazed or candied sweet potatoes
Rice with tomato sauce or gravy
Vegetables in season
Fruit sherbets
Salads, coleslaws with pimento
Cheese, cheese dishes
Corn oysters
Rice muffins, barley biscuit
Fruit, jams, jellies
Rice, tapioca or other custards
Ice cream
Dates, nuts, raisins (chopped), with whipped cream
Coffee, tea, cocoa

iny, and all kinds of vegetables, canned or fresh, may be used. This is an excellent use for left-overs. A fireless cooker will save fuel with good results.

Meat Pies.

Rice, cornmeal mush or hominy may be used in place of crust.

4 cups cooked corn meal, rice or hominy.

1 onion.

2 cups tomato.

$\frac{1}{2}$ teaspoon pepper.

1 tablespoon fat.

1 pound raw meat or left-over meat cut up small.

$\frac{1}{2}$ teaspoon salt.

Melt the fat, add the sliced onion, and,

Shepherd's Pie.

This is the name of a meat pie with a mashed-potato crust browned in the oven.

Nut and Bread Crumb Loaf.

1 cup chopped walnuts.

2 cups bread crumbs.

$\frac{3}{4}$ cup tomato juice and pulp.

2 tablespoons melted fat.

1 egg.

$\frac{1}{2}$ teaspoon onion juice.

$\frac{1}{2}$ teaspoon salt.

$\frac{1}{3}$ teaspoon pepper.

Make into a loaf. Put in a pan lined with waxed paper, and bake about one hour.

Nut and Cheese Loaf.

1 cup grated cheese.

INSIDE THE HOUSE

- 1 cup chopped walnuts.
- 1 cup dry bread crumbs.
- 2 tablespoons chopped onion.
- 1 tablespoon fat.
- 2 tablespoons lemon juice.
- 1½ teaspoons salt.
- ⅓ teaspoon pepper.
- Water.

Mix ingredients, using enough water to hold mixture together. Put in an oiled bread pan or in a pan lined with waxed paper. Bake in a moderate oven about forty-five minutes.

Candied Sweet Potatoes.

Parboil sweet potatoes about ten minutes, cool slightly, slip the skins off, and cut in halves lengthwise. Put in a dripping pan, dot them with bits of savory meat drippings, and pour over them about 1 tablespoon of karo syrup to each whole potato. Bake in a moderate oven until the potatoes are cooked through. Add a small amount of water, if necessary, to keep potatoes from burning.

Potato Cakes.

Shape mashed potatoes into balls or cakes. Roll in bread crumbs, egg, and bread crumbs, if desired. Bake on an oiled pan until brown.

Variations: An egg yolk may be mixed with 2 cups of mashed potatoes or a whole egg with 4 cups or 1 quart of mashed potatoes.

Ground nuts, meat, or fish may be added.

Minced parsley may be mixed with the mashed potatoes.

Fish Souffle.

- 1 cup milk.
- 1 tablespoon fat.
- 4 tablespoons flour.
- Pepper.
- ¼ teaspoon salt.
- 1 cup cooked fish flaked.

3 eggs.

Make white sauce from the milk, fat, flour, and salt. Remove from fire and add the yolks of the eggs and the flaked fish. Cool mixture. Fold in stiffly beaten whites of eggs. Pour into a buttered baking dish and bake twenty-five to thirty minutes in a slow oven.

Fish Timbales.

- 1 cup flaked fish, free from skin and bones.
- ½ cup bread crumbs.
- 1 egg.
- ¼ to ½ cup milk.
- 2 teaspoons lemon juice.
- ½ teaspoon salt.
- ½ teaspoon pepper.
- ½ cup green peas.
- 1 teaspoon chopped parsley.

Mix together the first seven ingredients using enough milk to make packing consistency. Oil timbale molds very thoroughly, pack in the mixture, and bake in a moderate oven in a pan of hot water until firm. Turn out on a hot platter. Serve with a white sauce in which has been stirred ½ cup green peas. Garnish with parsley.

Cheese Fondue.

- 1 cup soft stale bread crumbs.
- ¼ lb. mild cheese. (¾ cup grated).
- 1 cup scalded milk.
- 1 tablespoon fat.
- ½ teaspoon salt.
- 3 eggs.

Mix first five ingredients. Add yolks of eggs beaten thoroughly. Cut and fold in stiffly beaten whites of eggs. Pour into oiled baking dish. Bake about twenty minutes in a moderate oven.

Honey Drop Cakes.

- ½ cup shortening.
- ½ cup sugar.
- 1 cup honey.



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INSIDE A HOUSE

- $\frac{1}{8}$ teaspoon salt.
- 1 egg.
- 1 tablespoon lemon juice.
- 3 cups flour.
- 4 teaspoons baking powder.

Mix sugar and fat, add honey, beaten egg, and lemon juice. Mix well and add flour sifted with baking powder. Bake in small cakes in moderate oven from twenty-five to thirty minutes.

Sugar Not Necessary in Canning Fruit.

The use of sugar is not necessary for the preservation of fruit, according to the authorities in household economics. The masquerading of sugar as a preservative for fruit is due to a popular delusion and causes an unnecessary amount of sugar to be used in canning and preserving fruit. According to Miss Weigley, acting head of the department of Household Economics at the University of Minnesota, to prevent the spoilage of fruits, it is only necessary to bring the fruit to the temperature of boiling throughout;—that is, clear through the fruit, to kill all bacteria, and that no air, water or unsterilized utensil shall come in contact with it after it is heated.

Fruit juices may be canned without sugar and jelly made during the winter, a little at a time. The importance of sterilization of utensils is apparent.

Fruit may be cooked without sugar in an open kettle, allowed to simmer gently until completely heated through, with as little water as possible. Fill sterilized cans with the boiling hot fruit and seal. Do not expect this fruit to remain whole. The cold pack processes keep fruit from going to pieces very much. By the cold pack processes the fruit is closely packed in a sterilized jar while it is hot and immediately covered with boiling water, filling the jar. The top is put on the jar and it is either steamed from 16 to 20 minutes, or it is put into a boiler or large pail containing boiling water enough to cover the jars. Remove the boiler from the fire and let the jars cool in it. Success in this method depends on promptness. Jars must not be allowed to cool while the fruit is being packed in it. Water must be boiling.

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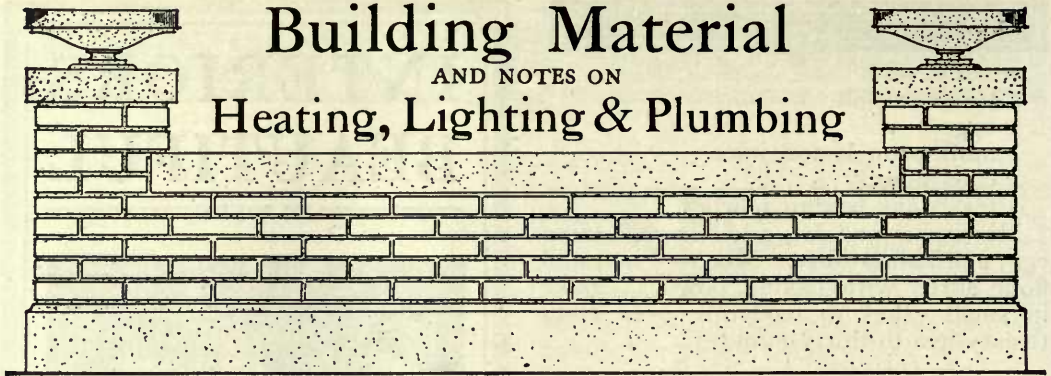
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The Water Supply

ONE of the first requisites of living, anywhere, is a plentiful supply of wholesome water. The quality of the water supply is dependent upon physical properties and upon chemical and bacteriological characteristics. To be suitable for drinking, water should be neither too hard nor too soft, and should not contain too many suspended impurities nor foreign matter. Pure water is colorless and without odor, but so important a matter as the water supply should not be selected without a chemical or bacteriological examination. Under proper conditions either surface or underground water may be used.

Wells.

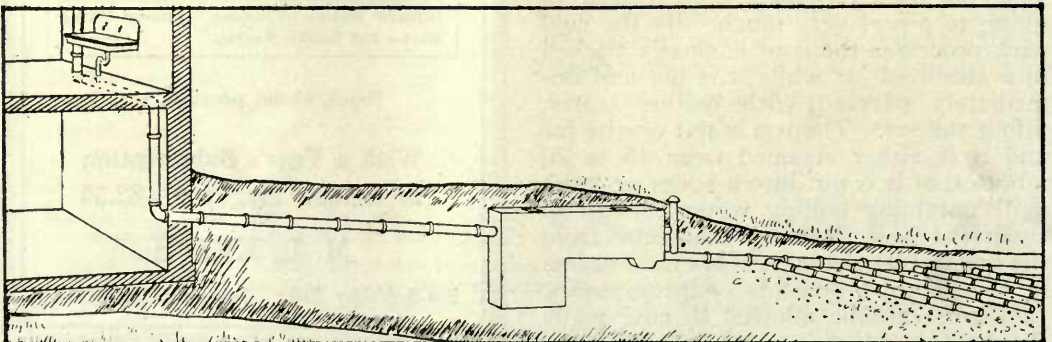
Wells, either dug, driven or drilled are the most common source of farm water supply. It must be constantly remembered that wells are liable to pollution from surface wash, from seepage and from underground drainage. They

should first be located at a sufficient distance from any source of pollution, and then every precaution should be taken to protect the well from any surface water or seepage. Stone, cement, brick, or tile can make the well safe. The top should be covered with a concrete slab properly reinforced with some kind of metal to prevent cracks.

Cistern water is another source of supply, and furnishes about as pure and palatable water as we have. It should be properly stored in a well constructed cistern, filtered through either a brick wall or preferably through gravel and charcoal, thoroughly well protected from possible contamination and dirt.

Storage Tanks.

The location of the storage tank must be planned with reference to the particular house. It has been found a great convenience when a tank can be placed



Sewage disposal—on the farm.

directly under the eaves so that by means of a cut-off the water from the roof may be turned into it,—or shut out in case the roof needs to be washed before the water is in good condition to use. As far as this water supply is adequate it gives a soft water supply which does not have to be pumped up under the roof. This may be piped to the bath room and the kitchen, using the general water supply when "rain water" is not especially wanted.

A country house or a farm should have a carefully worked out plan for the water supply which shall provide for every part of the farm; the house, the dairy, the stock barns, etc. On the requirements of this plan will depend the kind and size of the power plant necessary. The placing of the storage tank is often one of the vexing questions. Nothing is more unsightly than the unadorned elevated water tank, and many unsuccessful attempts have been made to ornament it.

Water Tower.

One of the most successful water towers is that for a home at Shinnecock Hill, Long Island, shown elsewhere in the magazine. While it serves its purpose in a perfectly logical and consistent way it adds a most attractive feature to the domestic architecture of the farm. It is necessary also to protect the elevated tank from extreme changes of weather, but at the same time the elevated tank may have a large capacity and is easily looked after should it spring a leak. The pipes to and from it can be easily repaired should they give trouble.

Pressure Tank.

A pressure tank may be placed in the basement and gives a very satisfactory system when it is simply a matter of supplying the house with water. The principle on which the hydro-pneumatic system works is something like this: When a receptacle is spoken of as being empty, ordinarily it is not empty at all—it is full of air. If we have an air tight tank with an opening in the bottom, and force water into this opening the air already in the tank, having no outlet, is compressed. When the tank is half filled with water the air which originally filled the entire tank is compressed into the upper part and will exert a pressure of 15 pounds to the square inch, quoting Prof.



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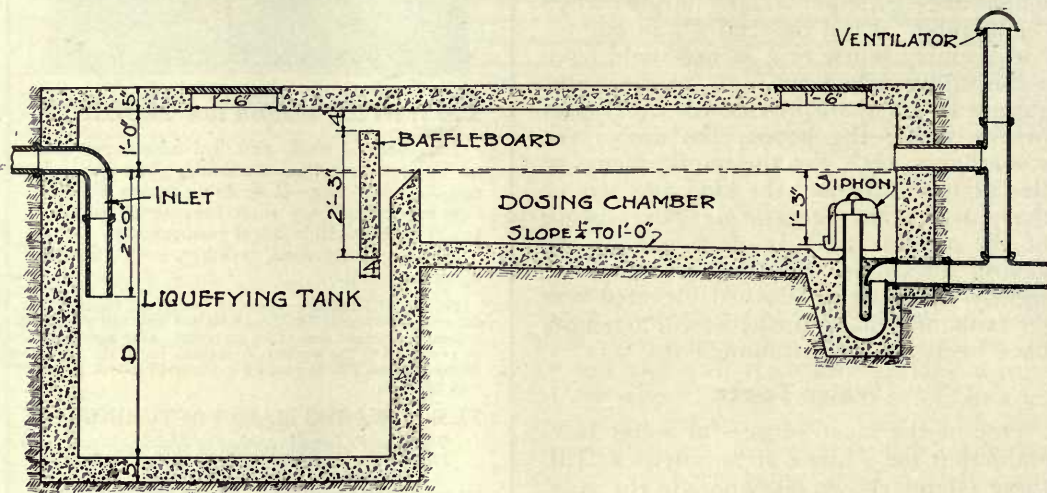
4062 Forest Park Blvd.,

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C. M. Emerson, of the Ohio State University. If a supply pipe is run from the bottom of the tank, this air pressure will force the water through the pipe to a height of 33 feet and the air remains in the tank. It is compressed when water is again pumped in, and when water is drawn off the air expands pushing the water before it.

which has a sparkling spring of water above the house level solves the question. In case the spring is below the house level but has a large flow of water the hydraulic ram gives a satisfactory and economical method of forcing the water into the buildings, but the amount of water must be greatly in excess of the needs, as only about 10 per cent of the supply can



The septic tank

The tank is the most important and expensive part of this system as it must be well made and of good material in order to stand the pressure to which it is subjected. In estimating the size of tank required it must be borne in mind that the tank is never completely filled with water; neither will a tank deliver all the water that it contains to a point above the height of the tank, unless air is first turned in to increase the pressure.

While a pressure tank is usually located in the basement it may be buried in the ground just outside the wall with one end projecting through the basement wall. This keeps the water cool in summer and prevents freezing in winter. The end projecting through into the basement allows for the convenient connection of pipes, gauges, etc.

Hydraulic Dam.

The power which will be used on the farm is determined by the special conditions. A farmhouse among the hills

be saved for use. Perhaps 90 per cent of the flow is required to raise the other 10 per cent and deliver it at the required distance.

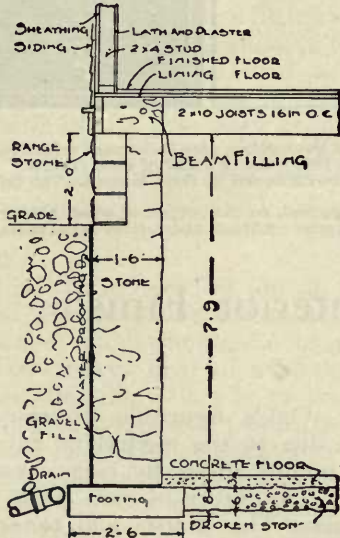
Sewage Disposal.

The next problem in the water supply is the method of sewage disposal. While in very sandy soils the cesspool, with walls laid up of brick or stone without mortar might work well for years, allowing the sewage to pass through the wall into the soil or possibly to pollute somebody's water supply. For later work it has been abandoned, and in many places the Board of Health has ruled against it.

A safe means of sewage disposal, as given by the government bulletin No. 60 of the College of Agriculture, University of Wisconsin, is shown in the two cuts which accompany this article, by courtesy of the department. The waste from the house runs into a septic tank to be liquefied, from which it is syphoned out into the drain pipes where it can best be utilized.

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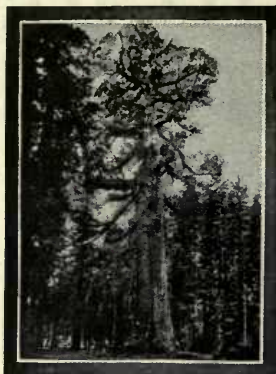
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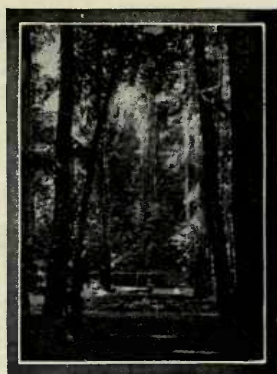
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WOODS

AND

HOW TO USE THEM



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.

A Coming Wood For Interior Finish— Red Gum



ONE of the newer woods which promises especial satisfaction to the home builder is red gum, because of its beauty, both of color and figure, its adaptability and fine workable qualities.

The intelligent building public is getting past the place where it is looking for a wood which may be "stained mahogany," and is looking for the woods which are beautiful in and for themselves. The fad is passing, we devoutly hope, for more or less bad imitations of something which one can not afford in the original. Mahogany is a beautiful wood, unquestionably, but to many people the prestige of the name carries as much weight, or more, than its actual qualities, and this feeling has brought about the general acceptance of imitation.

Commercially the term red gum applies to the heart wood of the red gum tree. In Europe this wood is also known as satin walnut and hazelwood. It is manufactured either plain or quarter sawed. Figured red gum somewhat closely resembles Circassian walnut, though figure is generally absent from the grain of the wood, making a smooth, even toned surface color. The figure in red gum is fundamentally different from the characteristic figures of oak and many other

woods. Oak's figure in quarter-sawed stock is due to the medullary rays with certain modifications by rings of annual growth. The figure in gum wood is due to neither. The shades and tones cross the rings in every direction, though they sometimes follow them with some regularity, and medullary rays have practically no visible effect. The colors ramify through the wood, obeying no known law of growth or deposit of earthy matter.

It is hard to explain why some trees are figured and many are not, although it is quite certain that the figure in red gum is influenced by the soil and situation.

Gum wood is also used largely in veneer, as it is better adapted than most woods for cutting into thin sheets, and it takes glue well. It is largely used for fine doors and for panel work.

As with all fine woods especial care must be given to protect it from moisture, so that it shall not lose its kiln-dried qualities. The wood should not be condemned nor manufacturers, who have exercised every care in its manufacture, censured, when the interior finish, whether it is mill work or finishing lumber, is not properly handled when it is delivered at the job. All 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 moisture 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 with a little care.

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 back-painted is simply protected on one side and allows the moisture to come in on the other.

Better practice is now insisting that heat be turned into the house so as to dry out the building thoroughly before hanging hardwood doors or putting on the trim. It is better if heat is on before these are brought into the building at all.

American Forestry Regiments in France.

What the American forestry regiments are doing in France will react on the conservation of American forests when they bring back their experience in the old and carefully conserved forests in France. We quote the following article by Lieutenant R. H. Falkner from the American Lumberman:

"The larger and earlier fortunes made by lumbermen in America were due more than anything else to the acquirement of vast areas of stumpage at a price so ridiculously low that conservation was a thing

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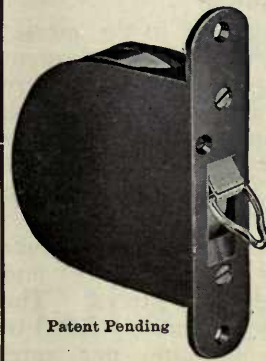
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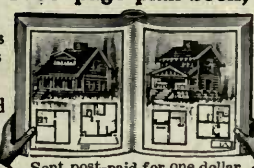
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to be scoffed at, while today the ever-increasing price of stumpage makes necessary the most careful and conservative management.

"Could any operator today in the United States of America make a tour of the lumbering operations of the forestry regiments (10th and 20th Engineers) in France he would see economical operations carried out to the minutest detail. And this is not fanatical conservation; it is not conservation that adds excessively to the cost of production, but it is due to an entirely new spirit of lumbering, the spirit of the American forestry troops, which taboos absolutely the waste of any material which can be of use. And when this is said, in France, it means the utilization of every part of the tree, down to branches only one and one-half inches in diameter.

"The American forestry troops are divided into ten districts scattered practically through all timber areas of France and this, by the way, is approximately one-tenth of the total area of the country. These ten districts are divided into about forty operations ranging in size from small pole, piling and tie cuttings to the operations of 20,000 capacity mills, running night and day shifts.

"There is a great variety in the species of timber over here, with the consequent variety in operating conditions. There is everything from a spruce forest, with logging conditions quite similar to those in the Adirondack mountains—to the maritime forests, almost identical with the pine found in southern Georgia.

"The maritime pine forests in France cover approximately 2,500,000 acres and contain about 130,000,000 trees. The stand varies from approximately 6,000 to 15,000 feet, board measure, per acre. While there are some very large blocks of solid timber it is against the custom of the country to allow the cutting of great single areas, particularly for the reason that the peasantry in the maritime pine section are practically dependent upon the resin industry. Consequently, while there is considerable timber available for the American exploitation, it is meted out, as a general rule, in small parcels, necessitating the installation of portable ground mills. However, some of the larger mills have as much as a one year cut.

"The American forestry troops in the pine country here are cutting, besides lumber, a great quantity of round timbers, ties, trench props and wire entanglement stakes. There is absolutely no waste, for all slabs and limbs are cut into fuel wood.

"There was a popular idea expressed by lumbermen in America before the departure of the first forestry battalions that the cost to the Government to produce lumber with the engineer troops in France would be tremendous. Several wiseacres went so far as to predict the approximate cost and the writer heard a very well known American lumberman say, last summer, that it would cost the Government \$200 to \$300 a thousand to produce lumber in France. As a matter of cold, hard fact it is a well established point here now that the forestry units of the United States Government are a remarkably good investment. The primary purpose of rapid production to meet immediate needs in the most economical manner by sending the men to France has been more than satisfactorily realized.

"When the war is over there will be returned to the lumber industry of America approximately 20,000 men who are, through their training and experience over here, the last word in logging and lumbering efficiency.

"The conditions of the troops are nearly perfect—everything that could be desired. The men are either housed or are quartered in tents floored and walled with lumber. They are well equipped with proper clothing and effects. Each camp has shower baths. The large size appetite that accumulates in a lumber camp is very satisfactorily treated three times a day with good, substantial, clean and well cooked food. Then there is the Y. M. C. A. with the attendant conveniences and comforts afforded by this institution to counteract the 'blues'—the canteen for tobacco and sweets; books, magazines, free stationery, etc. There is always great interest in the athletic contests conducted by the 'Y' in baseball, track, tennis, etc. Besides the music by the various battalion and regimental bands, numerous vocal and instrumental musicians, American, French, English and Italian, some of whom have attained opera fame, appear at regular intervals to share their splendid gifts with 'the boys.'



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VARIOUS branches of the United States army, particularly the Engineers and Signal Corps, are in need of skilled mechanics and artisans of all kinds.

Voluntary enlistments in the army have taken a marked slump since the first of June. The Minnesota district has been the banner district for the past three months, and Major John D. Yost, recruiting officer for the district, does not want to see his state supplanted by another.

Single men within the age limits of the proposed new draft regulation are urged to get in touch with their nearest army recruiting office and get placed before the new order is in force. All branches of the service are open at the present time and afford excellent opportunities for advancement.

Re-education of the Disabled, in Industry.

The re-education which is being planned in this country for returning disabled soldiers will, we are told, be as great a boon to those disabled in the industries. It was stated at a meeting of the cotton manufacturers that in Massachusetts one man was killed every six hours, in the industries, and that during the same period some working man or woman was injured, more or less seriously, every minute.

"We are killing and maiming more people in industry annually than we will call to the colors in the first three drafts."

The European countries began to establish vocational training schools for the rehabilitation of disabled soldiers soon after the outbreak of hostilities.

The movement had its inception with Mayor Edouard Herriot, of the city of Lyons, France, who found it difficult to reconcile the desperate need for labor in the factories and munition works while men who had lost an arm or a leg but were otherwise strong and well were idling their time in the public squares. He therefore induced the municipal council to open an industrial school for war

cripples which has proved the example and inspiration for hundreds of similar schools since founded throughout France, Italy, Germany, Great Britain and Canada.

They had both the humanitarian aim of restoring crippled men to the greatest possible degree and the economic aim of sparing the community the burden of unproductivity on the part of thousands of its best citizens.

Postage Rates Eighty Years Ago.

The zone system for postage was in effect eighty years ago, but at that time 6¼ cents was the rate for carrying a letter in the zone not exceeding 30 miles; 10 cents for the next zone not exceeding 80 miles; 12½ cents for 150 miles; 18¾ cents for 400 miles; 25 cents for all letters sent 400 miles or more, with a double charge for double letters. The rate on newspapers was 1 cent each within the state where printed. The rate for periodicals and magazines was 1 cent a sheet if not carried over 100 miles; 2 cents a sheet beyond that distance. Papers and periodicals were expected to circulate chiefly in their own state, or within 100 miles, as double the carrying rate was charged outside. Sectionalism was rife at that time, and in fact there was no strong feeling of nationalism until after the civil war, with the intense sectionalism which marked it in bitterness. Nothing perhaps has done more to foster a spirit of broad nationalism than the influence of a common literature. The national periodicals are read equally on the Pacific coast and on the Atlantic seaboard and all the way between. This tends to keep the people in sympathy because they know and understand each other better. Boys and girls in distant parts of the country who have read the same stories in the Youth's Companion or the Post and the Ladies' Home Journal as they grew up will have a mutual comprehension when they arrive at maturity, which is the surest foundation for national feeling and action.

KEITH'S MAGAZINE

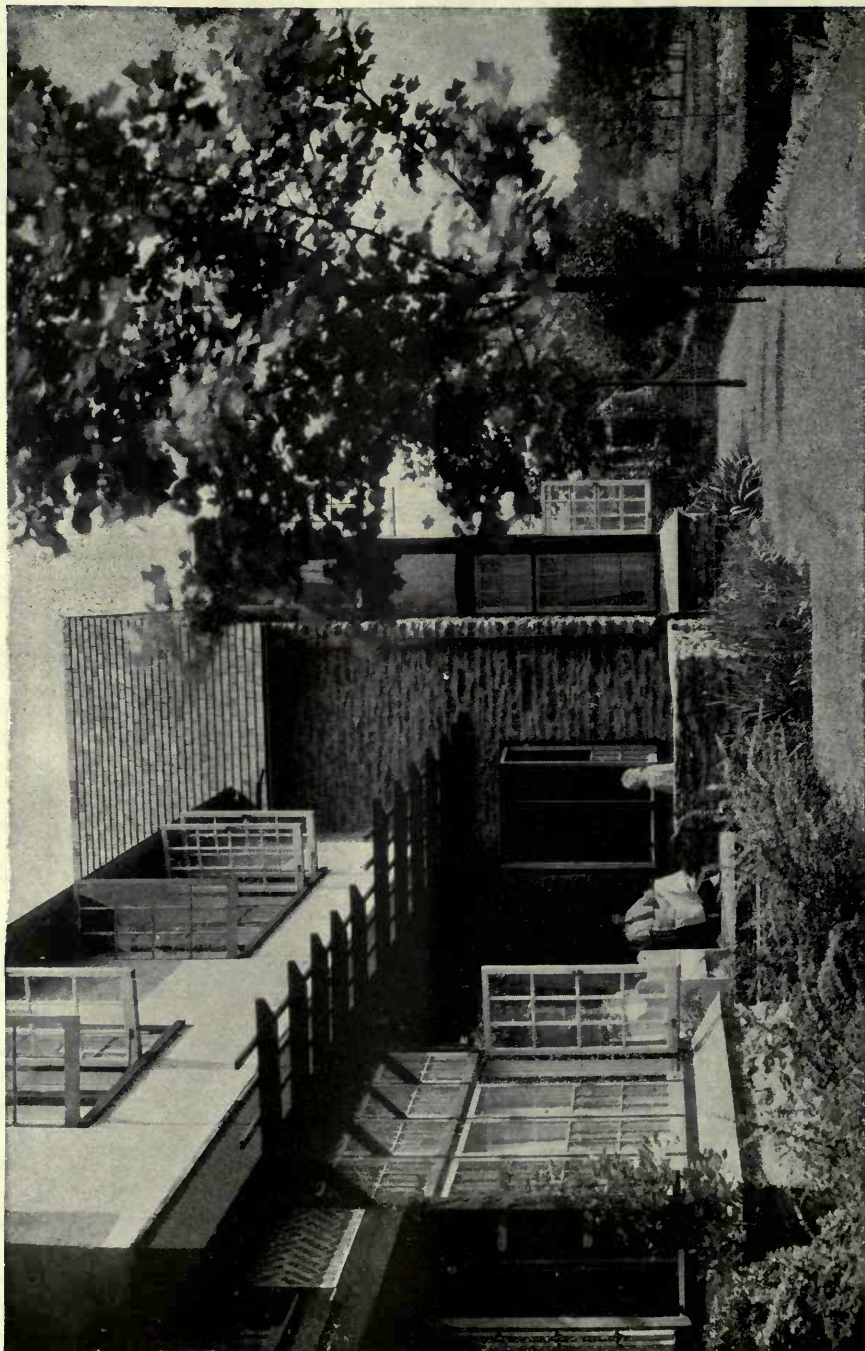
ON HOME BUILDING

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Mellor and Meigs, Architects

A picturesque combination of materials

Courtesy Moffat Yard and Company

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SEPTEMBER, 1918

No. 3



Pleasing effect of a simple border

Flowers and the Bungalow

Nancy D. Dunlea



THE real charm of a bungalow exterior often lies in its flowers. The architecture may possess the best lines, but the bungalow remains commonplace if it has not pretty flowers that harmonize with its style and color. On the other hand, with flowers chosen to bring out the beauty of its coloring, line and setting, the bungalow may have the distinction of the mansion, with the additional attraction of coziness.

In general, large or distinctive flowers

"show off" the bungalow to the best advantage. A definite scheme of planting is much better also than a few flowers growing haphazardly against the front porch, or in a bed on one side of the front lawn. To be sure, these may furnish blooms for cutting; but they do not make a place picturesque—except in a forlorn sort of way.

One pleasing arrangement for a bungalow yard is a bed two feet wide banked against the house on both sides of the

entrance. A choice of showy blossoms for these beds includes stocks of one or several colors, geraniums, foxglove, snapdragon, canterbury bells, asters, salvia, cannas, yellow coreopsis (perennials) gladiolas, French marigolds and hollyhocks. In some cases it is desirable to have a rotation of blooms. Stocks and shasta daisies, for instance, will not in-

terfere with each other in the same bed, and will take their turns in blooming. Another effective plan of flower arrangement is the use of a narrow bed on each side of the front walk from the house to the street. Flowers, large in blossom, but not too tall of stalk, are best here. In the spring, jonquils, tulips and hyacinths are alluring. Fleur-de-lis bordering the walk lend a desirable quaintness to either a rustic cottage or a colonial bungalow. Roses, trimmed to form little trees, two or three feet tall, are very charming by the walk side. Ragged

robin rose bushes, set at intervals of four feet, are very well suited to make a rose garden entrance to the bungalow. And speaking of roses, it should be said that roses nearly always befit the bungalow. The rose hedge on the boundary lines, the rose bed on one side, or the climbing rose on a trellis over the front door, porch or pergola seem to fit into the pic-



Climbing roses over the trellises

ture naturally, and are, therefore, artistic.

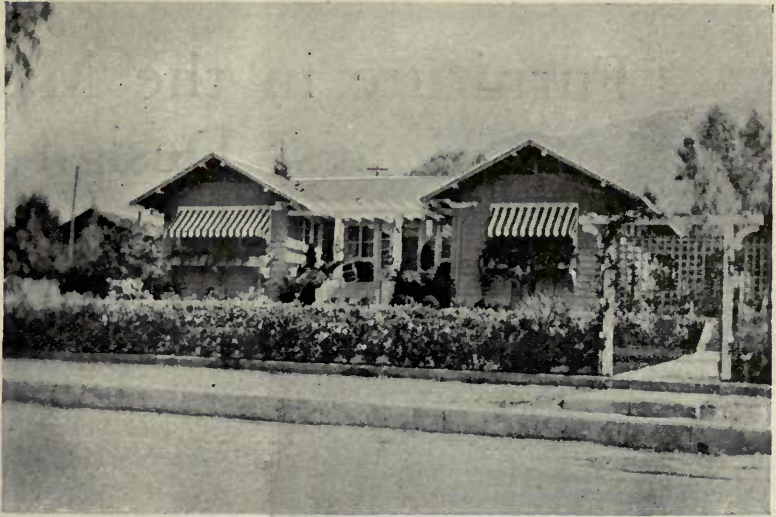
Care must be taken, whatever flowers are planted, to confine them, in the front yard at least, to one or two varieties, with the accompanying vines, shrubs and trees. The use of many kinds of flowers, unless very well planned, will result in an unpleasing hodge-podge. The favorites, or plants desired for house decoration, are much better planted in the back yard. As an exception, "an old-fashioned garden," with its colorful mixture of bloom, might be permitted to decorate the front yard of a colonial bungalow.

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In choosing flowers with regard to color, the house paint or stain, should be considered. Contrast is a good rule. Red flowers, for example, do not show with much advantage or beauty against a dark brown house. White or yellow flowers would be much more effective; although red flowers might be used against a dark brown bungalow

that has a porch trimmed with plaster or sandstone. Red geraniums are indeed quite striking against a porch "railed in" with cobblestone.



A gray bungalow with pink and white flowers

A gray bungalow looks well with pink stocks, pink foxglove or orange marigolds. It is also attractive when decorated solely with window boxes of pink ivy geranium. A combination of planting that sets off gray is—a bank of heliotrope and pink rose bushes set against the bungalow porch with purple wistaria climbing above the porch.

Zinnias are particularly pleasing if used in just the right place. They harmonize nicely with either a brown or white bungalow, and look extremely well with the cream plaster bungalow of very simple lines. Petunias, which grow quickly and luxuriantly, and require little water or attention, suit most any bungalow, whatever its color or type of architecture. Carnations, pansies, sweet peas, dahlias or chrysanthemums are best avoided if the general effect is to be striking.

Altogether, planning flower beds for the bungalow takes considerable thought if the result is to be artistic, but one is liberally rewarded when the flowers bloom and make it "a castle in Spain" come true.



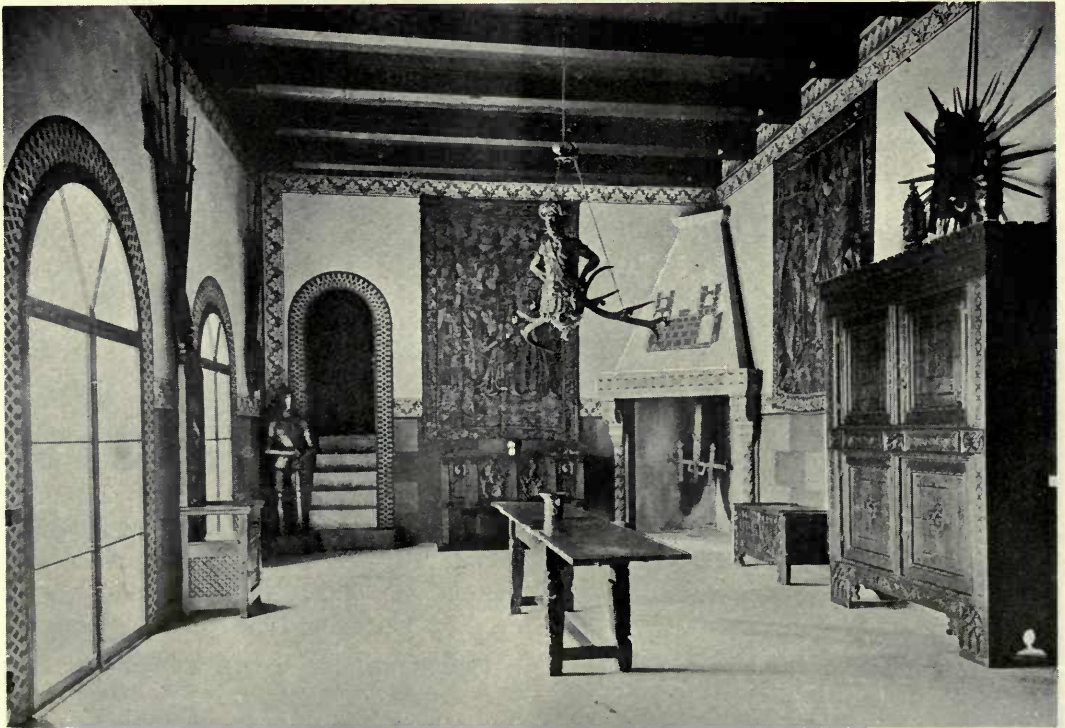
A border of yellow and white lantannas

Furniture in the Making Honest Design

Virginia Robie

FURNISHING a house is an education in itself, and education along all lines must progress slowly. To watch a house grow is a supreme satisfaction; to buy one thing at a time for a definite need and

Therefore we would say turn your back upon the things which produce merely an effect. Have bare walls if you will, but if you choose a hanging, select one that does not purport to be other than it is. "Marble" effects in papers are hap-



Barbarossa Hall (1173) restored by its American owners

place is the real joy of making a home. Haste has no part in the matter. Haste may produce a house, but never a home. Buy the best, if only a little; buy slowly; buy for next year—rather than for today; and seek lasting values.

One room furnished with the genuine is worth a houseful of artistic shams.

pily out of fashion—but papers veined and colored to represent stained oak afford a cheap substitute for wood paneling. And so it is with other phases of the house. There are many inexpensive and exceedingly clever substitutes to *suggest* good taste. A whole house could be filled with them for what it would cost to

equip one room with the real, but the room and its contents would be as satisfactory twenty years from now as to-day, while the sham house could give satisfaction for a brief period only, not for a moment, if the ethical side of the question were understood.

If the importance of such advice could be realized, many manufacturers would be obliged to go out of business or else reconstruct on new lines. "We make what the people want," says the wall-paper manufacturer, and he sends forth tons of atrocious designs, badly colored and bespattered with gilt. "We must please the people," says the furniture man, and he turns out padded sofas and chairs suitable for a lunatic's cell, Morris chairs which would make Morris groan with anguish, and brass bedsteads which produce nightmares, and so on through a long category.

"I hated to buy this shiny oak hall-piece," says the poor housewife, poor in



Ayer bureau

spirit as well as purse, "but I could find nothing else within my price, and the clerk told me it would wear well,"—and it does. For ten years it encumbers the hall, preaching its lesson of cheap ornament.

The parlor is furnished with similar pieces, likewise the dining-room. The house-mother loathes the ugliness, but the children have never known anything different, and they accept it as naturally as they do their oatmeal and milk. It must be good because their mother bought it.

One does not need to be told the kind of a house the second generation will live in. It may be even a little more fussy and a little more fringy.

That furniture designing in this country has made great strides within the past decade no one would for a moment deny. Arts and crafts furniture and the ever-present colonial reproduction show that many people demand good things. They know what they want and can afford to buy it. To them we have little to say. To the householders with limited incomes but excellent tastes—who know what they want and have the persever-



A simple, sturdy Windsor chair

ance to secure it—we need not sermonize. They will succeed in making their homes beautiful in spite of the small amount of money which they may expend.

We would speak to the class that is dazzled and awed by such furniture as we describe. Like colored busts of Indians and kindred "art works," these have a fatal fascination for many people. Some really admire; others buy out of desperation because they can find nothing else. Both classes are to be pitied; for in either case, the furniture is sure to have a degrading influence. Its ugliness is accepted in one instance as a necessity; in the other as a false standard of beauty.

Much has been said and written about the formative influence of early surroundings. Many pleas have been made from the platform in behalf of the child. Books have been written, lectures delivered, and schoolrooms furnished with this one idea in mind—to preach the importance of placing before children the best; not necessarily the costly, but the True and the Beautiful. What avails all this well-directed effort if children daily live with such furniture as we mention? What means the Greek cast and the Botticelli Madonna to

the child who "rocks" in the leather-and-fringe monstrosity shown in many shops? To what purpose are all the fine things he hears about beauty of line and purity of ornament if he daily hangs his hat on the combination hall-tree, settle

and mirror seen in many homes? To what end are his lessons on simplicity and truth if he sits three times a day before the be-mirrored and be-carved side-

board of the average dining-room? The hours spent at school are few—the objects with which he is surrounded are not his own. The furniture which he grows up with belongs to his parents—it is his also. He lives with it; it becomes his standard of what furniture should be. In after years he may escape it, may awake to

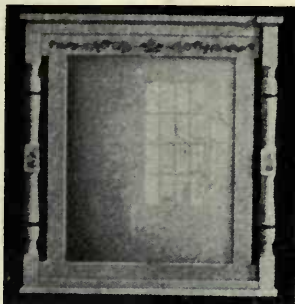
its false values, but the chances are that he may not. The schoolroom may exert a stronger influence than the home, but years are lost in the process, and when he knows the good from the bad he awakens to pity the taste of his parents.

We have spoken of the duties of the manufacturer toward the people. A

word might be said in regard to the duties of the people toward manufacturers of the highest grade. Time, the finest equipment, the highest skill, are factors in producing honest furniture, wall-papers, textiles and rugs. Made of the best material, under the most favorable circumstances, these articles are far cheaper, considering their quality, than the shoddy productions which are

offered to them as more economical.

If people of limited means could grasp this simple fact, they would gladly pay the difference in price, realizing that the money is well invested. A home is an investment, and the interest on the money



Peasant wall mirror



A good upholstered chair



Excellent type of modern simplicity and honesty in a Long Island country house

Aymar Embury, Architect

expended is represented, not in a day's or month's pleasure, but in growing satisfaction, as the years go by, that the house and its contents stand for stability, honesty—and beauty.

We place beauty last, because there is no real beauty without a foundation of honesty. It sometimes happens that things honestly made are not beautiful. We all know the house where everything is of the best material, and the result is painful ugliness. It furnishes inspiration for sermons on decorative art—and misspent riches. A perverted taste and a false idea of the beautiful are unavoidable results. The poor taste of many of our millionaires needs no emphasis. It is stamped on our public buildings, parks and statues.

There is the other house; the *cheap*, ugly one which preaches its lessons with equal force. We have spoken of shoddy furniture and its debasing influence on the life of the home. We would now add a word of protest against house furnishings in general which debase because they are not honest, either by their construction, design or color. Shams in the home can not fail to have an effect on the children. This opens up a large field, or it may be made to include everything in the home, from the paper on the wall to the china on the table. Nothing is small enough to be excluded, for nothing is too small to teach its particular lesson, good or bad. Few people stop to think of the moral force of honesty in homes.

An Electrical Kitchen

Edith M. Jones

UNTIL the housewife has been deprived of her gas range it is hard for her to realize what a truly great luxury it is. I remember very distinctly meeting, several years ago, the wife of an officer in the regular army. She told me how shortly after their marriage her husband had been transferred to a small fort in the far west. Living conditions were primitive—absolutely no modern conveniences, and the contrast with the city life to which she

had always been accustomed was many times most trying. She said servants were hard to get and much of the time she was obliged to do her own cooking on either a coal or wood range. She complained of the time it took and the dirt it made in the kitchen, and with a contented sigh she said, "Oh, a gas range is the best thing I have in my lovely new home." I imagine most housekeepers would feel the same way under the same conditions.

But the electric range has come as a great blessing to meet just such and many similar needs. And the kitchen in the suburban home is just one of these needs.

The three pictures shown in this article are views of the electric kitchen of a beautiful suburban home. This kitchen is very interesting to study, as it was very carefully planned by the mistress of the house, and every inch of space is most carefully made use of, and the classification of utensils is well planned. It is easily seen that "Everything has a place and everything seems to be in its place." A kitchen like this doesn't just happen. Indeed, it represents patience, time and clear thinking, and yet there is nothing of unusual expense—in fact, nothing but what most every home could have. Just a



The open cupboard doors show flour box and special cupboards



An electrically equipped kitchen

anything that comes in cartons. It is always a problem to know what to do with the broken package, because dust is inevitable. This seems to be one very practical way of solving the question.

The butler's pantry is very compact and well worked out. There is a chest of linen drawers; drawers for silver, and long and short, deep and shallow drawers for the different kinds of ta-

ble linens. There is ample shelf room for glassware and dishes, a broad working shelf for service, a table board closet, a broom closet, and best of all, the distance between the kitchen and the dining room is but a very few steps.

lot of little practical things, as for instance, the flour bin. Of course, there are many more elaborate flour bins, but this simple one is so practical and sanitary and quite within the range of any one. Compare it for a moment with the built-in, "tip-up," dirty, mouse-catching kind, and I am quite sure this will compare very favorably.

Then the sliding bread board conveniently placed near the sugar and flour, the mixing bowls, spices, etc., etc., make baking an easy task. The glass jars on the shelves are most satisfactory to the eye and equally practical for the storage of rice, barley, raisins, creamettes—in fact,



Ample shelf room and cupboards

The blue and white linoleum on the floor,—the white sanitas on the walls,—the ample daylight and cross ventilation all contribute their part toward making a cheerful and attractive workshop.

A glimpse of the maid's dining room can be seen in one of the photographs, and a screened porch that does not show in the picture completes the service wing in this delightful house.

As may be seen from the photograph, the electrical range is not unlike a gas range in appearance, with four hot plates placed like the four gas burners, and the oven at the side. There are two burners in the oven, one above and one below, with a key controlling each of the burners. Each burner has three heats, which puts the heat of the oven under more complete control than is possible with old methods. With three degrees of heat for each burner, this gives some fifteen combinations by which to regulate the oven. A thermometer on the face of

the oven shows definitely the amount of heat obtained. The time is coming when the old-time haphazard methods of the housekeeper will be replaced by a certain amount of exact information. A record of the degrees of heat required to properly bake a cake or roast a piece of meat, attached to the rule for preparing it, will be one of the first steps toward this exact information. The poor young housekeeper will not be expected to "hold her hand in the oven while she counts" in her tearful efforts over her first biscuit. We often suspect that failure comes because "the oven was not right."

In asking the mistress of this home how she liked her electric range, she replied: "It solved our kitchen fuel problem and has the added advantages of being absolutely cleanly, delightfully cool for summer, very safe to use and not extravagant to maintain."

Curing Vegetables for Winter Use

M. Roberts Conover



Y curing we mean that process by which the vegetable, or especially its outer covering is made practically germ-proof. Toward this result, the drying and healing process, must continue without interruption after maturity and harvest until the susceptible parts are closed to the action of ferments. But the best curing can be made ineffective if followed by careless storing.

The tops of onions are allowed to die down before they are dug. After digging, they must dry thoroughly and rather than leave them on the ground under a blistering sun, they should be put in the shade on racks where a drying wind sweeps over them. When there is no danger of sun-scald, however, they can be

left to cure on the ground for a day or so. Onions keep better in baskets or crates of small bulk than in bags. Stored in bags, they are inclined to heat enough to start them sprouting before winter is well under way. A dry attic is a good place to store them.

Round potatoes must not be allowed to sun-scald by lying on the hot earth in the sun, but should be gathered as soon as dug and, of course, dry. Potatoes dug late must be guarded from freezing. Potatoes keep best in cellars stored in barrels or bins where the temperature does not fall below 38 or 40 degrees nor rise above 50 degrees.

Sweet potatoes require entirely different treatment. If they are to keep through the winter they must be thor-

oughly cured by a slow drying in a room where a low fire is kept for several days,—a dry room where there is no steam as in a kitchen. They should be in slatted crates so that the dry air can circulate freely among them. Cellar storage will not do for sweet potatoes and an attic is too cold. A room warm from a chimney, or a chimney closet, is splendid for

keeping sweet potatoes in good condition.

Beets and carrots should be harvested before the frost kills the tops. Be careful not to cut within an inch of the roots, when removing the tops of beets, for otherwise they will bleed. Like most root crops, these may be kept for months in boxes of sand;—moistened slightly if the roots begin to shrivel. In many localities parsnips and oyster plant keep perfectly if left in the ground.



Squash, heaped for curing

Well-cured squashes and pumpkins require wise handling. They bruise easily while the rind is soft and though such bruises may harden and heal in the sun, the chances of decay are greatly increased. Squashes and pumpkins are cut loose from the vines and allowed to lie in the sun with the stem end well in the air for several warm autumn days. They are then heaped up and protected on cool nights from frost by coverings of straw

or canvass. They are best kept in a store-room which does not become cold,—the sweet potato room is about the right temperature for squash. If the squash must lie on the floor, keep them away from the outside walls of the room. The house-wall is safe, but in zero weather, the squash next the outer wall is liable to be touched by frost.



Pumpkins, waiting for the harvest

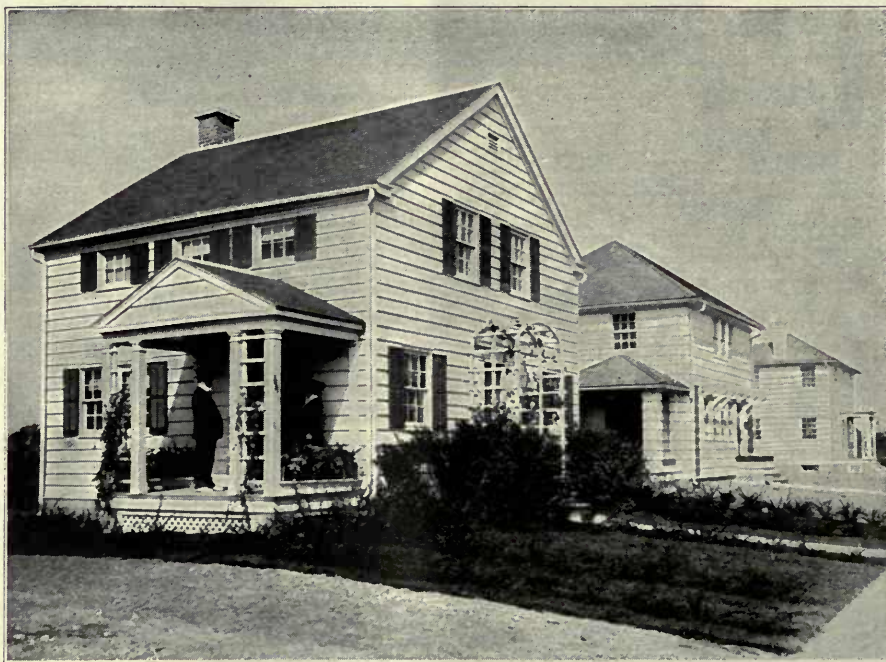
"A Decent Place to Live In"

Anthony Woodruff

YOU can't man the works unless you house the man," as stated by a Cleveland manufacturer, gives the heart of the matter which is forcing the immense and immediate attention of the country to the housing problem. The old-time temporary shack is not acceptable to the modern highly-

ated fifty million dollars for use in housing the shipyard workers, and as much more for munition and other workers.

When Jacob Riis discovered Darkest America, fifteen years ago, and wiped out Mulberry Bend, he started something which is now coming to the promise of fruition. We had become so accustomed



Davis, McGrath and Keisling, Architects

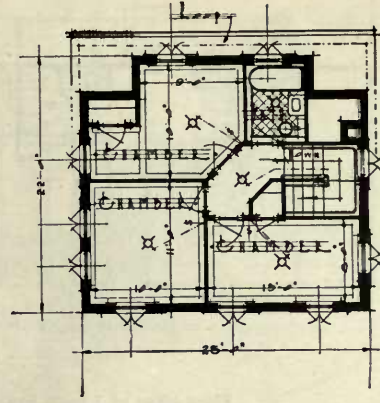
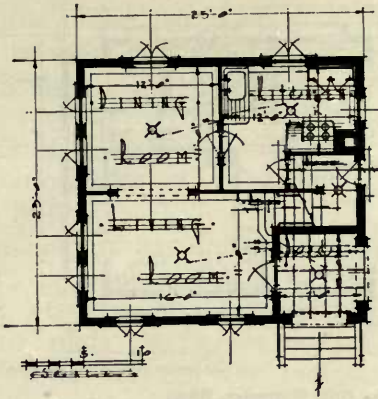
New England village type cottage—Flint, Mich.

paid workman. He has come to consciousness of his world citizenship and he demands its rights and privileges for his children. As an American citizen who is doing work tremendously necessary to bring the world war to a successful end, he has no right to subject his growing family to such conditions as will hamper the good citizenship of the coming generation. The government has accepted this responsibility and has appropri-

ated fifty million dollars for use in housing the shipyard workers, and as much more for munition and other workers. When Jacob Riis discovered Darkest America, fifteen years ago, and wiped out Mulberry Bend, he started something which is now coming to the promise of fruition. We had become so accustomed

to the knowledge that there were numberless children who were hungry and cold, dirty and sick, that we passed them on the street with only a sigh for poor humanity, and no thought of their citizenship or that they had a right to demand anything of us.

In the meantime Industry has discovered that men, like machinery, give a higher economic return when they are well housed and well cared for, and in



Davis, McGrath and Keusling, Architects

One type of the plans for a 6 room cottage—Flint, Mich.

some instances they have been working on the housing and related problems for some time. In this way there has developed a small group who have had experience in community planning who are working along these lines in a successful way. The National Housing Association has been paving the way for all sorts of housing reforms. Mr. Lawrence Veiller, secretary of this association, says that there are 230 improved housing develop-

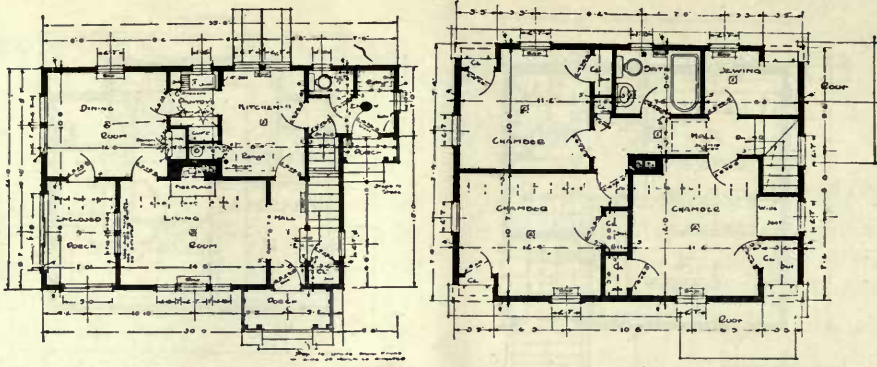
ments in this country, some good, some bad, some old and some new, but none which would be duplicated as they stand.

One of the most interesting and successful of the newer industrial developments in this country is that at Flint, Michigan. Many homes were built during 1916, but so great was the continued demand that a building company was organized through the efforts of the Chamber of Commerce. One of the best firms



Grosvenor Atterbury, Architect

A 7 room house on Indian Hill Road—Indian Hill, Worcester, Mass.



Grosvenor Atterbury, Architect

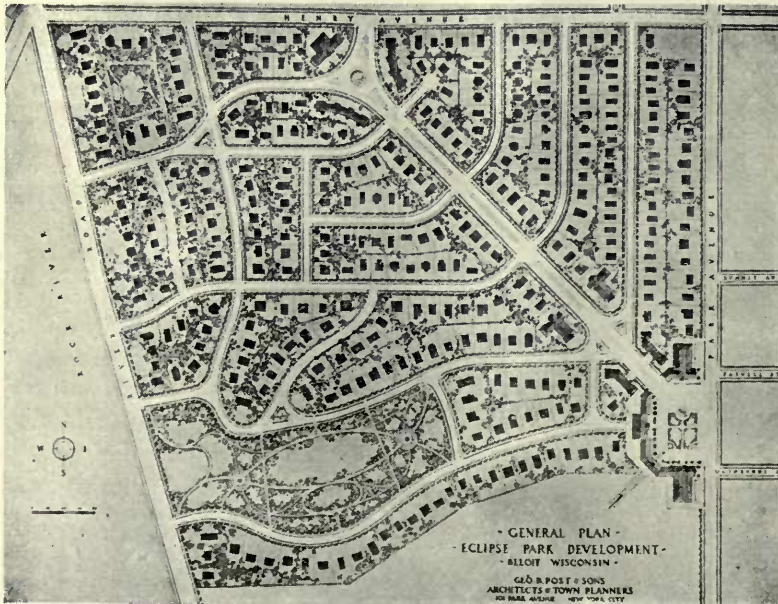
Floor plans of 7 room house—Indian Hill, Worcester, Mass.

of architects and community planners in New York, Davis, McGrath and Keissling, architects, were employed and a 400-acre tract of land purchased. The houses are five to eight rooms, but mostly five- and six-room houses. The dimensions range from 17 by 27 feet for five-room houses of one and a half stories to 24 by 27 feet for eight-room houses of two stories. There are 29 exterior designs, which allow a wide variety in the grouping. The houses are built on the lines

of the old New England village type, with close eaves, small paned windows and blinds, with a plentiful use of lattices and flower boxes, giving a greater diversity and individuality.

The story of the development of Indian Hill, at Worcester, Massachusetts, is of interest as showing the careful study given to the smallest features. Mr. Grosvenor Atterbury, architect and community planner, who is in charge of this development, was among the earliest thoughtful designers in what might be called "betterment planning" of model tenements and the semi-philanthropic foundations like the Sage Foundation and the Phipps, and a pioneer in community planning.

Starting with the thirty-acre tract of the hill and increased to 116 acres, this development is primarily for the housing of some 3,700 employees of an industrial company. The main line of



At Eclipse Park, Belolt, the residence streets are so laid out that they will not attract heavy traffic

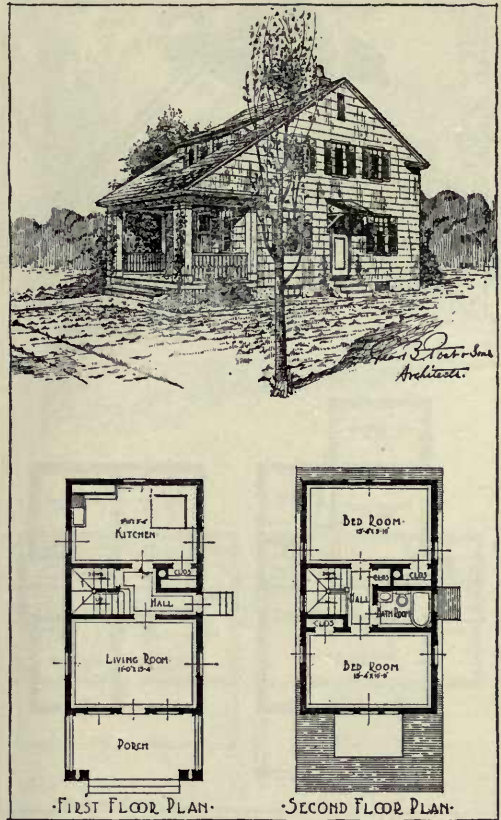
traffic is the Indian Hill road. The secondary streets are, in a majority of cases, contour roads. The whole village is laid out with special reference to the topography. Some 58 dwellings were built, in two operations, during the summers of 1915 and 1916.

The community has been studied and designed as a group as well as in the individual; white walls seen among the trees, with roofs gray green making a common bond between the individual units, bringing the whole group into a common aggregate which carries to the eye as a whole instead of giving the monotony of numberless small units. This is only one of the fine results sought in community planning, where co-operation multiplies the advantages and divides the relative outlay and expense.

Col. Roosevelt said of these houses that they are good enough for any American to live in,—the modern attitude of thought. That is bad housing which is not a good enough place for any American to live. The houses might have been more cheaply built, but they were built with reference to the upkeep in 1925 as well as present cost.

The cost of the houses individually is interesting as to the relative building costs in 1915 and 1916. The constructional cost of the house known as N2 increased from \$3,188 in 1915 to \$3,791 in 1916, while a similar type of house was built later for Erwin in the Blue Ridge section of Tennessee for a smaller sum. Of course the house built singly could not have been built for anything like that amount.

Specific terms of purchase have been arranged by which the worker may pay 10 per cent down, and a specific amount monthly. In case of death or incapacity within certain conditions, special arrangements are prescribed. Every effort has been made to assist the worker to a real home of his own.

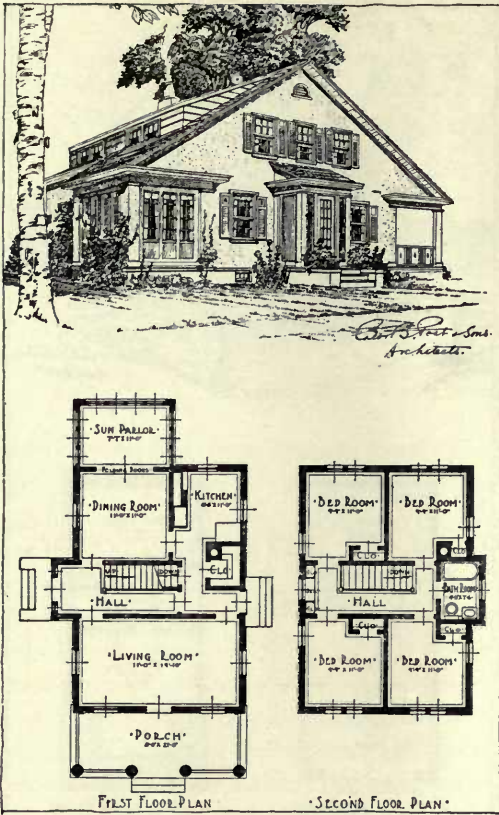


Geo. B. Post and Sons, Architects

A 4 room house at Beloit, Michigan

Two of the first houses were decorated and furnished completely "to act as friendly counsellors" to other comers, but the statement is made "that it is only just to say that the average taste displayed in these homes is remarkably high. There is little overcrowding; the mass of gimcrackery is conspicuously lacking; there is discrimination, selective choice, and restraint everywhere."

Another very interesting development is that at Eclipse Park, Beloit, Wisconsin, George B. Post and Sons, architects and town planners, prepared for the Fairbanks Morse Company, employing about 3,600 men. This is a garden village composed entirely of single-family, detached, free standing houses for mechanics earning \$20 a week and more, also a few clerks and foremen.



Seven room type of house at Beloit

The tract of land is of about 53 acres. The streets follow the natural contour, amply wide for the intended use and each fitted to its use. The checker-board plan has been avoided as far as possible in the conservation of space.

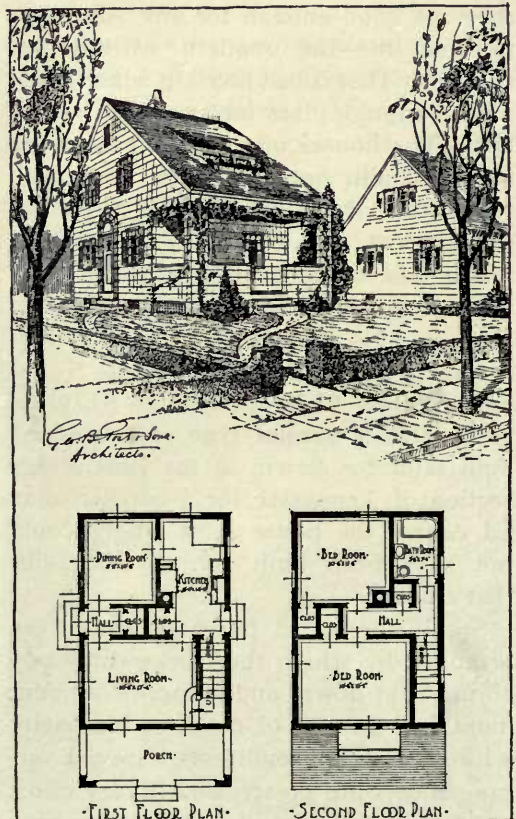
Only the main boulevards are eighty feet wide. The streets generally are fifty feet wide; the roadways eighteen feet wide with planting strips on each side of the sidewalk. The residence streets are so laid out that they will not attract traffic, being narrower and more winding, and so they may be expected to remain quiet.

Of the 350 houses contemplated these have been built in groups of fifty. There are five different types. Of the A-type, that is four-room houses, there are ten plans, differing more or less from each

other; of the B-type, five-room, there are eleven variants; of the six-room type, nine variants, etc. Great skill has been shown in placing the houses, both with reference to the land and to each other to give harmony and variety. The houses have been built in the most economical manner, having been designed to eliminate all possible waste. The houses are intended to be sold, rather than rented and very attractive prices and conditions have been given.

The subject of industrial housing is yet too new in this country to have anything like the garden cities of England, Port Sunlight, Bournville, or Hampstead, but the subject is being approached in a carefully studied way which will bring results.

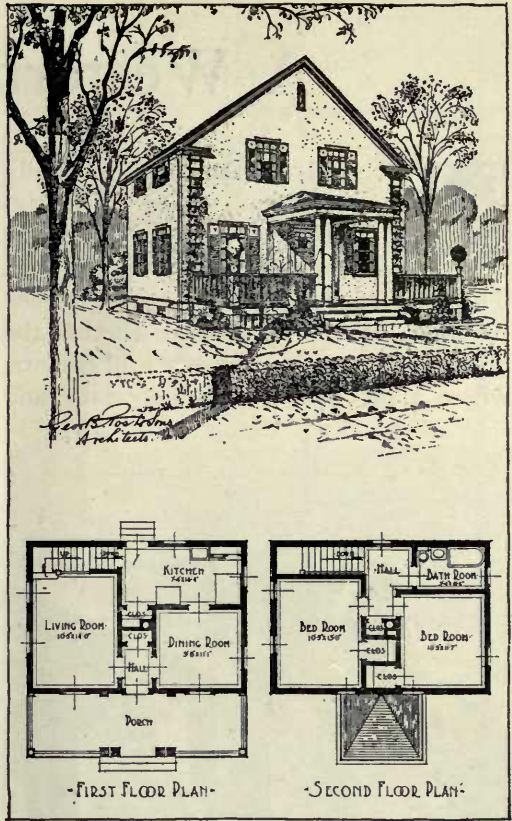
Our gallant soldiers in France are do-



A five room house at Beloit

ing their part to "make this world a decent place to live in." We have been fairly startled to find how much there is to be done before the masses of the working people can have a decent place to live in this country. We are perhaps taking an unfair advantage of our much abused language to apply this slogan of the armies to express the pressing need of the housing problem. At the same time the pressure of this problem can scarcely be overstated or overestimated, and there are two very different faces to the problem. We must not allow our lads who have gone away bearing a glorious ideal, when they come home to be disillusioned by a country which has failed to be true at home, and in comparatively trivial matters to the same ideals for which they were sent overseas to battle the Hun.

All the old traditions have been shattered, yet habit is a curious binding force which blinds the eyes and dulls the senses when we are following familiar paths. We are so accustomed to the idea that there must be some people who are ragged and dirty, hungry and cold that we pass them without a thought for their necessity. The suffering and hunger which we have allowed at our very doors, frightfulness has multiplied and made so aggressive that we in this country have pledged ourselves to wipe it from our borders, in its uselessness and misery. We have suddenly become conscious of the acute economic phase of the housing problem, and also its social and political bearings.



A five room stucco house at Beloit

The laboring man has come to a full realization of his citizenship and he demands its rights and privileges for his children. This, America is ready to grant; but to provide a proper home for every man who can afford to pay the rent, and to have this home in walking distance of his work is no small problem, with the immense congestion of war workers.

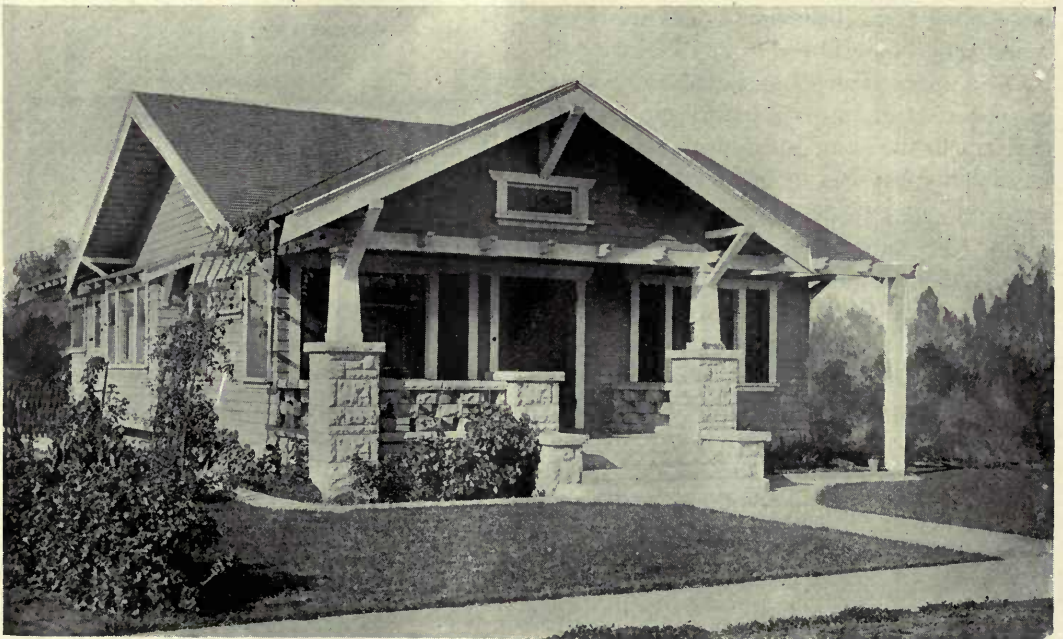


A Western Bungalow



HE needs of the average family are many and varied. The six-room bungalow fills the popular requirement in the popular way. The size of the house depends on the funds available, and also on whether the house is built in a warm or a cold climate, where a full basement is necessary and

against the wall at other times, would seem a more satisfactory piece of dining room furniture in a room of this type than the popular big heavy table which must of necessity stand in the middle of the room. There are reasons for believing that the clumsy "dining room set" of furniture will not continue in so great



A conveniently planned bungalow

E. W. Stilwell, Architect

the fuel question complicates the requirements.

It might be hard to find a better disposition of the space 28 by 42 feet than the arrangement given in the accompanying plan. The fireplace is located in the dining room closing the vista from the front entrance. This together with the writing desk makes this room a sitting room as well as a dining room. For that reason a gate-leg table which could be used for dining, and could be pushed

popularity, or at least will not seem so entirely a matter of necessity as has been the case. This heavy furniture makes the room useless except during the time in which the meal is served. The rest of the twenty-four hours it is "waste space."

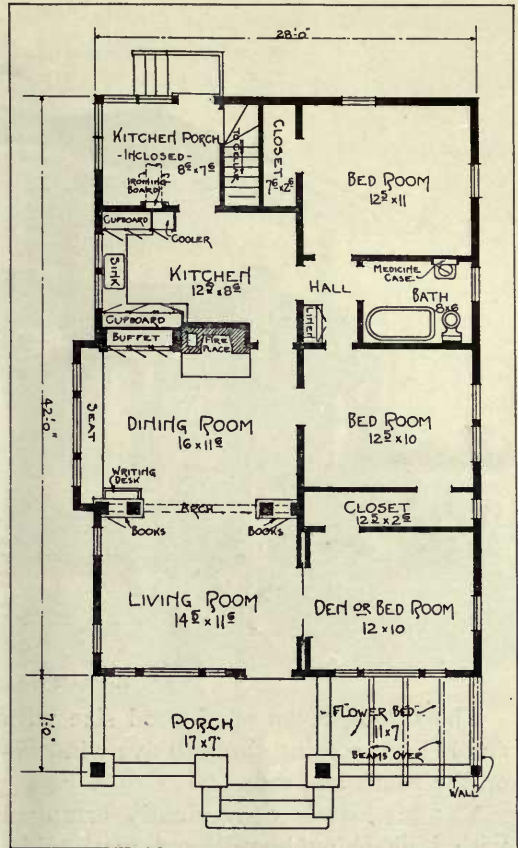
Sliding doors separate the den from the living room and allow it to be used as a bed room if desired. The long closet between it and the bed room is especially noteworthy as, while it gives full hanging space to both rooms, it also gives com-

munication between these two rooms.

The two bed rooms are connected by a short hall in which a linen closet is located and which gives access to the bath room from the kitchen as well. The fireplace in the dining room gives a kitchen flue beside the flues for the furnace and for the fireplace.

One end of the kitchen is filled with a cabinet of cupboards and working tables, with the sink conveniently placed under the windows. A breakfast table may be set in one corner of the kitchen, where the wall space is sufficient to allow it to be pushed against the wall. The kitchen is very well equipped as is also the enclosed kitchen porch. A niche is built in for the folding ironing board with a wall plug beside it for the electric iron. This gives a cool pleasant place in which to do the ironing.

The basement stairs lead down from the kitchen porch. Since this bungalow was built in California the basement is only excavated under the rear part of the house. It extends as far forward as the wall enclosing the fireplace chimney. This space is divided into four rooms, a laundry, furnace room, fuel room, and

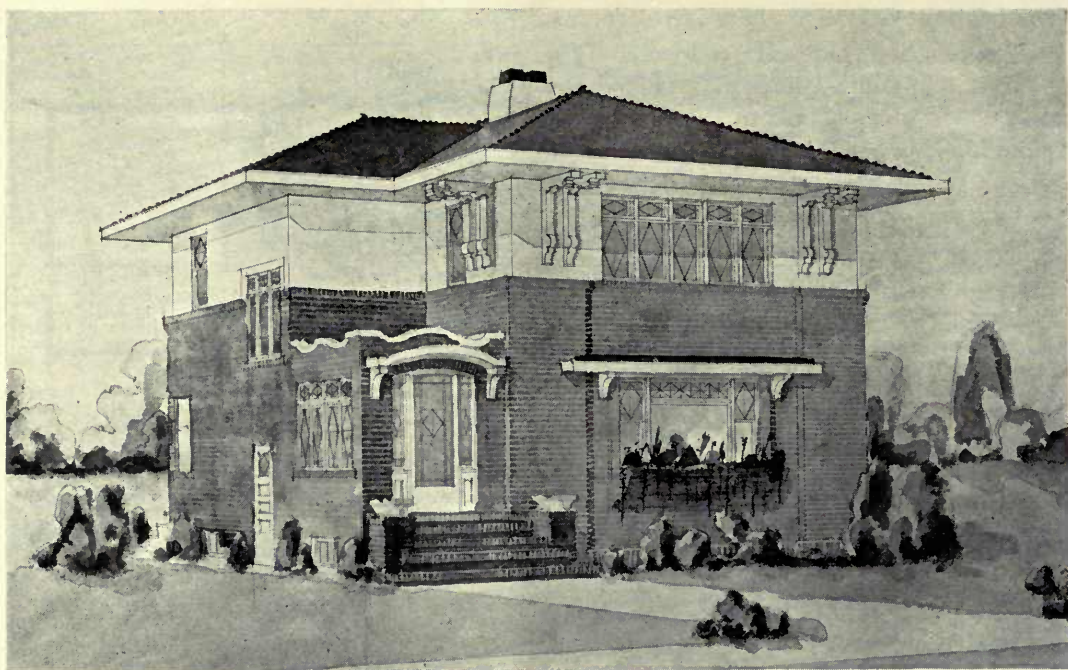


store room. The laundry has two enamel laundry trays, and there is an outside concrete stairway.

An Attractive Home Built of Brick and Plaster

IN THIS design we have a small brick and plaster residence, the lines of which, while simple, are interesting. The brick-work, which is of a pleasing color, extends up to the second-story window sills, with plaster above and under the soffit of the cornice, with the effect of a frieze which gives a setting to the window groups. The roof has a wide overhang supported on double brackets over the projecting brick piers.

The entrance is through a small glazed sun porch, into the living room. The main stairs are convenient to the entrance, at the end of the sun porch. The living room is well proportioned with a wide brick fireplace on the center wall. A bookcase is built on one side of the fireplace and there is a wide recessed opening on the other side, to the dining room. In the wide jambs of this opening are built attractive little cupboards with leaded glass doors.



The lines are simple, yet pleasing

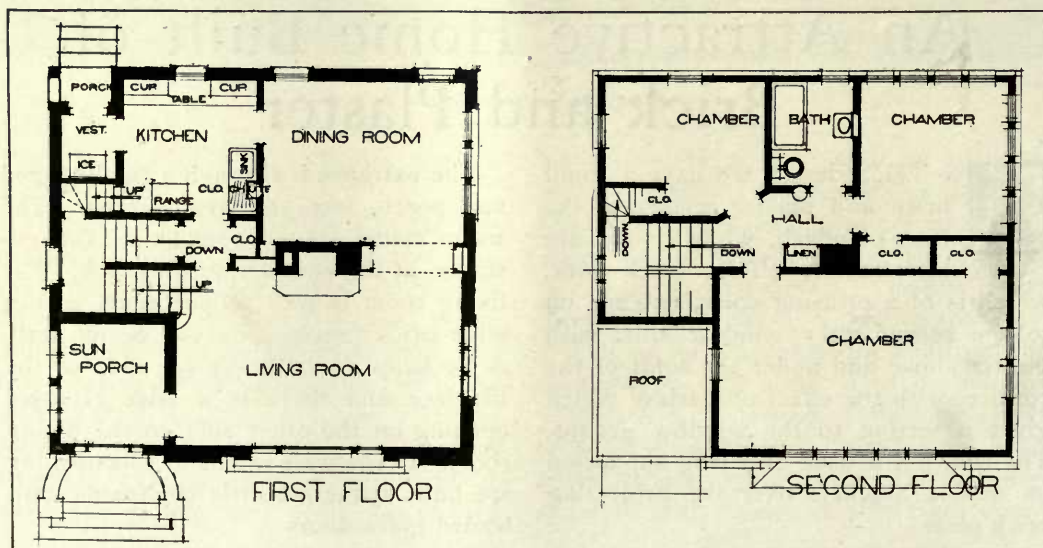
W. W. Purdy, Architect

The dining room is of good size with ample light coming through five windows on the south and east.

The kitchen is conveniently arranged with built-in cupboards and work-table. Steps from the kitchen reach the main landing of the stairs. A rear entry gives a place for the refrigerator, reached from a small rear porch. Stairs to the base-

ment lead down from a passageway between the kitchen and living room, with an outside entrance at the grade level.

On the second floor are three rooms and a bath room. The owner's chamber is over the living room and is a large room. Each chamber is supplied with a closet and there is a linen cupboard opening from the hall. One chamber is prac-



tically an enclosed sleeping porch, with windows filling two sides of the room. The bath room is very complete, with tile floor and wainscot, built-in medicine cabinet, clothes chute, etcetera. The first floor is finished in oak, while the second floor is done in white enamel.

There is a full basement under the

house with a well equipped laundry, fuel and vegetable rooms.

The roof is of shingles, stained, with galvanized hip and ridge rolls. There is a hood over the entrance and a protecting roof over the triple window in front extending between the projecting brick piers in a pleasing way.

A Compactly Planned Bungalow



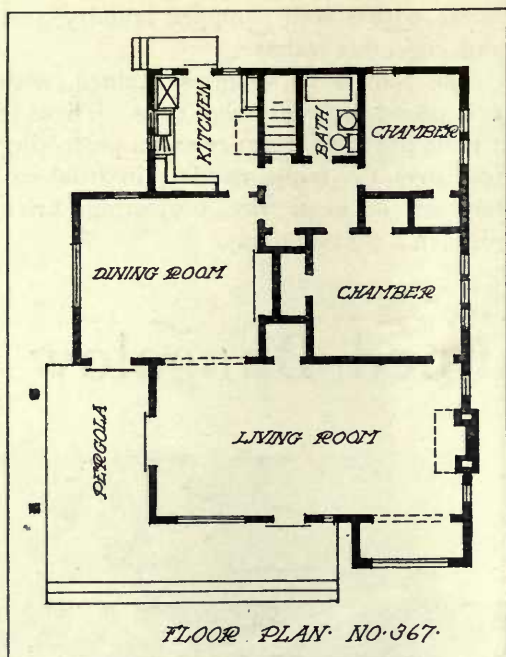
A small but attractive bungalow

J. W. Lindstrom, Architect

NOTHING is, perhaps, more practical to build at this time than the small bungalow which is economically and consistently planned. The bungalow here shown has the exterior treatment so popularly used in California. It has the surface covered with "shakes,"—a large shingle. It has the wide projecting eaves, which at the same time do not so much shadow as to keep green things from growing. It has the protected louvres under the ridge of the roof which keeps a circulation of air under the roof and keeps the attic space

from being banked with hot air, and thus keeps the rooms cooler than they would be otherwise. The pergola roof over the side terrace allows it the protection of vines, and the blessings of sunshine when the leaves are gone.

The entrance is into the living room at the front or through French doors under the pergola. The dining room also opens from the pergola covered terrace. A wide opening separates it from the living room. A fair sized chamber opens from the living room beside the fireplace. It has two closets and opens to a small square hall



on the other side. This hall gives communication between all the rooms of the house, except the living room, in a very convenient way. A linen closet opens from it and also the stairs to the basement. A buffet is recessed in the dining room, and the space beside it is given to a good closet from the living room.

The kitchen opens directly from the dining room and is very compactly planned, and is small in size. The refrigerator stands by the door and can be iced from the outside. The sink and work-table, together with cupboards, fill the angle of the wall.

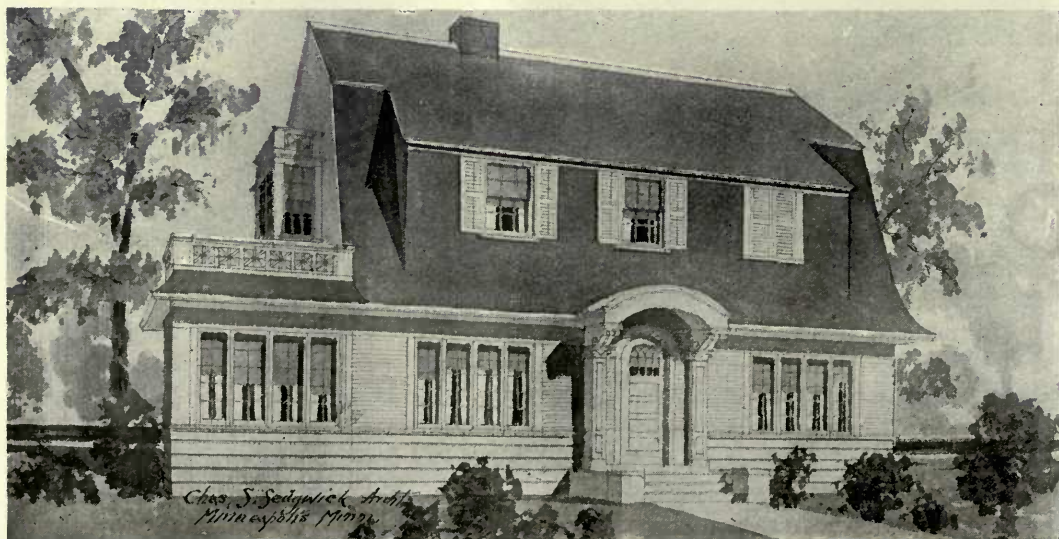
There is a basement under the house with the furnace flue carried beside the fireplace. A niche with a wide window projects to the front of the living room beside the terrace.

A Dutch Colonial Design



N EIGHT-ROOMED house, the main body of which is 32 by 28 feet, is shown in the accompanying design. It is planned for an

east front, giving bright sunny rooms. There is no waste space, and the rooms are cleverly arranged to make the most of the space enclosed under the main roof.



The gambrel roof gives space for the second story

Chas. S. Sedgwick, Architect

The bed room on the first floor is well placed, with the bath room opening from it and the passage leading to the kitchen.

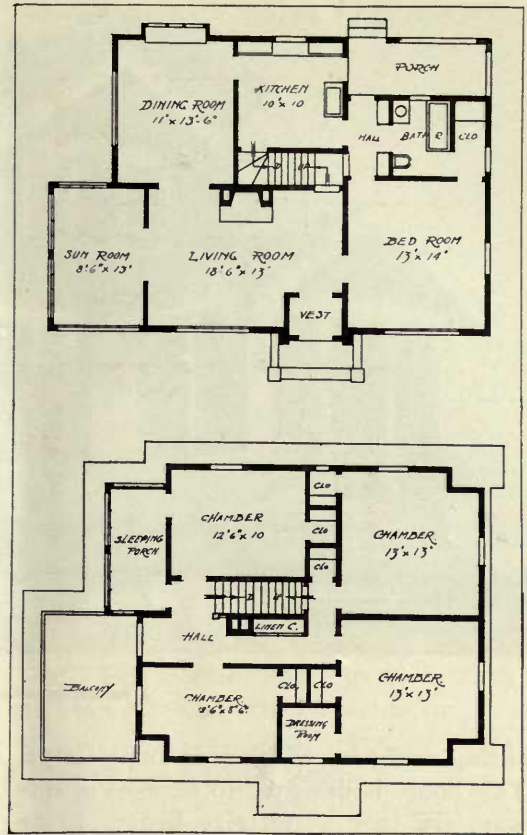
Casement windows in groups of four give good light and air to the living rooms, and make an interesting feature of the house at the same time.

On the second floor are four bed rooms, finished in enamel paint, with birch doors.

The rooms on the first floor are finished in enamel paint with mahogany doors. The floors are of white oak.

The house has the gambrel roof of the so-called Dutch colonial style, with colonial details freely used in a hooded entrance centrally located to make a symmetrical design. The grouped casement windows are attractive. Double-hung windows are used on the second floor and in the bed room.

The exterior of the house is covered with wide drop siding up to the window sills, with narrow siding above, while the low sweeping roof and the shingled sides of the dormers are stained a dark reddish brown. The siding and trimmings are painted white.



Two Bungalows



BUNGALOW suited to a narrow lot and one, the main part of which is nearly square, are shown in this group. A house 24 feet wide will have good space on either side, even when built on a narrow lot. In the first home the rooms are well disposed. While some of the rooms are narrow, yet they have a sufficient width.

The living room extends across the full width of the house, with a fireplace and bookcases across one end of the room. The entrance is through an inviting screened porch at the other end of the living room. The stairs lead up from the living room also.

A bay is projected for the buffet in the dining room, so that there need be no furniture projecting into the room. A breakfast alcove is built one end of the kitchen, with cupboards and working table beyond. Stairs to the basement from the kitchen have an outside entrance on the stair landing, which is also the kitchen entrance. The angle by the stairs makes a place for the refrigerator beside the door.

The bedroom and sleeping porch with the bath room between makes a convenient suite of rooms. With the bed on the porch, the bedroom, so marked, would be used as dressing room and private



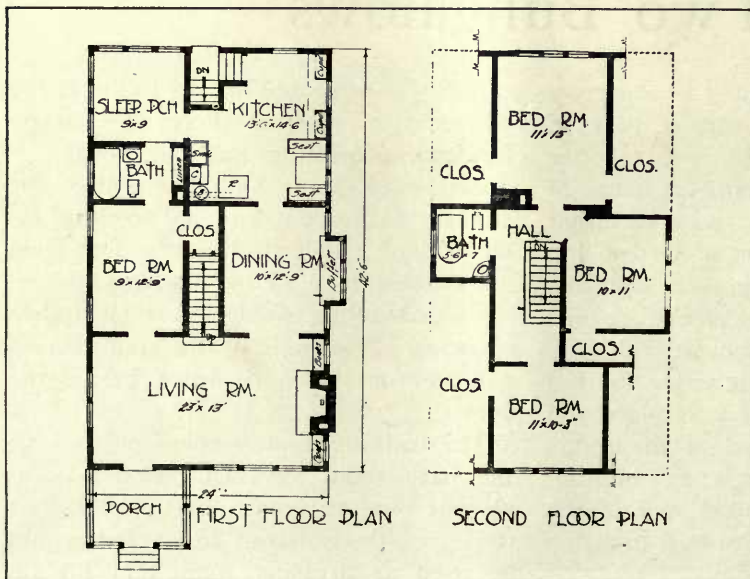
A bungalow suited to a narrow lot

sitting room, for which it is amply large. This house is designed to be used in this way. In case a full size bed is to be placed in this room, the place where it is intended that the bed shall stand should be decided and the door from the living

room placed accordingly. If the bed is to be placed against the inside wall, this door would probably be more convenient if moved as far as possible toward the outside wall.

On the second floor there are three bedrooms and a second bath room. These rooms are of fair size, with closets under the roof.

The second bungalow has less space under the roof, with a low flat dormer at the front which gives cross ventilation to the two bedrooms on the second floor. The entrance porch is placed under the main roof beside the front bedroom. The living room is square, with a corner fire-





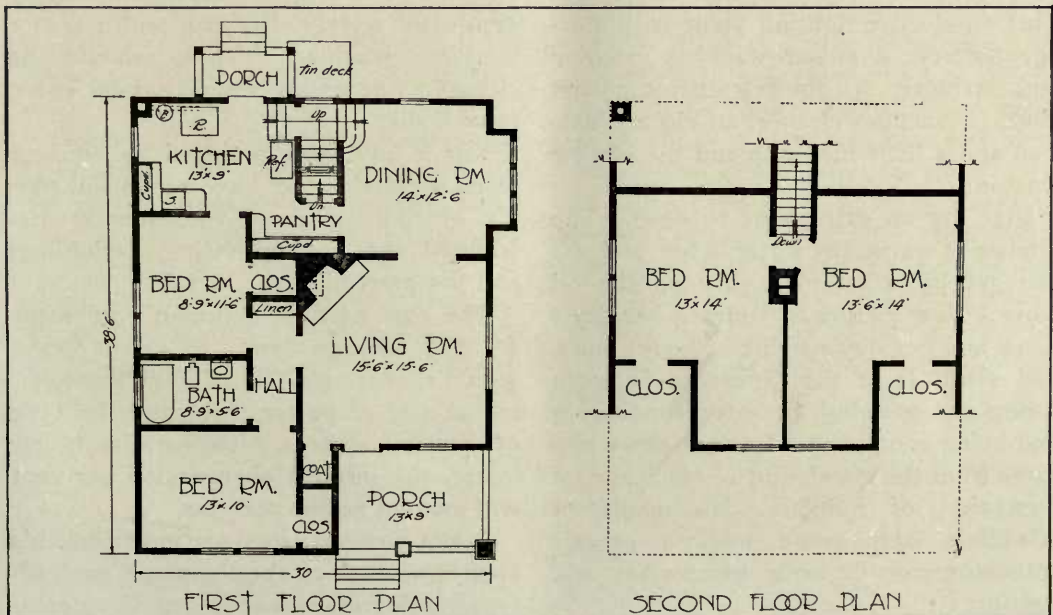
Only a flat dormer breaks the roof line

place, with a flue in the central chimney which also carries a flue for the furnace. There is a coat closet beside the entrance.

The dining room is back of the living room, with a wide opening between. The cupboard space and pantry is cleverly arranged between the kitchen and dining

room. The working space in the kitchen has been carefully studied and is well arranged. A second small chimney gives a flue for the kitchen range.

A small hall opens from the living room and connects with the two bed rooms and with the bath room. There is a linen



cupboard built in across one end of the hall.

Narrow siding has been used on the outside wall of each of these bungalows; in one case from the grade line, with a trim around the basement windows the same as around the regular windows; and in the second bungalow the watertable is

above the basement windows and the siding is used only for the space of the first story to the heads of the windows. Shingles given a dark stain are used above the head casing band of the windows in both bungalows. Dark brick is used for the chimneys.

Suppose

Xenophon Caverno



IMAGINE an average farm home without modern improvements and conveniences. Picture to yourself an average farmer's wife as she goes through her daily routine. Follow every step from the time she starts the fire in the frigid kitchen till she lays wearily down the last pair of mended stockings at night. Now by magic transfer her in her sleep into a house with just the plain conveniences; a heating system; running water, hot and cold; a bath room with lavatory, closet, and bath tub; a sanitary system of sewage disposal; a power plant that not only pumps the water but runs an electric lighting plant with storage battery; a power washing machine and wringer, a power separator and churn, a vacuum cleaner, an electric flat-iron and a little motor to run the sewing machine.

Give her an extra hour to sleep. The kitchen is warm, the water is hot, and she can get breakfast in a jiffy on the oil stove. Now picture to yourself her day's work and her day's uplift of body, mind, and soul. It is the difference between losing and winning, between conquering and being conquered. Look at these pictures from the standpoint of efficiency, of humanity, of romance. No magic of Aladdin's lamp could work a greater transformation or bring greater joy and comfort

And what would be the cost of this miracle? A long spell of sickness and first-class funeral would buy the whole plant. The wages of a hired girl, or two weeks of a nurse and doctor would much more than carry the interest on the investment; so would the price of a fair cow or a poor horse.

No farm is equipped for efficient work which does not have a comfortable house with a heater (hot air, hot water, or steam), running water, hot and cold, a complete bath room, a kitchen sink, laundry trays, a lavatory on the first floor if the bath room is on the second, a sanitary system of sewage disposal, and a power washing machine. These should be classed as necessary equipment for every farm home.

Nor is any farm equipped for efficient work which does not have a plentiful supply of running water conveniently distributed for stock watering, sprinkling, and fire protection.

The cost of this minimum equipment for the average farm, in usual times, would vary from \$700 to \$1,000, according to the size of power plant and the type of heating system. Taking the larger figure, the interest charge at 6 per cent will amount to \$60 per year.

When General Goethals undertook his Herculean task on the Panama Canal, his first consideration was in providing com-

fortable and healthful living conditions for the workmen he would bring to the job.

A farm, like an army or an industry, breaks down with its commissary and sanitary departments. The slender link of a woman's endurance limits the strength of the chain of farm living.

Neither is the possible saving in the wear and tear on a woman's life exaggerated. President Joe Cook, of the Mississippi Normal College, in a bulletin of the United States Bureau of Education, makes the rather startling statement that the average farmer's wife has to lift a ton of water a day. Here is how he figures it:

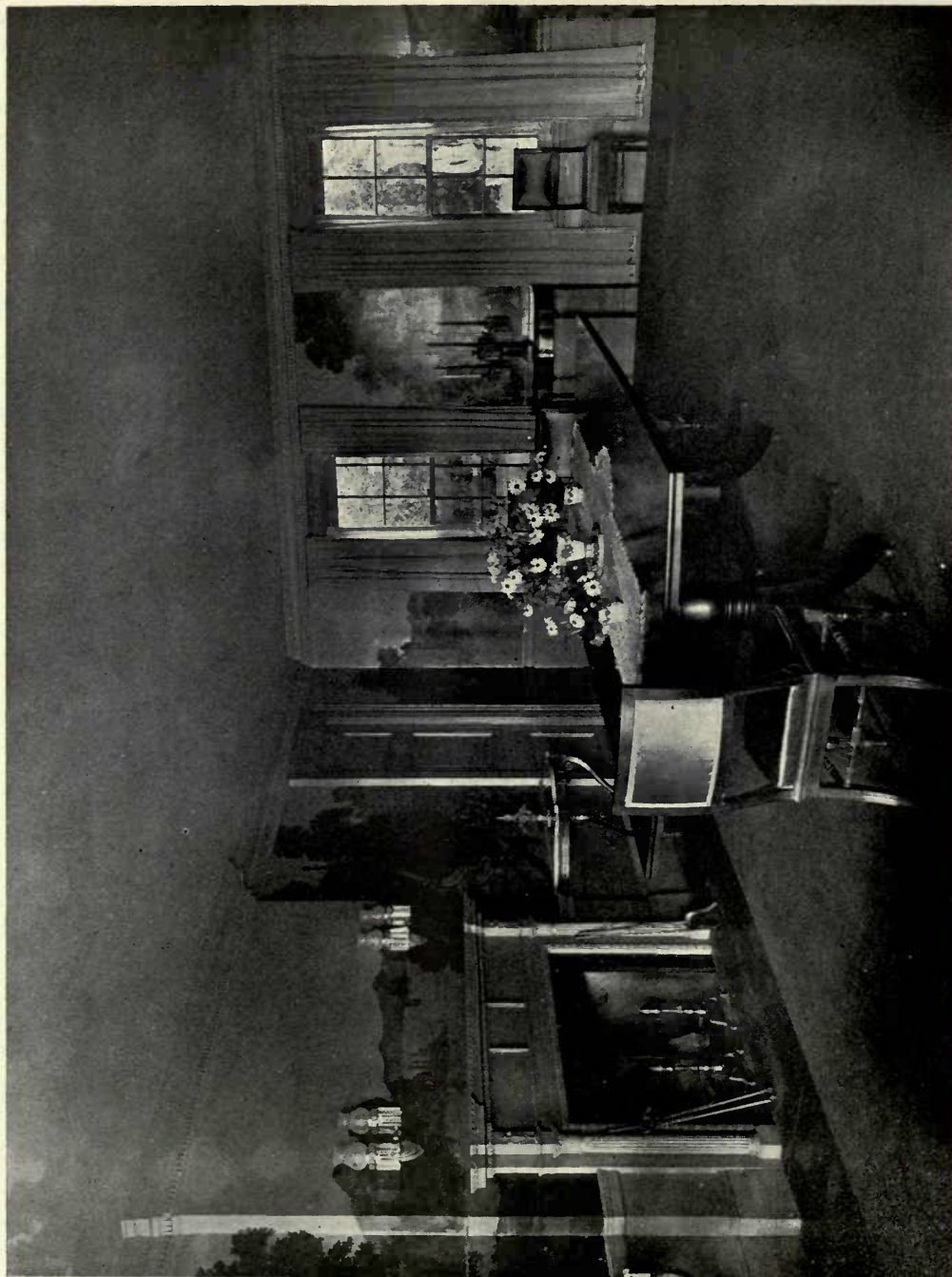
"The getting of the water from the source of supply to the point of application requires more manual labor than any other item of housekeeping. The water for the kitchen has to be lifted from the well, carried to the kitchen, poured into a kettle, poured out of the kettle into the dishpan, and from the dishpan out of doors. This makes six times the water is handled; and a bucket of water containing two gallons, with the containing vessel, will weigh twenty pounds. When this is handled six times, the total lifting is 120 pounds. The cooking of three meals a day on a meager allowance of water will necessitate ten buckets, which will make for cooking alone, 1,200 pounds of lifting per day. When to this is added the water necessary for bathing, scrubbing, and the weekly wash, it will easily bring the lift per day up to a ton; and the lifting of a ton a day will take the elasticity out of a woman's step, the bloom out of her cheek, and the enjoyment from her soul."

The average retired farmer is a pathetically lonesome figure in town. Ask him why he quit the farm, and nine times out of ten he will reply, "Wife couldn't stand the work."

We recoil from the concentrated misery of the city slums, of the sweatshops and factories because it is concentrated. We tolerate the great sum of human miseries on the farm because they are individual. If all of them could be massed before our eyes a cry of horror would go up to heaven. And behind the pity of it lies the economic waste; the crippling of the one great basic industry of our country on which all others depend. In the individual misery, we lose sight of the grand total.

Back of the question of the cost of fatigue-preventing equipment lies another real question. If you save the cost and keep the fatigue, what have you left?

"Fatigue does mischief negatively as well as positively: lowering vitality and breeding disease is its active and positive aspect. Shutting out the exhausted from their rightful heritage, contracting, binding, inhibiting, is its negative. Other faculties suffer as well as the vital bodily functions. For as exhaustion nullifies the benefits of better food and shelter, so, too, it paralyses the higher activities, all that feeds men's mental and spiritual needs. Offer what opportunities you will to the exhausted organism, they fall upon literally deafened ears. Fatigue so closes the avenues of approach within, that education does not educate, amusement does not amuse, nor recreation recreate. Books and learning, pictures, music, play—all the enfranchisements of the spirit lose their power."



Scenic effect on the dining room walls of a country house on Long Island

Howard Major, Architect



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Walls and Wall Papers

THOMAS HANCOCK, who seems to have had a discriminating taste in house furnishings, ordered from one John Rowe of London, in 1757, a shaded wall paper for the west parlour of his Beacon Street residence. A century later we find John Sibley of Salem importing a shaded pattern for his front hall.

Hancock's paper, together with the fine old Boston mansion, was demolished about fifty years ago to make way for a brown stone edifice, but a fragment of the later pattern exists, with the following notation in a clear Victorian hand:

"Laid on the front entry of Mr. John Sibley's house, South Salem, Massachusetts, Feb. 16th, 1858."

Imagination will aid those interested in reconstructing the Hancock importation, for the uncle of the Governor and signer of the Declaration of Independence gives most careful instructions by the hand of Captain Tanner. "If they can make it more beautiful," he writes, "by adding birds flying here and there with some landscapes at the bottom I should like it well." Then follows the description of a wall hanging in the house of Francis Wilke, Esq., of Boston, made by Dunbar of Aldermanbury a few years before, whereon are depicted "a great variety of different sorts of birds, peacocks,

macoys, squirrels, monkeys, fruits and flowers, etc." In other words, a medley similar to many of the latest wall hangings of this year of grace 1918, when Dunbar and John Rowe, and even old Thomas Hancock, are quite forgotten.

The back pages of the centuries have been turned with the result that countless historic patterns live again. We may be Jacobean, Georgian, Chinese-Chippendale, Colonial, Gothic or Victorian, as we please. Some of the papers are literal reproductions, others are free translations, nearly all are interesting, and many have real charm. Tapestry, brocades, velvets, decorated leather, old needlework, chintz, printed cottons, as well as old papers, have been taken as a working guide. All do not make the same appeal; some fascinate merely on the ground of clever designing.

Thanks to one of our big manufacturers, John Sibley's front entry paper may be purchased to the life. Although hung in the mid-Victorian period, it suggests an earlier day and, in all probability, was a revival of an eighteenth century design. The heavy shading gives the effect of high relief from one angle and of sunken paneling from another. Papers of this type were very popular in the fifties, as many old halls still testify. Sometimes brilliant green

INSIDE THE HOUSE

formed part of the background. The cry of "arsenic poison," however, soon doomed the sale of green wall hangings, but not until someone had written a lurid tale of how one cold-blooded William Sanders made way with two wives by using green wall paper in his kitchen. Notwithstanding this domestic tragedy, the writer knows of one old attic where at this very moment are three rolls of gray paper decorated with flower pots,—deeply, darkly, arsenically green. Vivid is the pattern, but scarcely more so than its counterpart on the walls of the parlor, now rounding out sixty-eight years of service, and not one member of the fam-

ily is under seventy. Poison it may be, but of the slow variety.

John Sibley's house has proved a source of inspiration, as have the Livingston manor on the Hudson, the old Lee mansion, Marblehead; the Osborne house, Danvers; the Wadsworth-Longfellow house, Portland; the Colonel Pope mansion, Farmington, and many other fine old dwellings located in New England and the South.

Visitors at the Pan American Exposition at Buffalo may recall the "Pope paper" in the New England Building and what a stunning background it made for mahogany furniture, dull gold mirrors,



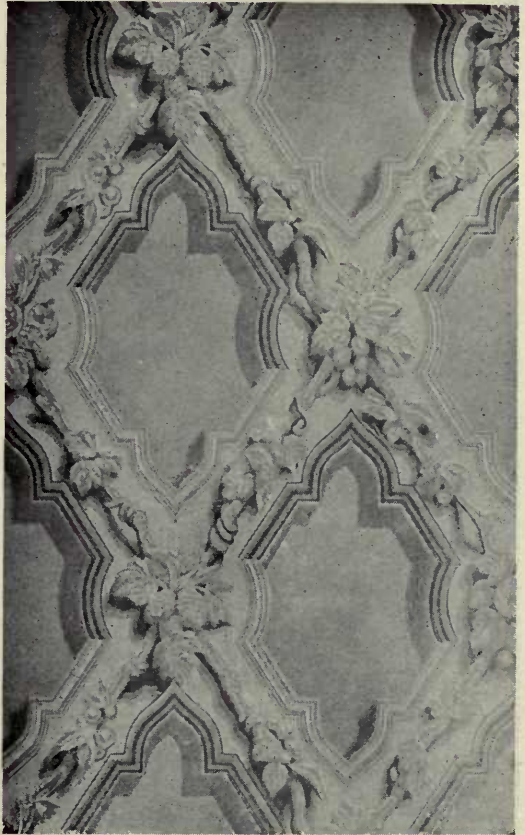
Modern Colonial hall showing "Esplanade" scenic paper

INSIDE THE HOUSE

samplers and silhouettes. Rectangular panels enclosing a small geometric motif provided a flat and very pleasing setting for a large colonial loan collection.

Traveling back nearly a decade, the Knickerbocker room of the New York State Building of the World's Fair at Chicago comes to mind as an earlier milestone; one of the first in this country, if memory serves correctly, where a public exhibition of heirlooms was given a consistent background. The walls were papered in narrow stripes of grayish blue shaded in the Hancock manner, while around the cornice and forming a border were festoons of deeper blue simulating folds of velvet. Doubtless this pattern had been made expressly for the building, for Colonial reproductions, as we now know them, were then unknown. By day the room was full of charm, but when lighted by candles it took on a beauty remote from the nineteenth century. At the ball given for the benefit of the Mary Washington fund, toward the close of the Exposition, when every American wore colonial costume and visiting officials from every quarter of the globe appeared in native dress, the picture was worth journeying far to see, and one that time could not efface.

Today when a characteristic wall hanging is desired the matter is extremely simple. From a wealth of material the specific need may be quickly and easily met. For old oak there are themes suggesting Jacobean needlework,—all quite flat and entirely appropriate as a wall surface,—for black walnut in Victorian taste, a host of designs copied from actual papers, and for the long intermediate span which we roughly class as the age of mahogany dozens of beautiful things.



Courtesy M. H. Birge & Sons Co.

The shaded wall paper laid on John Sibley's front entry—
Salem 1858

As a background for Adam furniture come the classic revivals, suggesting the jasper wares of Josiah Wedgwood. Other classic themes derived from Toiles de Jouy, English chintz and early American cottons, are less formal in treatment, and consequently more adaptable for everyday schemes.

Naturally, Chinese designs of all kinds are numerous, for China more than any other country has proved a gold mine to the wall paper designer. Some of the patterns are copies of Chippendale's interpretation of Chinese, several suggest the screens and lacquer panels imported

INSIDE THE HOUSE



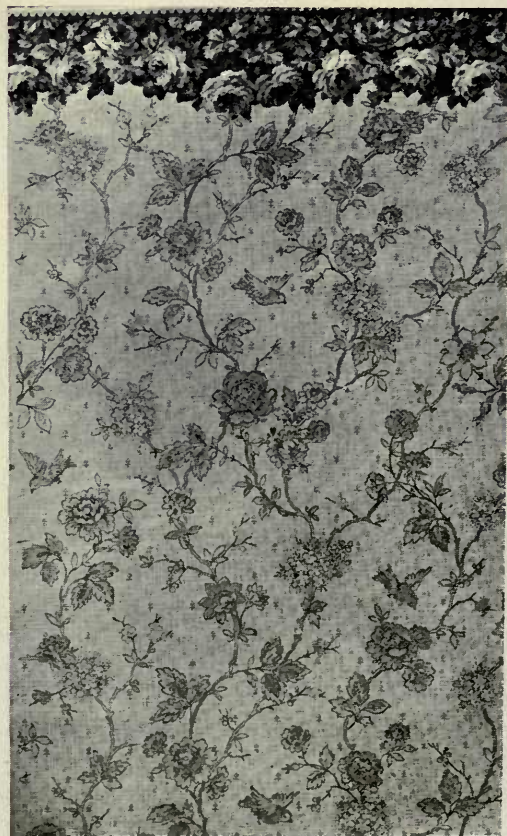
Chinese peony on black ground

during Queen Anne's reign, a few call to mind the beautiful porcelains of the *K'ang Hsi* period, while others, quite new in handling, proclaim their Chinese inspiration in every leaf, flower and twig. In the latter class is the Chinese peony on the black ground.

Japan offers almost as much as China in a manner equally characteristic, but the Japanese connection with our own *lares* and *penates* is not quite so close. We do not feel the same freedom in appropriating the designs from the "Land of the Rising Sun" as those from the "Flowery Kingdom." Unfortunately, no

traditions of sea-faring great grandfathers hover over Japan, no tales of ships laden with "ventures," no china made to order for fair American brides, no inherited ivories, silks, sandal-wood fans, old rice paper pictures, and ginger jars. Yet there are occasional wall papers of pronounced Japanese feeling which have great charm. They do not lead to old mahogany furniture nor suggest backgrounds for any inherited possessions. They inspire decorative schemes of quite another type.

Such a paper is the new crane and pine bough in cool grays and luminous black



One of the new papers—light gray side wall and rose crown

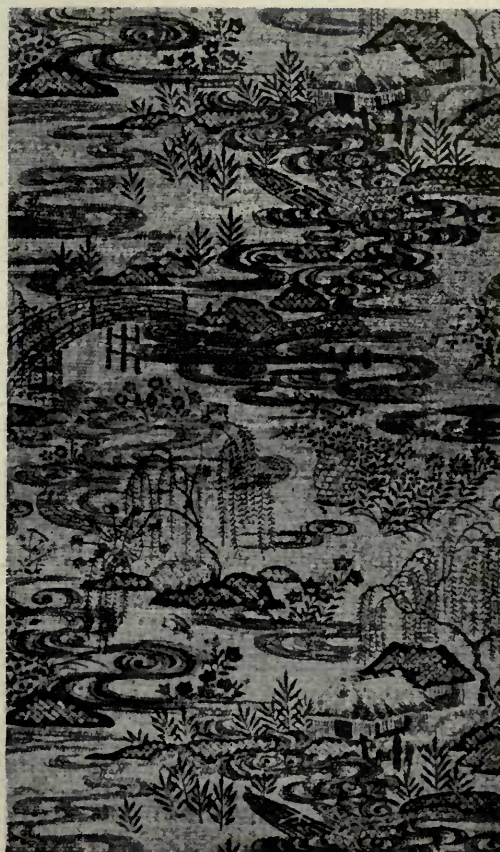
INSIDE THE HOUSE

on a grayish white ground. How attractive it would be in summer breakfast rooms with furniture painted black and woodwork painted the color of the background, with Japanese rugs in gray, black, and blue, and curtains of blue linen. On the table one might use blue and white Imari of the modern variety, and green ferns, or possibly yellow marigolds. Much one may do in the way of room building starting with such a paper.

Several of the Japanese bird and foliage patterns suggest interesting schemes for morning-rooms, garden-houses and tea pavilions. For the latter,



"Tropical foliage," reproduced from an old wall paper in the Col. Pope mansion, Farmington, Connecticut



Japanese grass cloth

old Madarin designs would also be highly appropriate. It is hard to get away from China, even in Japan. The wall paper debt to far Cathay is, of course, a tremendous one, for Chinese wall paintings gave European designers the first wall paper print. Still existing in certain old houses in England are rooms papered entirely in Chinese wall panels cleverly pasted at the edges. Mrs. Humphrey Ward's heroine, Marcella, spent many hours in a small room, the walls of which were adorned with pagodas, mandarins and much strange perspective. Mellor Park comes to Marcella's father by inheritance,

INSIDE THE HOUSE

with its seventeenth century staircase and its Chinese rooms of the early eighteenth century opening out on an old English garden.

Over a long period China furnished Europe with its wall coverings which, like the early panels, were painted by hand, and of such small dimensions that papering a room became a laborious process. Long after block printing replaced brush work wall papers continued to be made in comparatively small sections, necessitating most careful matching.

Patterns in the latter part of the eighteenth century and early years of the nineteenth assumed great size. Scenic effects and bold architectural motifs superseded the small decorative schemes. France had now become the center, and it is interesting to note that artists of renown lent their talents to the designing of wall coverings.

Many of the most famous renderings have been reproduced from the original blocks. With the right setting these big landscape and architectural studies are wonderfully effective, but they make rather rigid demands. Where the old-time values are re-created and the scheme of furnishing is on broad and simple lines, the scenic paper is full of distinction. It must not be cut up by many doors and windows, and should be regarded as a background complete in itself.

There are new adaptations of the old

themes which permit a more elastic treatment. For instance, "The Esplanades," shown in the illustration of the hall, is so arranged that the main picture may be placed at the most advantageous point of the room and the smaller and more uneven spaces filled with trees and architectural details, all cleverly leading up to the important tableau. The "Esplanade" comes in three different color schemes, pale gray, deep gray and taupe. These tones are typical of many of the old French papers and make a delightful harmony with mahogany when combined with old rose or with Gobelin blue. Another type of scenic paper introduces brilliant color, as in the hunting parties, street scenes and water views.

Of late several architects have used paper of pictorial value in paneled rooms, much as old decorative panels were placed in the eighteenth century. Instead of a continuous story covering the entire wall, certain episodes are selected in which drawing and color seem particularly interesting.

Naturally, the war has had its influence. Patriotic patterns are found in many of the shops, pleasing for the moment by their spirit and dash. But the most important effect of the great conflict on the wall paper market is the fostering and development of our own industries. With few exceptions, my illustrations are from "made in America" designs.

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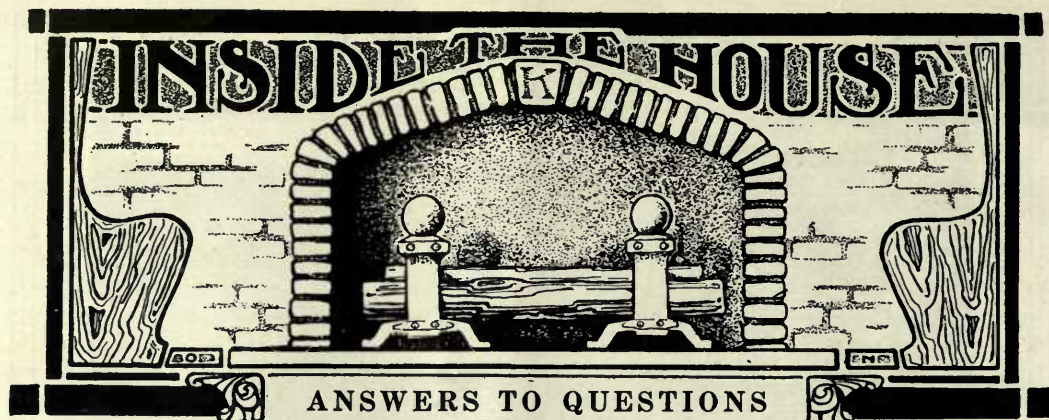
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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan.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

A Yellow and White Kitchen

B. L. J.—We have enjoyed reading this column and now will be glad to have suggestions from you in regard to the inside finish and decoration of our home, which is now being erected.

We had thought of having ivory enamel finish for living room and den. Furniture is fumed oak, leather upholstered chairs, and davenport wicker rockers stained brown with cretonne cushions, Wilton rug in tans, old blue, green and a little red in conventional design. Will you suggest a color or colors for walls in living room, den and dining room and woodwork for dining room and treatment of windows?

We would like a light kitchen, but not white. The back porch is to be enclosed and we thought of keeping the refrigerator there.

What color should blinds be for white stucco house with red tile roof?

We will welcome any suggestions you may have for the second floor as to wall coverings and colors. Furniture is circassian walnut in one room, mahogany in one and white enamel in another.

Ans.—As you have the fumed oak furniture and old ivory woodwork, you must have wall-covering a step halfway between, to bring everything together. I would suggest a tapestry paper with the colors found in rug, furniture and woodwork.

The woodwork in dining room might be the same as the other rooms or better, a tan rather on the orange hue—and wall

covering a shade lighter, with curtains of orange silk or sun-fast. It would be a good plan to curtain the casement windows and French doors by a rod top and bottom and on the window frame, then hang the curtains at the top of the ordinary windows with cord to pull them back and forth. These curtains should be of thin diaphanous material, gauze, silk, marquisette or fine net.

It is not necessary to curtain the leaded glass window, for of course it will be beautiful, as you are having it made to order.

Why not have the kitchen buttercup yellow? walls and woodwork alike with white muslin curtains, furniture like walls and woodwork, yellow enamel with white cloths printed in yellow. Have the cooking dishes white enamel and those yellow bowls, plates and pitchers that come with white stripes. Tables, white oilcloth tops or white enamel like sink, and cloths to be put on when mussy work is finished. The stove will doubtless be black, though the gas stoves do come in white enamel, and they are lovely, so clean and fresh looking. But if it is black, you can repeat the black by using a little black design painted around the room, and silhouette panels over tables and sink.

Cork tiling for floor is most restful to the standing person, though of course chairs and little stools that slide under the tables should be provided. Wash-tubs should never be in the kitchen. The ice-chest would find a very good place on the enclosed porch, where the kitchen color scheme would be continued.

INSIDE THE HOUSE

The outside blinds should be that faded blue-green, light in tone, used by the French on their stucco houses, with the tiles of red. It is between robin's egg and Nile green.

How would you like old blue in the circassian walnut room, pink taffeta in the white enamel room and changeable blue and flame color in the mahogany room, with papers that harmonize?

Plain Rugs—or Oriental Design?

N. U. M.—My new house will face the east. Could I use mulberry as a color scheme with gray walls? Would you advise natural oak woodwork and floors—or fumed? I like the light colored floor, as it shows dust less in this country.

Would you advise solid color rugs or an oriental design with mulberry predominating? What kind of curtains and of what should the overdrapes be made?

Ans.—As to light floors, the rule is that the ceiling should be the lightest part of the room, the side walls, including woodwork, the next, and the floor should be the darkest part of the room so it will stay down in its place. Of course, the furniture with its covering has to be taken into consideration with the walls, and the rugs count in the darkness of the floors. Mulberry and gray are lovely, but why don't you have gray furniture too? The furniture can be stained this color as well as the woodwork, and then I would use the mulberry for covering and stain the floor just enough to be in harmony with the furniture, and you will have a beautiful room and one light enough to be practical as you wish to have it.

The rugs with the design are easier to care for because the plain rugs show the footmarks more or less. There is a mulberry unfadable material that is good for curtains or a mulberry gauze.

The dining room would be good in a dull blue, a little toward the green blue, with walls and woodwork in tans.

Oak, Walnut, or Mahogany.

L. N.—Which of the three finishes would you advise us to get in starting to

furnish a home—oak, walnut or mahogany?

Ans.—The dull brownish mahogany finish is beautiful and makes a good foundation to start with, as you can add other pieces in this finish as you desire.

With Antique Mahogany.

R. D. K.—I am writing for suggestions in regard to interior decoration for our new home which is under construction. I have found your magazine very helpful, also your book on interiors. I want suggestions regarding the decoration of my living and dining rooms. The living room is across east front of house with stairway in extreme north end with windows in south end. The dining room is back of this, with north exposure. The woodwork throughout the lower floor is finished in ivory with mahogany doors and trim. The walls are putty shade plaster. The living room is 16 by 32 feet and dining room 15 by 17, both rooms to be furnished in antique mahogany.

I want my color scheme strongly emphasized in the rugs and draperies. Kindly advise me what colors you would suggest, also what style mantel in the center of the inside wall of living room. Would you advise antique silver hardware trim and lighting fixtures in living room, as in dining room? Am using numerous side lights in candle effect.

Ans.—In the living room use a brilliantly striped taffeta silk in blues, blue-greens and yellows, with furniture covering in plain tapestry to harmonize, and oriental rugs with all the tones of the room summed up. The silver hardware and lighting fixtures would be best with the antique mahogany, so we should advise using them as you suggest. In the dining room you can use wonderful chintz with big flowers and birds and in good colors.

A colonial fireplace is the only thing you can use.

Your ideas are so good and your house sounds so beautiful that we hope we can help you in the draperies and rugs, to make it just what you wish.

INSIDE THE HOUSE

Furnishing a Man's Bed Room.

L. A. B.—I am about to furnish a blue bed room and would like some advice in regard to the arrangement of furniture, etc.

I have a bed room set in the rich old ivory of the Adam design, consisting of dressing table with three mirrors and dressing chair, bed, chiffonier and rocker, the chairs having the reed bottoms. The chiffonier has no mirror. What would you suggest for a frame for a mirror to be hung over the chiffonier and the size? What size, colors and kind of rug? The room is about 12 by 12. What kind of drapes and under curtains? Would you add any more furniture in the reed or wicker, such as desk or day couch? Should the bed spread match the drapes? What pieces are used on a man's chiffonier?

The walls of this room are tinted plain blue and the woodwork and floors are a light oak. Room is on southeast corner. Where could boudoir lamps be used for effect? Also what pictures are suitable for a bed room?

Ans.—The mirror over the chiffonier should be about two inches narrower than the chiffonier, and the height should be about two-thirds of the width. The rug can cover the space left beyond the bed, with a margin of from six inches to a foot from the edges of the floor, or if you wish a larger rug, say about 8 by 10 feet.

Over curtains may be chintz with blue dominating. Have bed-cover, pillows, chiffonier and dresser runners of the same in Old English design. Then use cream marquissette next the window glass. A desk and day couch would be very comforting, but I would keep these in the old ivory, Adam design, and not mix types.

On a man's chiffonier should be military brushes and comb, tray for pins, safety-pins, etc., box of talcum powder,

small box for collar buttons, tray for razor box, large round box for collars, square box for handkerchiefs.

A lamp on the desk and another beside the bed with two on dresser would be convenient and effective. Shades like the over-curtains. Pictures should be sparingly used in a bed room, for this room is for rest. But one large photograph in brown tones of a picture by some English artist, with a narrow old ivory frame, could hang flat against the wall, with no cord visible, in the largest wall space. Do not use more.

Curtains for the Porch.

H. L. W. I wish to curtain a white sleeping porch with three sash windows on each of three sides. The entrance is a long glass door. We are afraid that dark green burlap will fade too badly and I do not care very much for striped awning. What could you suggest? I intend to have the curtains draw back and forth over a wire at the top.

Would the awning be good? I may have rag rugs in color which will match the curtains.

I would also like suggestions for curtaining or sash-curtaining a long glassed-front porch. The windows are boarded up a bit high. My furniture is rustic and there is a green grass rug.

Ans. We should advise the use of some unfadeable fabric for the curtains for the porch and then you can have as light or dark a color as you wish. There are also regular porch rugs, that come in colors to match the draperies if you prefer them to the rag rugs of which you spoke. If you wish we will send you some samples of the unfadeable materials.

Chintz curtains would be very attractive for the front porch for it is so pleasing with rustic furniture, but if you prefer you can have an unfadeable material there also.

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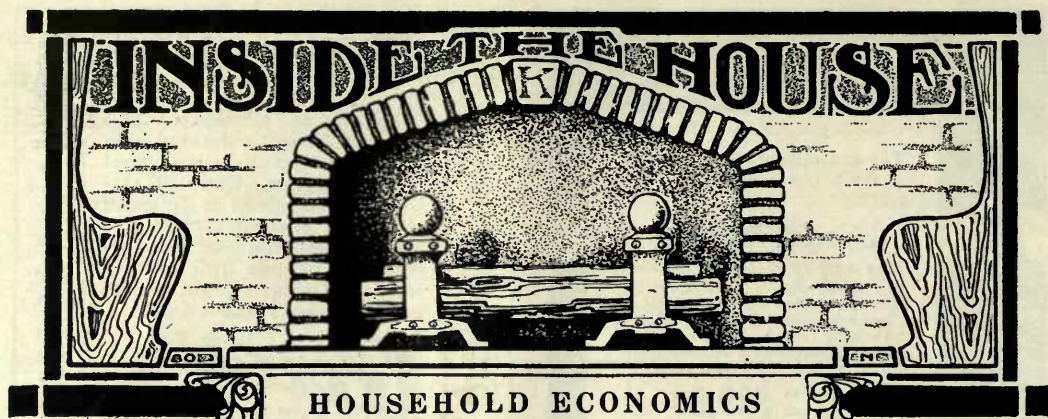
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Suggested Economies

To Cleanse Window Shades.

AFTER the summer light colored window shades are usually soiled. These may be cleaned by rubbing very gently with a soft cloth wrung out of a mixture of one pint of hot water and three tablespoonfuls of benzine. Keep the benzine away from the fire. Dry by wiping with a clean, soft towel.

Curing Mildew.

Perhaps every woman at one time or another finds that some wet pieces in her soiled laundry bag have caused mildew among the clothes. To remove this rub the spots with soap and cover them with chalk. Then put them on the grass in the sun. Keep it slightly damp for an hour or two and then let it dry thoroughly.

To Remove Water Spots.

Take a piece of the same material as that spotted and dampen it in lukewarm water. Place on water spots on right side and press with a moderately warm iron. Press until both pressing cloth and material are dry. The spots will have disappeared.

* * *

In cooking fruit, it takes nearly twice as much sugar to sweeten if added before cooking. Cook first, then sweeten to taste.

Some Egg Tips.

A tiny pinch of salt added to the whites of eggs makes them beat up quite quickly. A tablespoonful of water added to each white of egg before beating will double

the quantity. To prevent eggs from cracking when boiling always dip first in cold water.

Egg stains on silver spoons can be removed by rubbing them with damp salt.

* * *

Don't wash the eggs. Washing destroys the protective film and hastens their spoiling.

In a well regulated poultry yard eggs are laid in a clean nest and the shells are never allowed to be contaminated.

Preserving Olive Oil.

To insure olive oil from becoming rancid after the bottle or can has been opened, put in two lumps (to a quart) of loaf sugar. If the oil comes in a can, empty as soon as opened into a bottle or a preserve jar and put in the sugar. The sugar keeps the oil in perfect condition to the last drop.

Steaming Wrinkles Out of Gown.

Draw the bathtub or a large washboiler half full of hot water and hang the gowns that are wrinkled above it to steam. In a few hours the wrinkles will entirely disappear. This method also freshens lace and chiffon gowns.

The Menace of the Rat.

There are millions of rats and mice foraging and roaming at large in this country rendering treasonable aid to the Kaiser.

Experts have estimated that one rat will consume 40 to 50 pounds of food in a year. It has also been figured that it requires the continuous work of about

INSIDE THE HOUSE

150,000 men with farms, agricultural implements, and other equipments to supply the foodstuffs destroyed annually by rats in the United States. In addition, rats destroy other property, mainly of agricultural origin, the production of which requires the work of about 50,000 men. This gives a total of 200,000 men whose economic output is devoted solely to feeding and otherwise providing for rats.

This waste and devastation by rodents and other pests is really a building problem. The fact has greater importance because building against rats is also building against fire. The cellar walls should have concrete footings, and the walls themselves should be laid in cement mortar. The cellar floor should be of medium rather than lean concrete. Even old cellars may be made rat-proof at comparatively small expense. Rat holes may be permanently closed with a mixture of cement, sand, and broken glass, or sharp bits of crockery or stone.

When the house is building, there is little additional cost in making the foundations ratproof. It is a matter of thought rather than of especial expense. Southern seaport cities, notably New Orleans, which are sometimes threatened with danger of plague carried by rats from incoming vessels have made the whole region of the warves entirely ratproof as a sanitary measure and a precaution against disease.

Sunlight Engineering in the New Housing.

That sunlight is being studied in its relation to the new housing programs comes as a pleasant surprise to those who have long felt the unfortunate results of city streets which run with the points of the compass, condemning certain rooms in every house to sunless windows. "Planning Sunlight Cities" is a subject discussed by Herbert S. Swan and George W. Tuttle.

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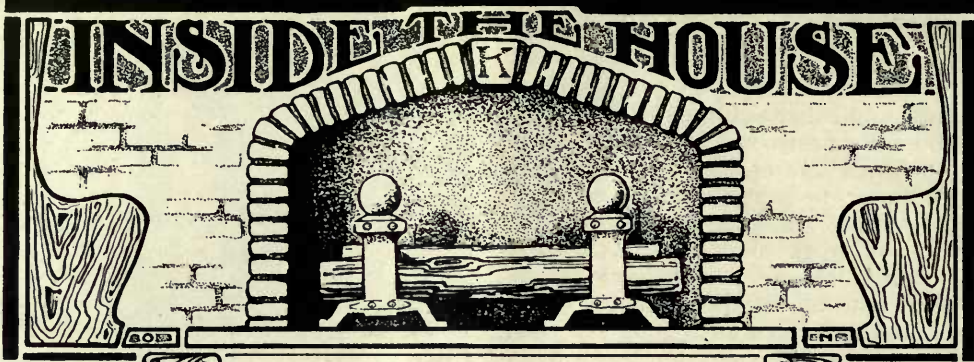
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THE TABLE AND FOOD CONSERVATION

What to Use in Place of Sugar

WITH all the good food in this country which can not be sent across the water; all kinds of grains and syrups, can the ingenious housewife satisfy the craving for sweets which, in spite of their patriotism, persists in her growing family, begging for cookies and cake? A famous cook, head of the commissary department of a Red Cross chapter who furnishes the lunches for all-day workers, says that it is not only possible, but she gives the rules which she has been using. For months she has not been using either sugar or wheat, except occasionally in the smallest quantities, and she has been feeding hundreds of people. Many of her rules she has adopted from old favorites, substituting conservation materials for sugar, flour and butter.

Conservation Cake.

- 1 cup corn syrup (or half maple)
- $\frac{3}{8}$ cup butter substitute (crisco)
- 2 eggs
- $\frac{1}{4}$ cup milk
- 1 square of chocolate, melted
- $1\frac{1}{2}$ cups barley flour
- $\frac{1}{8}$ teaspoon soda
- $2\frac{1}{2}$ teaspoons baking powder
- 1 teaspoon vanilla
- $\frac{1}{4}$ teaspoon salt

Cream fat, add syrup, then add the well beaten eggs. Sift flour, baking powder, salt and soda, and add alternately with milk. Add melted chocolate and vanilla, and beat well. Syrup makes a thinner

mixture than sugar while it is in the batter, but do not add flour as you would in other cake dough or it will be too dry when baked.

Put in two layers, or in small cakes, and bake 30 minutes if in layer or 25 minutes for small cakes. The cake should be firm when baked and drawn away from the side of the pan. Use conservation boiled icing between the layers and over the top and sides.

Boiled Icing, Without Sugar.

Boil a white corn syrup until it makes a fairly solid "soft ball" when tested in water. Use this syrup in the same way as the usual syrup made from sugar and water, for a boiled icing. Pour the boiling syrup over stiffly beaten white of egg, beating as it cools and it will make a foamy white icing that all children love, not to speak of "grown-ups." This may be flavored to taste as the corn syrup is noticeable otherwise.

Three tablespoonfuls of white Karo syrup may be used to the white of 1 egg.

Fruit Cookies.

- $1\frac{1}{2}$ cups butter substitute
- 1 cup corn syrup
- 1 cup sugar (maple)
- 4 eggs
- 3 tablespoons hot water
- 2 cups rice flour
- 1 cup corn or barley flour
- 2 level teaspoons baking powder
- $1\frac{1}{2}$ teaspoons soda
- 1 teaspoon cinnamon

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- 1 pinch of salt
- 2 cups small seedless raisins
- $\frac{1}{2}$ cup walnut meats

Mix in the usual way, adding the sugar gradually. The batter should be soft enough to drop from a spoon on the "buttered tins," using a fat substitute. If dough is too soft it will be necessary to add a little flour to bring to the proper consistency. This is a large rule and may be divided into halves or thirds for a small family. Comparison of the amount of flour used gives an idea of the size of a rule.

Canning Fruit.

It is not necessary to use sugar in canning fruit, as many housewives know from past experience. On a hot afternoon in summers past, or when the sugar has unexpectedly given out, many a jar of fruit, or of fruit juice prepared for jelly has been sealed up and set away to be made into jelly, or ready for table use when it was needed, and the jelly or sauce was fresher for being newly made. What was an incident then may now be made a policy and all fresh fruit canned without being sweetened. The fruit will keep perfectly.

When the fruit has been boiled and poured through a jelly bag in the usual way the juice may be brought to the boiling point, poured into sterilized jars and sealed, or it may be boiled, without sugar, until reduced to one-half its volume and it will require fewer jars and less storage space.

Fruit in Fruit Juice.

Any fruit sweet enough to be eaten without sugar may be canned in its own juice. This gives a product of finer flavor than can be produced by the use of sugar syrups. Divide fruit into two equal parts, selecting the best for the canning and leaving the poorer for making the juice. Extract the juice as for jelly making and can the fruit in it, using the cold pack or open kettle method. The fruit will stay whole and keep its shape. If desired this juice may be poured off for jelly making before using and the fruit re-cooked in syrup.

Blackberries in Blackberry Juice.

Take 4 quarts of berries or 2 quarts of blackberries and 2 quarts of raspberries,

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INSIDE THE HOUSE

or 2 quarts of blackberries and $1\frac{1}{2}$ cups raspberry juice.

Use only sweet berries. A combination resembling loganberry in flavor may be made by using raspberry juice with the blackberries. Crush one cup of the berries to be used for juice in the bottom of the kettle. Strain through a jelly bag. Return the juice to the preserving kettle, add the berries to be canned. Simmer 5 minutes. Adjust rubbers, fill sterilized jars, seal and invert.

Baked Apple in Apple Juice.

Take 8 fair apples, 4 quarts apples or 1 pint sweet cider.

Choose fair apples, core and bake slowly to prevent bursting. Cut the remaining apples in pieces. Put into preserving kettle, adding water enough to almost cover. Simmer till soft, strain through a jelly bag. Return the juice to an open kettle and boil it down to one-fourth its volume. Pour this over the baked apples packed in a sterilized jar and seal. Sweet cider may be substituted for apple juice extracted by boiling.

Carrot Fudge.

Here is the recipe for carrot fudge, as worked out by the director of home economics for the food administration of Texas:

- 1 cup corn syrup
- 1 cup mashed carrots
- 1 cup of milk
- 1 cup of sugar
- 2 tablespoons fat

Cook carefully on an asbestos mat, stirring constantly until the candy looks as if it were near scorching; test by dropping a portion of the cooked mixture into cold water. Pour into oiled tins and cut into squares. Flavor in any way you please.

Honey in Ice Cream.

Can we be patriotic and eat ice cream that is sweet? One commercial organization which has been using honey to sweeten the ice cream which it makes reports that, while honey is a little more expensive than the sugar which it replaces, as it makes a finer grade of ice cream,

justifying the little extra outlay in the cost. This company uses two times the quantity of honey, by weight, that it does of sugar, in sweetening the ice cream.

Modern Soap Making.

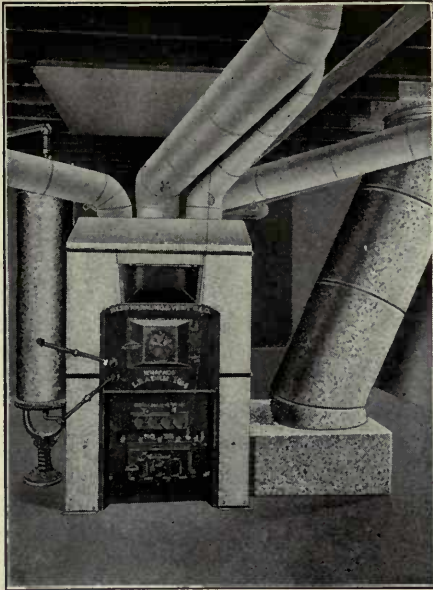
A few people can remember "Grandmother's soap kettle," a huge black iron kettle with spike-like legs, set over a fire made out of doors and grandmother, in an old gown instead of the dainty one she usually wore, superintending the mysteries of the annual soap making, like a witch over her boiling cauldron. The result was a lathery, gooey mess which we called "soft soap." She made her own lye out of wood ashes, and "saving soap-grease" was part of the daily routine of the kitchen. No scrap of fat was allowed to go into the garbage. In fact, in those days there was no garbage. What was left from the meals was fed to the pigs or to the chickens or it went into the soap grease.

It really is not difficult to make a cake of soap. The modern instructions are quite simple, and it is a very practical way to conserve fats which can be used in any other way.

Pour into a mason jar $5\frac{1}{4}$ cups of cold water. Add to the water the contents of a can of lye. Stir until all the lye is dissolved and allow it to become completely cold.

Fry out the fat from scraps of meat. Clarify the fat and get rid of any salt it may contain by boiling it for at least five minutes with several times its volume of water and allow it to cool. Let the fat collect, then skim it off. It may be melted and strained again.

Make some moulds about the size of a cake of laundry soap out of stiff paper or cardboard. Weigh out half a pound of fat. Heat it just enough to melt it. Measure out half a cupful of the lye solution. Add the lye to the fat, a spoonful at a time, stirring well after each addition. This should take five minutes at least. Keep on beating until the mass is fairly thick. Pour into the moulds and set it away to harden.



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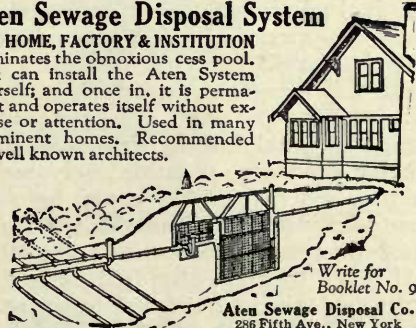
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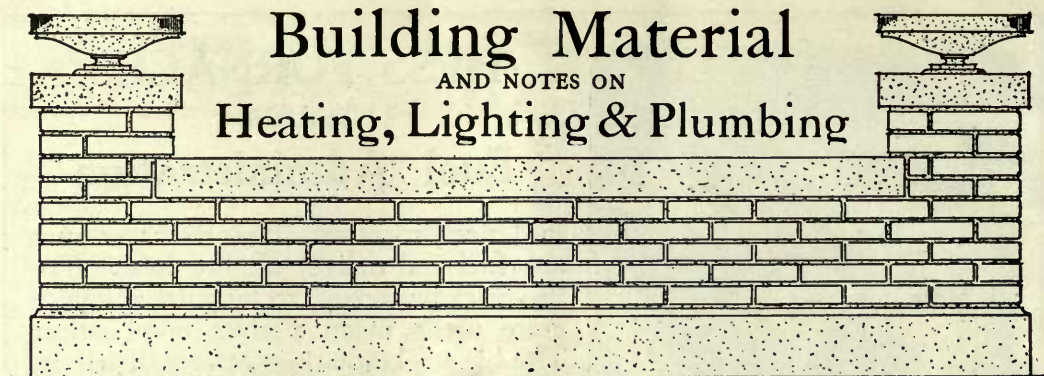
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Save Coal for War Work

EVERY American householder is asked to use as little coal as possible during the coming winter.

On the face of it this would seem an unnecessary request for, with the price of coal, no one is going to burn any more fuel than is necessary,—even if he could get it. The necessity which is before us is much deeper and more far-reaching than the personal cost and convenience. The fuel administration is asking the personal co-operation of every American householder in carrying out the government war program, in which coal plays such a necessary part. The excessive demands for coal for the next year are far greater than any possible increased production can give, and must be supplemented by the coal made available by domestic conservation. The shovelful of coal saved by the individual householder, multiplied throughout the country, will carry on war work. One shovelful is not the little thing it seems. With faith in the democratic ideal the Fuel Administrator is asking that all participate in the sacrifices necessary.

It is stated that one quarter of the fuel, as ordinarily used to heat our houses is wasted. This totals a surprisingly large amount throughout the country. How much of this can be saved this year depends on the individual attention of the householder, together with a little careful study of the subject at first hand.

In the first place see that everything about the heating apparatus is clean. If

it were possible to burn fuel with the requisite amount of air, and the proper mixing of air with the volatile gases, the combustion would be complete. The bunsen burner is an example of complete combustion. Even with a good flame if you hold a plate over it so as to check combustion the flame burns yellow and a deposit of soot covers the plate, with two results, the combustion of the fuel was not complete so some of it was wasted, and in addition to that the coating of soot prevents the heat which is generated from giving full efficiency. Such, probably are the conditions under which a large percentage of the small heating plants of the country are operated. Most business men pay no further attention to the domestic heating plant than paying the coal bills, or possibly, starting the fire occasionally and putting on coal when needed. How and why his home is warm or fails to be comfortable is entirely outside of his thought. If he goes to the furnace man or the heating expert he is told that each heating plant has its own peculiar conditions, owing to the difference in chimneys and drafts, and to the installation; and each must be studied in order to give good results. Only the most general rules can be given, here are some of the most important.

See that the flues are clean, and the furnace or boiler is clean; no ledges or openings clogged: See that the pipes, radiators and valves are in good operating condition before time for the fires to be started:

See that the grates are in good order: Stop air leaks, into ash pit or furnace: See that the furnace is equipped with the necessary dampers. A damper in the smoke pipe in addition to the usual check-draft will retain the heat which would otherwise go up the chimney and be wasted. Study the drafts and dampers on your furnace and find out the effect of each.

The American Society of Heating and Ventilating Engineers has recently given out the following Rules for Burning Coal: The flow of air through the fuel makes it burn,—learn to control it.

As far as possible select fuel giving best control and economy—with strong draft use small size, with weak draft use large sizes.

Carry a deep fire—at least level with the fire door.

In mild weather carry a layer of ashes on the grate.

Don't shake live coals into the ash pit. Save good coal from ashes.

Don't let ashes pile up under grate.

Keep damper in pipe partly closed.

Use drafts and dampers carefully to control fire.

Don't open fire door as check—it is wasteful.

After fire is well started put on coal enough to last 8 to 12 hours.

Burn off gases before closing furnace for night.

To bank fire for night partly close pipe damper, close draft at ash pit and open check-draft.

To save heat:

Do not heat unused rooms.

Use weather strips or storm windows to save heat. (It has been estimated that every storm window on the north side of the house may save a quarter of a ton of coal in a winter.)

Let in all the sunshine possible—free heat.

Don't overheat the house—65 or 70 degrees is sufficient, or less if there is a proper humidity in the air.

Watch the weather—don't let the house get cold.

Don't ventilate unnecessarily—all night.

Partly close cold air box during very cold weather, from cellar.



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Save Fuel in Cooking.

Among the fuel saving devices which have come to the housekeeper the fireless cooker is pre-eminent. With its radiators it will bake as well as boil, and is an ideal way of cooking the cheaper cuts of meat which require long cooking to make them as palatable as the choicer cuts, and also for such nutritious vegetables as beans, and for foods such as hominy, which require long cooking to make them good, but which are a delicious and nutritious food.

For smaller families the sectional or triangular kettles, so shaped that three can be put over one burner are very practical as fuel savers, allowing as they do the main part of the cooking for a moderate meal to be done over one burner. Nests of steam cookers accomplish the same results.

Comparative Cost of Building.

Submitted by a Contractor.

Many people think one should wait for lower prices before building or making needed alterations. This, it seems to me is a mistake. One might better build now than to wait, where the building is needed, and where it does not interfere with war work.

For several years before the war the prices of materials kept increasing. If the present prices should come down even a little the demand which would come would soon put them up again.

As for labor, it is scarce and will be scarcer. Our able bodied men have gone to war. Some of our best mechanics are building ships, nevertheless those who are available are in many cases some of our best workmen; men who would never slight a job or do poor work, as the less skillful have gone into other work.

Our lumber dealers tell us that now is the time for needed building; that we find conditions more favorable now than they will be again for years to come; that lumber and building materials have not advanced in cost nearly as much in proportion as have other commodities. But the time is coming soon when prices will advance to a point hitherto unknown, owing to an abnormal demand which now exists and to a shortage of materials and labor.

As to what it will cost to build now, compared with the cost before the war, same people would answer: "Double." Don't believe this till some one proves it.

I have taken some trouble to get actual figures on this subject. A house recently completed near me cost \$2,660. I secured a bill of the materials used in this house and figured up the quantities. At 1916 prices it would have cost, with labor, \$2,125. House size, 24 by 26 feet.

Comparative Costs	1918	1916
Excavation and cellar wall...	\$300	\$250
Chimney material and labor..	40	30
Concrete bottom of cellar....	75	60
Lumber, lath, doors, windows, finish, clapboards	1000	850
Labor, carpenter	625	515
Hardware, nails, hinges, locks	75	40
Slag roofing (3-ply).....	50	35
Plastering (including labor)..	100	85
Painting exterior, two coats, (paint and labor)	60	35
Inside finish (two coats and labor)	35	25
Plumbing (sink, boiler, toilet and bath)	300	200

\$2660 \$2125

I figured up the prices on a dozen or more such houses and found the advance this year over 1916 averaged some 26 per cent.

The labor and material for masonry work would have about the same rate of increase.

I have a letter from another company which gave notice of an advance on June 1st, yet when these advanced prices are compared with the old prices of two years ago, the increase is only some 34 per cent.

A prominent New York architect says, in one of our leading building magazines, that after consulting periodicals and papers, builders, carpenters and contractors, he has been able to make an accurate estimate of the increased cost of building from 1909 until now.

He gives 2 per cent for each year up to 1914, then it took a jump to 5 per cent, the next year it fell back to 2 per cent; 1916 increased 7 per cent, 1917 it increased 12 per cent, leaving a total increase since 1909 of 33 per cent. He does not give figures for 1918, but if we call it 15 per cent the figures will about agree with estimates already given.

If this is so, and it costs 26 to 35 per cent more to build than two years ago, since the cost of almost everything else has increased more in proportion, we conclude that the man who builds now will get as much for his money as he ever did.

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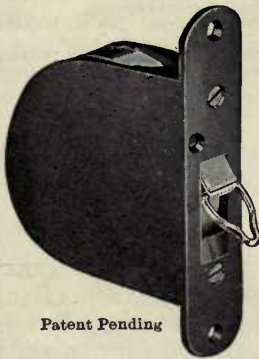
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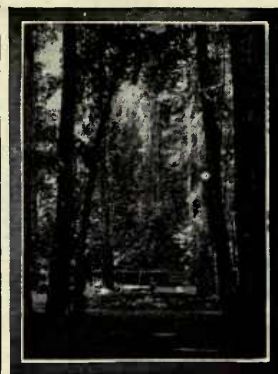




WOODS

AND

HOW TO USE THEM



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.

The Tale of Birch

THE poetry in a wood is first found in the growing tree, though this may be lost on an urban population. This is less likely to be the case, however, with birch than with other woods, because of the beauty and interest associated with the white birch, whose wonderful fairy-like bark takes the attention and grips the interest the first time it is seen, and lends an interest to other species of birch which have more commercial importance.

The white birch trees so famous for the birch bark of which the Indians made their canoes, according to the government bulletins, are one of the few American species which have a hold on the forests stronger than it had when the country was discovered. It is remarkable in the way in which it follows forest fires, as it pushes in and occupies vacant spaces left by great fires. Large tracts are in this way covered with white birch where there was little of it a century ago. The paper or white birch is a short lived tree, however, and hardier species crowd it out in the great forests.

While there are many species of birch aside from the white birch, we are chiefly concerned with the yellow birch and the red or cherry birch, sometimes called sweet birch. The yellow and sweet birch, which are used so largely for our beauti-

ful interior finishes, are, on the other hand, slow growing trees. Much of the finest birch in the early American forests was cut in clearing ground for the early settlers, and went to fill the demands of the wide fireplaces of that time.

Birch is now standing in commercial quantities in most of the states east of the Mississippi. The yellow birch is a northern tree and reaches its best development near the Canadian border. Both yellow and sweet birch are prized for their hard, heavy, strong, fine-grained and attractive woods.

Birch is a hardwood in fact as well as in name, and is one of the most versatile of all our commercial woods. The sapwood is white or yellowish, while the heartwood varies to a dark reddish brown. It is the heartwood which furnishes the beautiful red birch used for handsome interior finish and for furniture. It is hard and dense, has good milling qualities, lends itself well to stains and fillers and holds finish well. There is probably no important line of furniture produced in the country which does not make use of some birch.

For years birch was given a strong red stain and called imitation mahogany, or "mahoganized birch," in token of its similarity to that famous but often misused wood. With the more intelligent use in

wood which is now developing the demand for imitations, as such, is now passing, we hope, and it is being recognized that birch is much handsomer when treated on its own merits than any imitation can be. Mahogany was mistreated in the traditional red stain given to it and birch was doubly misused. Birch can be finished in a wide variety of beautiful tones, ranging from a rich tobacco brown to the most delicate tint of gray, or it may be painted to give a particularly fine enameled finish.

Both heartwood and sapwood take a brilliant satiny polish. The figure of the curly birch gives the noticeable grain and richness of tone looked for in the costly imported woods. The heart of the yellow birch is reddish and much of it is marketed and used for the same purposes as the cherry birch. Commercially, red birch does not denote the species, but is the selected reddish heartwood of the tree, while "unselected" is the run of the lumber as it comes from the mill, part sapwood and part heartwood.

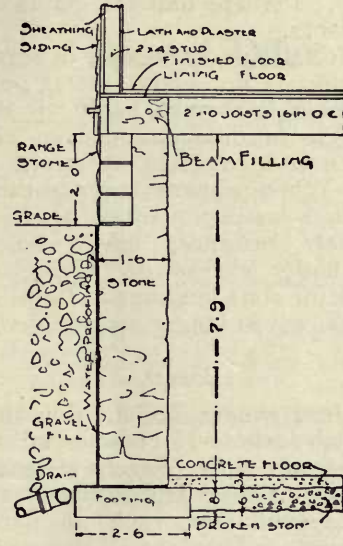
Maple

A large use of maple wood is due to a pleasing growth called "bird's eye" which adds much to the beauty of the wood when highly polished and carefully matched. The probable explanation of this peculiar figure is that it is due to buds, which for some reason cannot force their way through the bark, but remain just beneath it year after year, during long periods. Curly and wavy maple are accidental forms which frequently occur and are highly prized for their grain. "Bird's eye" and curly maple are not separate species, but are cellular distortions that may occur, in some form, in other trees than maple.

Four species of maple are of commercial importance as lumber—the hard or sugar maple, red maple, soft or silver maple and Oregon maple. "Bird's eye" occurs in hard maple, while curly effects occur more often in soft maple. The wood of the maple is fine, strong and durable, and compact in structure. Hard maple is by far the most useful and abundant member of the group. It is the maple used for hardwood floors, and where strength and resistance to wear are necessary features. In fact, the old use of maple and a darker wood in alternate strips or pattern was not successful

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because the darker wood did not stand up under the wear so well and was worn away more rapidly, so that the floors became uneven.

When the roller-skating craze struck the country in the '80's, maple flooring was found to stand the unusual wear which this sport gave it better than other woods and it was considered the best material obtainable for rink floors. This fact gave it a permanent place in the lumber industry. Perhaps half the maple output is for floors.

As with all fine wood, care in seasoning and laying is necessary, for if put into place green it shrinks badly, or if it is allowed to become damp, even after it has been properly laid, it swells up in ridges. When properly laid and cared for it develops lasting qualities of the highest order. Instances have been cited where under excessively trying conditions, as for stair landings in large stores, maple has given longer service than marble.

Beech.

The three genera, beech, birch and maple, which include 18 commercial species, form a group rather closely related commercially. These woods have several points of similarity, such as hardness, and strength. They are all susceptible of taking a fine polish. Their uses are similar. They grow usually in the same regions and they are often lumbered and milled together.

Only one species of beech grows naturally in this country. Red beech and white beech refer respectively to the heartwood and the sapwood of the tree, as there is marked contrast between them.

A great deal of beech is used for flooring and it ranks after maple and oak among the hardwoods so used. It wears as well or nearly as well as maple and has the advantage of swelling less than most woods. Its best service is perhaps given in factory and warehouse floors, where usage is rough and the wear is great. According to the government bulletin, the wheels of hand trucks produce little effect on a well seasoned beech floor.

Beech is one of the woods free from objectionable taste, so is used where wood must come in contact with foodstuffs. For this reason it is used for meat boards and is a good wood to use for table tops in the kitchen.

Some Lumber Terms.

Terms used in lumbering are often used in a special significance entirely different from their ordinary meaning. Such a specialized meaning has been given to the word "slab." Ordinarily it means a piece of any material that is thin relative to its other dimensions and yet of quite material thickness, as a slab of marble. In the sawmill dictionary, however, it means the cut taken first from a log in the process of reducing it to the square form for the sawing from it of lumber with square edges. The slab has one flat surface while the other surface is the bark or outside of the log. In Australia, however, a slab house is one built of planks that have been hewn out by hand. It may be of interest in this connection to mention a special form of slabs to which the term "puncheons" is applied in the United States. The puncheon floor of a house or of a bridge consists of logs that have been split and flattened upon the upper surface. The lower surface remains in the round except that it is flattened where it lies upon the stringers. Floors of this sort were common in the log houses of the pioneer days.

The term "flitch" also in carpentry is sometimes taken to mean a plank or joist and especially one of the plank-members of a laminated beam. Usually, however, the word "plank" is applied to thick boards of all sorts without respect to their use, although a piece that in ordinary uses is a plank becomes a joist or stringer when set upon edge and used as supporting timbers for floors.

Another term that is not peculiar to the United States but is gradually coming into use here from the export trade is the word "deal." This means in English and most foreign markets a plank that is 3 inches or more in thickness and 9 inches wide or wider. The term is, however, sometimes applied to pieces down to 2½ inches in thickness and down to 6 inches in width, although more rarely.

* * *

The man who starts out with the idea of getting rich won't succeed; you must have a larger ambition. There is no mystery in business success. If you do each day's task successfully, stay faithfully within the natural operations of commercial law, and keep your head clear, you will come out all right.—John D. Rockefeller.



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SPLINTERS AND SHAVINGS

Stock Raising on Cut-Over Land in the South.

AN IMMENSE obligation rests upon the United States to increase live stock production as a vital necessity in winning the war. The reduction of the breeding herd of meat animals in Europe has become increasingly serious. The demand on the United States for meat and other animal products is, and during the war will continue to be, far beyond any previous experience. With the end of the war, large demands will be made upon us for breeding stock, and a continued demand for animal products while her herds recuperate. It is, therefore, a patriotic service of a high order for the owners of grazing lands not now in use to place live stock on them."

In answer to this message from Mr. Hoover the Southern Cut-Over Land Association have taken up the matter of putting to the greatest productivity the vast area of lands in the south from which lumber has been cut.

From the days of wild lands people have felt that they had a right to pasture their cattle on other people's land. These men have scrub stock, and pay no attention to them. Good stock dipped and kept perfectly free from ticks fatten very readily, and they readily respond to both silage and cottonseed meal and any other feeds, and at the age of a year or two years are readily salable for beef. Some as compared with scrub stock are nearly 400 per cent more valuable.

In the South there is a big advantage in raising stock over people in the North, who have to take care of them seven months in the year. Today good live stock is the greatest asset any land can possibly have.

There is not a single one of the cut-over pine land sections that won't produce grass, clover and Lespedeza, says John M. Parker, Food Administrator of Louisiana. Lespedeza not only furnishes

an excellent grass for the soil, and an excellent hay for cattle, but it does something much more than that; it furnishes nitrogen all through the soil. You can't find the roots running down deep in the soil without realizing that it furnishes both nitrogen and humus. Burning that off constantly, as is so often done with cut-over lands, makes that land less productive and exhausts the soil.

A valuable product which will grow all over the cutover lands is burr clover.

The velvet bean not only furnishes splendid feed for livestock, but is a plant that takes your cutover pine land and protects that land while it is gathering nitrogen from the air and storing it in the soil.

"As to sheep, you know there are large numbers that have been raised on small grain from cutover lands; but sheep raising is not a success on account of common sheep-killing dogs which are the curse of the industry. Many fail to realize that sheep are not only profitable, but they are great weed destroyers and pasture fertilizers.

You have the great whitefaced sheep that stands away up in the air, and produces very little wool and very little money. It don't cost you any more to raise a high-grade sheep than to raise that scrub. Where your wool is worth practically 50 cents a pound, and lambs 15 cents a pound, there isn't any owner of cut-over pine land that can't afford to raise sheep.

There isn't any of your lands that can't be put into early spring corn. Do not think about raising a great corn crop, but raise cornstalks ten or fifteen feet high, and have them covered with velvet beans. That will form a great hay, and they will make that soil a great deal richer; and you can keep velvet beans in the fall long after frost, and turn in your cattle on a splendid nutritious feed.

In these lands you have the very finest potato land. It will raise the very finest sweet potatoes you ever saw. Those

vines will make hay, and then use your potatoes for food. Potato kilns will revolutionize the business. Cut-over lands will yield just as fine yams and sweet potatoes as any lands in the country, and those that are air-slacked or bruised are splendid feed for your hogs.

The section of the United States of greatest promise for the future development of meat animal production is the South, east of the Mississippi, the States of Louisiana and Arkansas and the eastern part of Texas. In addition to the partially-used farming lands in this region, here lie millions of acres of cut-over timber lands now practically unused, to which large areas are being annually added."

The Need of Art Schools.

During their great periods the ancient nations chronicled their doings on the walls of their buildings. To archeological research among the tombs, on the walls of which are painted familiar scenes of their times, we owe much of our knowledge of some of the people. Greek sculpture and Gothic churches told the story of their times. Up to the present, in America, billboards have been the signs of the times, but attention is being called to the change which has gone over the billboards since the War Posters have come.

Throughout the country the artists are doing a full share of war work. Great artists and architects and poets are in the trenches, often as common soldiers, as scouts, as map makers, or behind the guns. Museums are active in preparing for industrial needs. The severance of trade relations with Germany has released the trade thought of the country from dependence and has thrown the United States upon its own resources. Nothing could better serve the country in the development of industrial art than this necessity. While the last year has brought greater advancement along these lines than any previous period, only a beginning has been made. Art authorities urge that every effort possible be concentrated upon industrial art education. Art education is no longer for the dilettanti. It is of the greatest importance to the workers of the country. Good design is the necessary foundation for most of the industries.

BUILDERS

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The Labor Quota.

On August 1, the supplying of war industries with common labor became centralized in the U. S. Employment Service of the Department of Labor, and all independent recruiting of common labor by manufacturers having a payroll of more than 100 men was diverted to the U. S. Employment Service. This is in accordance with the decision of the War Labor Policies Board and approved by the President on June 17th.

The above action was found necessary to overcome a perilous shortage of unskilled labor in war industries. This shortage was aggravated by an almost universal practice of labor stealing and poaching.

While the restrictions against the private employment of labor apply only to common labor at the present time, these restrictions will, as soon as possible, be extended to include skilled labor. In the meantime, recruiting of skilled labor for war production will be subject to federal regulations now being prepared.

While non-essential industries will be drawn upon to supply the necessary labor for war work, the withdrawal will be conducted on an equitable basis in order to protect the individual employer as much as possible.

Under the operating methods adopted, the country has been divided into thirteen federal districts, each district in charge of a superintendent of the U. S. Employment Service. The States within each district are in turn in charge of a State Director, who has full control of the service within his State.

When the survey of labor requirements has been made and the aggregate demand for unskilled labor in war work is found, each State will be assigned a quota, representing the common labor to be drawn from among men engaged in non-essential industries in that State.

These State quotas will in turn be distributed among localities. Within each locality, employers in non-war work, including those who are only partially in war work, will be asked to distribute the local quotas from time to time amongst themselves. Quotas by localities and individuals are to be accepted as readily as they are for Liberty Loan and Red Cross campaigns. This plan of labor quotas is a protection for all communities.

You will note from the above outline that this is probably the most drastic action that the Government has taken since putting the National Army draft into effect. The absolute necessity for this program can be seen when it is realized that in Pittsburgh, for instance, there are advertisements calling for men to go to Detroit; while in Detroit street cars there are posters asking men to go to Pittsburgh. This same condition is apparent all over the United States and in the consequent shifting of labor a great part of our war effort is dissipated.

Modern Clothes vs. The Plague.

As Dr. Woods Hutchinson has said, our modern interest in fashionable clothes and the frequent cleaning and laundering which they require has been largely responsible for the disappearance of two of the worst plagues to which mankind formerly was subject: typhus fever and the bubonic plague or "Black Death."

* * *

It has been estimated that each American soldier in France requires thirty ship tons of transportation annually to keep him an efficient fighter. Each soldier who enlists for the cause of democracy imposes an obligation on the nation. Failure of traffic, industrial strikes and anything which impedes production or transportation is a treasonable crime against patriotism.

New National Forests.

President Wilson has issued a proclamation establishing three new National Forests in the East—the White Mountain, in Main and New Hampshire, the Shenandoah, in Virginia and West Virginia, and the Natural Bridge, in Virginia.

Proclaiming the forests is the final step in carrying out the law passed in 1911 for building up eastern National Forests through the purchase of lands in the mountains. * * *

Andrew Carnegie said: "Take away our trade, factories, transportation—even money—but leave me one thing—my organization of men, and in four years I will re-establish myself."

* * *

If we were as afraid of overeating as we are of going without rubbers there would be fewer colds.

KEITH'S MAGAZINE

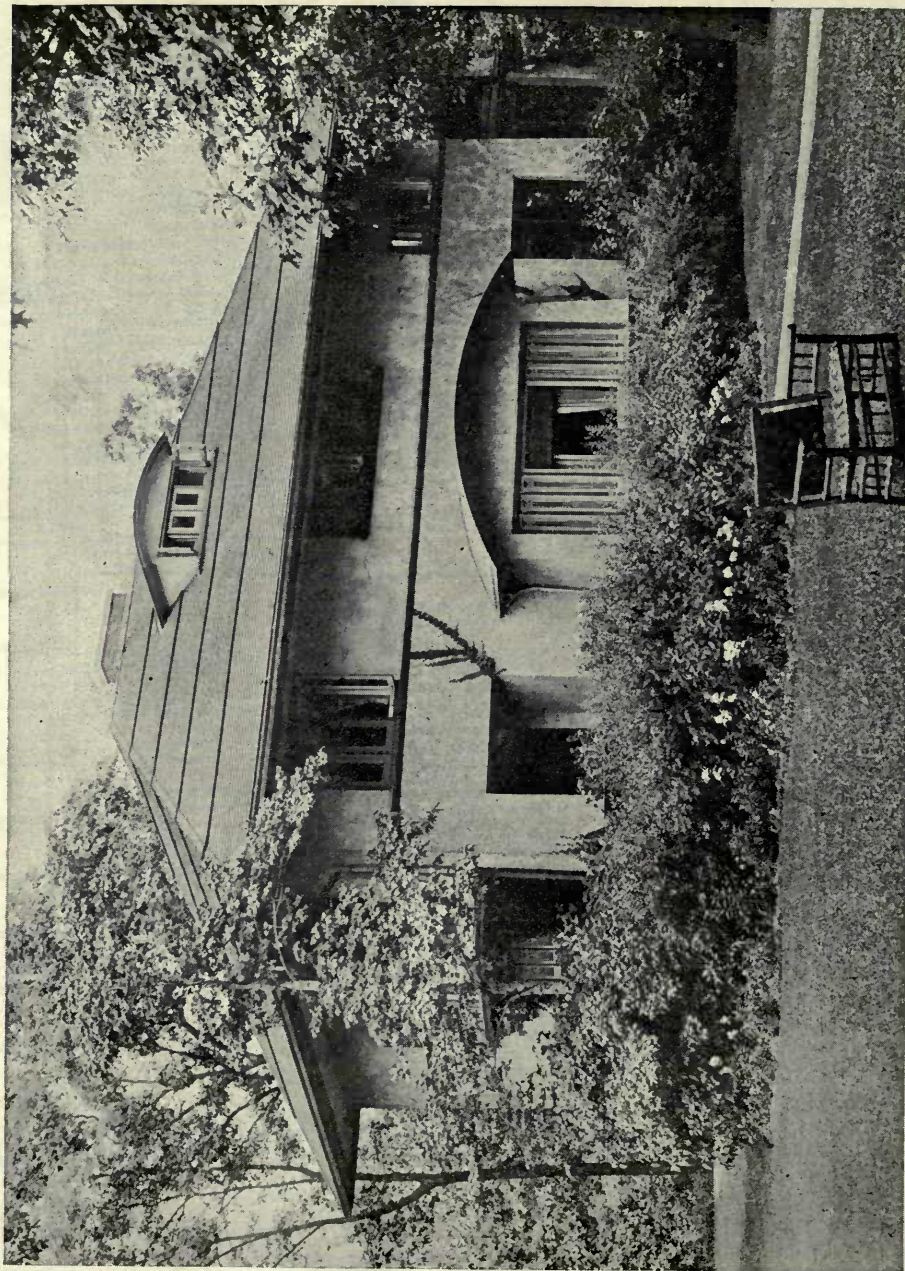
ON HOME BUILDING

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An attractive home in the Middle West

George W. Maher, Architect

KEITH'S MAGAZINE

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OCTOBER, 1918

No. 4

The "Prairie Style" of the Middle West

Anthony Woodruff

IT IS but natural that the undulating, grassy plains which spread in a green carpet almost from the Great Lakes to the Gulf should create and hold its own unique types.

To people accustomed to a line of hills always fringing the horizon there is something amazing in seeing to the ends of the earth. The view which is bounded only by the horizon makes its demands on everything which comes within the scope of vision. A group of architects in

the middle west are building long low buildings, with wide-spreading roofs, wherein the horizontal lines are given strong emphasis, as though repeating the long undulating lines of the plains. In a happy moment someone has called this the "Prairie School" of architects.

In its wide, spreading roof this movement may be related to the bungalow roof at its best, as it came from the great southwest, though it is much simpler than the bungalow roof was often allowed to remain. Simplicity in its main lines is



Interesting window treatment

F. Lloyd Wright, Architect

the key to the prairie school; unbroken roof lines, and windows gathered into groups to leave well composed wall surfaces. Where decoration is used it is designed so as to enrich and thereby emphasize important points; it is used in a strategic way, not merely "to be pretty," but to carry the attention to the entrance, or to the particular point to be noticed.

When ornament is used, with the best of this work it has a freshness and beauty not to be found in much of the conventional design found elsewhere, which has passed beyond the early phases of its origin. Though some examples of this type may be carried into extremes which have faults not less than those which they seek to avoid, they are new faults. The very verve with which it has been done has made it a vital thing in the building of the country. While it finds its fullest expression, perhaps, in larger building, especially country houses, yet its influence is noticeable even in the smaller residence work.

It is quite usual to give special interest to the glass surfaces by the design of leaded or metal lines, making the windows something of a picture set in the plain surfaces of the unbroken wall. This enrichment of the glass often makes an extremely pleasing feature of the house.

It is a curious thing, in the first illustration shown, that even the gables of the roof seem to help in the emphasis of the horizontal feeling shown in the house.

The leaded windows are heavily, yet pleasingly framed in the timber work. As is almost universally true with houses of this type the windows are casements; in this case opening out. The casement sash really closes the window opening in the simplest way. The expense comes largely in the hardware, and both with this form of sash and with the hardware, this

is the case because they are not made in any larger quantities. The fact that there is any equality in cost between the simple casement sash and the much more complicated double-hung sash of the ordinary window, with its cords and weights adjusted to the sash, and especially prepared weight box, shows what effect quantity production, and workman's facility, coming from their accustomedness to the type, can have on an accepted type. We are so accustomed to the usual

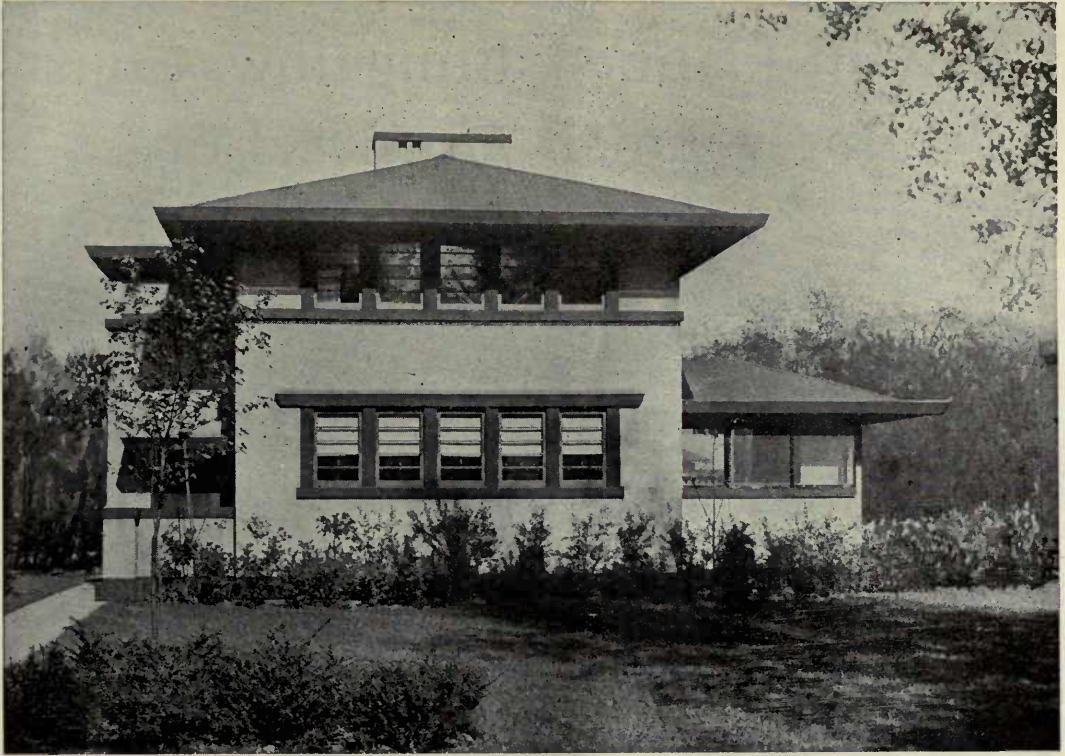


Vernon Watson, Architect

The emphasis is placed on the horizontal lines

"double-hung" windows that we do not realize that it has a rather complicated construction. Any workman can install them and make them weather-tight only because they are in such common use, rather than on account of their simple construction. The casement window has the advantage of opening the whole space of the window instead of being limited to a possible half in its opening.

In the next illustration also, a decorative feature is made of the windows. The vertical lines of the metal bars give a pleasing contrast to the horizontal lines so strongly emphasized in all the other



The grouped windows leave well composed wall spaces

F. Lloyd Wright, Architect

details in the design of the house.

A pleasing and rather unusual treatment is given the main body of the house by the rather strongly marked division of the exterior into basement, main story and frieze of stucco under the eaves. The double lines of the basement division are given by alternating narrow siding with the very wide siding of that part, while a very narrow siding is used for the main part of the house.

The second story window sills are carried around the house, forming the lower member of what we have called the stucco frieze under the roof which provides a setting for the second-story windows. To prevent too great contrast with the lower portions, narrow horizontal members be-

tween the windows divide the stucco panels.

The stucco house shown is fairly representative of the type in the grouping of the windows, leaving fairly heavy piers at the corners. The second-story windows are made into a feature catching the heavy shadows under the wide projecting roof. The broad chimney is effective in its placing. The horizontal bars of the glass are a rather unusual treatment.

In the frontispiece the horizontal lines are not so strongly marked. The sill course of the second-story windows continued around the house gives the effect of a frieze under the eaves, and the double lines of the shingles carry the lines of the roof, broken by the unusual dormer.

A Well-Planned Bungalow Court for a Small Corner Lot

Charles Alma Byers

FOR the improvement of city property for income purposes, the bungalow court idea, because it has proved an exceptionally practical one, is fast receiving favorable recognition throughout the country. In fact,

sisting of two rows of apartment units designed to face a central walk or parking scheme, the idea is also interpretable in an arrangement of either one, three or more rows—with equal latitude afforded in the matter of planning the buildings to



The detached bungalow

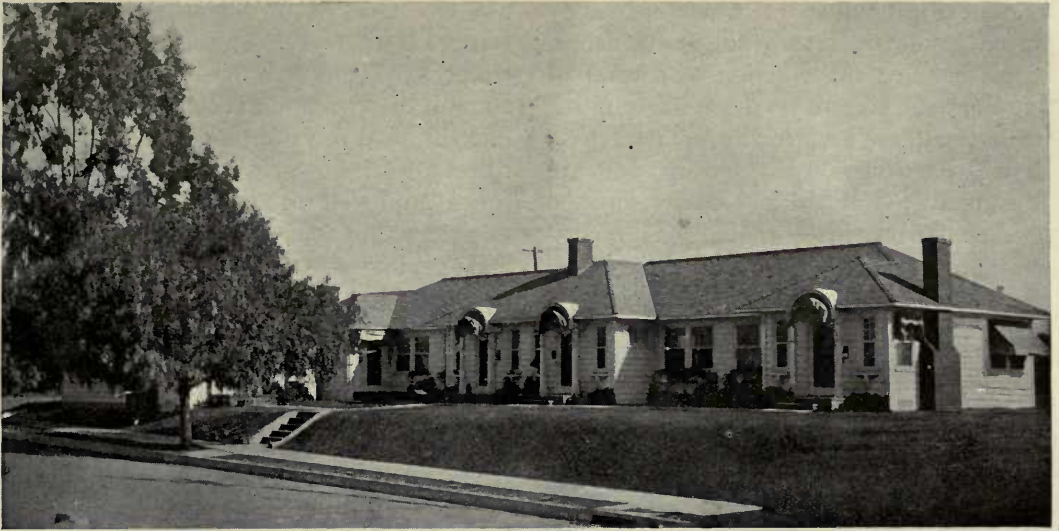
Harold Bowles, Architect

it is questionable whether any other income-building plan ever came into favor more rapidly or more deservedly; for the extensiveness of its range of possibilities, both in matter of cost and in manner of employment, was readily apparent, as well as appealing, from the very beginning. Briefly, it may be adapted to a ground plot of almost any size, from a single city lot of quite limited dimensions upward to a group of several lots, and its cost per unit may range all the way from a few hundred dollars to as many thousand. Moreover, while commonly con-

comprise one, two or more apartments each. Then, too, the bungalow court constitutes a plan of property improvement that may be consummated in installments—that is, if it is impossible or inconvenient to finance the undertaking in its entirety, the various units may be added from time to time, as circumstances permit. The last-mentioned method of procedure is often especially

appreciable, and quite frequently adopted.

A few words, by way of suggestion, should also be said of the bungalow court's possibilities in the way of location and the class of tenants to be catered to. Primarily intended as a rival of the ordinary apartment-house building, it perhaps has had its greatest popularity in resort cities. However, it has also come into considerable favor in the humbler residential districts to provide rented homes for salaried workers, and is likewise rapidly gaining a foothold in the still humbler districts where reside the bulk of

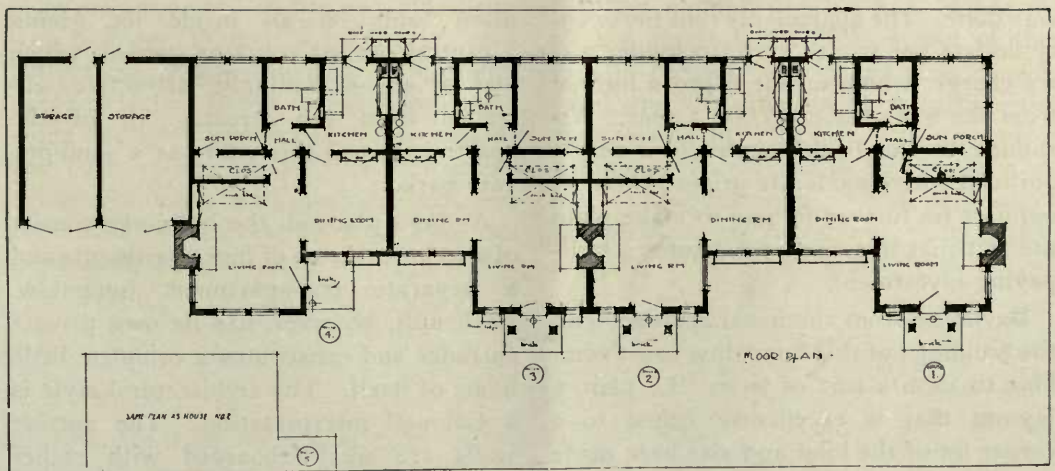


A bungalow court for a corner lot

a city's common wage-earners. In the matter of its adaptability to neighborhoods of the last-named kind, the idea seems particularly worthy of consideration. The question of "better homes for working people," notably in factory centers, is at present receiving much attention, and it would seem that the bungalow court plan might very satisfactorily serve as the desired solution of the problem—especially in view of the fact that, while conserving ground space, it enables the building of attractive and conveniently planned little homes, in admirable gar-

den settings, at costs so comparatively small. It, of course, will be readily realized that the per-unit cost of such an arrangement must be governed by the character of the neighborhood in which it is located and the rent-paying ability of the families that can be counted on as tenants.

Through the small bungalow court here shown are made readily apparent many of the above-suggested possibilities and variations of the court idea. In the first place, it utilizes but a single building lot, sixty by one hundred and twenty feet in dimensions; and on this limited



amount of ground space, which ordinarily would be devoted to a single residence, it has enabled the erection of a total of five homes. Moreover, these home units, while small, are architecturally attractive, have a pleasing garden setting, and are conveniently planned and cozily finished inside. Hence, little difficulty is experienced in finding tenants for them, with the result that a vacancy for very long is extremely rare. Including its proportion of the original garden work, cement

use of. One of its advantages, for instance, is that each of the units faces a street, and another is realized in the amount of lawn and garden space thus allowed. Two rows of houses of less front-to-rear depth but greater width are sometimes employed on a lot of no greater dimensions, but it is rarely that a different arrangement will permit more apartments on a ground plot of this size, without too much crowding. However, the design of this court suggests this possibility:

That, provided the lot were ten feet wider, the improvements might be started with the one main row of apartments, and later, when additional capital were obtainable, could be added a second row duplicating the first, in reversed plan. This would ultimately produce a total of eight apartments, and comprise



Five houses on one lot

walks, and so forth, each apartment represents a total improvement expenditure of a little less than \$1,000—such cost being based on the prices of materials and labor that prevailed in southern California about a year ago, when the building was done. The apartments rent for twenty dollars per month each, including water charge, which means a gross income from the five of over \$1,000 a year. Assuming the lot to be located in a neighborhood where moderate prices prevail, it requires no further figures to make plain the fact that this court constitutes a well-paying investment.

Deviating from the usual arrangement, the buildings of this bungalow court combine to form a sort of letter "L" plan, a lay-out that is excellently suited to a corner lot of the kind and size here made

a most admirable arrangement, with a central walk and parking. Preceding the building of the second installment, the entire unoccupied space would, of course, be given over to lawn and garden work. The double row of apartments is more often built on an inside lot, giving a central parked court or garden, which makes an exceedingly attractive entrance from the street. All of the apartments use this court as a semi-private park.

As here planned, the buildings consist of a connected row of four apartments and a separate one-apartment bungalow. Each unit, however, has its own private entrance and constitutes a complete little home of itself. The architectural style is a Colonial interpretation. The outside walls are weatherboarded with rather

wide re-sawed siding, which, including all finishing timbers, are painted white. The masonry work, including the paving of the entrance porches, is of dark red tapestry brick, and the roofs are shingled and painted a bright green. The color scheme is thus simple but pleasingly effective. Interesting details of the exterior are to be observed in the rounded hood extensions of the front entrances and the flower boxes of the front window groups. The little apartments are well provided with windows, and the front door of each is also glassed.

In interior arrangement and finish all of the units are identical, except that each alternate plan of the four connected apartments is reversed and that the entrance to the one at the rear end of the row leads into the living room at one side instead of on the front. The single bungalow is a duplication of the plan of the second apartment from the front.

Each unit consists of living room, dining room, sun porch, kitchen and bath room. The living room in every instance contains a couch or disappearing bed, which is wholly concealed when not in use beneath the elevated floor of a closet adjoining the sun porch. This sun porch comprises the regularly used sleeping room, and the disappearing bed of the living room is made to serve for children or in emergencies. In the way of built-in conveniences, there is a book-case, with glass doors, at one side of the living room fireplace; the dining room contains a china cupboard and drawer combination; the bath room, besides the customary equipment, has a wall medicine-case, and the kitchen possesses the usual sink and cupboards, as well as a draught cooler

and hot water boiler. A small rear extension not only provides a sheltered stoop to each apartment, but also contains a small storage closet.

The interior finish in all of the units is suggestive of the Colonial style. The pine woodwork of the living room and dining room of each is enameled in old ivory, and elsewhere it is enameled in white. The fireplace of each living room is of red brick and wood, handled in Colonial style. Hardwood flooring is used in living room and dining room, and the walls of these rooms are papered. Elsewhere pine flooring is employed, the floors of bath room and kitchen being covered with linoleum, and the walls are tinted. The different apartments vary from one another only in the matter of the pattern and color of the wall paper and in the color shades of the wall tinting.

No basement or cellars are provided, but the various units are equipped with floor gas furnaces, to supply warmth when the fireplaces are insufficient. This court is located in Los Angeles, California, and is well suited to the conditions of that progressive city. While the building cost per unit was actually less than \$1,000, the cost of the court's duplication would naturally vary according to the local prices of materials and labor, a fact that ever requires considering.

As an example of what may be accomplished through the employment of this idea in the way of remunerative investment and the creation of attractive and comfortable little homes, this bungalow court surely deserves to be closely studied. As suggesting a possible solution of the problem of "better homes for working people," it is also interesting.

The Cupboard for China

Katherine Keene



HE house with many built-in features usually makes especial provision for my lady's china, which will at the same time make a display of the interesting china, and give it special protection. Wherever it is prac-

the house was completed, omitted plastering and all insulation, setting the built-in buffet, just as it came from the mill, against the unplastered outside wall of the house. Of course, it is cold. The wind blows right through the clapboards



A cupboard built into the wall does not gather dust above it

tical china cupboards are built into the wall, as such a cupboard will not gather dust, and is less in the way than one which projects into the room. At the same time a sideboard which projects beyond the wall on the outside, unless it is given good insulation, makes a cold wall.

In severe weather it is often discovered that a very considerable amount of cold is driven into the room around a projecting sideboard bay, and on further investigation it is found that the speculative builder, since he did not expect to live in the house and it "would not show" when

and sheathing into the drawers and the cupboards, and so on through into the room. Sometimes it is so cold that my lady, sitting at the head of her table, feels that she has an open door behind her. When the house is building, it is well to watch the construction before the cupboards and pantry fixtures are being put into place.

The buffet which is shown in the illustration is neither projected into the room nor outside the wall. A window seat on either side fills the depth of the linen drawers, while the cupboard above is more shallow, as they are usually built. Dishes are apt to be broken if cupboards are built so deep that dishes must be lifted past those in front.

This is really a clever arrangement as the sideboard and seats do not take from the service space of the room any more than the piece projecting into the room would do.

If the cupboards are not built in there are often corners and small waste spaces where room may be found and a shallow

cupboard be built in.

The depth of the cupboard is fixed by the largest size of plates which are to be put into them. Twelve inches is usually considered ample. Six inches more than the thickness of the wall, which is cut through will in this way give room for a china cupboard.

The cupboard beside the fireplace in the old-fashioned room shown carries memories of the old farmhouse, back east, in its quaint setting and furnishings. Such a cupboard can often be built in beside the modern fireplace in a Colonial room.

The other photograph shows a cupboard which just matches the door near it. The opening and the trim are the same. This



A china cupboard built into an old door way

suggests a cupboard built in an old door opening which is no longer used for its original purpose. Just a little more than the width of the partition will give space for china. The drawers underneath should be deeper if they are to be really useful for table linen, as table cloths look

better when put on the table if they do not show too many folds. This difficulty may be obviated by rolling the clothes. With long table cloths this is often a very practicable thing to do in any case. Special table linen drawers are made long enough to take half or at least a quarter the width of the widest cloth.

At least one drawer should be from 30 to 48 inches to accommodate table linen.



A china cupboard beside the fireplace

What to Plant in the New Yard

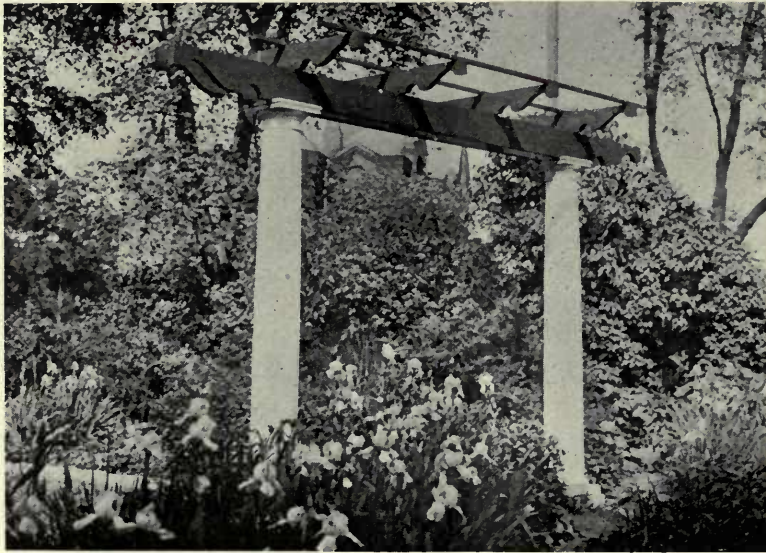
Adeline Thayer Thomson

EVERY spring finds people in a deep quandry regarding the planting question. This is particularly true, perhaps, in the case of the new home builder who knows little or nothing of flowering plants or

particular showing from them until next year. One should begin in the fall to plan if not to do the planting.

Suppose we discuss a half-dozen planting varieties from each of the groups mentioned above, which we know will

give satisfaction not only from a decorative standpoint, but in general hardiness and all-around desirability. In selecting these half dozen varieties of shrubs, vines, perennials and annual plants, it is deemed that they will not only come within easy reach of the small purse; but that they will suit equally the one of larger proportions, inasmuch as individual varieties of such planting stock may



The german iris is unequalled for the May display among the perennials

shrubbery, but who is anxious to beautify his grounds with planting stock that will give the greatest amount of satisfaction for a minimum amount of expense.

There must be shrubbery, of course, climbing vines, too, for the porch or pergola; perennials that need planting but once in a lifetime; and annual varieties also, not only because they are desirable plants to have, but because they will furnish an attractive flower display this coming season, thus allowing the perennials time to get adapted to the soil and new location, with no expectation of any par-

be purchased in any quantity desired.

The forerunner in the group of shrubbery in point of blossoming time, is the Lilac, and no collection, however extensive, is complete without this grand variety. It is not the old-fashioned type, however, that we are recommending at this time, but the newer type—the Persian Lilac. Its yield of immense lavender, or white blossoms, is much more prolific than the old favorite and the shrub is far more attractive, its branches tending to droop gracefully, rather than attaining the spindling growth of the old-fashioned

variety. The flowers, borne in large panicles, resemble the common Lilac, both in form and color, but as previously stated, are produced in far greater numbers, the shrub being literally loaded with bloom; thus making a far lovelier color display.

The Syringa follows the Lilac closely in flowering season, presenting an exquisite display of fairy-white blossoms, in mid-May, which fill the air with heavenly perfume and intoxicate the senses with its loveliness.

The Syringa is not only a very ornamental shrub when in flower but it is attractive throughout the entire season. The Syringa and Lilac attain about the same height—from 4 to 6 feet.

Speaking of companion shrubs, there could be no two more strikingly beautiful shrubs in combination than are the Syringa, and the Wiegelia, the next shrub on our list. The flowering season of the two shrubs mature at the same time, the glowing pink flowers of the Wiegelia not only



Hardy larkspur is a most satisfactory perennial

emphasizing the purity of the white blossoms of the Syringa, but their own dainty coloring is doubly intensified by the snowy whiteness of the Syringa. The Wiegelia does not attain as great height as the Syringa—seldom making more than five feet—so should be planted in front, or at one side of the Syringa.

If I might have but one shrub in my yard I would unhesitatingly choose the Bridal Wreath (*Spirea Von Houteii*). And surely in every way, there is no more desirable shrub for the home grounds. The name, Bridal Wreath, is well chosen, for when in its glory of flower in late May, it is wreathed in a fascinating, filmy, lacy, veil of white, hanging in graceful ripples and folds, that would do honor indeed, to the fairest of brides. It presents a wonderful sight when in bloom, and in every way it is a desirable variety for the planting scheme. Bridal Wreath is spreading in its habits of growth, and attains about the same height as that of the Wiegelia.



The foxglove blooms through June and early July

The Hydrangea spreads its panicles of blossoming color throughout September; a time when most shrubbery has long since sheathed their colors. Had it no further recommendation than its late flowering season, this would be enough to insure its popularity. It has, however, many good characteristics, making it a favorite for generous culture.

The Japanese Barberry (*Berberis Thunbergii*) has no attractive flowers, but nevertheless it is invaluable for low plant-

highly spoken of for ornamental flowering effects, while the two remaining are unequaled for close screening purposes. The varieties are: *Clematis Paniculata*, which is smothered throughout the month of September with starry, white flowers; *Clematis Jackmani*, with its harvest of large purple flowers measuring four to six inches in diameter and produced from June to early September; *Honeysuckle* (*Japonica Halleana*), a grand evergreen variety yielding hosts of white flowers,

changing to yellow, throughout July; *Dorothy Perkins Rose*, a most satisfactory climber yielding, in June, blossoms tinted in the most exquisite shades of pink; and the *Aristolochio Siphon* (*Dutchman's Pipe*) and *Lycium* (*Matrimony Vine*), for close shade. It might be added that



Bridal wreath is one of the most desirable of all shrubs for the home grounds

ing effects; for shady locations where other shrubs will not thrive; for hedging purposes; and for its very ornamental scarlet berries which remain on the branches throughout the winter months. So much for the shrubbery.

Hardy climbing vines play an important part in every planting scheme. Wreathing garlands of green over porch and pergola; providing close screens of shade from the burning sun; hiding unsightly objects with a mantle of loveliness, trailing over stone walls and fences, climbing vines provide an intimate touch of hospitality and artistic beauty that may be created in no other way. The hardy vine is by far the most desirable for year after year they grow more luxuriantly beautiful, and are easily held in check by pruning if they over-reach their bounds. The following four varieties cannot be too

Clematis Paniculata combines fine shade-giving characteristics with its ornamental flowers, and is an especially good vine on this account for porches and pergola.

No home yard, to my mind, is complete without a collection of perennial plants. There are no flowering plants so satisfactory in every way or that create a more beautiful flower showing. The property owner, indeed, is making a great mistake in stocking his yard with annual plants alone, instead of giving the preference to the hardy plant. They cost somewhat more, to be sure, but it must be remembered that the perennial weathers the severest winter and each year outrivals the former season in yield of blossom and thriftiness of growth; while the glory of the annual plant is laid low with the first breath of frost. The fact that perennials multiply increasingly from year to year,

offers the owner opportunity to multiply stock easily, so that the initial cost of the plants covers a goodly stock of perennials for the near future.

The following half dozen varieties have been chosen for the beauty of their flowers, their adaptability to all locations, and varieties that will provide a succession of blossoming color from May until October.

The German Iris is an unequalled perennial for the month of May. Madame Chereau, a grand white, and pale lavender varieties that will provide a succession of perhaps, when but one is to be selected. There are hosts of varieties, however, to choose from, sporting all sorts of wonderful colors.

The scarlet Oriental Poppy flames into flower in early June, fairly dazzling the eyes with its brilliancy and one's senses

with its striking beauty. The hardy larkspur, *delphinium formosum*, reaching towards the sky with its intense blue spikes of bloom, will bring joy to the heart of every beholder. The flowers are unfolded in mid-June, following closely in the wake of the Oriental Poppy, which by this time is scattering its last petals

Then there is the gold-bronze petalled *Gaillardia*, so lovely throughout August and September; *Phlox, decussata*, for August, and *Pyrethrum Ulignossum* laden with its weight of white daisy-like flowers during the month of September.

The annuals varieties to be especially recommended for a bright, attractive display are: Sweet Alyssum, for borders and low foreground effects; Aster, *Nasturtium*, *Zinnia*, *Petunia*, and Marigold, for many desired plantings.

The Little Place

I

*It is a very little place,
A thing of cozy rooms and halls,
But, at the door, a happy face,
And, in the crib, a baby calls.
If it were twice as large as this—
A mansion, say, of stern estate,
It could not bring a greater bliss;
No greater Happiness await.*

II

*Home is not multitude of things;
It does not mean the marble stair
And haughty pose and pompous wings
And costly trimmings everywhere.*

*It is not made of brick and stone,
Pretentious . . rising to the sky.
Love is the architect, alone;
He draws the plans—not you and I.*

III

*It is a very little place,
Ah yes . . whilst there, across the way,
A temple rises, full of grace,
A Mansion, impudent and gay.
Yet we who have the humbler part
Would not exchange for anything.
Within the portals of the heart
A thousand fragrant paeans sing!*

—W. Livingston Larned.

The Importance of the Entrance

Franklin Boyd

WE are so constituted, and perhaps happily so, that impressions are often more important to us than substantiated facts. When impressions are sufficiently strong we may be quite blinded to surrounding conditions. Nowhere is this point of psychology more patent than in the feeling we have about the homes we enter. If the approach is pleasing and the entrance charming we are prepared to interpret every thing which we see on entering as beautiful or at least interesting, and the people we meet there as having at least a certain amount of charm. The personality which is back of the details which have pleased us would presumably be equally pleasing. We enter such a home expecting pleasant things and pleasant people. We usually find what we are looking for and expecting. A beautiful building with a mean, unprepossessing or badly designed entrance must be studied in photograph if its beauty is to be appreciated. The eye and the mind focuses too closely



A beautiful entrance flanked by pillars

to see far beyond the point where one is entering.

The first requirement of the entrance, architecturally, is to call attention to the point the observer is hunting by giving importance to the entrance and making it easily and quickly placed. As with most points of good design, good architecture must first satisfy the mind as to matters of fact. Any sham or deception is bad design and bad architecture. Even the beauty of past traditions will not much longer, satisfy the mind. The present age has broken with all tradition. It is taking its own mentality seriously,

and insisting that the things which it does, seriously, must satisfy its common sense. As a result "common sense" is not so rare as in the days of the old jingle, for people are giving it more exercise and it is growing and developing, like the young of a species.

The traditions of the Colonial, and especially the Colonial entrance stays with us, because it is not only intrinsically beautiful but it is also reasonable. While

we do not understand the meaning and are not sure of the origin of the carved volute of the old Greek Ionic capital, nor of the smaller scroll and peculiar foliage carved into the Corinthian and composite caps so commonly used in Colonial details, we are so familiar with them against the background of all building since the time of the Renaissance, that the eye still accepts it without question, as the symbol of that which is more elaborate than the simple mouldings. The careful proportions and subtle curves of the Colonial and more or less intricate grouping of mouldings could have only originated and been worked out in an age less occupied with a multiplicity of things than was our own, even before the war. It belongs to a period of leisure and of comparative prosperity. The tendency of our own period is toward a simplicity which is almost austere, and which welcomes the Colonial as a relief from its own austerity, without at the same time, requiring a great amount of original thinking. It is with a sense of relief that we fall



Effective use of brick with stucco to enrich the entrance

back into the line of thought of our forefathers.

Compare the simple hooded entrance of the modern type of house with the Colonial entrance flanked by carved pillars. The hooded entrance shows the spirit of our times. A very effective entrance is obtained in a very simple way. The mouldings are not elaborate; no great amount of labor is expended on this one feature. Strongly marked shadows produced by carefully proportioned overhangs and well placed brackets, enriched by spots of high-light and denser shadow, give the interest which would otherwise be obtained by carved mouldings and members.

Materials are used very carefully in the modern entrance in order to get all the effectiveness possible from a change or enrichment of the building material. Not least among these are the values obtained by the texture and color of a brick surface or of a combination of brick with stucco. Lighting features are among the



A simple modern hooded entrance

valuable adjuncts in designing the simple entrance, for these add light and the color,—which can be obtained only in the use of glass and light,—to the value of form. The shadow line is always kept in mind in the design, as being of sometimes equal or greater moment than the form itself,—again demonstrating the value of impalpable things.

The seat beside the entrance is another feature of the modern entrance which satisfies the mind in its reasonableness as well as the eye in its picturesque possibilities. In large measure the seats are useful seats, rather than ornaments not intended for use. They are in infinite variety, painted or stained as best

befits the special conditions. Vines and planting are valuable assets, often converting the porch entrance into a veritable bower, dotted or massed with color in the season of the blossoms.

The wide clapboards so much affected in Colonial work is especially effective in the entrance, even though the reason of its original use has been quite reversed in the passing of time.

In early Colonial time in New England, and in the South as well, great pine trees were cut for the lumber. It was then a very easy matter to get wide white pine siding of wonderful quality. On the other hand nails were hand cut and very expensive and possibly imported from the

old country as was much of the building material. Using clapboards as wide as possible was a matter of conservation as they required so few nails, comparatively, and most of the fine old houses of the time were covered with a wide siding. On the contrary, at this time when wide boards are hard to get and nails are plentiful conservation comes in using narrower siding.

There is an interest in placing side by side a fairly typical entrance built in Colonial times and one built and designed in modern times for a home of about the same class; each dignified and substantial, ministering to the needs of its time. With all their graceful details and their careful and well balanced design there was often a touch of the fantastic in some part of the older house, a whimsical feature some place, which gives a touch of the individuality of the owner, or of the times. The use of the pineapple in decoration, as shown



A stately entrance of Colonial times

in some of the notable Colonial examples, either at the entrance or on the gate or fence posts, was one of these. Presumably some of the East Indian sea captains created a great impression when they brought this tropical fruit back to the colonies from over seas. It was used as the central feature of the broken pediment over the entrance, and was effective if somewhat out of scale to the critical modern eye. In some cases the pineapple was so strongly conventionalized that it is only recognized because it was used in the same way. In other cases the pineapple was carved in a very realistic way. As a finial it seemed to especially please the Colonial fancy, and the pineapple took the place of the ball or urn on the stately fence and gate posts which add dignity to some of the fine old Colonial mansions.

The modern entrance which is shown is that of a country home such as may be found,—in the merit of its design,—scattered broadcast throughout the land.

The development of architectural schools throughout the country has given to young architects opportunities for



A modern entrance on Colonial lines

training and study which has made itself felt all over the land. There is a long list of American architects who have done notable work in the design of country houses and have given to America the dignity of a domestic architecture.

Why the Leaves Change Their Color

From the Forest Service

IT requires no vivid imagination to picture Mother Nature going about these days with a liberal supply of paint with which she colors the leaves of the trees and other plants and thereby produces the vivid tints which characterize the foliage of this season. In reality the change in coloring is the result of certain chemical processes which take place in the leaves.

The change is not, as many people suppose, due to the action of frost, but is a

preparation for winter. All during the spring and summer the leaves have served as factories, where the foods necessary for the trees' growth have been manufactured. This food making takes place in numberless tiny cells of the leaf and is carried on by small green bodies which give the leaf its color. These chlorophyll bodies, as they are known, make the food of the tree by combining carbon taken from the carbonic acid gas of the air with hydrogen, oxygen, and



Nature paints the landscape

various minerals supplied by the water which the roots gather. In the fall when the cool weather causes a slowing down of the vital processes, the work of the leaves comes to an end. The machinery of the leaf factory is dismantled, so to speak, the chlorophyll is broken up into the various substances of which it is composed, and whatever food there is on hand is sent to the body of the tree to be stored up for use in the spring. All that remains in the cell cavities of the leaf is a watery substance in which a few oil globules and crystals, and a small number of yellow, strongly refractive bodies can be seen. These give the leaves the yellow coloring so familiar in autumnal foliage.

It often happens, however, that there is more sugar in the leaf than can be readily transferred back to the tree. When this is the case the chemical combination with the other substances produces many-colored tints varying from the brilliant red of the dogwood to the more austere red-browns of the oak. In coniferous trees, which do not lose their foliage in the fall, the green coloring mat-

ter takes on a slightly brownish tinge, which, however, gives way to the lighter color in the spring.

While the color of the leaf is changing, other preparations are being made. At the point where the stem of the leaf is attached to the tree, a special layer of cells develops which gradually sever the tissues which support the leaf. At the same time Nature heals the cut, so that when the leaf is

finally blown off by the wind or falls from its own weight, the place where it grew on the twig is only marked by a scar.

Although the food which has been prepared in the cell cavities is sent back to the tree, the mineral substances with which the walls of the cells have become impregnated during the summer months are retained. Accordingly, when the leaves fall they contain relatively large amounts of valuable elements, such as nitrogen and phosphorus which were originally a part of the soil. The decomposition of the leaves results in enriching the top layers of the soil by returning these elements and by the accumulation of humus. That is why the mellow black earth from the forest floor is so fertile. But if fires are allowed to run through the forest and the leaves are burned, the most valuable of the fertilizing elements are changed by the heat into gases and escape into the air. As a result, forests which are burned over regularly soon lose their soil fertility even if no apparent damage is done to the standing timber.

Suggestions for the Hearth

Felix J. Koch



WE have been hearing quite a good deal, latter-

ly, anent preserving the hearth in the farm home; the need of a rallying place, much of this sort, in every rural homestead, large or small, and, along with the thousand other improvements to the Anglo-Saxon farmhouse, there is coming ever more and more attention to the hearth.

Latterly, there has come to notice a rather interesting hearth which might lend its suggestion otherwheres.

The one is from a college building of the big Lincoln Memorial University for mountain boys and girls, at Harrogate, Tenn., almost where Kentucky, Virginia and Tennessee join. This hearth, a glorious, withal inexpensive, fireplace, is built, not indoors, but out. That is to say, at one forecorner of the building, well within the shelter of the big piazza, this fireplace has been built.

In the summer it serves just as an ornamental set-off to what would otherwise be an acute angle, a great, rounding fireplace, with concrete hearth raised to catch the wildest spurt of fire and keep this from the porch.

Some early autumn, however, when the big harvest-moon makes old folk and especially young want to linger out-doors



For a glowing fire, under the harvest moon

on the porches, late as can be, telling stories, singing, playing games, perhaps, and the tinge of cold that comes with autumn is apt, ordinarily, to force them in, or else to bring on wraps that make one heavy and "uncomfy."

Not so, however, here at Lincoln University; instead, just as soon as the night breeze gets a bit cold, one or other the young men will off to the wood-pile or wood-lot near and bring in enough wood to start the fire. In a trice it is blazing on the hearth, roaring up the chimney. Apples are brought out to roast, or home-grown potatoes are thrown in the embers here; chestnuts may be set to roast, the popcorn popper be hung, and with flagons of cider here for whosoever would drink, what so delightful as a chill—often even a really cold—night out on the porch, with such a fire?

A Chalet-Bungalow of the Southwest

IN Southern California the term Swiss Chalet has been given to the type of bungalows and two-story houses that have flat roofs or nearly flat and more or less flat timber construction showing in the supporting brackets of the wide overhanging eaves. This style might be called one of the novelties in American home building which has been evolved to meet special conditions.

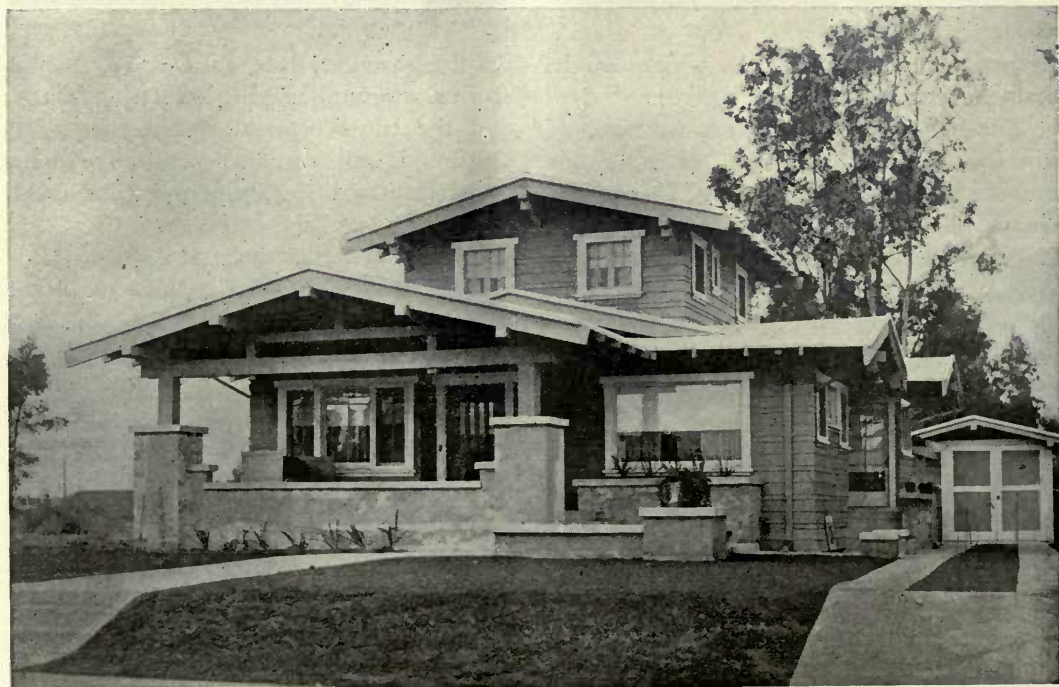
Because of the length of the heated season this Swiss Chalet type of house is becoming popular in some parts of Oklahoma and Texas. Where it is known it is liked, because of the comfort it affords through the greater circulation of air in such second-story sleeping rooms. It was evolved to provide special sleeping

comfort during the heated season. At the same time, since one or both of the upper sleeping rooms may be entirely shut off and left unheated during extremely cold weather, it would be an economical house in any climate.

The general construction is substantial. The roof being low and flat, has only to be well framed and may be given any kind of roof construction.

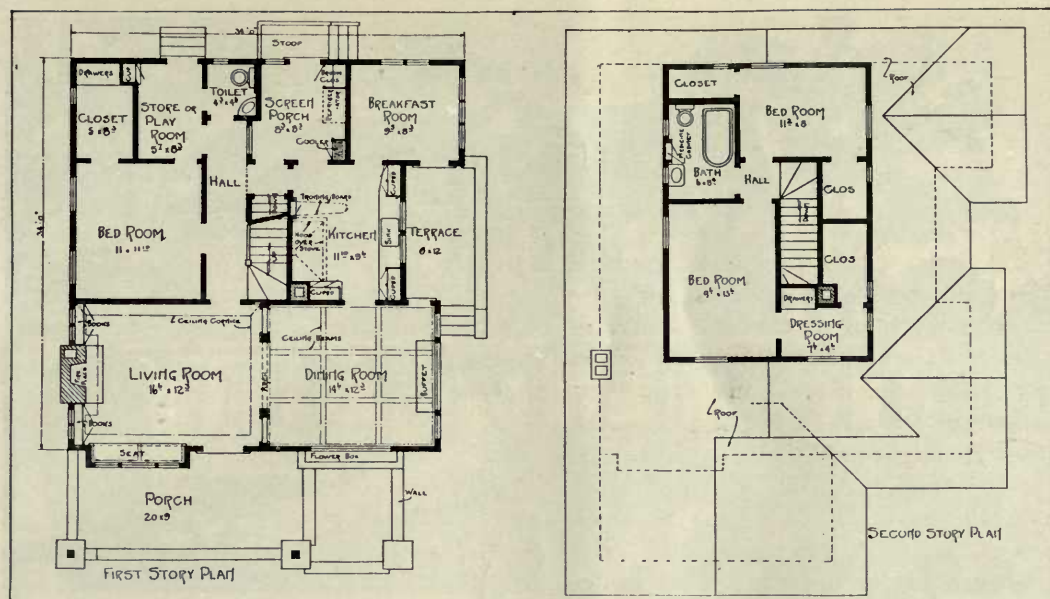
The roof shown is of a composition roofing built up after the fashion of the tar and gravel roof of store buildings. A beautiful effect is obtained by surfacing the last coat of asphalt with crushed granite. Marble screenings, or crushed brick or tile giving the darker shades, may be used.

These plans were prepared under the



A bungalow with second story sleeping rooms

E. W. Stillwell, Architect



ensorship of a woman having expert knowledge of woman's housekeeping needs. The kitchen, as may be seen, has been very carefully planned. The hood over the range and the ironing board cabinet are shown by the dotted lines and are in convenient reach of the sink and working shelf. The chimney is in the dining room wall and a fireplace could easily be built in the dining room if desired. The breakfast room could be used as a nursery instead, where there were small children, if such a room were needed on the first floor.

The stairs are in the hall opening from the living room, accessible from all parts of the house, and the basement stairs are under them. The refrigerator and broom cupboard are on the screened porch and also the cool closet.

A special feature of the plan is the manner in which the first-story bed room is connected, through the play room with the toilet, giving a complete isolation to these three rooms in the case of the contagious diseases so common to childhood, when such isolation is sometimes of inestimable advantage to a family.

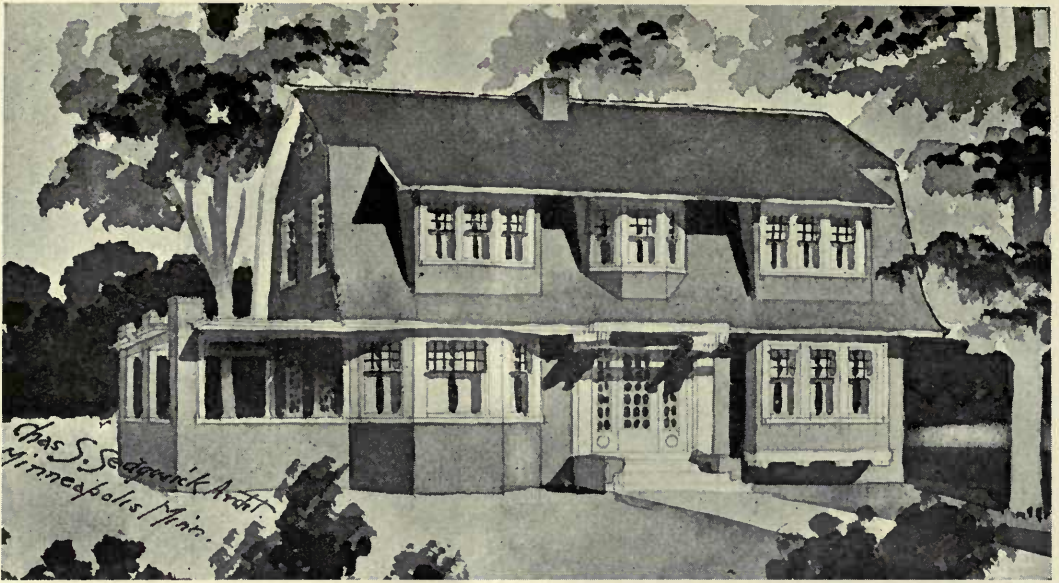
Under a Gambrel Roof



HOME suited to a wide suburban lot, where it could be set among trees is shown in this design.

The windows are grouped in a symmetrical way with the entrance with its bull's eye or leaded glass as a central feature. Advantage is taken of the two pitches of the gambrel roof to get full windows in the second-story rooms.

The entrance is into a wide central hall, from which the main stairs ascend. A convenient seat is built in beside the stairs. The basement stairs are reached from the passage-way to the kitchen. A short run of stairs from the kitchen meets the main stairs on the landing, giving convenient access to the second floor from the kitchen. A small toilet is



A home suited to a wide suburban lot

Chas. S. Sedgwick, Architect

reached from the passage-way and a linen closet opens from it.

On one side of the main entrance is the long living room, extending the whole

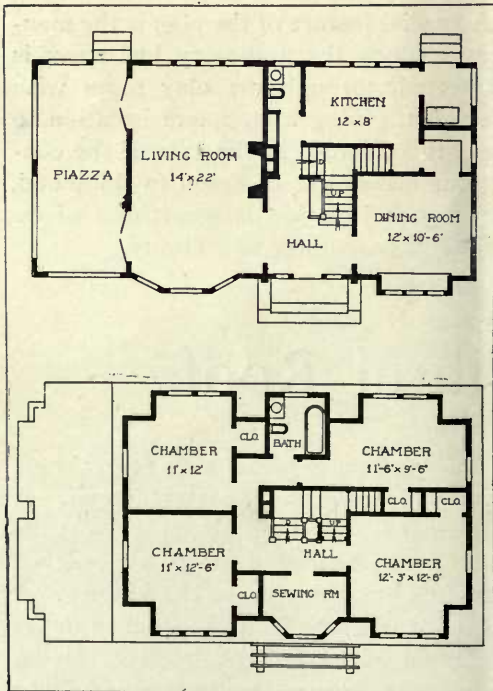
width of the house, with a piazza beyond. Two sets of French doors open the living room to the porch. Both ends of the living room are filled with windows and there is a fireplace on the central wall.

Communication between the dining room and kitchen is through a conveniently arranged pantry, with shelving on two sides. In the kitchen the sink should be placed against the toilet room wall, giving a close centralization of the plumbing pipes. The refrigerator is given a place on the rear porch. The basement is equipped in the usual way.

On the second floor are four chambers with good closets, and a sewing room. The bathroom is directly over the toilet on the first floor. There is a stair to the attic story which contains storage space under the roof.

The first floor is finished in oak. The second story is finished throughout in white enamel.

The construction is of frame. The outside is covered with wide siding, painted old Colonial white. The roof is shingled and stained a moss green.



A Larger Stucco House



WHEN sun and sleeping porches are enclosed under the roof with a similar treatment, it gives the appearance of a much larger house, as is the case with the home illustrated here. The house itself is not small, as the rooms are of good size. It is of the

side, between the windows. A big fireplace fills one end of the living room with windows beside it and the seats forming an angle nook.

The stairs are placed well back from the entrance so that the full width of the hall is available.



A home built of stucco and brick

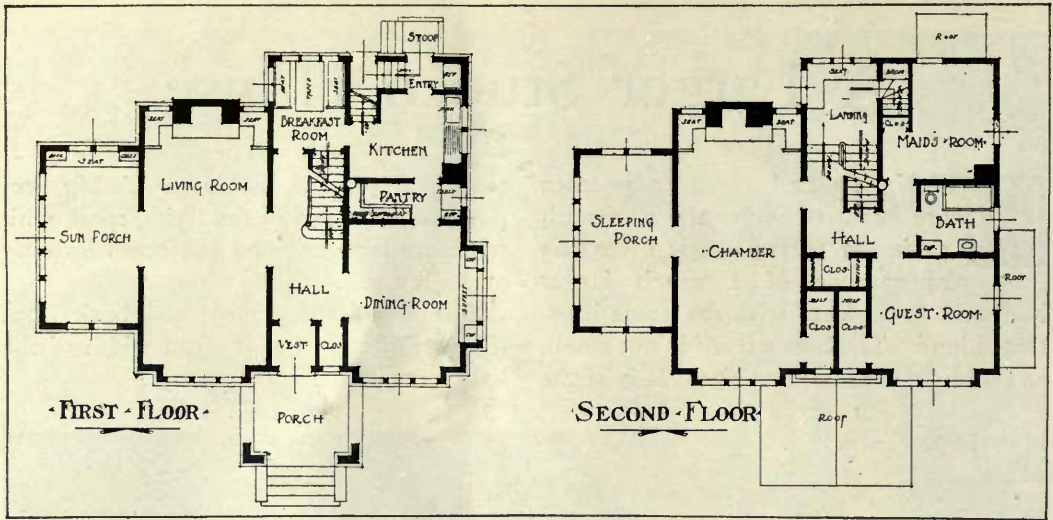
W. W. Purdy, Architect

central hall type of plan, and a hall of fair width separates the living room from the dining room and service part of the house.

Beside the vestibule is a roomy coat closet opening to the main hall. A wide opening connects with the dining room, but it is shut off from the living room since the openings to these rooms are not opposite.

The living room extends across the full width of the house. The sun porch connects with it by a wide opening and French doors. Across one end of the porch is a seat with bookcases on either

An attractive buffet is built into a bay on one side of the dining room, with windows over the serving table. Between the dining room and kitchen is a roomy pantry, with ample china and cupboard space. The baking table and bins are under the window. In the kitchen are wide sink tables under the windows. There is a rear stairway opening from the kitchen which leads to the main landing. The basement stairs are under, and lead from the rear entry with an outside entrance at the grade level. The refrigerator space is in the entry.



The most unusual feature of this plan is the breakfast room which opens off the kitchen, with table and seats in place, and windows on two sides. The breakfast room is also reached from the hall.

On the second floor is a large chamber over the living room, opening to a sleeping porch. On the other side of the house is a guest room and the maid's room. The closet space is unusually generous.

The wide seat on the landing of the main stairs makes a very attractive feature of the hall.

The second floor is finished in pine enameled. The main floor is finished in oak.

There is a basement under the house with the usual equipment of laundry, furnace and fuel rooms. A hot water heating plant is installed.

Cottage Housing

THIS is the day of small homes, unquestionably, not only on account of the smaller first cost, but even more because the upkeep in the terms of labor and fuel as well as money cost. Fortunate is the householder this year whose house is tightly built and well constructed. Money saved a few years ago through employing a cheap contractor who gave a low price because he "skinned the job," so that the wind blows through every chink and cranny will, this year, prove a disastrous economy, with the necessary fuel restrictions. Money spent on a thoroughly well-built house will more than pay interest on

its own investment, in fuel as well as in comfort.

The cottages shown here are compactly planned and very conveniently arranged. The first one has the appearance of a rather small cottage, yet contains a surprising amount of room. A small hall from the living room connects with the sleeping apartments, opening directly to the bath room. The front bed room extends to the line of the front porch, leaving space for a well-proportioned porch and entrance to the living room. Both a linen cupboard and a coat closet open from this hall. A corner fireplace fits well into the scheme of the living room, with



An attractive cottage

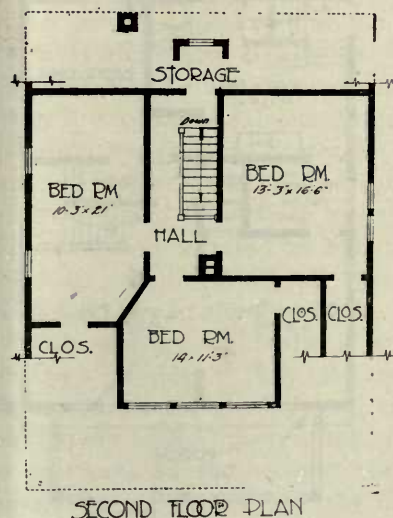
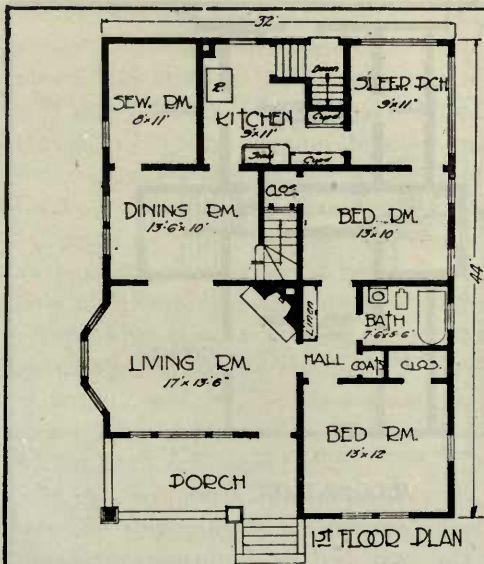
its bay of windows at the other end of the room.

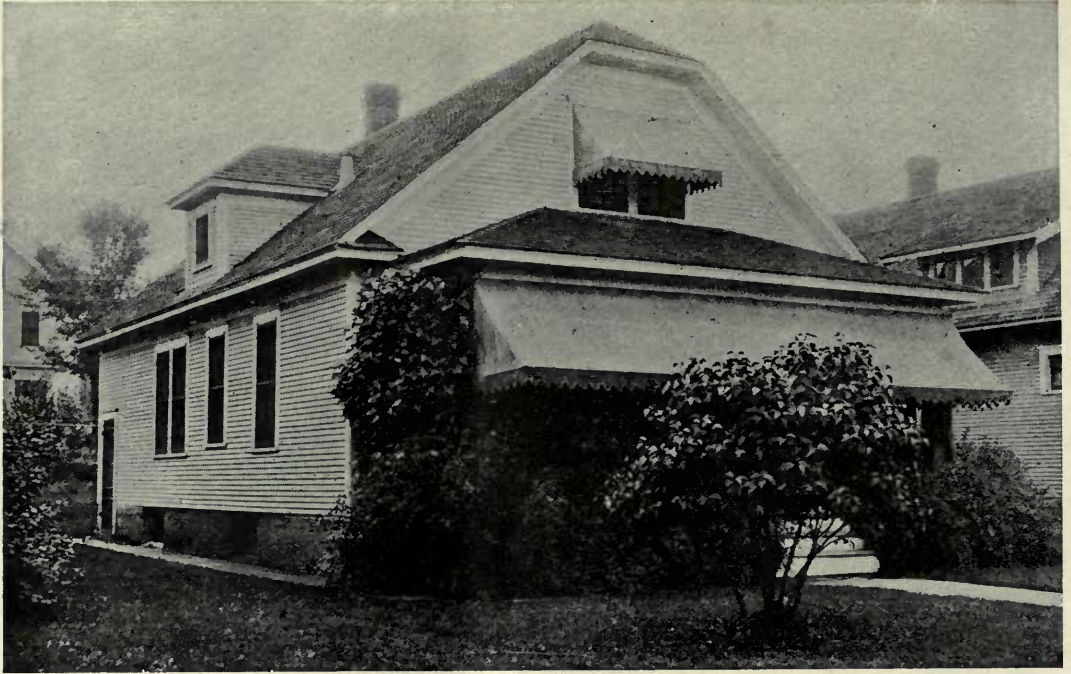
Back of the living room is the dining room; both good sized rooms. A small room which may be used as a sewing room or may be made into "father's own particular domain" in case he wants a room all his own. The kitchen is conveniently arranged. The sleeping porch opens from the kitchen as well as from

the rear bed room. The stairs are centrally located.

Though the roof is no steeper than necessary to shed the rain and snow, yet there is room under it for a good bed room in each gable, while an economical flat-roofed dormer gives a front bed room. Closets are built in under the roof.

The second cottage is a little smaller, having one bed room on the first floor.

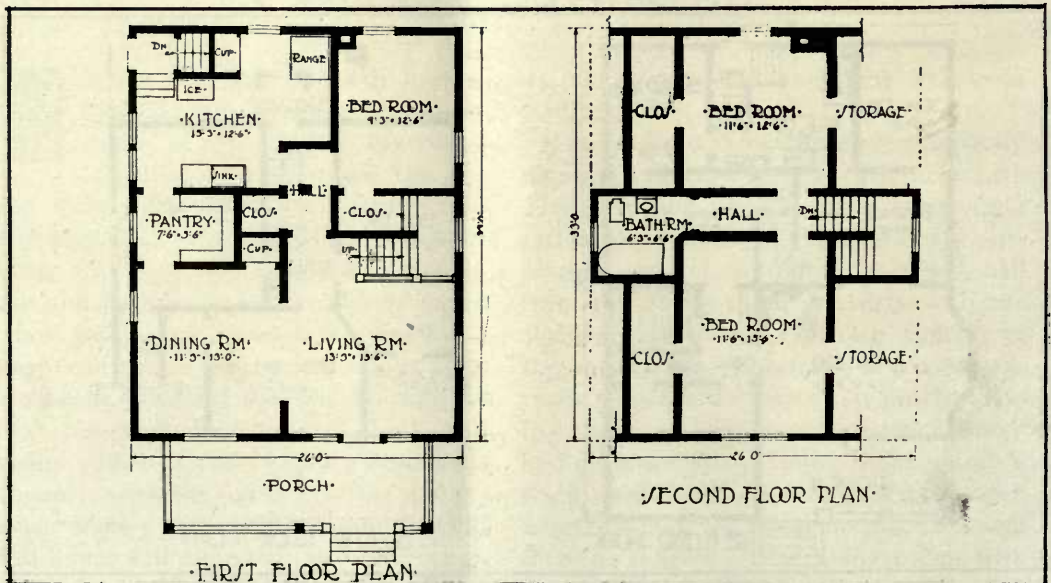




A cottage with sleeping porch in the gables

Since the ridge of the roof is the long way of the house, the sleeping rooms are built under the steeper roof without dormers, except the smaller ones for the bath room on one side and stair landing on the other.

The porch extends nearly the full width of the house, with an entrance into the living room. The dining room is beside it, with a fair-sized pantry and kitchen back of the dining room. A small central hall connects the living room, kitchen



and dining room, with a good closet opening from it.

On the second floor are two good bedrooms and a bath room, with generous closet and storage space under the roof.

Vines and shrubbery shade and seclude the porch very fully. The first cottage is also attractive in its planting, though part of it is only fairly started, the climb-

ing wires not yet being covered by the vines.

The exterior of both houses is covered with siding. On the first, the siding is carried to the ground level with excellent effect. The concrete basement wall is to be seen in the second cottage, since the sidewalk is too near the house wall to allow planting about it.

When Others Ride, I Walk

Evelyn M. Watson



WHEN others ride, I walk. It is not conventional, I know, in fact, rather provincial and out of date, but it is delightful to walk the country roads and to feel the thrill of living as it surges within, and the thrill of life as it beats about on all sides like a magnificent, overwhelming, rhythmic pulse expressing itself in color, odor, form, and other manifestations of living beauty.

When others ride, I walk! It is a pleasure to take bypaths through the woods where cars and carriages cannot go, where only those who care will come, where only the heart can respond, so far beyond reason and comprehension are the mystic beauties of the forest.

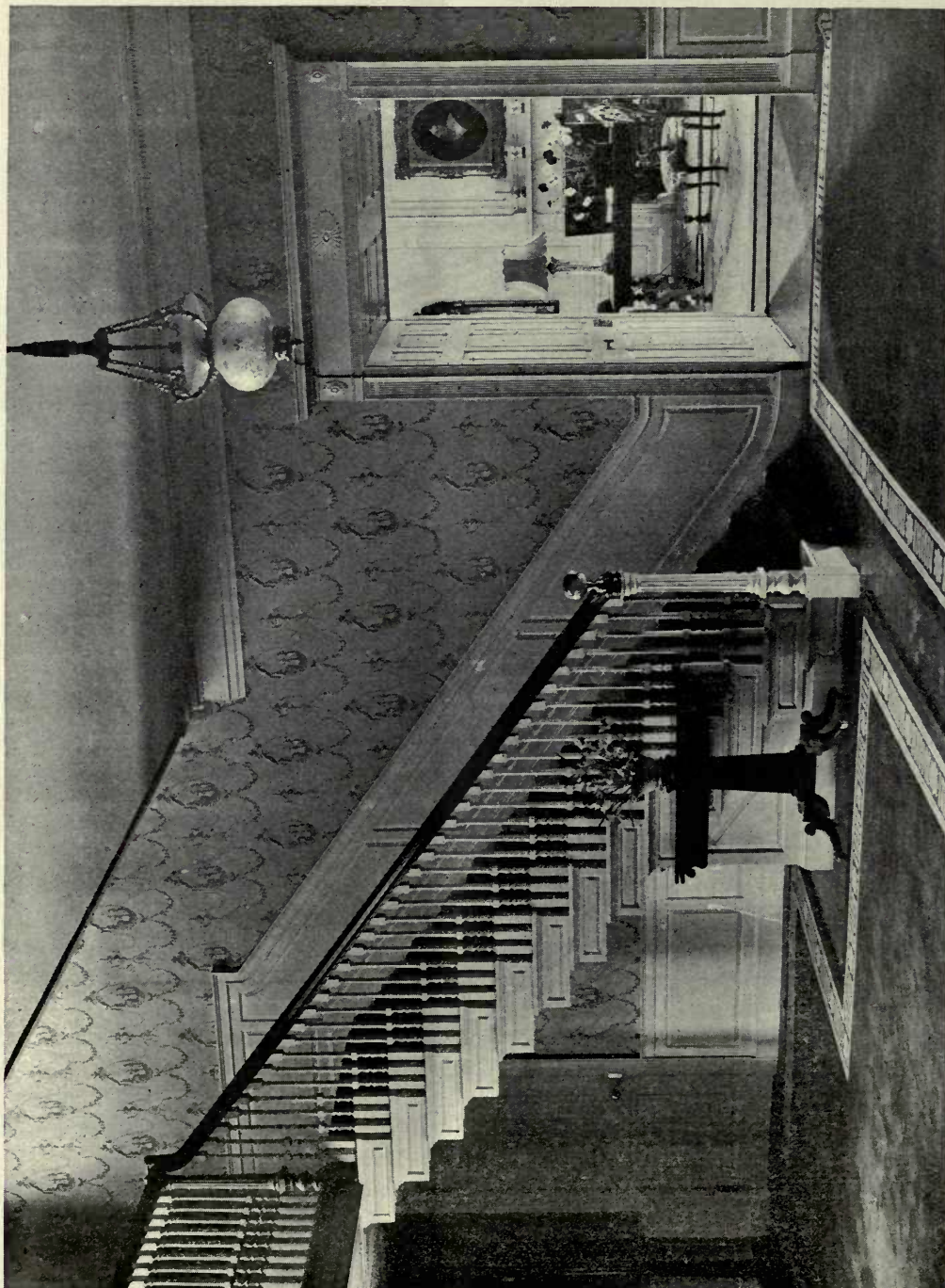
It was on one of these walks I found a thrush in a green bramble bush, a quaint little lady thrush in her housedress of brown, sitting patiently over her eggs. She eyed me with the utmost of suspicion as I parted the leaves of her palace and let a bit of sunlight play into the shadowy green of her residence. She trembled and quivered and uttered a faint little "chirp" of fright, so I left her and went on, remembering the privilege of our meeting with a keen relish ever after.

It is a wonderful privilege to walk, to feel the springing earth at one's feet in the early morning, to feel the soft air

beating against one's face, to catch the woodsy smell from the high trees and the delicate odors of flowers. The colors of the world, too, are magnificent—the soft rich browns of the earth, the multitude of greens of the trees, and the changing colors of the fall, and the wonderful blues of the sky. Then, the shadows, softening here and lightening there, bring out colors and add tone, depth, and richness.

But I walk for another reason—God's forest has been the haunt of many good people who have gone before me. They have come here to the forest to think, to dream, and something of their spirit stays with me when I come into the bypaths. I feel it, perhaps, because I want to feel it, but it is there, an undeniable sense of following and being followed, by others whose love of the woods has guided them. I can get better ideas, wider visions out here. Things I had not dreamed of, thoughts I had not hoped to have, conclusions I had suffered to find and had failed to reach before; all these come when I am out in the woods.

While others ride, I walk; it is a pleasure and a privilege. They go along highways through the gateways of cities. I pass slowly along byways, and there are no gateways to the woods; the woods themselves are gateways to the throne of Peace!



Colonial hall and staircase

Howard Major, Architect and Decorator



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

First Principles

PROBABLY the hardest as well as the most common problem of house furnishing is to reconcile old furniture with new woodwork; not antique furniture which can, with a little care, be adapted to the newest setting, but furniture neither old nor new, which might be called middle-aged. It does not match the woodwork, nor does it harmonize. Matching is not required, in some cases is to be avoided, but harmony is essential. Mahogany furniture and white woodwork do not match, but no background so satisfactory as simple white paint has yet been found for colonial furniture. Its historical accuracy is an important factor, but that does not explain all its charm. There are several combinations founded on precedent which do not give the same satisfaction.

The style of the room should, if possible, determine the contents, and happy are those who can build first and then buy the furniture. The logical sequence is first the floor and wall treatment, both based on architectural conditions, and then the furniture. If the house is of the half-timbered style with an interior finish conforming to the exterior the best effects are obtained by oak furniture of the same general tone as the trim. The designs should be sturdy and simple and in harmony with the setting. Mission furni-

ture, if not too massive, a fault with much of this type, can be used with safety. Old oak is particularly appropriate with walls of plaster and sturdy trim. Old oak suggests, to many minds, something so scarce and expensive as to be almost unattainable, but if purchased under favorable circumstances it can be secured at prices comparing favorably with old mahogany. Old furniture is now regarded by the decorator with an interest as keen as that of the collector. According to Allen French we no longer collect old mahogany. We furnish our houses with it and thus get the interest on our money from the use of the things we buy.

Whether the furniture be old or new, unity should be preserved, if possible. Unity should not be confused with monotony. A certain diversity of tone and texture is necessary, but the juxtaposition of mahogany furniture and dark oak woodwork, golden oak furniture and white paint, should be avoided.

With the severe trims now favored by many architects and growing in popularity with laymen, furniture to be in harmony must be of severe lines also. This does not mean that all pieces should match or all be cut on angular lines. It does mean that gilt chairs should be absent, ornate pieces, if numbered among the household possessions, placed else-

INSIDE THE HOUSE

where and a general harmony maintained. This harmony may include furniture of different periods if there is a structural similarity and the woods do not conflict. But there must be taste and discrimination back of the selections. Oak, walnut, even mahogany, if the latter be of a brown tone and not the ruddy color of the American Empire style, could under some circumstances be placed in one room, but a skilful hand should group them.

When the interior is completed it is seldom possible to change the permanent features. Therefore, the choice of furniture should be postponed until the funda-

mental features of each room have been decided. Better spend less on the house than build at such an outlay that the contents of an outworn and outgrown home must be used. Not that all furniture should be thrown away which is neither antique nor very new. A great deal can be accomplished by a skilled workman in "doing over" unsatisfactory pieces. Clumsy black walnut may be remodeled, golden oak may be scraped and re-finished, and the services of an upholsterer may accomplish wonders. But a careful weeding process is imperative else the new home will be less successful than the old where the rooms, if faulty, were at least consistent.

In a colonial house, where the interior is designed to accord with the exterior, the furnishing presents few perplexities. Mahogany of suitable design should be chosen for the main rooms of the first floor and preferably for the bed rooms. Where rooms are detached from the main part of the house the treatment can be more individual. Dens, libraries, and smoking rooms are often so located as to permit widely different schemes. Naturally the hall is the key-stone of the house and upon its particular character depends the plan of furnishing. We have already considered briefly the historic sequence of the hall. Let us now consider several modern alternatives.

Suppose we choose, by way of example, a living hall eighteen by twenty! How can it be treated in order to gain the best results? The house has a small vestibule giving direct entrance to the main room, which in this case is the hall? The staircase



Windsor chair and tall cupboard of early seventeenth century design

INSIDE THE HOUSE

should be placed at the rear, and if it rises to a broad landing with one or more windows three points are gained: a constant flow of air in summer, a quick and effective means of ventilation in winter, and an ornamental feature at all times, for staircase windows afford an opportunity for leaded glass or for effective curtain treatment.

The heating of the hall should conform to modern standards with the least objectionable of radiators. If the hall is the living center of the house it should have a fireplace. With the staircase opposite the front door the hearth should be located at the side. It may be so placed that the flue can be used for a fireplace in the adjoining room, presumably in the dining-room unless the house has a library, when it would better be located there. In the average living-hall plan, however, there is no library. The rooms consist of a hall, a dining-room, kitchen, etc., and a small room which is usually designated as "den," a name, however, rapidly going out of favor.

The decorative treatment should conform to the rest of the house. It must be comparatively quiet in color scheme so as to provide a good background, for a living hall will contain more pictures

than would be placed in an entrance hall.

Let us also consider a different floor plan, the conditions as to size, cost, etc., being the same. Suppose the 20x18 floor space is allotted to a living-room, and that it has a fireplace opposite the doorway, providing a flue which can be used in the main bedroom above. The hall is



An entrance hall where the treatment is dignified and distinguished

frankly an entrance, but being designed by a good architect is neither dark nor unattractive. It contains only what is absolutely essential in the way of furniture and furnishings. If small it may be papered in the same way as the living room. If of fair size it may take an exceedingly decorative treatment which in itself makes pictures unnecessary. The space given to the den in the other plan is devoted to a small reception room where

INSIDE THE HOUSE

callers may be ushered if the living room is occupied, or if for other reasons a more formal room is preferred. The dining room and the service part of the house will be a trifle smaller than in the other arrangement, but the gain has been so great in privacy and coziness that this disadvantage is more than balanced. The staircase is the real problem with this plan. If made a special feature of the house it may rise from the living room or be placed in the entrance hall and screened by means of a vertical lattice. A screened staircase has much to recommend it, particularly in a small hall.

The difficulty of placing a stairway in an entrance has led many architects to favor a return of the old staircase hall which was never an entrance hall. There are numerous arguments for and against

such a plan. Many halls would lose their most important feature and, by all odds, their most picturesque, if the staircase were removed. On the other hand, the tiny hall with its steep stairway thrust in the face of every visitor would be vastly improved by such a departure.

The objection may be raised that the average house does not provide sufficient space for two halls. It is here that a plea for the screened staircase may be made; for it overcomes the space difficulty, and enables a type of step to be used which would be impossible without a screen. Not that a steep ladder of steps should be permitted; the risers must be moderately low no matter what the treatment, but with a lattice the stairway may be a little narrower than if finished with a handrail.



Living hall with staircase niche

Lord & Hewlitt, Architects

INSIDE THE HOUSE

"It is in the smaller and unpretentious house," says Robert Spencer, "that a quiet, interesting treatment of entrance hall and stairs becomes really difficult and is seldom found. As a rule, too much dependence is placed upon petty details, particularly in the matter of stair railings, and newel posts, and not enough made to plan an essentially quiet, simple scheme of well-related parts, well related for convenience, well related for architectural effect."

Once the setting or background is completed the placing of the furniture fol-

lows easily, the informal pieces for the living hall, the more formal for the entrance hall. In one of my illustrations is shown a modern hall with a spiral stairway, where the treatment is dignified and distinguished. This hall with its round arched windows seems almost like a bit of mediaeval building, and the narrow staircase, a survival of an early type. Another illustration shows a living hall with a staircase niche opening from it with the traditional use of mahogany treads and hand rail, and an interesting glimpse into the dining room.



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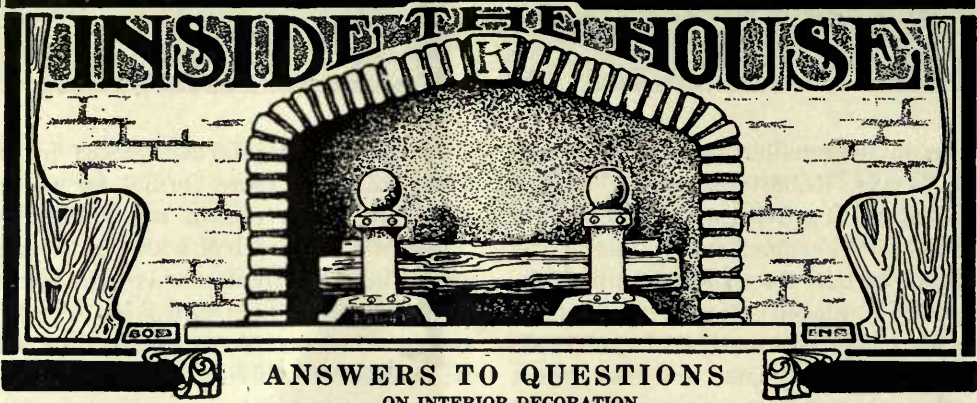
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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan.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

In Tan and Gold.

A. M. I enclose floor plans of our new house which we expect will be ready soon. It is a two-and-a-half-story, red brick, with stone trimmings; brick laid with black mortar; woodwork dark green, with a very little dark red. The reception room will be pine trim, finished in white, or old ivory enamel. Floor, quarter-sawn oak, natural finish; rug, seamless Axminster, soft reseda, with a narrow conventional border of darker shade. Furniture, black walnut, upholstered with silk brocade, in shades to match the rug; mahogany piano, music cabinet and rockers; old-fashioned, high-back cozy corner in velour, to match rug, with cushions of old rose, gray and old rose, and green in this room; two good paintings, the rest of the pictures are views from abroad. I have lace curtains for the three windows. What shall I use for the four casement windows? They are just one glass now; we will put in leaded glass later.

What shall I put on the walls?

Should the enamel be white or old ivory?

The house faces the west and the rooms will be very bright.

Vestibule, hall and stairway are quarter-sawn oak; floors in natural finish. We plan to beam and panel later on.

Dining room, cypress trim, oak floor, natural finish; a sunny south room. We expect to add a sun room off this room. The furniture is solid golden oak with leather upholstery, too valuable to give away. We expect to beam and panel this

room also. The rug is a seamless Axminster, very dark red and ivory.

Den is a north room, cypress trim, oak floors; rug, brown, fawn and ivory; desk, writing table, chairs, early English, or old English with all straight lines, and old brass handles on the desk. I thought of tan for the walls. What color should the trim be? This is the only room downstairs where I want chintz hangings. Fireplace, dark red brick, also in the dining room.

Second and third floors, pine trim, all finished in white enamel.

I have an old mahogany Grandfather's clock and small mahogany table, also antique brass plate for the hall.

We have been taking your magazine for two years and find it very helpful.

Ans. The casement windows would be charming curtained with gauze silk in green to harmonize with brocade. The enamel should be so deep a cream or ivory as to be almost tan. It will look better with the walnut furniture. Of course, grass cloth is always best for the walls if you want to spend the money. It lasts wonderfully and makes the pictures look so well. This would be in tan or deep cream like the woodwork or perhaps a shade darker. If you do not wish to spend so much, use a stippletone paper of the same general tone.

In the hall and vestibule a Japanese gold paper and the woodwork painted in gold color would be attractive and would lead into the rooms most appropriately. They put a gold powder into the varnish

INSIDE THE HOUSE

and turpentine and it is very little more expensive than ordinary paint.

In the dining room the trim should be something between the ivory tone in the rug and the color of the furniture, then use a paper with flowers and birds, in the colors of the room, a little of the red repeated and the ivory and tan and golden oak colors, then have curtains of brick color sunfast, with ecru marquisette next the glass. In the den the trim should be quite a deep tan and the chintz should have a tan background with large flowing English pattern.

Gray Stain or Brown?

W. N. K. Would be very grateful to you for a few suggestions as to the interior decoration of my house, being built from one of the plans in your magazine.

The woodwork on first floor is to be oak, stained medium dark.

What wall coloring would you suggest for the living room, which is on the north-west side of the house? Am using a rose and green colored rug.

I had thought of using some shade of gray (plain) with rose drapes. Would it be all right to use the gray shade with that woodwork and what do you suggest for the ceiling?

I know some shade of tan or brown would be more harmonious, but I wanted some other color.

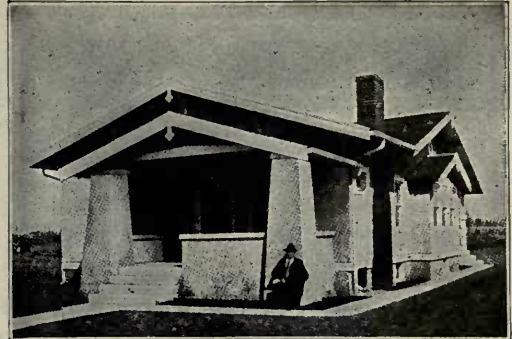
I have thought of old blue for my dining room. I have a blue rug and fumed oak furniture.

I also have fumed oak and Spanish leather furniture in my living room.

My kitchen is finished in natural colored oak woodwork. What color would you suggest for walls here? Also what color tile for floor? Am not having a white kitchen, as I did not care to enamel the oak woodwork.

Ans. Why do you not have the woodwork and furniture stained gray instead of brown or tan? Then your gray and rose draperies would be lovely. The ceiling would be tinted gray.

Otherwise gray would be unpleasant and you had better keep to tan color. With the natural oak in the kitchen you can have orange colored walls and a tile that is in harmony—sort of a terra cotta color.



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INSIDE THE HOUSE

Curtaining the Windows.

H. M. We have had our home remodeled and we are now ready to paper and drape the windows of the hall, living room, library and dining room. The woodwork is all in white enamel and the doors are mahogany. The front room or living room faces east, is on the northeast, has three windows on east and one on north. The library and living room are open to each other, have a built-in bookcase between in the arch. The library is west of living room and has large box window. We already have the draperies for library and living room—green and ecru, and want your suggestion on how to drape windows. I am enclosing diagram of east windows. Also I want to know what kind of paper would look best with green draperies like the sample and the white enamel woodwork.

The dining room is on the southwest side and is shut off from other rooms by sliding doors. It is in white enamel, has large box window on south and small or medium window on west, with lots of light.

The hall is on southeast, has two windows and glass in front door. The hall is shut off from other rooms by sliding doors. The stairs are in mahogany and white enamel. What color of draperies and wallpaper should be used in hall?

I surely will appreciate your suggestions and it will relieve me so much.

Ans. In the library and living room you had better use a tapestry paper that will have the mahogany, ivory and green colors. In the dining room you can use curtains of gauze silk next the glass with over curtains of chintz, with blue and green, brown and creamy background.

You can have gold color curtains in the hall with tan wallpaper having self design. All curtains should hang in straight vertical folds, in harmony with the construction of the room. The box windows have a valance from one side to the other of the opening, flush with the room's surface, while the over curtains hang at each end and close against

each panel of the separating woodwork.

The under curtains hang close to the glass. Portieres can be made of same materials as the curtains with interlining between the two surfaces. I should use portieres at all openings with cord and pulley.

Red Oak Finish.

A. L. J. We would like suggestions as to proper treatment and coloring for walls of living room and dining room of our new bungalow. The woodwork throughout the house is to be red oak, with exception of kitchen, breakfast room and bath, which are to be white enameled. Is it advisable to have oak stained slightly? I had thought of tan or soft shades of brown for living room. I have had browns so long would like to get away from that to something different. I am afraid of tiring of other colors. My living room rug is in soft shades of tan, old rose and olive green, furniture is fumed oak, rockers are all of reed with upholstering in shades of tan, old rose and green tapestry. The finish of the reed is frosted brown, which has a slightly green appearance. The dining room, which is separated from living room by French doors, will have furniture of American walnut with a blue rug in rich shades which has a touch of buff through it. I am afraid to have walls painted blue, as I think one would tire of it so quickly.

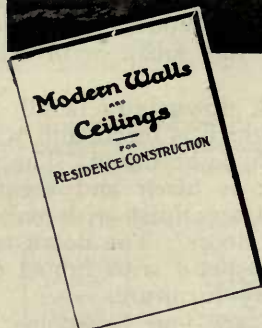
How shall I have the radiators finished?

Ans. If the red oak is that lovely pinkish color you could leave it with just a touch of stain washed over to settle into the open grain. The stain thus used would be of the color and texture of the whitish-green-gray moss found on tree trunks in the woods, and would harmonize with your rug's green. Then the pink tone of the original wood would recall the rose color in the rug.

Instead of using brown, use curtains of light green or the rose color—or a changeable green and rose unfadeable, the furniture stained to harmonize with the woodwork.

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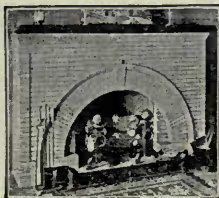
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INSIDE THE HOUSE

perfect harmony, no matter if the color is unusual.

I should have the dining room walls painted buff, not blue, for blue is too positive for walls, and you can use the blue color in the curtains. Personally I prefer the rough sand finish, as it is less cold in surface and more artistic.

The radiators should be painted to match the walls. There is regular paint for this purpose which wears wonderfully well.

The White Finish.

R. P. Am enclosing a rough plan of my home. Please give me some ideas as to interior decorations. The exterior is brown with cream trim. We live in the country and our home is bungalow style. My woodwork is pine. The walls will have to be tinted.

The dining room furniture is dark oak and the living room mahogany and willow and as there are French doors between would like them both the same as the hall. Would it be better to have it also like the living and dining rooms? The bedroom furniture is mahogany, with white iron beds.

Do you consider white enamel better than hard oil finish for kitchen and pantry?

Ans. I should have the dining room, living room and hall trim all an oyster color. This will harmonize with the dark oak and the mahogany equally and have the walls tinted a shade lighter but the same hue.

The white enamel paint in the kitchen and pantry are, to my mind, far better than hard oil finish. These rooms should be so snowy and cheerful and cozy that they remind one of a bouquet of flowers. White muslin curtains or white marquissette at the windows, hung so as not to exclude the light and air but to give a finish; and table-cloths of white with printed design in the color of the enamel

ware used here. Chairs and tables should be painted white enamel, heat and waterproof paint.

You should have two sets of curtains and table-cloths, so that they may be always clean.

Suiting the Wall to the Furniture.

V. E. Will you please give suggestions for decoration of our house? It is built of brick, 28x32 rug finish with white woodwork.

The woodwork downstairs is all oak except kitchen, which is birch, and walls are all sand finish, to be tinted. The upstairs woodwork is birch and we had planned a natural wax finish with mahogany stain on the doors. The downstairs we want to correspond with fumed oak and some tapestry furniture.

Upstairs there are four bedrooms, all well lighted. One on the southwest is to have brass bed and American walnut dresser, chairs, etc. On northwest there is to be oak furniture; on northeast white enamel furniture, and on southeast old ivory. The bathroom is all white. What wall tints would you suggest?

Ans. I should keep the walls a deep cream, not too yellow, but rather drab in the living room. The kitchen is much better with white enamel paint, as you can have the white tile. The wall above the tiling, might be a shade of blue lighter than the linoleum and white muslin curtains at the windows.

Bedroom with brass bed and walnut dresser could have deep neutral yellow wall the color of the light striking on the brass, with changeable silk or sunfast draperies. With the oak furniture you might have dull neutral blue walls with chintz draperies. With the white enamel furniture gray walls with gray and pink draperies. With the old ivory set cream wall with draperies the color of wisteria flowers.



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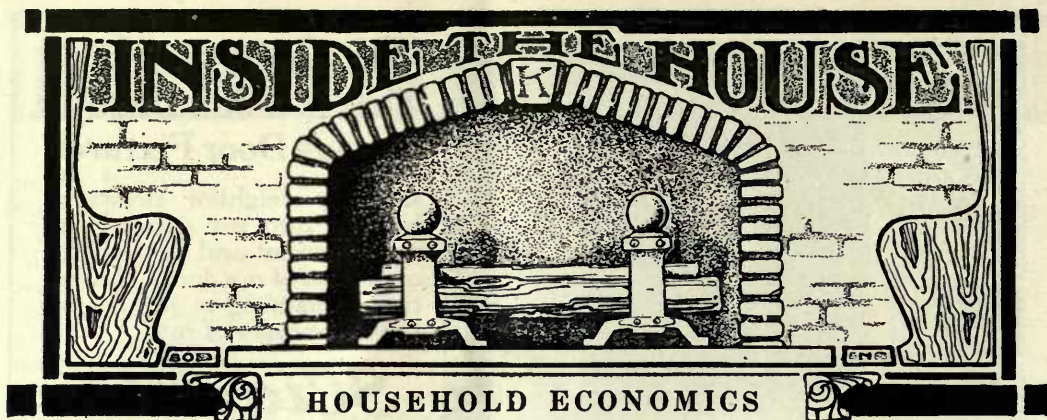
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Don't light up your house every night as if you were conducting some festivity.

Don't make a hot house plant of yourself. It is un-American.

Kitchens and Fuel Conservation.

THE kitchen is the center of war work at home. We find the great communicating trenches where fuel conservation meets food conservation and the family morale is welded into shape for the fray. When housewives set their minds to work on methods of fuel conservation in cooking, there are some things which will occur to them at once. Many more methods there are, of course, but these few are good starters.

When baking, use the oven to its fullest capacity. Bread, potatoes, beans—all can go in at once. Never light a fire to bake a pan of biscuits and nothing else. Keep ever before you the fact that fuel is necessary to send food to your boy in the trenches. Efficient use of direct heating, habitual use of fireless and pressure cookers—all of these schemes are worthy of much attention now when a fuel famine looms in sight. When one kettle of food is boiling some other food may be steamed with it. It does not harm a pudding to start it steaming in the potato kettle. Some foods that require long peri-

ods of cooking can be omitted from our dietaries in time of war.

A small oven which occupies but one burner is a practical saving device, for it uses less heat than an ordinary oven requires. There are dozens of other ways to practice kitchen conservation in fuel, and it takes the intelligent American woman to think of them. "How I Cook to Save Fuel" can be a topic for discussion at a woman's meeting. New ideas come forth at top speed when the subject is once approached.

Personal Opinions and Fuel Saving.

There are a few personal matters which enter prominently into the subject of fuel conservation. One is the matter of dress. Persons otherwise intelligent and willing to save anything the government asks of them will insist on maintaining their before-the-war styles of winter costume.

The knowledge of warm clothing is our natural inheritance. Our ancestors knew no other course than long underwear and heavy garments for the cold months. The ease and luxury of over-heated rooms have taught many of us the ways of the

INSIDE THE HOUSE

sheer sleeve and the "all-the-year-round underwear," until we find ourselves trying to save fuel and still maintain a temperature high enough to keep the goose-flesh from our arms and legs.

Ask your grandparents how they used to dress in the winter and then follow their example. It would be a disgrace worthy of any punishment to let style step between America and stern prosecution of the war.

Another matter which involves the personal opinions of the war family is the question, "just how warm shall the rooms be kept?"

"An average temperature of 64 degrees is the best for the human race," declares Professor Ellsworth Huntington, of Yale University.

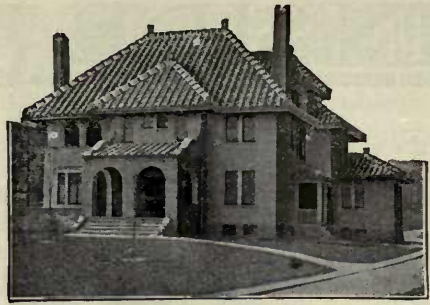
Moist air, according to his statement, is more healthful than dry air and feels warmer at a lower temperature. Sudden drops in temperature and gradual rises are also a good means of preserving health. If we know we are "following the doctor's orders" it is not so difficult to change our modes of living. If we know that a drop from the usual temperature of our rooms is good for the health as well as the pocketbook and the country, there is a triple impetus in the direction of fuel conservation.

Unneeded bed rooms and parlors kept up "mostly for show" should have their heat supply turned off. Sleeping in slightly heated or unheated bed rooms saves fuel and invigorates health. No argument in behalf of unheated sleeping rooms is necessary in the face of the many living testimonials of health maintained or regained through sleeping out-of-doors.

Above All Keep the Stoves and Furnaces Clean.

It will be a sad day when an enterprising American learns that he helped to retard the progress of the war because he was not as clean as he should be.

The yearly going-over of the heating plant, like the Saturday-night bath, has ceased to be a habit in the "best circles." Frequent—very frequent—cleaning of the furnace or heating stove is absolutely essential to good heating. Do you know that one one-hundredth of an inch of soot



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INSIDE THE HOUSE

has the same power to resist heat that ten inches of iron have? You would hate to have ten inches of iron between you and your radiator or register, and still we go on letting the soot collect in the pipes and interior of the heating plant. Let us make war on the soot. Keep it out as you do rats, for it eats up heat and money and defeats all your worthiest resolutions to help the nation by doing your share of fuel saving. It might be a good plan to institute a "soot day" along with the other time-tried days of labor like "wash day" or "baking day."

The Salvage Idea and the Ash Heap.

Sifting ashes for available bits of coal is not plebeian, but patriotic. Because Toney Bonino down in the slums sifts every quart of ashes, don't hold yourself above the act. Cinders and unused coal find their way into the ash pile every day and heretofore the ash man has been paid to haul them away. Think of paying a man to haul away the heat for which we are paying and suffering!

Make yourself into a private salvage unit and begin operations at once on the ash heap. When you see the coal scuttle gradually fill up from your efforts at reclamation you will feel as joyous as the small boy who locates a dime in the sand pile. Interest your neighbors, too, in reclaiming coal from the ashes.

Know Your Furnace.

After all, the heating plant is the big fuel eater, whether it is a furnace in the basement or a little coal stove in the living room. Make a thorough inspection of your heating plant and learn every possible detail of its dampers, drafts, pipes and general make-up. Then call on your fuel administrator or on the local merchant who sells the particular type of heater in your home. Either the fuel administrator or the local dealer will give you a careful lesson in regard to your furnace or stove, instructing you in the details of its operation. If he tells you nothing new you can pat yourself on the back for being a real fuel saver. If you learn a few things about drafts and dampers, so much the better for the fuel campaign.

It may even be necessary to add some new dampers to your heating plant. Do not hesitate to add them if you have the slightest feeling of their need. The country is sparing neither men nor money in winning this war for humanity's sake.

Make Light Use of Lights.

Gayly lighted rooms may have looked prosperous and festive before the war. Now they seem festive and pro-German. Let us reduce their use to a minimum.

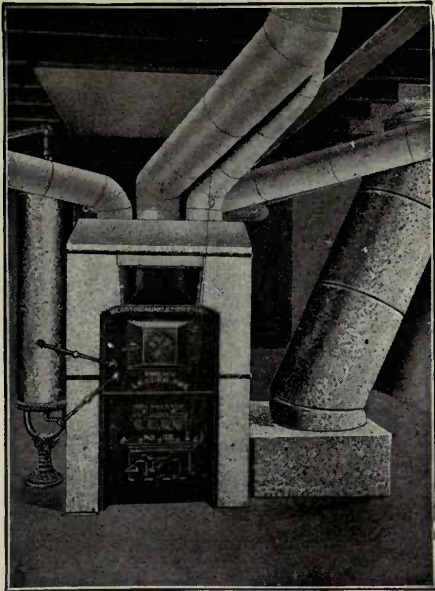
Because the lights in a house operate by a button on the wall is no reason to believe that they have no connection with fuel. In the electric power plant that generates the electric power, coal is going into the furnace by the ton to create that power and every time a light is wasted, coal is wasted.

If you use kerosene lamps remember that kerosene is needed in war operations, and the American people must be sparing in its use as well as other kinds of fuel.

Turn out lights the instant they are not needed and never light a single burner more than is necessary. It is an economy plan to remove at least one light bulb or gas tip from every room. For ordinary purposes almost every home uses more light than is necessary. It is an easy matter for most householders to arrange the day's labor in such a way that the "close" work for which much light is necessary is done by daylight and other work at night.

Have you been in the habit of keeping a light burning all night on the baby's account? Don't do it any more. He will sleep better and be healthier if there is no light in his room, and if you must see him in the night, use a flashlight or a quickly relighted lamp.

Just another word about kerosene, whether it be used for lighting or heating purposes. Remember that 24,000,000 more barrels are the demands war makes for that fuel, this year. This is no time to pour the precious liquid into the stove to start the fire, and the bathtub will have to be cleaned with soap or pure elbow strength. Keep the lamp wicks trimmed and the globes and oil vessels clean. Do the same with the oil stove. Cleanliness is a shield against the fuel waste.



A HESS Welded Steel Pipe Furnace showing hot air pipes, air supply and tank heater. We make pipeless Furnaces also.

Next Winter's Fuel

You are up against a fuel problem. The Fuel Administration requires that you use one-third less of hard coal than usual; that you omit entirely the use of smokeless or eastern soft coal; that you use western soft coal from the nearest source; that most of the coke produced shall be taken for Government purposes.

This means that you must take such fuel as your dealer can supply you, whether it is adapted to your heater or not.

YOU CAN PREPARE in time for this condition by installing a HESS WELDED STEEL FURNACE. There are no flues inside to clog with soft coal soot; there are no open seams to leak gas and smoke. It will burn anything, hard or soft coal, screenings, mine run, lignite, coke, wood, straw or chips, all in the same fire box, without change, and the furnace will do full duty with any of these fuels.

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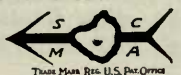
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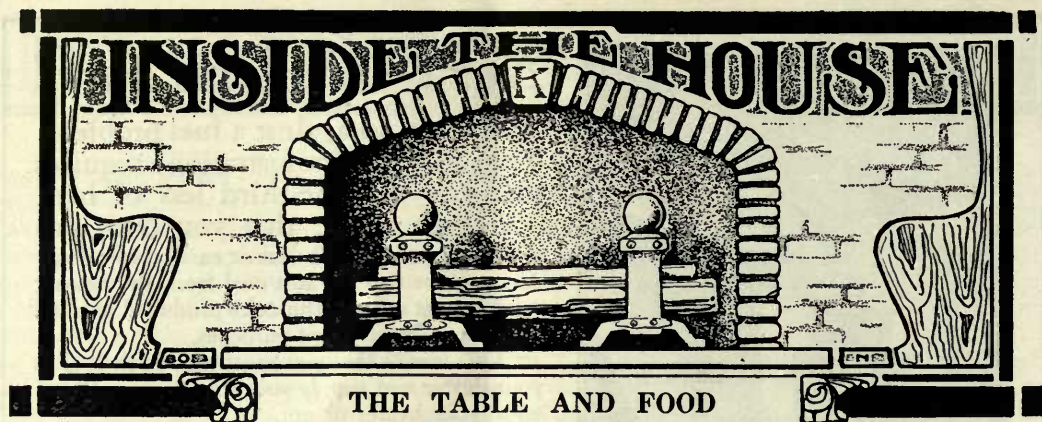
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Is Sugar a Necessity or a Luxury?

SUGAR is not a product of Nature. Honey was the only sweet known to the ancients. "A land flowing with milk and honey" expressed luxury in Bible times. It is only within the two last centuries that sugar has taken so prominent a place as a table luxury in the civilized world. To other peoples it is still practically unknown. A hundred years ago sugar was made almost exclusively from sugarcane. The development of the sugar beet industry is put to the credit of an imperial edict of Napoleon I.

One of the features of German pre-war work in preparedness was the home production of the essential elements of food, among which the development of the sugar beet itself as well as the sugar beet industry, made the war possible to them. The beet sugar growing areas of Europe which, before the war, furnished half the sugar of the world, are practically out of the growing this year. Belgium and northern France, which were important producers, are ruined and desolated. The beet fields of Russia are lying in waste. Germany and Austria are growing more valuable crops. The sugar supply of the world has been cut in half.

Sugar, like starch, is not a tissue builder. The only tissue which it forms, Dr. Wiley tells us, is fat. When eaten it enters the blood more readily and quickly than other foods, and so forms an ideal fuel, especially in the case of muscular

fatigue. For this reason it is craved and needed by our soldiers, while our own health would not suffer in the least under our usual conditions and in a well-balanced diet, if we entirely eliminated all additional sugar and sweets. Nevertheless it is the *wasted* sugar that we are asked to save first, though patriotism is ready to make the little sacrifices along with greater ones. Sugar, washed from the bottom of coffee and tea cups is pro-German.

Sugarless Desserts.

Every cup of syrup or honey furnishes one-quarter cup of liquid, therefore for every cup of syrup or honey that is substituted for sugar, reduce the original amount of liquid in the recipe one-quarter cup. (16 level tablespoons equals 1 cup.)

Baked Apples.

Prepare apples for baking as usual. Fill centers with honey instead of sugar, add a few chopped nuts if desired. Put in pan and add three-fourths cup of water and one-fourth cup honey. Bake as usual.

Rice Pudding.

Allow 4 tablespoons of rice and 1 tablespoon of honey or maple syrup to a quart of milk. Bake very slowly for four hours, or as long as the oven is in use for other things. Slow baking is necessary to obtain a rich creamy consistency.

Rolled Oats Pudding.

1 cup rolled oats
2 cups boiling water

INSIDE THE HOUSE

- $\frac{1}{4}$ cup molasses or corn syrup or
- $\frac{1}{8}$ cup honey
(Sweetening agent)
- $\frac{1}{2}$ teaspoon cinnamon
- $\frac{1}{2}$ teaspoon nutmeg
- 1 teaspoon salt
- $\frac{1}{2}$ teaspoon vanilla
- $\frac{1}{8}$ teaspoon ginger
- 1 cup raisins
- $1\frac{1}{2}$ cups hot milk

Cook the rolled oats in the water for 30 minutes. Add the remaining ingredients, turn into a baking dish, and bake in a slow oven $1\frac{1}{2}$ to 2 hours. Serve hot or cold, with or without cream.

Sauces Without Sugar.

Maple Sauce.

To one cup of maple syrup add one-fourth cup of nut meats chopped fine. Heat and serve with hot rice.

Chocolate Sauce.

Add one square of melted chocolate to one cup of hot corn syrup. Season with vanilla.

Fruit Sauce.

To one cup of corn syrup add one-half cup chopped raisins or dates. Heat before serving.

Honey Sauce.

- 1 cup honey
- $\frac{1}{4}$ cup water
- 1 tablespoonful butter substitute
- $\frac{1}{4}$ teaspoonful salt
- $\frac{1}{4}$ teaspoonful cinnamon
- Dash of nutmeg
- Juice of one lemon

Boil together fifteen minutes. The juice and grated peel of one orange may be used instead of the lemon.

Corn Meal Balls Stuffed with Dates.

Boil corn meal in salted water for two hours, form it into balls, stuffing the inside with dates or raisins and chopped nuts, topping it with a date or nut. Serve this on toasted biscuit and eat with syrup.

Corn Souffle.

- 1 tablespoon fat
- 4 tablespoons flour
- 1 cup milk
- 2 eggs
- 2 cups corn
- $1\frac{1}{4}$ teaspoons salt
- $\frac{1}{8}$ teaspoon mustard

Melt fat, add flour, and gradually add milk. Bring to the boiling point, add corn, seasonings, and yolks of eggs. Fold in white of eggs beaten stiff. Turn into an oiled dish, and bake in a moderate oven from twenty-five to thirty minutes.

Hominy and Cheese.

Put in an oiled baking dish layers of hominy, which has been soaked over night and boiled until done, and grated cheese in alternate layers. Pour over it enough milk to come half way to the top. Cover with crumbs and brown. Serve as a substitute for meat.

Carrot Salad.

Grate raw carrots on a coarse vegetable grater. To one cup of grated carrot add one-half cup of broken nut meats. Wafer thin slices of onions may be added. Serve on lettuce leaves with mayonnaise dressing.

Carrots with Rice.

Peel the carrots, slice, and cook in boiling meat stock until tender. Boil the rice, arrange the carrots in a heap in the center of a deep platter, border with the rice, and pour over all the stock in which the carrots were cooked, after seasoning with salt and pepper.

Bean Roast.

- 1 cup beans (white) stewed
- 1 cup peanuts
- $\frac{1}{2}$ cup bread crumbs
- 1 teaspoonful salt
- $\frac{1}{8}$ teaspoonful pepper
- $\frac{1}{2}$ cup milk

Grind the peanuts and beans. Add the other ingredients. Shape in a loaf and bake 30 minutes. Serve hot with tomato sauce.

Clarify Fats.

Clarifying fat improves color, odor, flavor, and keeping quality. Heat the fat in an equal volume of water for a short time. Stir frequently. When cool, remove fat layer and reheat to drive off extra moisture; or heat the fat with a few slices of raw potato until the potatoes are browned, then strain.

In muffins, gingerbreads, spice, molasses and fruit cakes and cookies, this



suet can be added in the melted form. For biscuits, shortcakes, dumplings and pie-crust it may be chopped very fine or ground and worked into the flour. A slightly rounded tablespoonful of chopped suet is equivalent to one level tablespoonful of rendered suet or any other fat.

When buying meat, the thrifty householder will insist on receiving every scrap of fat which the butcher used to be expected to trim off and keep as his own, although it had been weighed and paid for in the bill. The meat may be cooked with the fat on and all of the fat which will not be eaten trimmed off before serving, and later clarified for cooking purposes.

Soften Hard Fats.

Rendered beef and mutton fat are too hard to use satisfactorily in cooking. Two cups of rendered beef or mutton fat, melted with one cup of vegetable oil, such as cottonseed or corn oil, stirred while hot and occasionally while cooling to prevent separation, gives soft pliable fat.

Make Savory Fats.

Some fats, such as mutton tallow, leave an objectionable flavor. Prepare these as "savory fat." Use them in frying meats or vegetables, and for making sauces to combine with vegetables.

- 1 lb. unrendered fat (chopped fine)
- 1 slice onion, $\frac{1}{2}$ in. thick, 2 in. across
- 1 tsp. salt
- $\frac{1}{4}$ tsp. pepper
- 1 tsp. bay leaves (broken)

Tomato Appetizers.

There is no vegetable, perhaps, more luscious in appearance than the tomato, whether it is served fresh or cooked, and which at the same time adds a direct value to the diet.

Vegetables which are just out of the garden, if cooked at all, taste best when simply cooked—steamed, boiled or baked—and served with a little salt, butter, milk or cream. Often a heavily seasoned sauce covers up the more desirable vegetable flavor.

Overcooking of vegetables impairs their flavor. Very delicate flavors are de-

stroyed, while vegetables with strong flavors, such as cabbage or onions, become disagreeably strong if cooked too long. Overcooking also destroys the attractive color of some vegetables.

French Tomatoes.

Place ripe, smooth tomatoes of uniform size in a saucepan and cover with boiling salted water. When the skins crack and the vegetables can be pierced with a fork lift them out with a skimmer. Drain well and lay each, with the rounded side up, on a crisp slice of buttered toast in a deep saucer.

With a sharp knife, score the top in the form of a cross. Season with salt, paprika, a tiny pinch of ground spices, a bit of sugar and a generous piece of butter, and set back in a hot oven for three or four minutes.

Stuffed Tomatoes.

Choose large, firm tomatoes, not over ripe. Cut off a slice from the stem end of each, remove a portion of the pulp and chop finely. Drain and add to the pulp any leftover mackerel flaked into fine particles or any cold meat or poultry can be used and with it half the quantity of crushed cracker, or bread crumbs.

Season highly with grated onion, salt, minced green pepper, celery salt and add little chopped parsley, also a tablespoonful of vegetable oil for each tomato. Blend the filling, fill into the tomatoes and arrange in a baking dish. Sprinkle with bread crumbs mixed with melted fat or corn oil and bake.

Tomato Souffle.

Melt two tablespoonfuls of fat, add one tablespoonful of cornstarch, and when blended pour in gradually one cupful of tomato puree. Cook, stirring constantly, until well thickened, and add three-quarters of a cup of grated cheese.

When the cheese is melted remove from the fire, fold in the beaten yolks of two eggs and half a cupful of very moist cooked hominy. Season to taste with salt and paprika, and when almost cold fold in the stiffly whipped egg whites. Bake the mixture in a buttered souffle dish.



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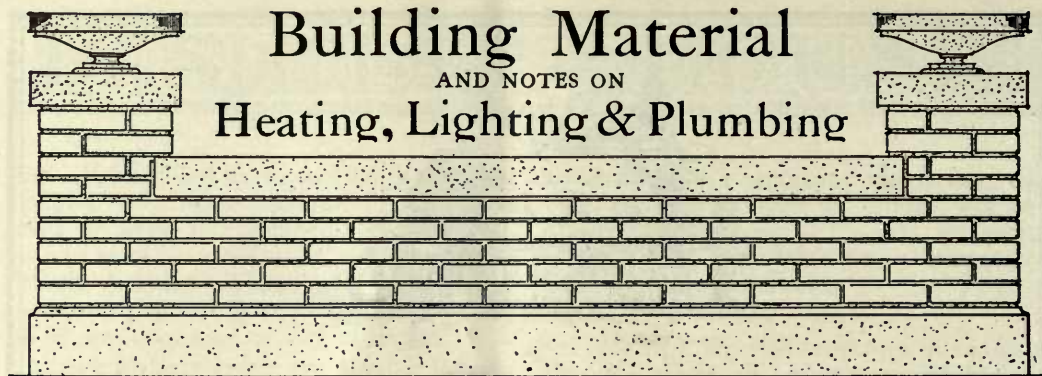
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Building Material

AND NOTES ON

Heating, Lighting & Plumbing

So great is the need for fuel this year, beyond the normal or possible production, that the United States Fuel Administration is asking the assistance and cooperation of each individual householder. This is essentially a war OF Democracy as well as a war FOR Democracy. It is the spirit of the individual fighter and the individual worker which carries the whole work along. So it is but natural for the Administration to appeal to the individual consumer to save every shovelful of coal that is possible. Points which have been discussed in Keith's as good building construction, tight building, and fuel economy for the householder, the Fuel Administration is now urging as a patriotic measure to help win the war.

Let Us Follow the Trail in Fuel Saving

PREPARED FOR KEITH'S MAGAZINE BY THE UNITED STATES
FUEL ADMINISTRATION



YOU have run the furnace for years. You should, by all that seems sensible, you argue, know better than anyone else how to get the best service out of it.

Make the House Give the Furnace a Chance.

Fuel conservation does not necessarily begin in the coal bin nor on the wood pile. A perfect heating plant may be making a lone and gallant fight for fuel conservation while the house is a slacker to the cause. One furnace cannot heat a township, and when there are dozens of cold-air leaks around the doors and windows, you are burdening your heating plant with the task of heating outdoors.

The first thing a woodsman does to his primitive shack is to "chink up the cracks." Why does not the man who lives in a modern dwelling follow this example? Windows and doors can steal more heat than anyone can afford to lose

this winter. Cracks so small they are scarcely visible will cause a large fuel waste. Weather-stripping is the best means of arming a house against the onslaughts of winter winds, but if this method is impossible, strips of felt or even paper may be used to a good advantage in keeping out the cold air. Storm windows on the exposed side of the house are almost essential.

There may be other means which occur to you of resisting the winds of winter when you take a census of the air-leaks in your house. The open fire in many homes makes a futile attempt to heat the vast out-of-doors as well as the room in which it is located and fails flatly in both efforts. At least 90 per cent of the heat of an open fire goes up the chimney. Think of it! Every time you turn a bucketful of coal into the grate, nine-tenths of it helps to heat the chilly night without while you try to keep warm on one-tenth. An open fire is cheerful. We

Americans will find other ways to bolster our morale. Smiling soldiers, knee-deep in mud and water, are holding on to their high spirits without the aid of as much as a candle flame. Shall we waste coal in open fires, merely because the fires cheer our spirits?

When we face this war-time need of fuel, we find that there are minor details of operation that we have overlooked. They seem insignificant but perhaps our neglect of these very details may lose a few extra pounds of coal every month. A few pounds are not much for one family, but when those few pounds are multiplied by 20,000,000 American families the count goes high enough to send soldier-laden transports and supply-laden vessels, following them, to the battlefields of democracy.

We are open-minded patriots, ready to follow fuel orders without argument. If certain methods of fuel saving with which we are unfamiliar bear the stamp "successfully tried out" we are ready to put them immediately into practice in our heating and cooking plants. Now is not the time for 20,000,000 private investigations in as many families regarding fuel conservation. Fuel must be saved at once, and the only way to do it is to follow the blazed trail of best methods.

The Enclosed Radiator and Its Efficiency.

The radiator is not particularly attractive as a piece of furniture in the room. How shall we treat them so that they shall have as few objectionable features and as high an efficiency as possible? They may be recessed in the walls or placed under seats or enclosed by grills. But in that case they lose in efficiency. "Radiators installed so that the air does not circulate freely around them suffer a loss of efficiency and the amount of radiation must be increased 20 per cent for recessed radiators and 40 per cent when radiators are concealed."

Through the courtesy of Mr. J. F. Beckbissenger, architect, we give an installation which he has used, with satisfaction for some time, and which gives an excellent solution of the problem of radiators under windows, as it keeps the air in circulation around them even though they are recessed or built under seats.

In a residence there are objections to leaving radiators exposed in the room as they will cause dust to blacken the walls

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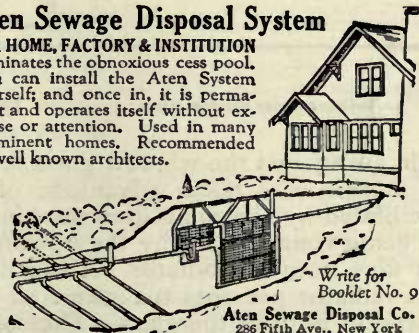
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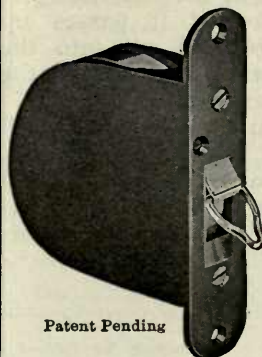
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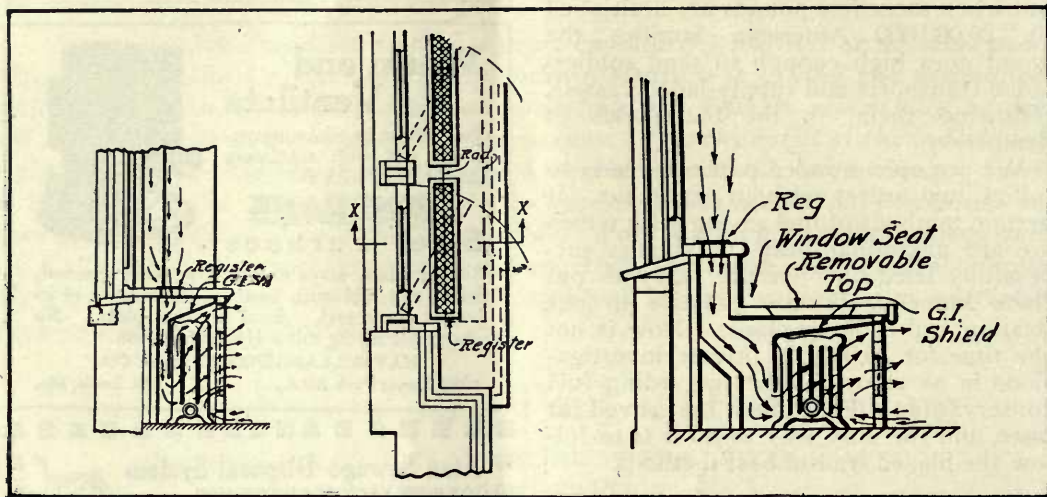
and ceiling just above in a very unpleasant way; and if placed under a window the curtains and hangings soon become soiled and almost greasy.

By so placing the radiators under the windows that the natural currents of the air keep a circulation through the grills and openings there has proved to be little loss of efficiency, even though the radiators are partially or entirely enclosed.

On the cuts the direction of the air currents and their movements are indicated by the arrows. The natural tendency of

all seems to be drawn down through the grill. As the air which strikes the surface of the window is likely to be cooler than the air circulating at the floor, there would be a stronger circulation of the air and hence a greater efficiency for the radiator than when standing in the dead air of a recess.

The architect states that he has been using this method for enclosing radiators for the last six years and has not been accustomed to allowing for decreased efficiency, as is customary for enclosed radi-



Radiator under window sill

Plan

Radiator under window seat

Courtesy of Heating and Ventilating Magazine

cold air against the window glass to drop is in this case taken advantage of and facilitated by the radiator action, instead of being counteracted by the upward hot air flow from the radiator. A shield over the radiator prevents the warm air from rising in front of the glass. The cold air from the window drops through the upper grill down back of the radiator. As the air becomes heated it passes up through the radiator and out into the room, inducing a current of air along the lines shown by the arrow.

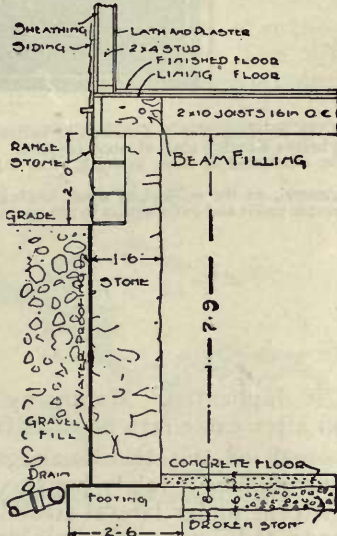
The other diagram shows the same arrangement applied to a window seat. Both the window seat and the sill remain cool, and there seem to be no uncomfortable drafts from the windows, as the air

ators as compared with free standing radiation. During the extreme winter weather, heating systems installed in this way have kept the houses warmed. With this arrangement as the difference of temperature between the inside and outside of the glass became greater there would naturally be an increasingly stronger circulation of the air, tending to keep the radiator so installed at full efficiency.

The black, grimy spots on the newly decorated wall which gradually appear back of and above the radiator are a great trial to the housewife and an installation which will give the usefulness of the radiator without having it in sight and at the same time protect her curtains and wall will be doubly welcome.

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(Fig. 6)
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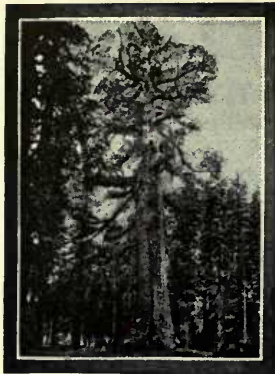
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WOODS

AND

HOW TO USE THEM



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.

Mahogany



MAHOGANY has been the word to conjure with, especially in speculative building. An owner has felt that it was worth the money to him to be able to say to his prospective client, "It is all finished in solid mahogany," and by the same token "imitation mahogany" has filled the houses.

Mahogany is a very beautiful wood. Tradition says that it was first used in the repair of some of Sir Walter Raleigh's ships at Trinidad in 1597. There is a story that some mahogany planks brought to England as ballast by a West Indian sea captain attracted the attention of his brother, a Dr. Gibbons, who was building a house in Covent Garden, who suggested that the wood might be used in the house. The carpenter, however, objected to using them because the wood was too hard. Later Mrs. Gibbons wanted a small box made, and the doctor sent the mahogany to a cabinet-maker. He also complained that the wood was too hard. But the doctor insisted as he wanted to preserve some of the wood as a memento to his brother.

The finished box polished so nicely that the doctor ordered a bureau made of the same wood. The cabinet-maker displayed that in his shop window before delivering it. The Duchess of Buckingham saw it and begged enough wood from the doctor

to have it duplicated. Mahogany furniture soon after came into popular favor.

The wood of the true mahogany is hard, fine-grained, easily-polished and durable except under lateral strain. It is some shade of brown with a pinkish cast and grows more beautiful as it ages. It is old mahogany which has naturally the rich reddish tone which is so much admired that the new wood was stained to get at once the desired tone. The brilliant red tone which was so popular for a time was very far from giving the rich effect of old mahogany. The natural color of mahogany is really much more of a brown than red, or with a rosy tinge in the brown, giving, when finished, a warm brown color which grows richer in tone as the years go by.

It is only a comparatively short time since the only mahogany used in commercial quantities in this country was imported from Santo Domingo in the West Indies, and this wood established a reputation which has outlived the wood of that island.

As this variety of mahogany began to grow scarce other islands of the West Indies were searched and Cuban mahogany began to establish itself as a rival to Santo Domingo. This in turn became very scarce and is now exceedingly high in price. At about the same time that Cu-

ban mahogany began to be generally known there were quantities of logs being cut in various parts of Mexico and Honduras, which were found to produce lumber in most respects equal to Santo Domingo or Cuban. Generally speaking, these Central American varieties were softer in texture but in many cases this softness was an advantage in working.

Florida, Cuba, Mexico, and Honduras exhibit distinct features of soil and climate and produce grades of mahogany of characteristic qualities. The difference between woods from the various regions



The shaded area shows the natural habitat of mahogany

is often so marked that an expert can tell at a glance from which one of them a given piece of wood has come.

Mahogany from those parts of Mexico and British Honduras where soil and climatic conditions are very favorable to rapid plant growth is considerably lighter in weight and often much lighter in color than that from more elevated regions.

From 100 to 150 years are required for a mahogany tree to reach merchantable size. It grows both on high dry ground and in low moist situations. It is on the latter sites, in Mexico and Central America, that the largest timber is produced.

Both species have been planted experimentally in India, Burma, Africa, and other tropical countries, first being introduced at the Calcutta Botanic Garden toward the close of the eighteenth century. Since 1865 its artificial extension over India, Burma, Andaman, and parts of east and west Africa has been fairly rapid. The large-leaved species has been introduced into the Philippine Islands, where it grows very rapidly, but the wood is soft.

INTERIORS BEAUTIFUL

200 VIEWS



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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Mexico produces larger mahogany trees and a greater yield per acre than any other country. Honduras produces logs 40 feet long and 4 feet in diameter. The wood is a beautiful dark color with a more or less wavy figure. Even 6-foot pieces with a wavy grain and including crotches of the trees sometimes bring fabulous prices. Occasionally single logs have been sold for \$3,000.

The color of heartwood ranges from a rich light brown to a dark red-brown, the shade becoming deeper with age and exposure. Florida mahogany is the darkest colored, Cuban and Honduras wood come next, and the baywood grade of Mexican mahogany is the lightest colored. These marked differences in color, as also in density and weight, appear to depend entirely upon the rate of growth, which, in turn, is dependent upon soil and climatic conditions.

The name mahogany is applied commercially to more than 50 different woods. True mahogany (*Sweitenia mahogani*), however, is produced only in tropical America, from the tropical parts of Florida and adjacent keys and islands to the northern part of South America, according to the government bulletin. Perhaps half the lumber now sold and used as mahogany is not the true mahogany, the available supply of which has been greatly depleted and is not sufficient to meet the large demands. Some of these other woods, in their general structure bear little more than a general resemblance to true mahogany, but many of them are beautiful woods and will take the skilful finishing which makes them much like mahogany in appearance. When such woods come to be known and used for what they are and for the beauty which they possess their real value will not be less than when they are used as an imitation of mahogany.

Australian mahogany is the name applied to several species of the eucalyptus growing in Australia; East Indian mahogany is lumber made from the rohuna tree; African mahogany is from trees which belong to the same natural order as the true mahogany. Philippine is sometimes called the American mahogany. There are woods called mahogany from India, Ceylon, Andaman, and Borneo.

Air Patrol Against Forest Fires.

An announcement comes from Vancouver, B. C., that the provincial government has contracted for the construction of a flying boat, which the Government will operate on lease for a time with the option of purchase. "The flying boat is different from a seaplane, being a boat with wings and similar in design to those in use off the British coast for patrol work. It will have a wing spread of forty-two feet with a chord of five feet, and will be of mahogany. The aviator and observer will be seated forward of the planes, while the engine will be located overhead between the planes and will have a thrust propeller aft, allowing unrestricted vision in front. The power will be from a 100 horse power Roberts engine, which will develop a speed of seventy-eight miles an hour and will allow for the machine to climb 3,000 feet in ten minutes. The advantages of such a machine to aid in the detection of fires are obvious. One of the considerations that led to the trying out of the possibilities of a forest patrol from the air is that several of the staff of the provincial forest branch are serving in the air in France."

Back to the Wood Lot.

Gone are the days of the wood shed in most American homes, even in the country. The wood lot has turned into a family park and while the multitudes clamor for fuel the trees stand helpless no matter how willing they might be to help win the war. An unused wood lot does not help to send ships to France. Careful harvesting of wood will clear out the rubbish and dead wood from the grove and improve its appearance as well as its timber value.

Farmers and woodsmen with large wood lots have a distinct service to perform for the country. Every cord of wood they use or haul to their neighbors in the nearby town reserves coal to bunker a ship for the Atlantic. Although it is not economical to transport wood where rail service is necessary, a great deal may be accomplished by supplying wood to those who live within team distance of the country. This war will be won by the countless little efforts of individuals. Make a survey of the old woodlot and see what it will contribute to the cause.



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KEITH'S MAGAZINE
MINNEAPOLIS, MINN.

SPLINTERS AND SHAVINGS

Farm Labor Needs Housing.



HERE is at this time" says G. I. Christie, of the Department of Agriculture, "a need for a larger number of comfortable homes for the tenants and hired help on the farms. The old shack which was simply a place in which to exist will no longer satisfy the workers. For the appearance of the farm and the beautification of the country, suitable, comfortable homes should be built and maintained. The building of houses for the help will allow many farmers, instead of moving to town, to remain in their own homes on the farms, where they can render the greatest assistance to the community and to agriculture."

The war has emphasized this need, because the drafting of the young men has necessitated looking to those of more mature years for the farm labor supply, at least while the war continues. Naturally most of the older men are married, and therefore homes suitable for families to live in must be provided.

Shorter Hours vs. Output.

An important advance in working conditions has been effected in changing the hours of labor. Formerly Scotch tweed mills were open from 6 a. m. to 6 p. m., with two breaks of one hour each, making 55 hours per week. During 1917, however, the working day was reduced to the limits 8 a. m. to 6 p. m., with one hour break for the mid-day meal, making 49½ hours per week. It is now contended that the output has not greatly suffered. Of course, in the case of continuous machines like cards there must be a decrease in output, but in the operation of looms, winding machines, etc., where much depends on the dexterity of the operative, a reduction of hours is apt to be compensated by the increased energy of the worker.—*Commercial Reports.*

Such a report from a government bulletin is eloquent comment on the effect of shorter hours of work, with a reduction of 5½ hours of work a week for each worker,

yet "the output has not greatly suffered."

Rehabilitation Hospital.

One of the largest and most complete hospitals in the world is being erected by Henry Ford at Detroit, which is expected to take a large part in the work of rehabilitating American soldiers wounded overseas. The hospital will bear Mr. Ford's name.

Built on a 20-acre tract of land, the hospital will have 50,000 square feet of floor space. It will be a four-story structure, except for the diagnostic building in the center, which will go up six stories.

With 1,300 windows it will be impossible for a person anywhere in the building to get more than 24 feet away from the light. Forty porches will surround the structure and a roof garden is to extend over the entire building.

Mr. Ford is spending \$3,000,000 on the institution.

Fuel from Wood and Farm Waste.

British Columbia reports a new process of making smokeless fuel from wood wastes, utilizing not only the sawdust produced in lumbering, but straw, cotton, grain hulls, sugar and hemp stocks. It is stated that from 150,000 cords of wood which are said to be wasted daily on the Pacific coast this process would produce 13,000,000 tons of the new fuel annually. It is not a briquetting process, but one by which waste is converted into artificial fuel. Analyses given of this fuel show 90 per cent fixed carbon, 3.5 per cent ash, 3.5 per cent volatile matter, and 3 per cent moisture, with 13,740 British thermal units per pound.

"The Ash."

The oars of a row boat are often referred to picturesquely as "the ash," but this term is no longer descriptive, inasmuch as it has been found that Douglas fir makes very excellent oars and the United States steamboat inspection service at Washington, D. C., is now making elaborate tests with a view to the extensive use of this wood in naval, emergency fleet and merchant marine use.

KEITH'S MAGAZINE

ON HOME BUILDING



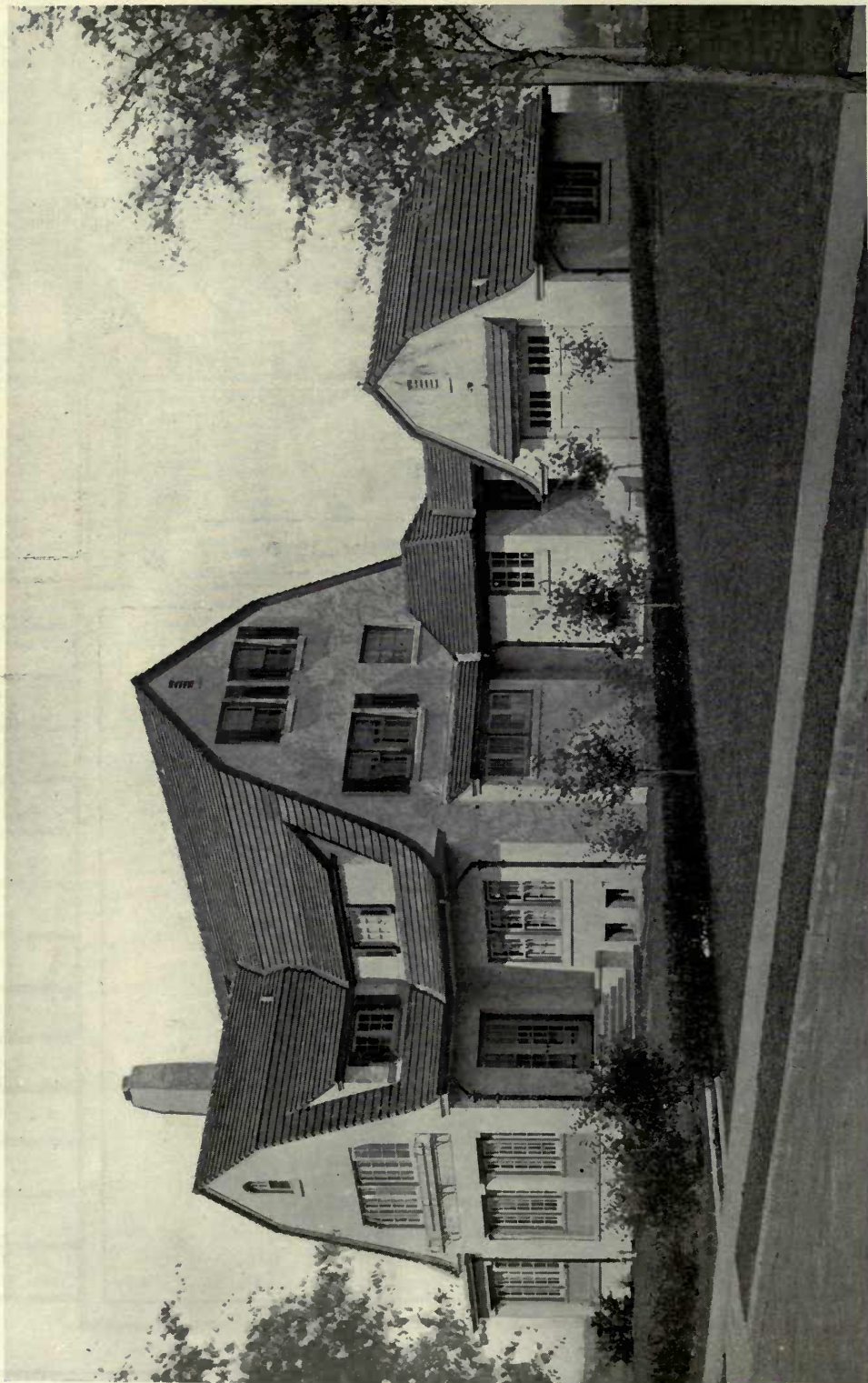
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A home on Long Island built by the Sage Foundation



Glazing the Porch

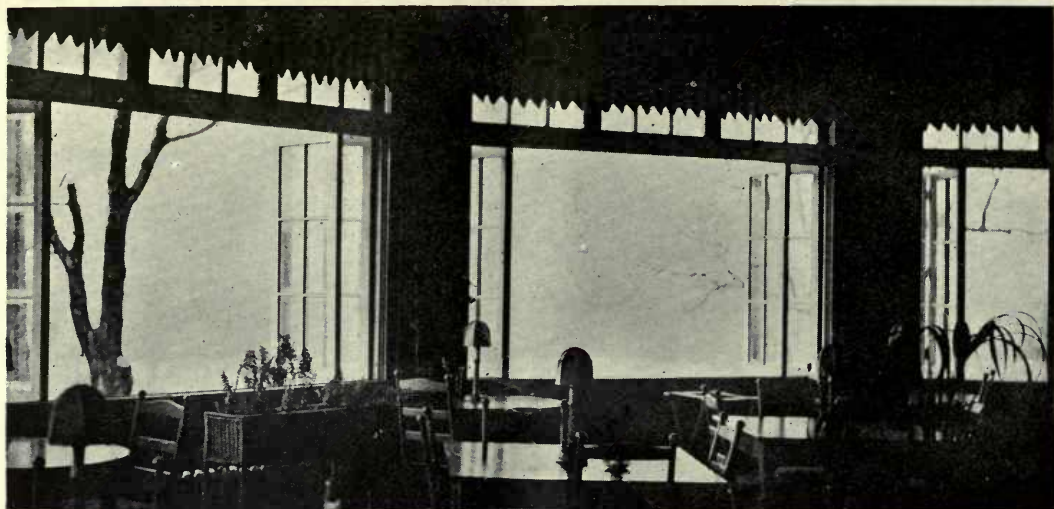
Anthony Woodruff

WITH the first breath of the wintry winds the screened porch which has given such comfort during the heat of the summer loses its value, temporarily, at least, and becomes only so much waste room about the house. Then comes the time when the glazing of the porch becomes a matter of immediate importance and the question of how it can be most easily and satisfactorily done is the thing to be settled.

In many cases a regular double hung window is installed in the porch when it is building, or some type of a sliphead or

street-car window, when it is desired to open up the whole space of the window. To many people this makes the porch too shut-in and too much like the rest of the house, and the porch is screened temporarily and used as an outdoor room during the summer months.

If, however, no provision has been made for glazing the porch, then the possibilities are narrowed down to some form of a sash which does not require special construction in the frames if the space is to be easily glazed, and this would mean some type of a casement.

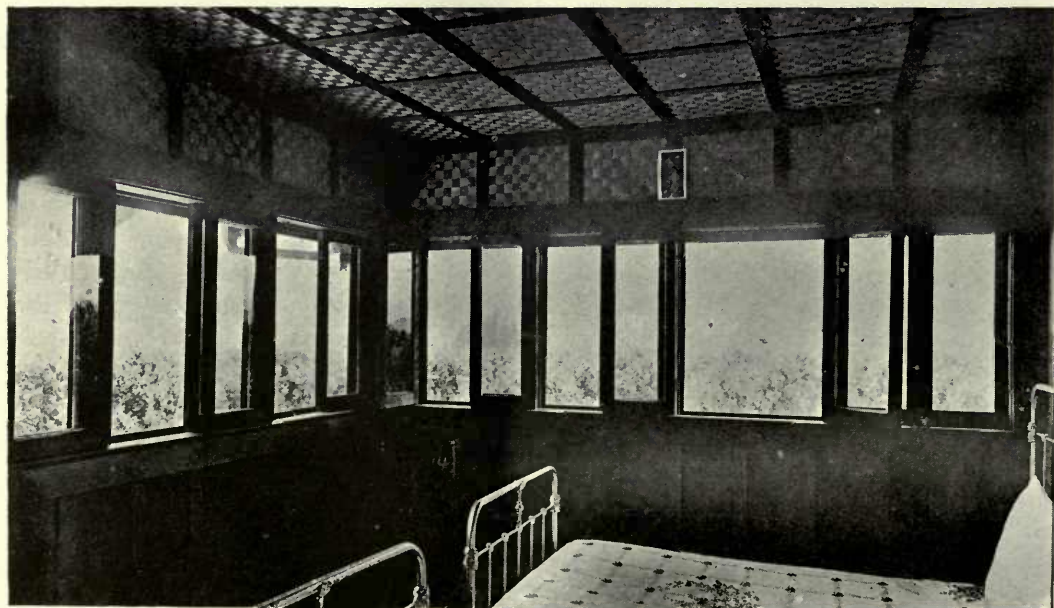


Wide view from the porch of a Country Club

There are so many things to be taken into consideration in glazing the porch, that it resolves itself into rather a complicated problem or series of problems. In the first place the screening as well as glazed sash must be taken into consideration. The flowerboxes and growing flowers under the windows must not be broken by pushing a sash back and forth

over them. The sash must be tight when closed so that wind or rain can not beat through the cracks. Curtains for the inside and probably awnings for the outside must also be considered.

Casement sash which open out can easily be made tight. They require a fastener of some kind which will allow them to be held firmly at any desired



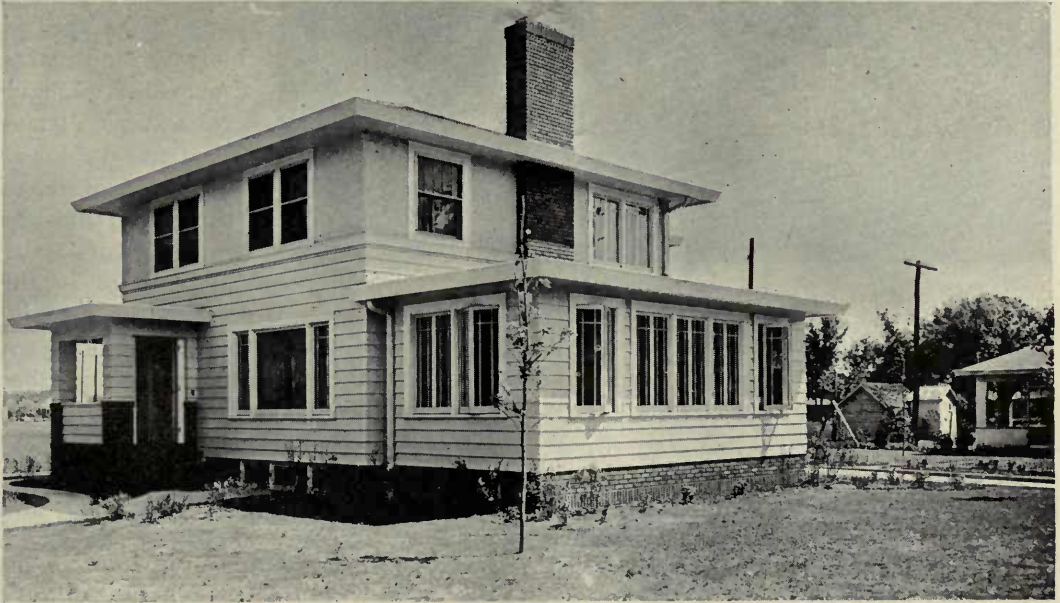
This sleeping porch is simply enclosed by hinged sash.

amount of opening, and very satisfactory holders are on the market. In this case the screen must be placed inside the glass and flower boxes dropped so the sash can be opened over the flowers or vines grown in them.

A sash or screen which swings inside is likely to interfere with the inside curtain arrangement. This is especially the case with screens, and some type of a sliding screen is often preferred. It is only

the usual window. There is a screen on the market which rolls, like a shade on a roller, which is a convenient solution in some cases.

Another solution of the problem of glazing the porch is the casement window hinged in pairs, which slide to one side or the other of the opening, and which brace and hold each other in place. This arrangement allows the full space to be opened when the windows are opened,



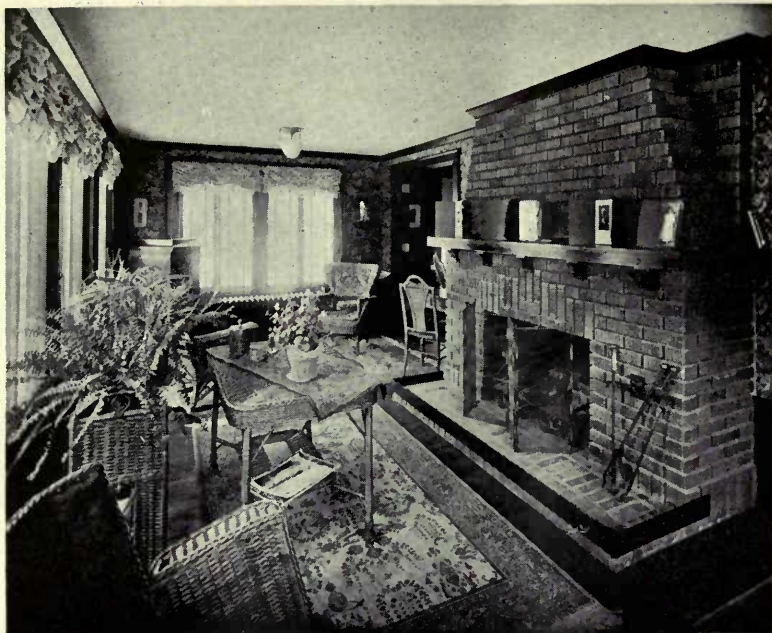
A sun room adds to the attractiveness as well as to the livable quality of a house

necessary for the screen to slide far enough to allow the glazed sash to be opened or closed, and such a provision is easily arranged. Where the sash swings inside, the curtain may be placed on the upper rail of the sash itself, and the full size of the opening screened on the outside. Where the sash swings inward, however, special attention must be given to the details of the sash, especially at the sill, so that the rain is not likely to be beaten in to the room around and under the sash. This can be made tight with proper care. There are also special hinges which, before opening, raise the sash over the ledge of the window stool similar to

without the necessity of stationary meeting rails.

In glazing the wide openings of a porch the windows may be made a real feature, in a decorative way, by the treatment of the glass. The small square panes are always effective, and are usually the simplest way in which the glass can be divided.

The first illustration shows the porch of a charming house, enclosed with small paned casement sash set in groups. The house is of unusual interest in the combination of materials, brick, stucco and timber work. The Tudor arch of the windows is presumably a constructional



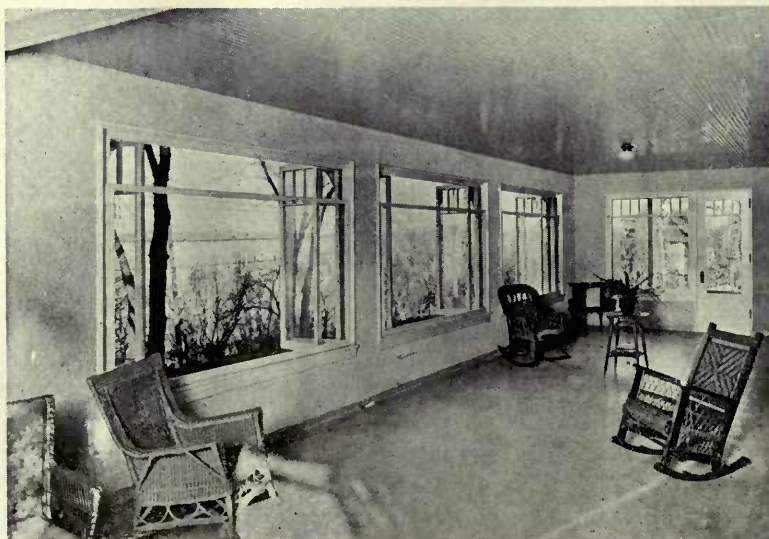
Sun room furnished in wicker

feature well suited to the timber work, while the brick course at the grade and in the porch floor and steps adds a good touch of color.

In perfect weather one would always prefer an open porch. The popularity of the glazed porch lies in the fact that it gets the best out of any season. It can be opened completely when the air is fine. It gives protection against the sharp biting wind, yet preserves the outlook as far as possible for its daylight use, and allows outdoor sleeping without being exposed to the weather.

The sleeping porch shown is enclosed with simple sash, hinged to swing inward, in

paper. These were selected to give a plain texture or otherwise according to whether there had been many cuts used on the printed page for which the matrix was made. The panels were tinted in keeping with the color scheme of the room, and in this case kept a record, was in fact a memento to the owner, while it was only



Big sun porch of a summer home

a piece of unique decoration to the casual visitor in this guest room.

Another interior view is the porch of a country club which is used as a dining room, with a wide view of river and wooded hills. This space is so enclosed that the four sash closing the opening may be pushed to one or both sides, leaving unbroken the view from the opening.

The next group of photographs show a sun parlor, such as might be added to any house, seemingly, but which on the inside becomes intrinsically a part of the home. The chimney is made to carry a fireplace both in the living room and for the sun room. The division of the glass in the sash emphasizes the vertical lines, as they do in the regular windows of the house.


This sun room is furnished in wicker. People often ask how best one can arrange for flowers and growing plants in the sun parlor. A wicker flower box such as is used in this room is a very practic-

able solution of the question. The metal inner box can be lifted out and carried outside or even set into the bath tub when the ferns need to be washed or to be put under a spray. Table, desk and chairs are all of wicker. The big fireplace is of brick, as is the raised hearth. A rack for the fire irons is made a part of the fireplace itself. The raised hearth with the fender gives a certain amount of protection to the rugs from the danger of sparks from the fire.

The last illustration is the big sun porch of a summer home at the lake. The window openings give a splendid view, with which the sash does not interfere. The windows are screened on the inside with a sliding screen in two parts which meet at the transom-like division of the sash. In this way the screen may be pushed up far enough to allow the windows to be adjusted, yet the line is high enough that it does not interfere with the view.

Food

Edith M. Jones

EVER, perhaps, has food been so important a factor in world development as it is today, with its triple function: that of feeding the world that the people may live, and added to this the spiritual elements in the increased morale of the troops which are well fed themselves and know that the people at home are cared for, and on the other hand the spirit which has come to the American people in sharing what they have, in no great abundance, with other people in greater need.

To the great mass of people in this country, since the pioneer days at least, eating has been one of the pleasant features of the routine of living, sometimes so pleasant that it seemed worth while living to eat. The household centered around a

rather lavish entertainment, and the house was planned and built with that idea in mind quite as much as for the actual living of the family. "The kitchen was large and required a great deal of work,—but it allowed one to entertain so nicely." It has been a quick reaction which has cut the guest room out of the average house and carried the "entertaining" to the Club. Nevertheless, it is not the true spirit of hospitality which has been reduced, but rather its more or less superficial manifestation. "Man is essentially a social being," and woman is even more so. What has been pruned from the social world is coming into blossom in social service. What was hitherto offered to an equal to be returned in kind is now given freely to others because it renders

real service. Big industrial plants are establishing dining and lunch rooms where the food is not less valuable than the friendly atmosphere which it engenders.

This war is putting a test upon democracy which even to the most optimistic is a revelation. Even in aristocratic England ladies highly born and bred, whose hands have never been allowed to be soiled with labor, are doing the most menial work voluntarily, in the service of hu-

manity. The "leisure class" has been eliminated. While many women are hunting war work, the majority have sensibly taken up the work nearest them, which in many cases is preparing three meals a day, and the personal supervision of their own kitchens.

same thoughtful study as the rest of the house.

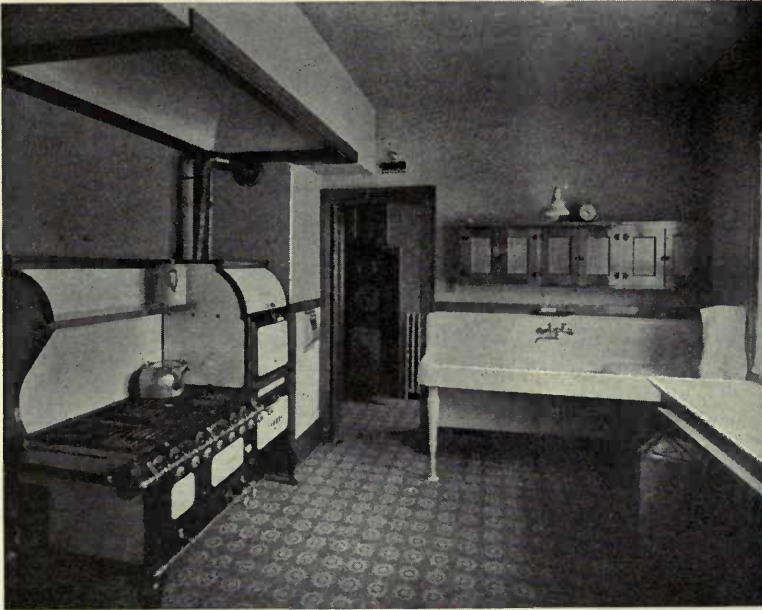
The woman who spends much of her own precious time in her kitchen, and the householder who does not allow any part of his home to receive less than the most thoughtful attention, meet on common ground in the decoration, or careful finish of the kitchen. It was natural that one of the first things to receive attention was the range. The old-fashioned

black cook stove, which rusted and could not be kept clean, has become a thing of the past. The modern range is generally a gas range and is white on all of its large smooth surfaces, with enameled pans for the broiler and under the burners. Nothing has done more to eliminate the drudgery of the kitchen than the passing of the old types of cooking stove which made black and greasy everything

which came in contact with it.

The sanitary condition of the refrigerator is one of the most important points in relation to the food which is kept in it. Here, unless it is easily kept clean, the housekeeper must spend too large a proportion of her time, for a sanitary refrigerator is imperative if the family is not to be exposed to possible danger. The modern refrigerator is so constructed and finished that it may be kept sanitary with the minimum of labor. It is immaculate on the outside as well as on the inside, as dirt and dust does not find a ready lodging place on its polished surface.

Metal lined and closely covered flour

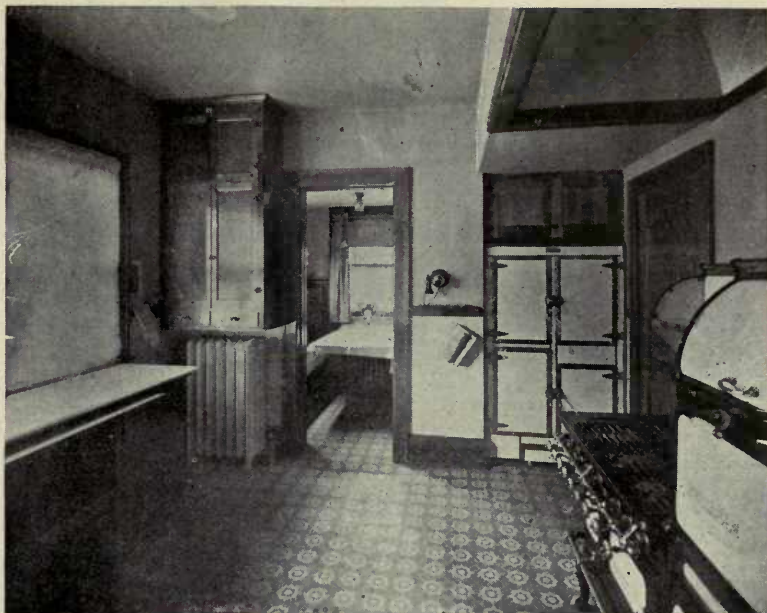


Shows the hood built over the range

and meal bins keep foods in prime condition and prevent possible inroad from mice or insects. A metal lining for pan closets has its advantages.

The material which shall be used for the table top is another matter for consideration, both from the sanitary and the aesthetic point of view, since the work table must come more or less in direct contact with some of the food. In the kitchen shown in the photographs, vitralite, a white glass, has been satisfactorily used, as it is strictly sanitary and very good looking. The moulding board, however, is of wood and is pushed under cover of the table top.

Another feature of this kitchen which is very well shown in the photographs is the hood built over the range. The steam and gases which rise over the cooking are more or less saturated with fat or oil, and as every cook knows leaves a film of grease over the tea kettle and cooking vessels when these utensils have cooled. This is especially the case in any



Nothing has done more to eliminate drudgery than the white range and refrigerator

kind of frying. Just such a film is deposited on the walls and ceiling above the range if the gases have no means of escape and must settle back as they cool. The hood built over the range gathers these gases directing them to the vent which allows them to be carried to the outside air. During the extremely warm season the excessive heat is carried off in this way. In other years we have not considered the possibility of heat being wasted in the same way. A slide or damper which would partly close the vent would allow the matter to be regulated.

Hedges and Exclusiveness

Chelsa C. Sherlock



HERE is something about a fence that appeals to the average individual, especially if that individual is inside the fence. Just why the majority of us should prefer to fence ourselves in, is a problem in human na-

ture to be handled by students of human nature.

Since man must have a fence, he has naturally turned to Nature for the assistance necessary to make his fence as attractive to the eye and senses as possible.



Hedge of Barberry, trimmed

We no longer see picket fences in our lawns, but we do very often find hedges of various kinds.

In order to determine just what kind of a hedge to use on one's home grounds is a matter that may be readily answered by ascertaining what one's preferences are. If there is no preference, then it is necessary to acquaint oneself with the various hedge growths and form a preference.

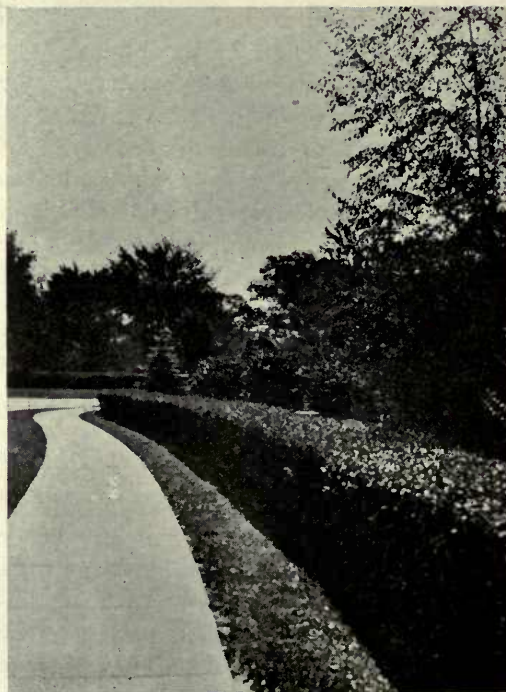
There are any one of half a dozen shrubs which lend themselves readily to hedge making and blend well into the landscape. It should be remembered in the first place that a hedge is not a fence, although it may serve to define boundary lines and perform the function of a fence in that respect. The average hedge, in order to be at its maximum attractiveness at all times, must be more or less coddled until it has attained its growth. It is better not to plant a hedge at all unless you are reasonably certain of giving it the care needed until it has reached its full

growth and height. Nothing is more unsightly than an unkempt and uneven hedge, some plants killed out, others broken off or stunted.

In varieties, there are several. The most common and probably the most popular is the privet hedge. It is strong and sturdy, makes a rapid growth and can be easily wintered with even the slightest of care. It will seldom winter-kill if mulched with two or three inches of straw or leaves.

This is the most popular hedge for trimming. When neatly trimmed and kept that way it will form a solid square of dark green around the lawn. It is a very beautiful hedge and cannot be truly appreciated at its best unless it is trimmed at least once every thirty days.

Another hedge that is more rugged in appearance when allowed to go untrimmed is the spirea shrub. This shrub makes an excellent hedge and in the early summer, when it is in flower, it is a mass of white blossoms. During the remainder



Privet hedge, trimmed

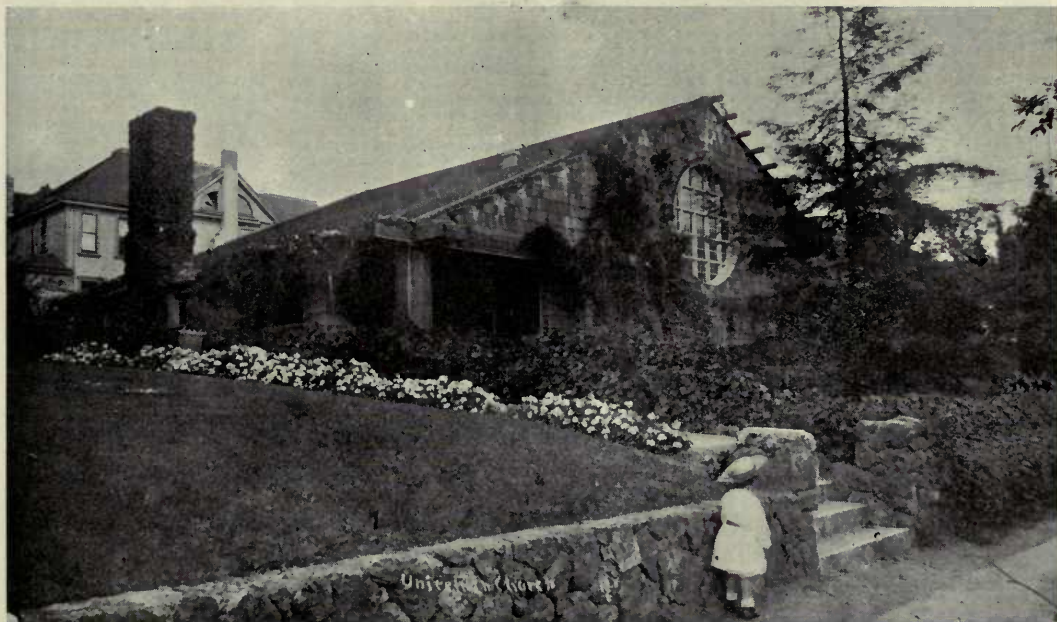
of the season it is a deep green in color and makes a fine hedge. If untrimmed it will attain a height of six or seven feet and give a degree of privacy that is not possible with the privet or other trimmed hedges.

The spirea may also be trimmed, not so short as the privet, perhaps, but it will stand a substantial cut-back. It winters well and will not kill out if mulched properly, even in extreme northern climates.

carry and propagate wheat rust and it makes quite as beautiful a hedge. In some respects the Japanese barberry has the advantage as it does not naturally grow so tall.

Early in the fall barberry quickly turns to a multitude of colors, bright orange, yellow and red, and is a pleasing sight, a gentle reminder that autumn is near at hand.

This shrub makes a very sturdy growth



Flower hedge, and vine covered wall

The barberry has been another very popular hedge, judging from the number which were to be seen in almost any residence community. Being a "prickly" shrub it was very effective in keeping dogs and other prowlers out of the premises, provided it grew thickly enough.

Since the common variety of barberry has been convicted of guilty connivance in the spread of wheat rust, notwithstanding the satisfactory way in which it carries itself in other respects, much beautiful planting, probably acres of it, have been ruthlessly torn up, grubbed out, and burned. The Japanese variety does not

and may be allowed to grow at will or it may be trimmed as the privet hedge. It seems to be more of a success, however, when trimmed round rather than box-like, as most of the privet hedges are being trimmed at the present time.

The barberry also produces a small red berry in great profusion, which make it doubly attractive to some people. A little barberry may be added to give a spiciness to apple jelly, but if the berry serves no useful purpose, merely the bit of color added to the general scheme gives it sufficient reason for being.

It is of the branching sort and if al-



A hedge of roses in the early summer

lowed to grow at will it will not attain a great height, but will send out low spreading branches in every direction. Where it is intended to trim the barberry, it should be carefully trained until the desired height has been reached.

It is a hardy shrub and will winter as easily as the privet or spirea.

More hedges die the first year than at any other time in their period of growth. Some caution should be exercised as to the soil in which the hedge is set. If it is not naturally rich but is a heavy clay, it would be well to dig a trench about two feet wide and the same in depth and remove all the soil. You can then have your nurseryman fill up this trench with soil which nurserymen specially prepare for their shrubs.

The soil should be stirred at least once

each week, and if the season is dry the hedge should be thoroughly watered every evening and the soil stirred up early the next morning to prevent baking.

In winter killing, hedges get their severest set-backs. It is the action of the frost heaving and cracking the soil that causes the damage. It eventually reaches down to the tap root in which the vital sap has been stored and destroys it, causing the plant to die.

If your hedge is properly mulched, it will easily winter and there will be no ragged places in the hedge the next season, due to winter killing.

Altogether, the hedge, no matter what the variety of shrub used, adds much to the appearance of any place; it gives a certain distinctiveness and charm all its own.

Elasticity in Planning the Home



HOUSE which will grow in its usefulness as the family grows, which will fit itself into their varying needs and moods, is more likely to be attained when the house has been carefully planned, and

built so as to be all on one floor, or there may be two rooms finished on the second floor with windows in the several gables. As shown there is a living room, a dining room and den or office, with an outside entrance, occupying the front of the



A brick porch screened by the planting

E. W. Stillwell, Architect

studied through a period of time before the actual building is to begin.

This is the time for home planning. When the war is over, or perhaps when the latter stages shall be in sight, a tremendous amount of building will be demanded. There will be likelihood of hurried building and hasty planning with the danger of ill advised results, unless the necessary building has been carefully planned beforehand.

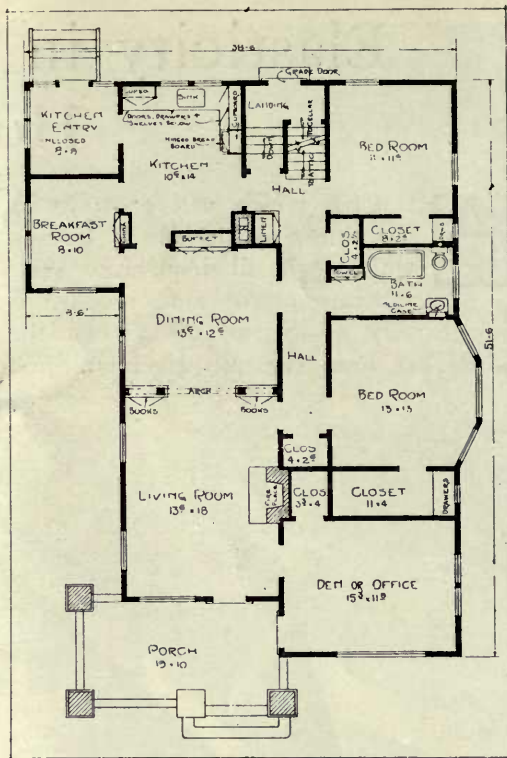
The bungalow here shown may be

house. In addition there are two bedrooms and a bath, with good closets, connected by a central hall. The kitchen connects with both the dining room and a small breakfast room. A stairway opens from the hall which leads to the second story, either as attic storage space or as sleeping rooms under the roof. Two rooms may be planned on the second floor, with good closets. Low as the roof seems these rooms have a 7 foot ceiling, dropping to 5 feet at the clip of the rafters.

The gray brick work of the porch is nicely designed, and harmonizes well with the white stucco of the gable. It is laid up in rather an unusual way as to form, and gives an excellent background for vines.

Alternate plans show the middle bedroom with a size of 16 by 13 feet, by eliminating that much of the central hall way, making the bedroom open from the living room and from the hall. Omitting the hall would make it necessary in going from the kitchen to go through either the dining room or the bedroom in order to reach the living room, so it is omitted only when such an arrangement is desired.

A garage may be built adjacent to and back of the bedroom, which may be conveniently heated from the heating plant for the house. In that case a door from the stair landing, which is at the grade level, opens to the garage itself, while another door opens to the outside.



A Seven Room Cottage

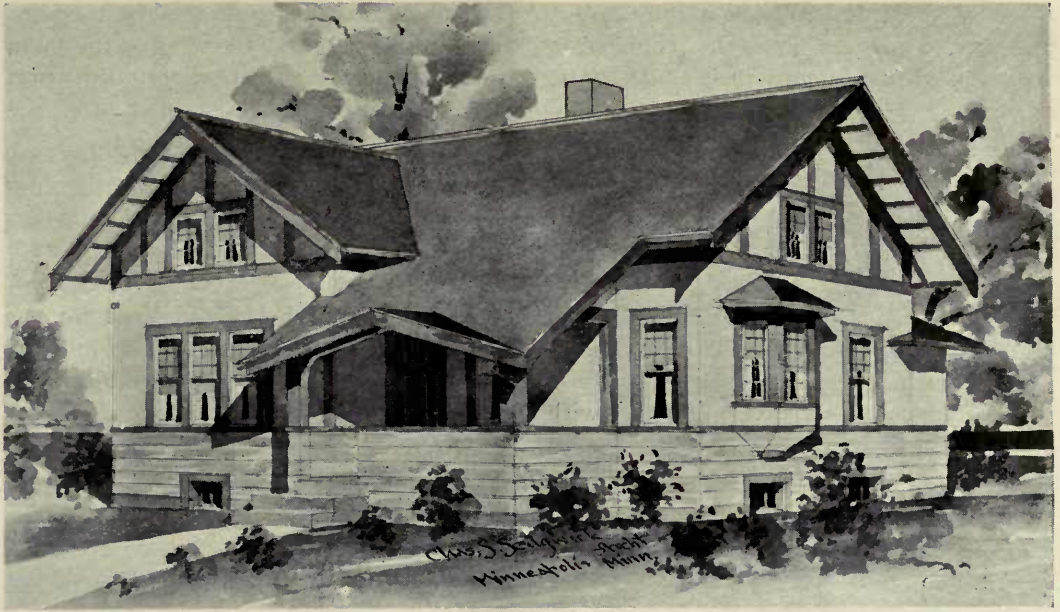


EVEN for a small family three or four bedrooms are almost a necessity, especially where a room must be provided for a maid, and a guest room is desired. The accompanying plan has four bedrooms, living room, dining room and kitchen, built into a compact house 32 feet in width across the front with 27 feet in depth. The studding is 12 feet, with the bedrooms set back from the house wall to get head room. The ceilings are 8 feet both for the first and for the second story rooms.

There is a full basement under the house with concrete walls. The main structure is frame, sheathed, papered and covered with narrow siding to the sills of the first story windows, and stuccoed above that line, with timber work in the gables.

The roof is shingles and stained. All outside cornices, timber work and trim are stained a dark brown, while the sash is painted white. The chimney is centrally located so that it emerges near the ridge of the roof, giving it the protection of the roof as far as possible, with as little danger as may be from possible down currents, and also holding the heat from the chimney in the house.

The plan of the main floor is of the central hall type, with the entrance through a porch which may be screened for summer or glazed for use in cool weather. On one side is the living room with a bedroom opening at the back of it. Connecting with the bedroom is a bath and a closet. On the other side of the hall is the dining room with the kitchen back of it. A buffet is built into



A Stucco Cottage

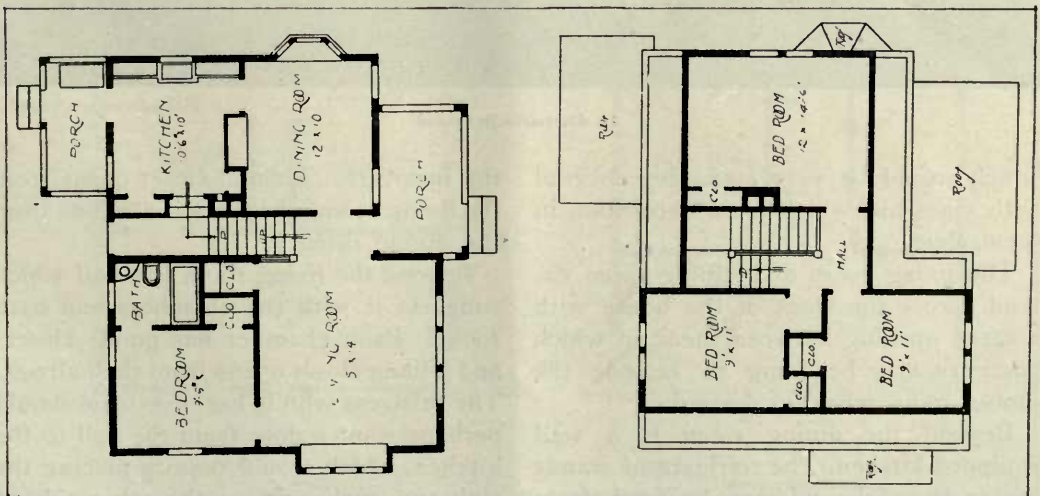
Chas. S. Sedgwick, Architect

a niche in the wall. In the kitchen is a built-in cupboard or cabinet on either side of the sink. Three steps below the kitchen floor is the passage with a grade entrance, which leads to the basement, under the main stairs. There is a good closet in the kitchen.

On the second floor are three bedrooms, which are not the full size of the rooms under them, headroom for the

whole room being gained by the smaller size of the second floor rooms.

Since a bath room is not shown on the second floor, it would seem better to have the bath room accessible from the living room on the first floor. This could be done by rearranging the fixtures in the bath room so that a door could be cut from the living room closet, making this into a possible passage way with hanging



space at the side. Where it is possible, however, a private bath in connection with the owner's bedroom is much to be desired.

Birch is used for the finish throughout

the house, though maple may be used for the floors of the first story. For the main living room and bedroom on the first floor the birch finish is stained. On the second floor it is finished natural.

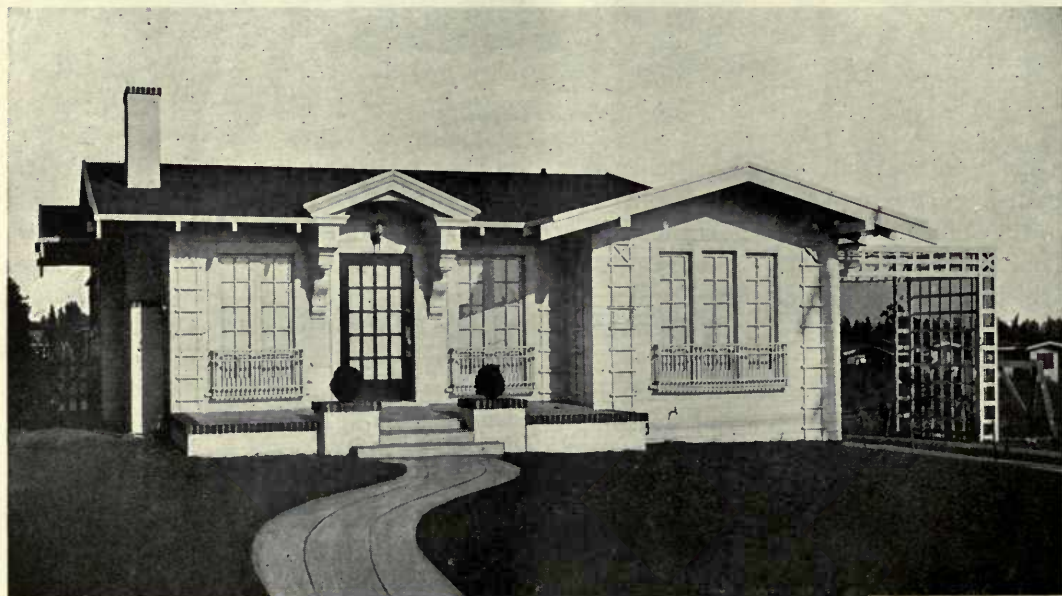
A Five Room Bungalow



WELL arranged and compactly planned bungalow is shown here-with. The approach is across a concrete terrace edged with brick. There is an effective little grill across the front windows, and trellises

the screened porch without need for the ice man coming into the kitchen, and the rear of the house need not be left open for him.

The living room is of good size and the wall spaces allow a good disposition of



An Attractive Bungalow

J. W. Lindstrom, Architect

which would be very attractive covered with vines but which are a decoration in themselves.

The living room and dining room extend across the front of the house with a cased opening between them, in which portieres may be hung to seclude the dining room when so desired.

Beyond the dining room is a well equipped kitchen. The refrigerator stands beside the sink and may be iced from

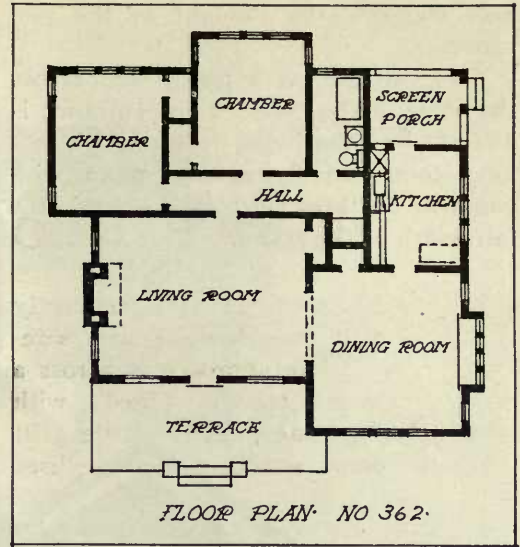
the furniture. A small closet opens from the living room, and there is also one from the dining room.

Beyond the living room is a hall which connects it with the chambers and bath room. Each chamber has good closets and a linen closet opens from the hallway. The mistress who is her own maid would perhaps want a door from the hall to the kitchen, which would require placing the sink and cupboards on the other side of

the kitchen. The screened porch gives a good working space when the house-keeper wishes to work out of doors.

The living room and dining room are finished in red gum wood. The other rooms are finished in pine and enameled, and gum doors. All floors are hardwood.

The low pitched roof is covered with shingles, stained green. The wide projecting eaves are supported by brackets, and the rafter ends are left exposed and all painted white. The exterior walls are covered with wide siding and painted white. Distinction is given by the hooded entrance with its hardwood door, which counts with the color in the touch of brick work in coping and porch floor.

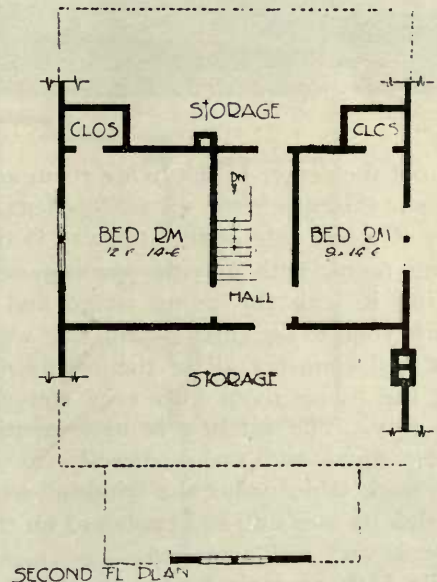
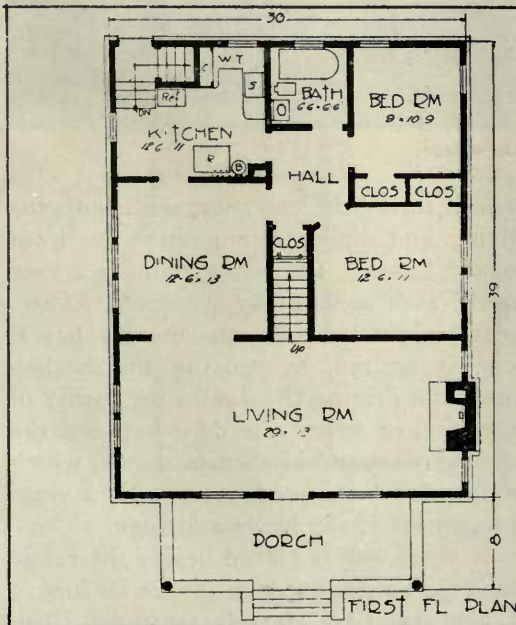


Cottage or Square House



HERE is a standing argument as to the more economical construction, that which stands in four unbroken walls, and that which furnishes two or more sleeping rooms under the roof. Here are shown a home of

each type. The first is a cottage. Some people might even call it a bungalow if the distinctions are not too closely drawn, though a true bungalow is not supposed to have a second story. "Cottage" is a good term for it means a small house, and



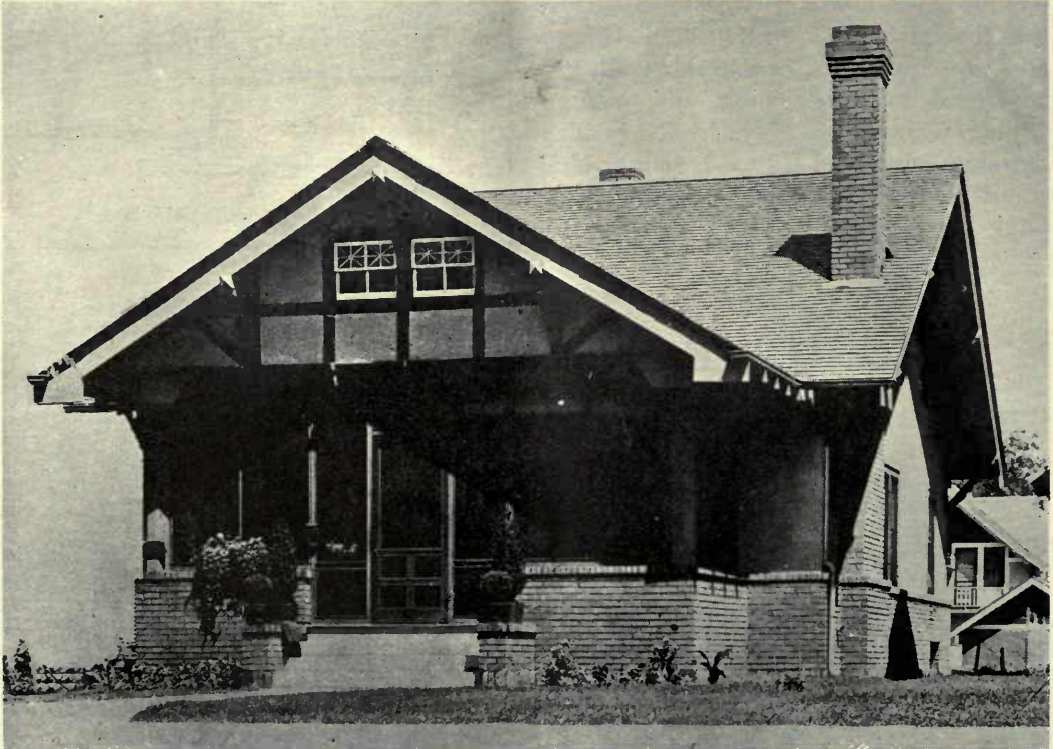
also suggests the thought of the picturesque.

This cottage has a porch well across the front of the house. The entrance is directly into the living room, which is a long comparatively narrow room with windows on three sides as it extends the full width of the house.

wall so that all of the plumbing pipes in the house are in one wall. On the second floor are two bedrooms.

The exterior wall is built of brick to the first story window sills, and of stucco above that, with timber work for the porch.

The square house has a sun porch,



A compactly built cottage

From the center of the living room and opposite the entrance is the enclosed stairway. On one side of the stairway is the dining room, with a wide opening connecting it with the living room, and a door beyond to the small central hall way. This hall connects all of the rooms except the living room in a very convenient way. The kitchen is back of the dining room and opens directly to it. The work table under the window, with the sink on one side and cupboard on the other, is very well arranged.

The bath room is beside the kitchen

which forms the entrance, with both the living and dining rooms across the front of the house. The living room is a long room with a wide bay window. A fireplace might be built opposite the bay if one is desired, by moving the kitchen door and placing the flue in the corner of the kitchen where the door between the dining room and kitchen is shown, which must also be moved over, with a rearrangement of the kitchen fittings.

A wood box is placed beside the range near the entry and opposite the ice box.

The stairs are cleverly arranged. The



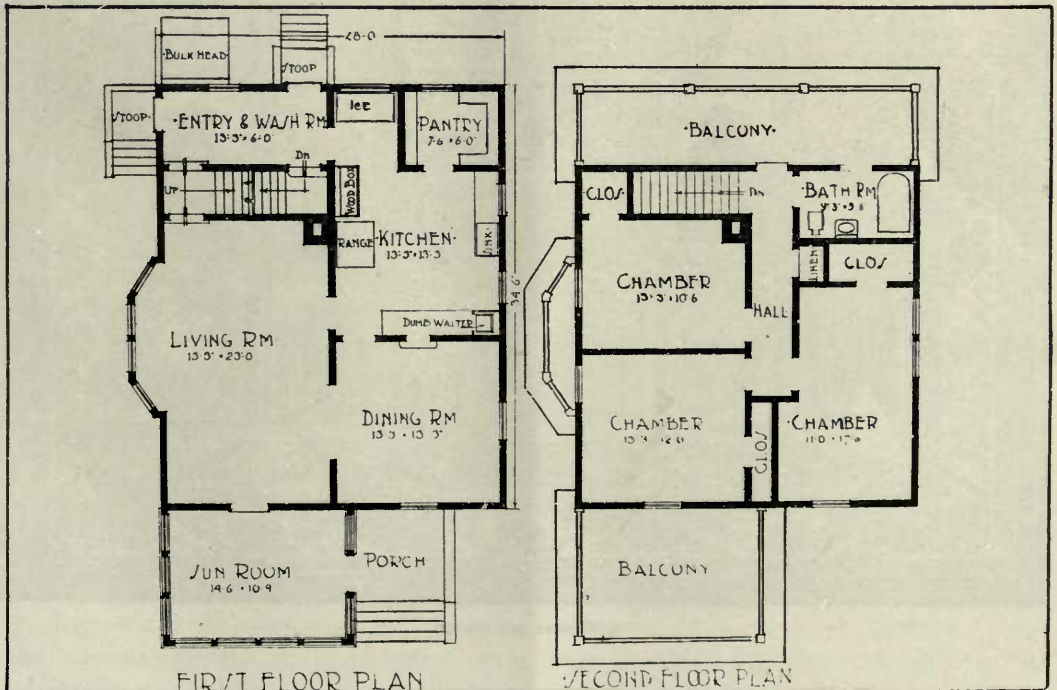
A Good Home

basement stairs are beside the kitchen door. Steps from the entry and from the living room both reach the main landing.

On the second floor are three bedrooms and the bath room. The rooms are well

supplied with closets with a linen closet from the hall.

The exterior is attractive with its white painted siding to the sills of the second story windows, and stained dark above.





A Mosque rug design



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Rugs

QUEN the choice of the rugs for a house often hangs the success or failure of a decorative scheme. Better delay the furnishings than compromise on unsatisfactory floor coverings. At the outset one question should be given careful consideration. Are the rugs to be plain or figured, part of the background or part of the decoration?

Taste in interior fitments goes to extremes. At one time no rug but an Oriental pleased us; today there is a revival of the large rug of one solid tone. If the use of the Oriental sometimes becomes the abuse of the Oriental, it is no less true that the plain floor covering has received an undue amount of attention. Both have their place in the scheme of things. Sometimes the rug of one tone holds and binds the scheme; sometimes the figured surface of the Oriental is needed to give balance and contrast. In either case the real mission of the rug is to act as a foundation. If it does not meet this test it is a failure, regardless of cost or beauty. This viewpoint is that of the decorator, not the rug collector, who, naturally, brings a different aspect to bear on the subject. More and more, however, are collectors becoming decorators, reserving their choicest specimens for a gallery precisely as they would their old masters. Indeed the almost priceless old Persian and

Turkish weaves are masterpieces quite as much as the old canvases. The rare "hunting" and "garden" rugs, the finest of the "prayer" designs, and the scarce "Polish" carpets—woven far from Poland—equal in interest, and sometimes in value, the pictures painted during the same centuries in another quarter of the globe.

Many people well posted on Van Dyck and Rembrandt, who would blush to confuse Chippendale with Sheraton, or to mistake Wedgwood for Crown Derby, have very vague ideas about rugs. "Oriental" is an elastic term covering everything made in the Asiatic countries. "Prayer" rugs by reason of their distinctive design stand apart, and Bokharas, thanks to numerous imitations, are easily recognized, but the broad classifications of Persian, Turkish, Caucasian, etc., are regarded as too complicated for the average mind. Writers on the subject have discouraged the amateurs by seldom agreeing on a common basis of terms, and by illustrating the rarest specimens in the respective groups. The famous rugs of the world are very important as object lessons. They represent the highest skill of the old weavers and their place in history, romance and the arts cannot be disputed, but a book dealing with modern rugs in relation to modern rooms, rugs classified by color and pattern, rugs

INSIDE THE HOUSE

best suited to mahogany, to oak, to painted furniture, would be hailed with joy by many people, and the time is ripe.

The perplexed housewife planning her living-room is seldom a connoisseur. She is eager to know values and, once the

Many of the modern Persians, as sold in the shops, are too delicate in tone for anything but very light scheming. With walls of pale gray, ivory or cream the exquisite blendings of Kermanshah and Kharassan are very effective, forming a logical foundation. Combined with ivory grounds or fields the soft blues and old rose tones of borders and medallions make delightful color notes which may easily be repeated in draperies and upholstery. With such a setting Mahogany of straight and simple line, or Louis XVI. furniture in cane and painted frames, will look quite in its right environment. But place either the Kermanshah or Kharassan in a room with dark or even medium dark walls, add furniture of oak or heavy mahogany, and harmony is lost at once. It is difficult to walk without being conscious of a very light color under foot, and the tendency is to look for the darkest portion of the rug on which to walk. Stepping gingerly from one point to another is not in tune with modern ideas of freedom and no one object should detach itself from everything else, claiming instant attention.

The devout Oriental removing his shoes at the threshold has no counterpart in our civilization. We put our beautiful rugs to base uses when measured by the standards of the East. We place on our floors rugs intended to be hung on the walls and we grind under our heels the precious prayer designs. Possibly the attitude of the modern weaver is growing commercial. Aniline dyes and Western influence have altered the old traditions. Yet still to a great extent



A Whittall Gorevan

study is undertaken, interested in all the distinctions so dear to the expert, but at the outset the difference between a Senna Knot and a Ghiordes Knot does not seem vital nor the number of Knots to the square inch. If she is a woman of taste she seeks fitness just as she would in selecting furniture and draperies, giving careful attention to harmony of color, line, and durability.

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does the Turk, if not the Russian, regard the prayer rug as sacred.

In choosing Oriental specimens another point must be taken into consideration. Does the design lie flat? Is the composition one that may be viewed from four sides, or is there a top to the pattern? Without going too deeply into the fascinating phase of realistic, semi-realistic and conventionalized designs, it may be said that the Turkish, Turcoman and Caucasian examples show a more geometric rendering than the Persian. Bokhara is a good example under the Turcoman or Turkestan group. Indeed the flatness and simplicity of this design have given it a tremendous vogue. Not only has the Bokhara octagon been woven over and over in European and American rugs, but copied in other mediums. "Bokhara oilcloth" is now on the market and not bad as oilcloth though hardly Bokhara.

Colors are usually stronger in Turkish and Turcoman rugs than in Persian, and also in the durable and often beautiful specimens from Afghanistan and Beloochistan. The districts under Russian rule have departed in some instances from the old inherited designs, and those bordering on



A Daghestan rug

China show still another influence. Many of the border rugs are highly interesting, the finest being the Samarkands woven near the Tien Tsin Mountains in western Turkestan.

The rich wine shades of Bokharas are finely adapted to oak paneling, oak furniture and the color schemes which are often selected for living rooms and libraries. Old specimens whether of the so-called Royal or Princess class are very valuable, having a bloom which time alone can give. Modern Bokharas compare favorably with modern Kazaks, Kelims, Samakands and Cabistans in wearing qualities and in price. Modern Persians

woven after old designs but sometimes with different dyes, present so many phases that they must be studied first hand. The various names beckon on to further investigation so associated are they with the golden age of Oriental looms—Gorevans, Kashans, Sennas, Feraghans, Sarabands, Saruks, Sultanabads, Herats, Kermanshahs, Kharassans, etc.

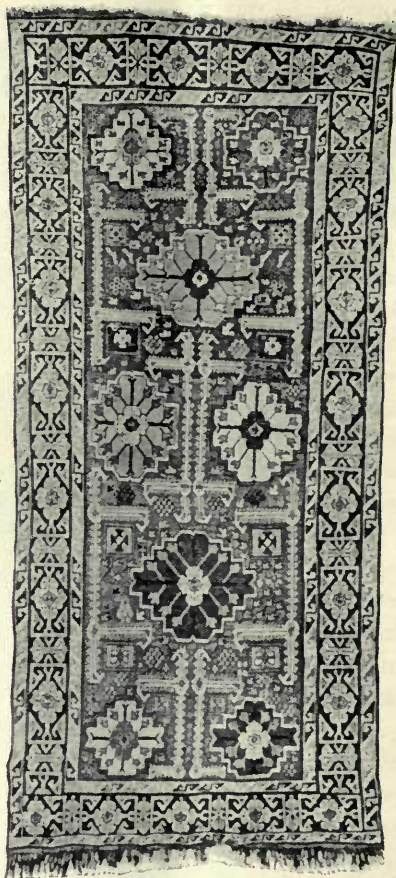


Old Chinese Rug of the type now successfully reproduced

INSIDE THE HOUSE

Persian designers are masters of the use of floral and animal forms. In rugs, in missals and enamels, in tiles and pottery their skill is set forth. Particularly in the old hunting rugs is their ability in this particular most cleverly shown. No matter how crowded the surface with flowers, birds and animals the effect is that of a design not a picture. Even when there is a top, as with many of the garden rugs and always with the prayer rugs, the composition is beautifully handled. European weavers have seldom attained this wonderful flatness in the arrangement of floral motifs. One has merely to mention carpet designing of the Victorian period to call to mind the opposite effect. Body Brussels in rose pattern, for instance, when the petals were apparently crushed with every footstep, is a good example, if the adjective "good" is regarded as synonymous with "typical."

"Hunting" rugs are seldom copied in modern weaves, but the "garden" and "tree of life" rugs are occasionally found in the shops. As wall decorations these beautiful old designs in modern wool and silk are wonderfully effective and this brings us to a neglected phase in the use of rugs. We are all familiar with museum specimens hung on walls for pres-



Kabestan in geometric design with border characteristic of Caucasian rugs

ervation, but few of us see in a private house, unless that of a collector, a rug used as a wall decoration. Yet many rooms would gain in beauty and distinction if this plan were followed. Naturally an interesting example must be chosen, one with a design composing well as an upright panel, and with a color harmony carefully related to the room. Particularly where a plain rug is used on the floor would the patterned rug lend life and interest to the wall.

As covers for tables the smaller Caucasian designs are well worth considering—one or two in a house perhaps, chosen, like the wall rug, with much discretion, and placed where both beauty and utility

are served. Cushion rugs are now on the market and have their place for interior use. Chinese cushion mats are beautiful in tone and design. Cushions covered with these colorful articles are most effective when used in a formal row on a narrow, straight settee. They are never lounging cushions, and their value lies in their rich color and dignified, substantial character. No mention of modern Persian rugs would be complete without reference to the "Sharistans" woven by hand on looms owned in this country. The designs are based on famous rugs of the fif-

INSIDE THE HOUSE



teenth and sixteenth centuries and woven to order. The best traditions of the past are revived in these beautiful articles which have the life of a new rug combined with the bloom and glow of the treasured antique. The wonderful color harmony of the Sharistan—suggesting the softening influence of time, air and sunlight—is entirely a matter of weaving, not washing or artificial “aging.” The fact that these rugs can be woven to fit any given space, makes them very desirable for large rooms, while the color schemes are entirely in harmony with modern ideas of interior decoration.

On the subject of washed and “doctored” rugs so much has been written in the form of advice and warning that little new is left to be said. Between intelligent washing frankly done and injurious “doctoring” secretly done there is a wide gap. When a rug is sold as a washed article and the purchaser understands and approves the process, preferring the subdued after-effects to the clearer, brighter colors of the original product, the transaction is entirely above board.

Whether the wearing qualities of the rug are impaired is another matter and whether the treatment is always in the interests of beauty is also a question. Rugs of modern weave showing strong aniline dyes are undoubtedly made more livable by washing, but with older and finer rugs it might be well to let time and gentle wear soften the colors.

The beauty of Chinese rugs needs no emphasis, so finely adapted are they to modern rooms. The soft tans, deep yellows, pomegranate and apricot shades combined with black and Imperial blue make a color foundation upon which a beautiful room may be evolved.

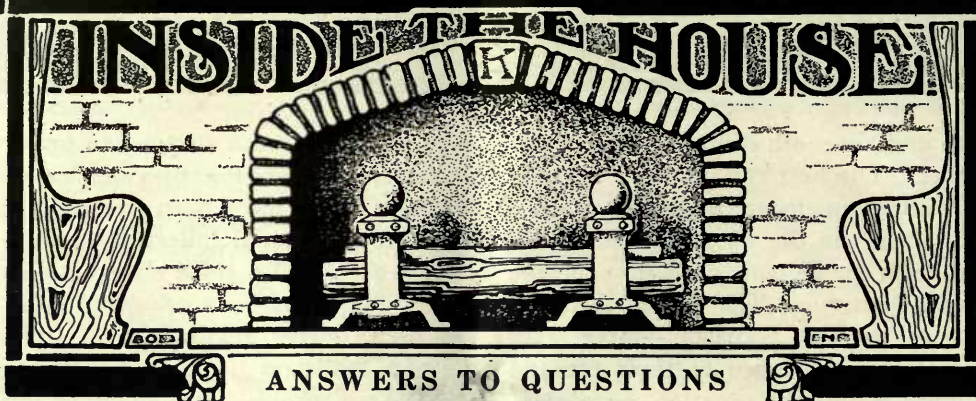
Within the past seven years more Chi-

nese rugs have been sold, so an importer declares, than in the previous seventy. Many of these have been fine old specimens from Celestial collections, others of later weave, and a third class of modern make. Japanese weavers have sent to our doors clever adaptations of Chinese designs, while on English and American looms remarkable reproductions have been made. Notably in New York, which has become a great producing center, are very beautiful “Chinese” rugs woven.

Few people realize the variety and scope of the weaving industry in New York and its environs. Rugs and tapestries setting forth the best traditions of the old French looms are being, in several localities, made under most interesting conditions. Flemish and French weavers design and work as their ancestors did in the seventeenth and eighteenth centuries. In one atelier may be seen an “Aubusson” rug designed by a Gobelin artist twice decorated by the French Government, also beautiful examples of Savonnerie rugs.

Wars change the maps of the world, making new sources of supply. Undoubtedly the past three years have had a great effect on the American rug and carpet market. New industries have sprung into existence while a great stimulus has been given to established activities. For years America has taken high rank in the making of plain rugs and carpets and in the beautiful two-toned effects which decorators now use so extensively. Oriental patterns in the hands of several manufacturers have been skilfully reproduced, notably in such types as “Anglo-Persian.”

Within the next half dozen years great achievements may be expected from our own rug industries.



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.

Relating Color Schemes to Tapestry and Fire Place.

M. E. P.—Having been so interested in your suggestions to other home builders that I am writing for ideas for my new home. Under separate cover am mailing you first floor plan and front elevation of my house which has lately been completed.

I am in a quandary as to color schemes for my living room, dining room and reception hall. The building faces northwest. I have a gray stone fireplace in living room, a five-foot wainscot in all three rooms with plaster panels. What stain would you advise for woodwork and what color for rails and panels? I have a dining room suite of quartered oak which I will have to use at present. Am building a buffet under the casement windows. Tapestry is used on davenport, and window seats and I have some old walnut furniture. Unfortunately my living room furniture is a promiscuous array of brown leather chairs, oak library table and mahogany piano. I thought I would take my color scheme from the tapestry and gradually eliminate the furniture that clashes. What would you think of using old blue in dining room for window draperies and a rose or mulberry in living room? Also would you advise solid color or figures? Will get new rugs for the two rooms and hall.

The house is built of buff tapestry brick with gray mortar joints and a slate roof in natural color. What color shades would you advise?

The second story is to be finished in

white or ivory with mahogany doors. In my room over living room, which has a west and northwest exposure, I have a red-brick fireplace and mahogany colonial furniture. What color shall I use on walls and for window draperies?

Ans.—Why not stain the living room in dull gray with a little settled effect of mulberry at the crevices of the moulding. Then use mulberry draperies in the living room. Then if the walnut pieces are pleasing treat the library table with an oil stain trying to bring harmony in color till you are able to eliminate the objectionable pieces and make the room right? Couldn't the brown leather chairs have new covering in place of the leather? or at least slip covers of some harmonious material? I would keep to solid colors because of the figure in tapestry. The panels above wainscoting would be good in grass-cloth in the mulberry and gray tones.

Use cream-white shades. Would you like a chintz for your bedroom bringing in the brick color and green leaves for contrast, using a warm neutral gray-tan color for walls? Net should hang next to the windows throughout the house.

With a Touch from the Navajo.

G. C. R.—Enclosed find pencil sketch of our house which is in course of construction. House faces west with fine unbroken view to west and north. Can you help me with some of the interior problems? The colors I had thought of are a gray-green tiffany plaster finish for sun parlor, living room and hall. Wood-



Do Your Rooms Give You Pleasure?

MANY house owners realize that they have not been getting the maximum enjoyment from their homes. Such enjoyment depends for more than we commonly suppose on the nature of the decoration.

The background of interior decoration is the walls and wood trim. The things involved are color and material.

We have a portfolio which will help considerably in deciding on pleasing color harmony.

Ask our nearest branch to send you Portfolio K E.

To make sure of the material, specify Dutch Boy White-Lead, mixed with turpentine or flatting oil. It can be tinted any shade, in any texture or finish.

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INSIDE THE HOUSE

work downstairs is oak, upstairs is fir, all floors quartered white oak. The dining room has built-in buffet and we considered paneling wall with wood strips, having panels finished in light brown tiffany plaster and above, a landscape paper in browns, yellows and greens with cream plaster ceiling. I have brown rug for this room. The den will have a Navajo rug and blanket for couch in gray, red and black. Would you advise plain gray walls with stenciled border in black and red, gray sunfast curtains and dark wood finish? I should prefer no thin curtains at windows.

What do you suggest for kitchen and breakfast room in pine finish? The latter can be seen from dining room, living room and hall. If the table and benches are gray, what color should walls be? Or on account of dining room colors, would the table and benches be better in ivory with deeper cream color for walls, blue stencils and blue curtains for casement windows? My preference is for gray and it would not soil so easily. The kitchen sink is under the windows with built-in cupboards on either side and keene cement wainscot.

Upstairs we will have plain plaster finish and thought of a warm tan for northwest large bedroom with doors and dormer windows outlined with narrow white stenciled lines. Dormer windows in both bedrooms have window seats. Southwest bedroom in blue-gray color; the maid's room is undecided. Have two soft gray Indian rugs for one bedroom. One walnut bedroom suite with poster bed and one bird's eye maple suite.

What would you suggest for downstairs toilet opening from the den and for the bath room? Both have tiled floors and keene cement wainscot.

We expect to buy new rugs for living room, also davenport and chairs and draperies for all rooms and sun parlor furniture. How can I treat the two pairs of French doors in living room? The ones at right of fireplace leading out of doors into pergola seem to demand dif-

ferent treatment from those leading into sun parlor, yet it seems as though they should be curtained the same? Any suggestions as to rugs, draperies or decorations will be appreciated. Is a glass top for Pullman breakfast room table practical? This is an appalling list of questions, but they are real problems and I so want our home to be harmonious and at the same time interesting. We enjoy Keith's Magazine very much and will be deeply grateful for any help you give.

Ans.—The den sounds very harmonious and the walls in gray stencilled in black and red would be very attractive and delightfully in keeping with the Navajo rugs and gray curtains.

In the breakfast room with the gray benches and table, the walls would better be a lighter shade of the gray and the draperies of chintz in colors that would repeat all the colors of the rooms which are seen from it. Glass over the small table is quite practicable.

It is not necessary that the sun parlor wood be finished like the living room—in fact, a contrasting treatment would be better. Your plan for the dining room is very charming and perfectly feasible. Keep the toilet and bath rooms in light gay colors like a summer lake and its surroundings—that is, green sky-blue, yellow, etc.

We are using a gauze silk on the French doors, and this would be good at both of the openings.

A Dainty Color Scheme.

G. N. G.—Will you kindly send me interior decorating scheme for plan enclosed? The plan is a bungalow, the outside green creosote shingles, and white trim, the roof green asphalt shingles.

The living room, dining room and breakfast porch or room, since it is plastered and finished same as any other room, are trimmed in fumed oak. All other rooms are in yellow pine, finished in white enamel or old ivory.

The fireplace in living room is brick. There are ceiling mouldings in living and dining rooms and French doors between

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INSIDE THE HOUSE

breakfast porch and dining room. Front porch floor is laid in 6-inch tile.

Ans.—Make the living room wall tan, with drapery curtains dull blue, furniture fumed oak with tapestry covering in browns, tans and blues. For the dining room walls use flowered paper with orange and dull green and other tones, draperies orange, furniture brown finished mahogany or walnut. Let the kitchen be in cream with curtains of light blue unfadeable material and dishes white with blue stripes, furniture white enamel with blue strips. Breakfast room, chintz with colors of dining room and living room, furniture enamel in one of the shades found in the chintz.

One bedroom gray and pink, the other chintz with green unfadeable hangings. Net curtains at all windows.

Brown Stained Woodwork.

J. H. R.—I am mailing a rough sketch of floor plan of a bungalow being built for us. I wish to ask your advice about furniture and curtains.

The three front rooms are practically in one. Woodwork is pine and stained brown. Walls are plastered white.

The outside of the house is painted gray with white trimmings and roof a dull green. What color in rugs and curtains would be suitable? I prefer blue and brown or green with mahogany or black walnut furniture, but do not know if this would go with woodwork stained brown. My mahogany piano is all the furniture that I have which I wish to use.

Ans.—With your brown stained woodwork, black walnut furniture or the brown finished mahogany, both so popular just now, would be in perfectly good taste. The draperies could be orange in plain sunfast in the living room and chintz in all colors in the dining room. Then paint the walls a warm deep cream almost tan.

Suggestions.

W. S. W.—We are building a new home and I want to finish my dining room with beamed ceiling and plaster paneled wainscoting—what do you think of it?

I am having a large fireplace in my liv-

ing room using the wood mantel which is finished in fumed oak. Now I want to use brass and irons, but am undecided as to hearth and facing. Will it be right to use brown tile or should we use red brick? We have found your magazine to be lots of help to us.

Ans.—The beamed ceiling and plaster panelled wainscoting are both in good taste and in vogue, providing the room is large enough for this treatment. It is not appropriate in a small room because the cutting of the wall space causes the room to look smaller. Ceiling cornices are also much used.

We should advise brown tile in the living-room fireplace.

In Blue and Green.

D. D. P.—As a subscriber, I am asking you to kindly send me a few suggestions. We are building a \$7,000 bungalow and am thinking that I want the old ivory enamel and mahogany furniture in both living room and dining room. What style of mantel will be best in the living room? Both of these rooms open with French doors into the sun parlor. To be restful to the eyes I want to have green in the sun room, a green rug, and gray-green wicker furniture and plants.

Would blue hangings in both rooms or old rose in living room and blue in dining room, make a pleasing ensemble?

I am buying everything new, so do not have to consider matching anything on hand. I am anxious to make no mistake, but have an artistic and pleasing interior. Had thought of gray paper to go with the ivory and mahogany, plain for living room and tapestry paper for the panelling in dining room.

Ans.—The mantel in the living room should be old ivory like the woodwork.

The blue hangings in living room and dining room would be harmonious provided you use the right blue and the right green in the sun room. Chintz or figured silk in these rooms would be charming and would harmonize with the green.

Do not use gray paper, it is too great a contrast for the mahogany. Oyster color or neutral tan is far better.



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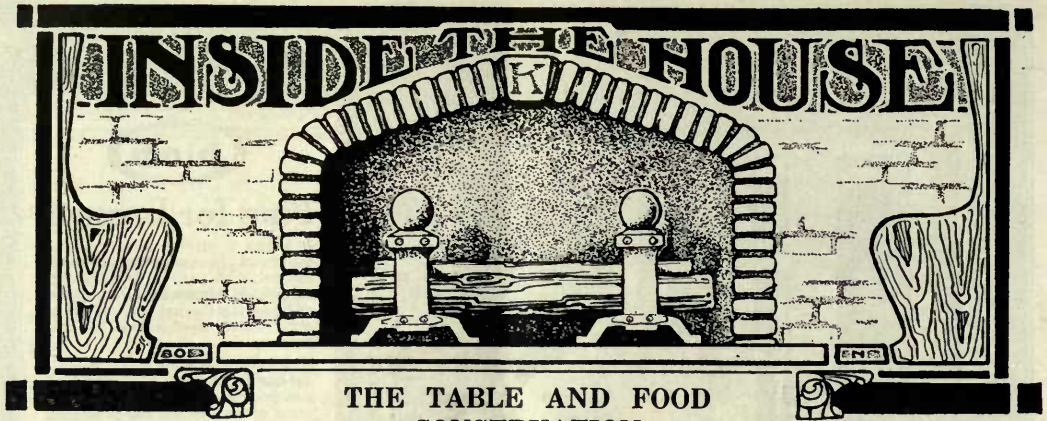
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Conservation Thanksgiving Dinner

LABORATE dinners are a thing of the past. While our boys are in the trenches we can not pile up unnecessary food on our tables. The traditional family dinners will be very simple this year, but it will be not unlike the original Thanksgiving day, when the forefathers of this nation gave thanks for a bountiful harvest in the new land of freedom. On this Thanksgiving day of 1918 all Americans in this country and at the battle fronts of Europe will give thanks for the harvest which, with the fruits of self denial, has saved nations from starving and made it possible for our soldiers to fight victorious battles for the freedom of the world.

This year when a failure in the harvest would have meant starvation to millions and perhaps defeat in the greatest cause on earth, Americans have at last realized the true spirit of the first Thanksgiving day. They know now what it is to work and save and to be filled with fear lest there will not be food enough for all who are struggling for liberty.

On the tables of every American household on Thanksgiving day, there will be the same Victory bread that all the Allies are eating. For those in France and Belgium who have suffered more than we, perhaps there will be even a deeper feeling of gratitude as the Victory loaf is broken than there will be in American

homes on our own day of thanksgiving.

Let this feast in every American home this November be made up largely of products from the gardens and orchards in order that the more staple foods may be sent to our armies, for we must never forget that every bit of transportable food which we do not eat will be shipped over the sea to hasten the day of the victorious return of our soldiers.

This year something else will replace wheat as far as possible. We find that we can use corn syrup and honey instead of sugar, without any real sacrifice on our part. These menus have been prepared to meet these conditions.

Menu No. I.

Turkey	Mashed Potatoes
	Tart Fruit Sauce
Baked Squash	Pickles or Olives
Oatmeal Parkerhouse Rolls & Butter	
Malaga Grape & Celery Salad,	
Conservation Mayonnaise Dressing	
Hot Buttered Liberty Wafers	
Pumpkin Pie	Coffee

Menu No. II.

Scalloped Oysters	Baked Sweet Potatoes
Creamed Onions	Stuffed Olives, Nuts
	Rice Finger Rolls
Pineapple Salad with Grated Cheese	
Liberty Wafers	
Mock Mince Pie (conservation pastry)	
	Coffee

The shells of hickory nuts, walnuts and butternuts make a very high quality carbon for gas masks. No other nuts will do, except Brazil nuts, which are imported. Seven pounds of shells will produce enough carbon enough for one mask. A family of children can have at least one soldier's mask to their credit.

INSIDE THE HOUSE

Menu No. III.

Roast Chicken, Gravy, Mashed Potatoes
Dressing made with Liberty Bread
Creamed Carrots Celery
Baking Powder Barley Biscuits
Cranberry Sauce
Honey Ice Cream, Conservation Cake
Coffee

Menu No. IV.

Grape Fruit
Steak Birds Candied Sweet Potatoes
Tomato Souffle Stuffed Olives
Bran Baking Powder Loaf Bread
with Raisins
Carrot Salad
Baked Apples Stuck with Whole Almonds
and Marshmallow, or
Marshmallow Pudding
Cornflake Macaroons Coffee

Nut or cheese and bread crumb loaf may be substituted in these menus for meat, and may even be shaped on the general lines of a roasted fowl.

Rules for Preparing Menus.

Every housekeeper has her own way of roasting turkey and chicken, and for making cranberry sauce. Since it takes more sugar to make cranberries "jell," we will be satisfied with cranberry sauce this year, reminding ourselves that we like tart fruit with meat (or without it, as the case may be). These menus include many dishes for which the rules have been given during the last few months and are not repeated. Conservation cake with a delicious boiled icing, using neither wheat nor sugar, which was given in September, will be especially useful during the Thanksgiving and Holiday season.

Oatmeal Parkerhouse Rolls (20 rolls)

1 c. liquid (milk and water)
2 teasp. corn syrup
1½ tsp. salt
1 cup rolled oats
2½ c. wheat flour
½ yeast cake, compressed or dried, softened in ¼ c. liquid.

Directions for making rolls using compressed yeast.

Scald liquid and pour over rolled oats, syrup and salt. Let stand until luke-

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INSIDE THE HOUSE

warm. Add yeast softened in warm water. Add flour and knead. Let rise until double its bulk. Knead again and put in pans. When light, bake from 20 to 30 minutes in moderate oven.

Directions for making rolls using dried yeast.

Make a sponge of $\frac{1}{2}$ cake of dried yeast, $\frac{1}{4}$ cup liquid and $\frac{3}{4}$ cup flour. Cover and let stand over night. In the morning scald the liquid and pour over rolled oats, syrup and salt. Let stand until lukewarm. Add the sponge. Add the remainder of the flour and knead. Let rise until double its bulk. Knead again and put in pans. When light bake from 20 to 30 minutes in moderate oven.

Rice Finger Rolls (3 doz. rolls)

1 cup milk
6 tbsp. sugar } or { 4 tbsp. syrup
4 tbsp. fat } { 2 tbsp. fat
 $\frac{1}{2}$ tsp salt
 $\frac{1}{2}$ cake compressed yeast softened in
 $\frac{1}{4}$ cup liquid
3 cups boiled rice
8 cups flour

Scald the milk with sugar, salt, and fat. Let cool until lukewarm, and pour over the boiled rice. Add yeast which has been softened in $\frac{1}{4}$ cup warm water. Stir in flour and knead. Let rise until double its bulk. Knead again and put into pans. Let rise until light and bake 20 to 30 minutes in a moderate oven.

The rice should be boiled in a large quantity of boiling water, in order to insure a dry rice. At least 8 or 10 times as much water as rice should be used. Save rice water for thickening sauces, etc.

Steak Birds.

Small pieces of thin round steak (raw) in which are rolled one slice of bacon and half an onion are tied up in the shape of birds; to make them realistic tooth picks may be inserted as drum sticks. Dredge them in corn flour and brown in frying pan. Add a pinch of fat and hot water to cover; let simmer for ninety minutes.

Give to the Red Cross, pits from peaches, apricots, dates, cherries, plums, prunes, olives. Shells of walnuts, hickory nuts, butternuts, Brazil nuts.

Conservation Mayonnaise.

$1\frac{1}{2}$ tbsp. cornstarch
1 cup water
1 tsp. salt
2 tbsp. vinegar or lemon juice
1 tsp. mustard
Cayenne pepper
2 egg yolks or 1 egg
1 cup oil (olive, corn or cottonseed)

Cornstarch Paste: Heat $\frac{3}{4}$ cup water and put in salt. When boiling add cornstarch, which has been stirred into $\frac{1}{4}$ cup cold or lukewarm water. Cook until transparent. When cold the thickness should resemble that of the Mayonnaise.

Mayonnaise: Add cayenne pepper, mustard, and salt to the egg and beat. Add 1 tablespoon of the vinegar. Then add the oil in small quantities at first, beating constantly. As the mixture thickens, gradually add the rest of the vinegar and oil, continuing the beating until all of the oil and vinegar are used. When done the dressing should resemble whipped cream in consistency.

Combination: After the cornstarch paste is cold, blend the two by thoroughly beating.

Mock Mince Pie Filling (makes 2 qts.)

1 qt. green tomatoes 2 tbsp. suet
 $\frac{5}{8}$ cup sugar 1 tsp. salt
 $\frac{5}{8}$ cup syrup 1 tsp. cinnamon
 $\frac{1}{4}$ lb. raisins 1 tsp. cloves
 $\frac{1}{4}$ cup boiled cider 1 tsp. nutmeg
 $\frac{1}{8}$ cup vinegar $\frac{1}{8}$ tsp. ginger

Pare and chop tomatoes. Cover with water, scald and drain. Place in preserving kettle, add other ingredients and enough cold water to nearly cover. Simmer for 1 hour. May be canned and kept indefinitely.

Conservation Pastry.

$\frac{1}{2}$ cup white flour
 $\frac{1}{2}$ cup barley or corn flour
 $\frac{1}{3}$ cup fat, which may be reduced to $\frac{1}{4}$ cup when corn flour is used.



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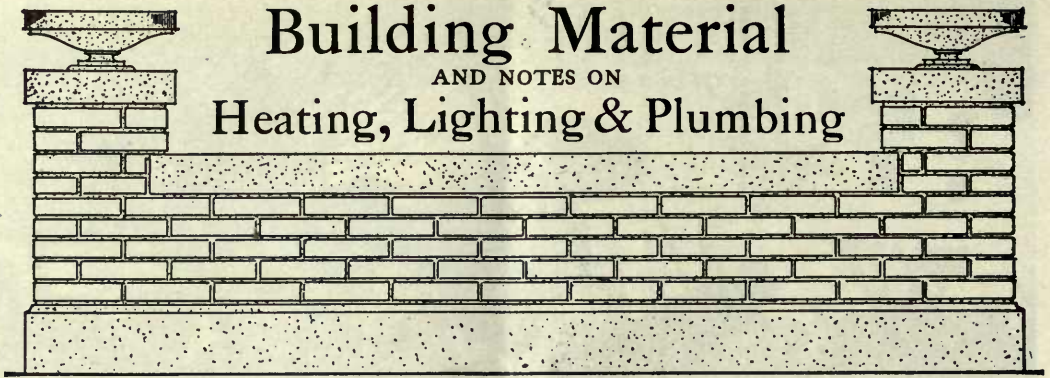
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Substituting Soft Coal for Anthracite



AVING to our present fuel conditions many people are finding it necessary to use soft coal in heating plants intended for the use of hard coal. "Suggestions for Fuel Conservation," prepared by William H. Reid, smoke inspector of Chicago, gives some very timely advice. At least $1\frac{1}{2}$ tons of soft coal will be necessary, according to Mr. Reid, to be substituted for one ton of hard coal. The same sizes in soft coal should be selected, as the hard coal previously found satisfactory. The size, however, should not exceed 3-inch lumps.

Soft coal is a free burning fuel on account of the gas it contains. For this reason hard and soft coals exhibit different characteristics when burning and should not be fired in the same way. It is necessary to spread anthracite completely over the bed of live fire. Hard coal fires should be disturbed as little as possible. Bituminous coal can be fired by placing the fresh charge on one side of the grate only, leaving a part of the fuel bed uncovered. The volatile matter arising from the freshly fired coal is ignited by the red hot coal on the uncovered part of the fire and a large part of it burns in this way, giving up its heat value. Fresh coal may be placed at the front of the grate with the live coal pushed to the back. With circular grates the fresh charge may be placed directly in the center, building up a pile in the shape of a pyramid with successive charges of fresh fuel. This permits the coal to coke slowly and insures

a mixture of the volatile smoke, and gases which pass off from the fresh coal, with the hot gases from the coked coal burning at the edge of the firebox. A complete combustion is thus obtained with greater heat generation.

When burning soft coal, if the entire surface of the fuel bed is covered with a heavy charge, the volatile matter from the fresh coal does not ignite for a considerable length of time after firing, and much of it passes away unburned as tarry greenish-yellow smoke. The furnace and flues become filled with smoke and when the fire finally works its way through the fresh layer of coal, the smoke and gas may ignite with an explosion violent enough to cause damage. These explosions are more likely to occur with the finer grades of coal. Fine coal should be wet just before firing to prevent its being carried into the flue, also to prevent waste of fuel by sifting through the grates.

The better methods of firing reduce the amount of soot deposited in the passageways and flue. We are told that one one-hundredth of an inch of soot has the same power of heat resistance as ten inches of iron. By inducing a more complete combustion it also increases the amount of heat transferred to the heating plant. The burning gases are transformed into heat instead of clogging the passageways and vitiating the atmosphere as soot and smoke.

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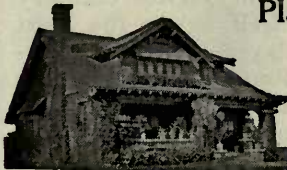
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burn soft coal; that is, at the moment of firing a great deal more air is necessary with a free burning coal. After the volatile matter leaves the fuel bed, the carbon content of the fire is about the same with all coal, requiring practically the same amount of air.

Soft coal may be used in heating the house during the mild weather, saving the hard coal for the more severe weather. The two fuels may be mixed before firing, or the soft coal may be thrown on the fire first and then covered with a layer of hard coal. Both methods have been employed successfully.

In the Firing Line.

Fires should not be disturbed excessively and should be poked only enough to break up clinkers or coked coal. Ashes should be removed by shaking the grates, but only enough to keep the fire clean; not enough to lose good live coal. A thin bed of ash on the grates may prove economical in moderate weather. The ash box should be cleaned out every day, as accumulated ash interferes with the draft, and sometimes even causes the grates to burn out.

Air admitted over the fire is quite as essential to combustion of soft coal as the fuel itself. Never fire large lumps of coal. They should not be larger than a hen's egg, except for keeping fire over night. It is improper to use a slice bar and stir the incandescent fire, green coal and ash, together. It is very important that the ash-pit should be tight and the damper in the ash-pit door adjusted so that the minimum opening required to properly burn the fuel may be obtained.

Never fully close the damper in the chimney connection.

Never let tubes, gas passes or smoke pipe become dirty.

Never leave clean-out door at bottom of chimney open.

Never make openings in the chimney for ventilating purposes.

A Fuel Conservation Number has been issued by the Heating and Ventilating Magazine which makes very timely and authoritative suggestions relative to the use of soft coal in heaters designed for burning hard coal, with cuts showing different methods of firing, which might prove helpful to those who are having special difficulties under present conditions.

The Building of the Chimney.

The fundamentals of fuel conservation go back to the building of the chimney. The value of a flue depends on area inside the flue opening, and velocity, or intensity of the flue action. The height, shape, location (which controls temperature maintained) and manner of construction govern the intensity of the draft, while the free area governs the volume of gases transmitted. An excess of area is a poor substitute for lack of intensity and the lack of either one results in incomplete combustion or the use of higher priced coal.

"Draft is not suction," says E. C. Lillie, Denver Smoke Inspector, "it is a case of push, pure and simple." It is Nature's effort to obtain equilibrium between the outside air and the heated air in the chimney. "Water currents, air currents, or gas currents take the way of least resistance, so if you have any cracks or openings through the sides of your chimney the air is going through those and not through your fuel bed."

"Many chimneys of sufficient height and area are rank failures owing to loose construction, causing infiltration of air and checking of the draft."

"Talk about fuel conservation! Were all the coal now available which has been wasted during the last ten years because of poor chimneys, every mine in the country could be shut down for a year and we would suffer no inconvenience." Chinking and cleaning the chimney is an important part of fuel conservation.

Construction.

Build all chimneys from the ground up. None of their weight should be carried by anything except their proper foundations, which 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. Place a fire-clay flue lining, preferably round, on the foundation and lay the brick work up to the top of the lining. At this joint prepare a batch of thin mortar containing a liberal percentage of cement and pour it in between the tile and brick until full. Smooth up the joint inside as the work proceeds and you will have a chimney that is worth while, provided it is of proper size, height, location, and straight from top to bottom. "Size, 10 inches round for small houses; 12



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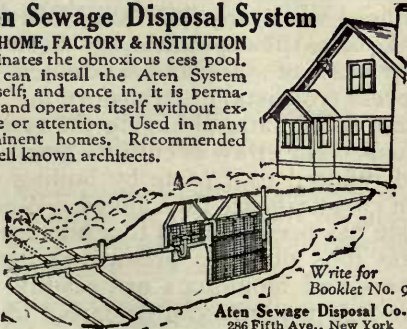
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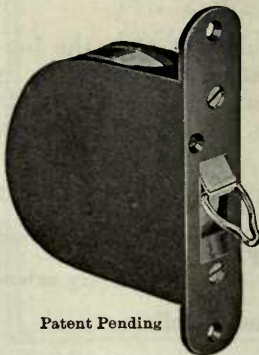
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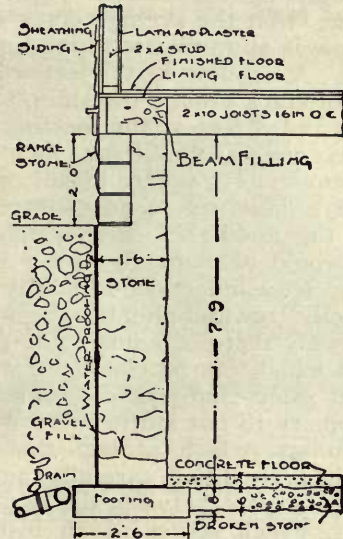
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inches round for eight or ten-room; and 15 inches round for larger. Why round? Because it is better," says Mr. Lillie as smoke inspector, "regardless of the opinion of your bricklayer."

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A Non-Freezable Water Tank.

Much modern farm equipment owes its inception to the memory of the farmer boy who has long since left the farm, but who carries in distinct remembrance the unnecessary hardships of his boyhood days on the farm,—that is, hardships that seem unnecessary in the light of his more lately acquired knowledge.

A certain boy grew up on a farm and knew all of the hardships of farm work as it was conducted before modern appliances made it a vocation instead of a job. After a while he grew tired of it, and he moved out to Dakota and built a

flour mill, believing that life would be easier that way.

But he did not forget the old days when he had to thaw out the watering trough for the stock to drink. He wanted to go back to the farm, but not to its discomforts and inconveniences, and when a farmer told him that the man who could invent a stock tank that would not freeze would make a fortune, this one-time farmer boy started thinking, and experimenting. He gave up the milling business and bought a shed in which he started a tin shop. Out of that shop came the ideas for the tanks that do not freeze. It is simple, when you look it over.

The water is kept from freezing by what looks like, and is not much more than, an old-fashioned oil lamp. The water is stored in a tank surrounded by a dead air space, and it is kept from freezing, but not too warm, by the heat of the lamp, which will burn for days at a very low cost.

Then he perfected a sun-lite window for hog houses, and other specialties which have been devised and perfected.

French Produce Artificial Wood.

French experimenters have produced an artificial wood, says the American Consul at Lyons. The product has been found after years of study and experiment. The process consists of transforming straw into a solid material having the resistance of oak. The straw is cut into small pieces and reduced to a paste by boiling. Certain chemicals are then added. When the paste has been reduced to a homogeneous mass it is put into presses, and planks, beams and mouldings are readily made. The new material can be sawed like natural wood. It makes a good fuel, emitting little smoke.

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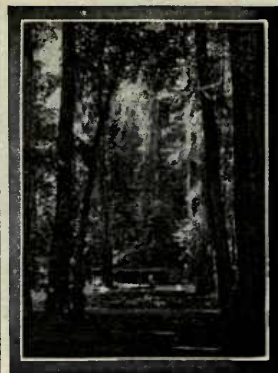
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WOODS

AND

HOW TO USE THEM



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.

Cypress—A Wood of Antiquity

CYPRESS is mentioned in the most ancient usage of wood. Cypress and the Cedars of Lebanon are the woods which are mentioned in the Bible. We are told that when Abraham was climbing the mountains of Chaldee from which he viewed the promised land the royal dead of Egypt were being placed in cypress mummy cases in which they repose today unless ruthless hands have desecrated them. Some remarkable records of the longevity of cypress lumber and shingles have been quoted concerning its use in this country. Shingle roofs in Maryland, in Connecticut and New York which have been in use for 150 or 200 years or even more are put to the credit of this wood.

Cypress is one of the stronger and heavier soft woods, which but for its greater weight, resembles redwood more closely than does any other conifer. Both cypress and redwood are among the most durable woods. Cypress grows in swamps covered with water much of the time. Often canals are dug in which to tow the logs to the mills. The butt cuts of large cypress trees will not float when green, so it is customary to girdle the standing trees several months before felling, which allows them to dry enough that they will float. Whether the fact that cypress grows in swamp and marsh

ground gives it a resistance to moisture and makes it durable under trying conditions, it seems to withstand time admirably whether it is in position exposed to the weather or buried deep in the ground. Even "pecky Cypress" does not seem to rot.

Cypress is specified for exterior wood work of all kinds, as its inherent qualities seem to make it less liable to be attacked by rot under trying conditions. It is used for conservatories, pergolas and porches. The very nature of the construction of a greenhouse invites rot, as does any use where a wood is kept in a warm moist place, and where the moisture has no chance to evaporate. It is stated on good authority that greenhouses built in 1885 and since that time with clear cypress, free from sap, are being still used, with the wood in a good state of preservation.

Pecky Cypress.

Pecky cypress is one of the lower grades of cypress, so called from the fungus growth or disease which has left it honey combed and pockmarked. A board from a "pecky" log is more or less speckled, with long holes averaging about the diameter of a lead pencil. Such wood is necessarily heart wood, as peck is never found in the sap wood. This fungus growth seems to have something in common with

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dry-rot leaving the wood immune to the disease. While its strength is not as great as that of sound cypress, nevertheless it is sufficient for its practical usefulness, especially for fencing, railroad ties and particularly for greenhouse accessories.

For finishing lumber cypress is one of the woods which lends itself to a somewhat decorative use on account of its pronounced grain and somewhat rough texture, taking readily a stain or color in any of the varying tones of brown, gray or green. It is a wood of much individuality, the irregularities of its grain being full of suggestive charm. It is especially suited to interiors where a bold decorative effect in the wood work is wanted. When certain effects peculiar to Japan and to Japanese treatment is desired, cypress is used owing to its similarity to their sugi wood.

Japanese Influence in Wood Work.

Those who know Japan well tell us that in their house building and fittings where wood is used they seek for decorative effects in the grain of the wood and in the varying colors. To them a knot in a board with the irregular grain of the surrounding wood is exquisite, something to furnish a decorative note to the room in which it is placed. These wise yet often simple people seem always to have made an effort to discover the utmost beauty in each object in its original condition. When they worked with a wood they sought primarily for its color and grain, with metal for its lustre. They give preference to the natural features and endeavor to bring out to the utmost the peculiar inherent qualities of each material.

Led by an inbred artistic discernment, followed by an appreciation of each bit of beauty, the Japanese have devised various ingenious methods of treating and finishing woods. They have a rare taste and considerable skill in adapting to practical decorative use every effect which they are able to obtain or to produce. They have utilized drift wood, with the softer parts of the wood worn away leaving the harder grain in irregular ribs like an embossing on the surface. They found that a charred wood with the char brushed out left a result similar to that found in driftwood.

For generations this process has been used for all sorts of decorative purposes. A favorite wood of the Japanese craftsman is the sugi, a coniferous wood, rather soft and easily-worked and almost without resin. It is close grained and when cut into flat sawed boards shows a beautiful figure. Some centuries ago it was discovered that fire applied to the surface of a sugi board would char some portions of the grain faster than others. The charred portions could be rubbed out with rice straw leaving a hard grain standing out like an embossed surface against the lighter color of the soft grain, giving a very beautiful effect.

The American cypress quite closely resembles the Japanese sugi in its characteristics, and an American adaptation of the Japanese methods of working sugi have been given to cypress obtaining quite brilliant effects. There is also an acid treatment sometimes given to cypress which brings out the beauty of the grain.

The Japanese have long realized that the irregular, sometimes fantastic natural figure of some of the world's fine woods is one of the most beautiful expressions of nature's artistry. This is the material with which the home builder decorates his house when he makes a careful study of his interior wood work. He has this beautiful natural product with which he makes the setting he chooses for his home life. Into this he brings the furniture for his comfort, chairs, tables, cases for his books, all made from some type of this same beautiful natural product, after passing through the artistry of the manufacturers in a more or less satisfactory way.

When a wood which has a large figured grain is used for an interior, if the grain is to be finished to advantage the wood work should be kept in comparatively flat surfaces. Sharp curves or deep grooves in the mouldings should be avoided and the whole finish kept on very simple lines.

Sycamore.

Sycamore is another wood which has a beautiful figure when quarter sawed. In localities where sycamore is abundant the home builder would do well to give it a full consideration in planning for his wood work as it has a very distinctive grain, and is a tough, strong wood.



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THE announcement made for the Graduate School of Business Administration of Harvard University for the ensuing year contains an innovation in that special one-year courses have been provided to meet the present national needs for trained specialists in certain lines of work. These courses, of course, do not lead to a degree but count for a degree if the student returns to complete the work. While the school is primarily for college graduates it has also accepted, without candidacy for a degree, non-college men of qualified preparation if they have had at least three consecutive years of business experience and are over 21 years of age. The special one-year courses above referred to are for men above the draft age and for those who are unfitted for military service. This plan includes a one-year course in accounting, one in industrial management and one in business statistics.

The announcement of the lumbering courses is of such interest that it is reproduced in part:

"In the earlier days when timber land was abundant and relatively cheap lumbering was largely a business of speculation in stumpage, and the rise in the value of the timber often made up the bulk of the profit. Under such conditions the manufacture and distribution of the product did not require the highest efficiency of organization. Meanwhile the supply of timber has become greatly reduced, the business of handling it has become large and complicated, and carrying charges, the costs of labor, materials, and other factors have gone up rapidly. The result has been that, deprived of the support of cheap stumpage, lumber companies are being compelled to operate on a narrow margin of profit. To secure this profit is more and more plainly a problem of management, of manufacture, including log-

ging and milling, and of distribution, including transportation and selling. Under these circumstances, the problems of wood production, of providing for future supplies of timber, urgent though they are, must still appeal to the capital invested in lumber as secondary to the problem of management.

"There are 48,000 sawmills in the United States, not counting many thousand specialized forms of manufacturing which also use wood. The total investment in industries using wood amounts to two and a quarter billion dollars. Chiefly on account of the financial history of timber land ownership and enormous developments in utilization, these industries are facing the necessity of fundamental readjustments in organization and method. Indeed, the present may be regarded as one of the turning points in the business history of lumbering. Certainly it is recognized by lumbermen as calling for more and more scientific methods within the business and a broader understanding of the economic relations between their own production and that of an ever-increasing number of dependent industries. The result is a new opportunity for the man trained in the scientific principles of business as applied to lumbering."

The Curious Arab.

The Arab has some curious ways. He takes off his shoes when he enters a house, but keeps on his hat. He reads and writes from the left. He eats scarcely anything for breakfast or dinner, but in the evening he sits down to a hot meal swimming in oil. His sons eat with him, but the women of the household wait till the males have finished. The Arab rides a donkey when traveling, his wife walking behind, and he laughs at the idea of giving up his seat to a woman. The Arab has one strong virtue, and that is he is rarely seen drunk.

—Hartford Times.

KEITH'S MAGAZINE

ON HOME BUILDING

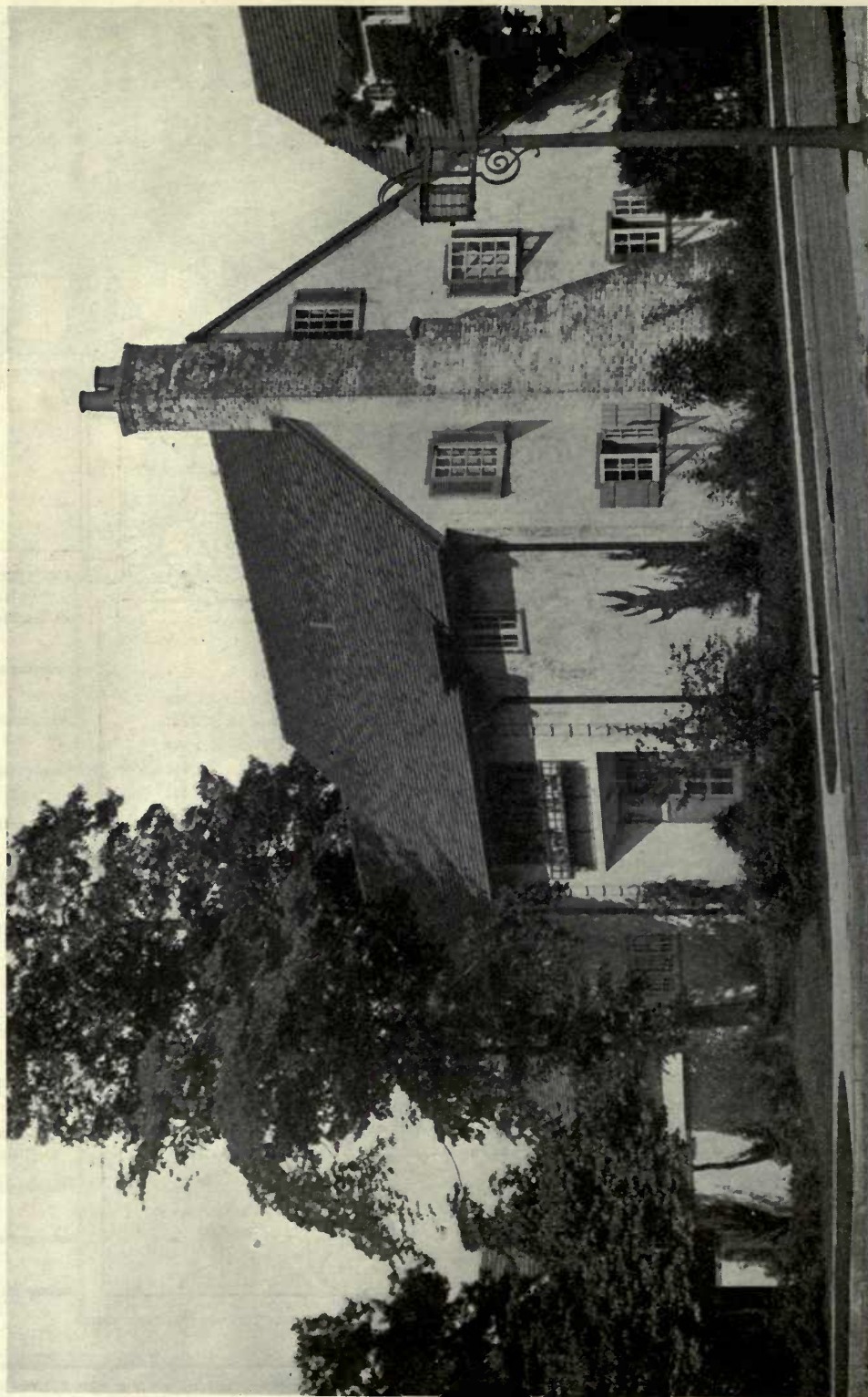
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Courtesy Atlas Cement Company

A Charming Home in Forest Hills Gardens, Long Island

Albro and Lindberg, Architects



A New York Home

D. Stuart Douglass, Architect

The Decorative Value of the Trellis

Anthony Woodruff



NATURE is not taken into consideration as fully as her offer of service warrants. Perhaps we have not gotten past the psychology of the pioneer to whom the forces of nature were so often inimical—terrible forces before which he stood helpless, in the ruthlessness of which he quite forgot her mild beauties.

As a people, we in America have considered beauty as a thing apart. We have a way of associating the idea of beauty with costliness. We have the feeling that if a thing is to be beautiful it must be costly, and oftentimes we take it conversely,—that if a thing has been costly that it is to be admired for beauty. As a matter of fact nothing is further from the truth in many cases. If you can find a

charmingly simple, vine-covered cottage, compare it with an elaborate mansion nearby, in the matter of pure beauty. At the same time you can find many elaborate mansions, but the charming vine-covered cottages are seldom found. There is a something which we call "charm" which is not inherent in materials, which is perhaps somewhat akin to the magic of superstitious charm. It has the essence of beauty but is deep rooted in the heart of things. It is something which we hope to achieve in our homes,—but which must first be in ourselves.

If we wish the co-operation of nature we must study her ways and fall in with her plans; select from her bounty the things most adaptable to our needs. If we wish a vine-covered porch or doorway

the vines must be selected with reference to the climatic and soil conditions, to the amount of sunlight and heat which it will have, and the amount of shade and of blossom which we wish. Following this must come constant and intelligent care, which if we love the vines and the blossoms will be a pleasure, even though tiresome, but which will become an unmitigated bore if these things mean nothing to us. We must pay the price for what we want in some kind of coin; it may be in work and it may be in money, often in both.

The trellis has a very definite and practical place in the decoration of the home. It is primarily a framework and guide for the growth of vines and shrubbery, but at the same time it is often a decorative feature in itself.

This must be the case in climates which are unfriendly to growth during a definite



Vines cling to the rough surface of stucco

part of the year, more or less according to the nature of the growth. There are vines and shrubs which start with the first warm breath in the spring, or that come into early and beautiful blossom. There are those to which the leaves cling and stay green until Christmas. The berries may last through most of the winter.

Trellises and planting around an entrance must be designed just as carefully and as intelligently as the details of a Colonial entrance, and may give as great satisfaction to the owner if it is as entirely in keeping with the rest of the house.

Stucco makes an excellent background for the trellis and vines. In fact the rough finish of many a stucco surface in itself allures creeping vines over its surface with most charming effects. They do not wait the invitation of the trellis in the more congenial climates. In more severe



The entrance is a bower of blossoming vines.

Folsom and Stanton, Architects



D. Stuart Douglas, Architect
Stucco makes an excellent background for trellis and vines

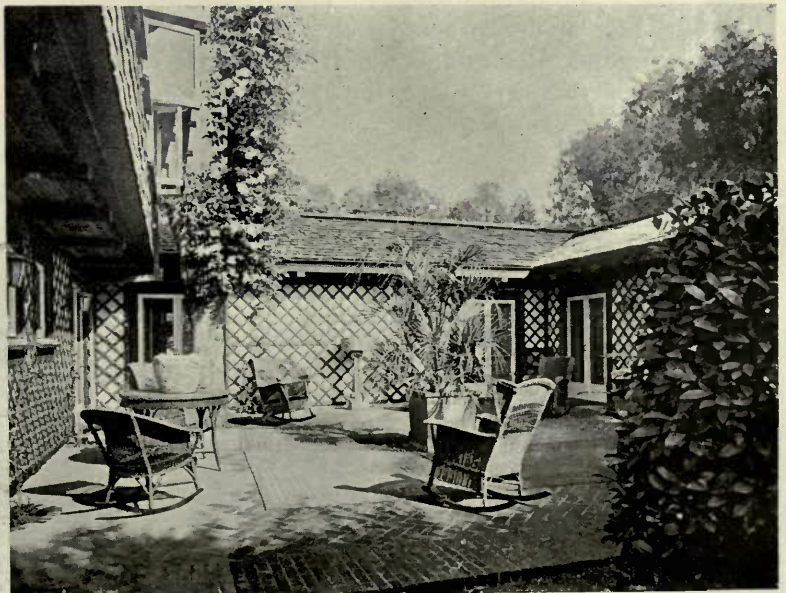
climates the trellis remains to give at least a certain texture to the wall when the vines are gone or before they have started.

Pergola covered terraces and entrances utilize the trellised supports carrying a mass of vines and flowers from the ground to the rafter work overhead, where it may spread at its leisure into a more or less dense covering.

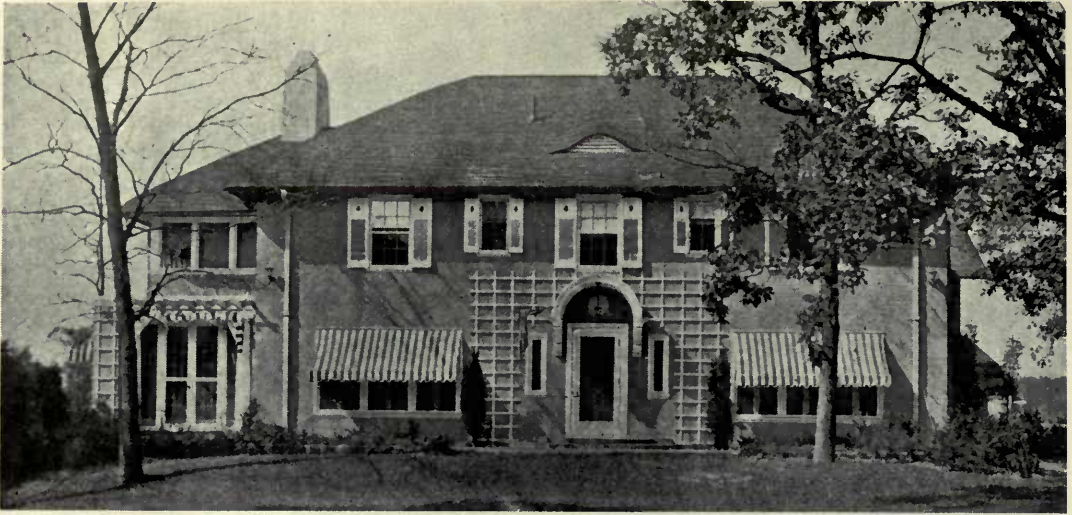
Even the interior of a sun room is sometimes trellised over walls and ceiling in the attempt to bring outdoors under shelter and is often very charming. For a brick terraced, partially inclosed court or porch the trellis-covered walls seem particularly appropriate. Small brick-coped areaways open earth-spots for the planting of growing things. Even a tree may be accommodat-

ed, as on the charming porch illustrated. A long, expensive sea voyage has been prescribed for many a convalescent when the same relaxation and complete dropping of business worries, if it could be accomplished on his own sun porch, would have an equal curative effect. He would get almost as complete "change of air" from that of his down-town office.

It is about the entrance, perhaps, that the trellis has the greatest value as a decorative feature of the house, where it has been planned with the designing of the house and furnishes the key which has been repeated and carried out in the rest of the house. Not as an afterthought, does it have its full value, though it gives one of the greatest possibilities in the remodeling of an old house



Trellised walls of a sunroom or court



Courtesy of Creo-Dift Co.

A trellised entrance

Mills, Rhines, Bellman and Norhoff, Architects

which is to be made into a modern, efficient and beautiful home.

The white window blinds give a quaint effect to the home shown in the last illustration which is well carried out in the

trellised entrance. It is attractive simply as decoration, but will be doubly attractive when covered with vines, selected either for their blossoms or their foliage and berries.

Glazing the Porch in New Zealand



HE world is growing so much smaller with its many lines of communication and its mutual interests that we have a direct in-

terest in what is being done in far-away countries. Even in the matter of the ways of building we find much common interest. The photographs which follow are from Auckland, New Zealand, and show some of the newer type as well as some of the older buildings. Cement and stucco are being used in Auckland increasingly.

The first illustration shows one of the newer wards for infectious diseases added in the Auckland Public Hospital. It shows what may be done with very simple construction to make an extremely airy apartment. The windows are pushed back showing how the space may be opened entirely. American windows have been used in this case, of the type of case-



The new ward of a hospital

ment sash hinged in pairs and sliding across the opening to one side or the other. The building is constructed with the greatest simplicity.

The second photograph shows another Auckland home with windows of a similar kind, enclosing the porches in such a way that a large part of the house may be completely opened to the outdoor air, or made comparatively close at will, for these windows close very tightly against the window stool, and when weather stripped make a very tight window.

The last photographs show the porch of an Auckland home as it was first built, and after it had been enclosed with case-ment sash. The house is of an interesting type with its stucco walls, tile roof and chimney pots. The porch as first shown is very airy, but the second view shows it scarcely less so, while at the same time it may easily be made tight against either storm or wind, or left open to the sunshine and breeze. It is quite as attractive in one case as in the other.



An Auckland Bungalow

The progressiveness of Auckland is attested by the comparative familiarity of the name in American publications, where it receives more than occasional mention for one reason or another. Auckland is a city of something over a hundred thousand inhabitants, in the province of the same name, which occupies the upper part of North Island of the New Zealand group, a little to the south and east of Australia. Auckland has about the same latitude in the southern hemisphere as that of Washington, D. C., Kansas City or San Francisco in the northern.



The open porch and after it has been glazed

The Modern Nursery

Clare Tennant

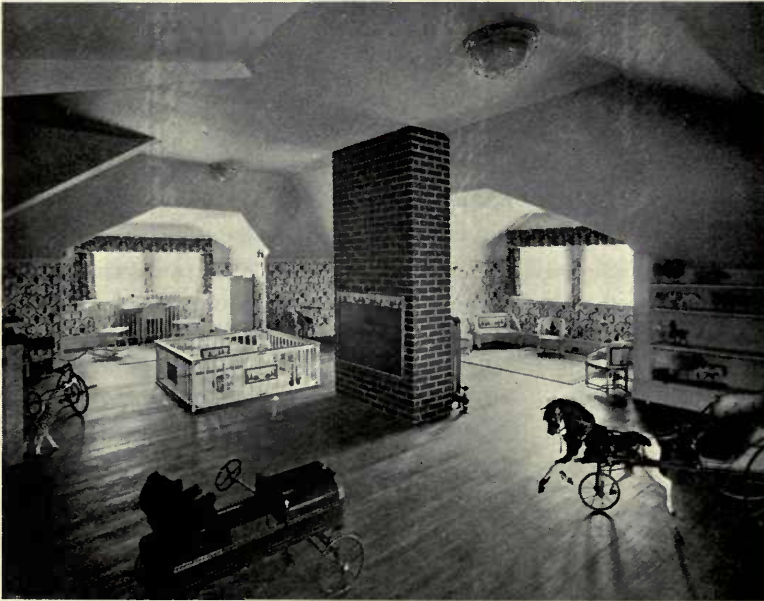


THE old fashioned idea that any kind of a room filled with all the cast-off furniture of the house was good enough for the children to play in, does not fit in with our highly organized modern life. The children are entitled to a nursery just as carefully planned and decorated as the rest of the rooms in the house, with furniture and

impressionable are greatly influenced by their environment and their tastes and desires in later life are often the result of what they had or did not have in childhood.

Of course the ideal nursery arrangement consists of two rooms, one a night nursery and the other a day nursery, but in these days of living in apartments and

small houses where there is not one more room than necessary, a combination sleeping and play room is all that can be managed. If the room, which has to do duty for sleeping and playing purposes, is large enough to permit it, a curtain can be hung across the center from wall to wall, thus dividing it into two rooms, one-half for sleeping and the other for playing. If however, the room is too small for this plan, the beds can be



Courtesy Hoggson Magazine

Could a jollier room be found for the children than this attic playroom

decorations of a nature to suit the mind and years of a child. It should be a place of joy where the children may keep all their toys and belongings, where they can have wonderful games, books to read and all the things that go to make a happy childhood.

A charming room, furnished with pieces that may be inexpensive but of good design, with a few good pictures on the wall will do a lot toward forming the taste of the child. Children being very

so placed that they do not interfere unduly with the playing side. Screens are exceedingly useful in a nursery of this kind. For instance, one or two ordinary clothes horses covered with canvas or some heavy material can be painted with Mother Goose motifs, or will serve as a background for beautiful child pictures clipped from the magazines. These will serve to portion off a corner of the room or may be placed to make a delightful playhouse. This is an excellent scheme

because it keeps the children happy in their own place, where they can play and keep their toys without disturbing or cluttering up the other rooms. An old triple fold screen would do for this purpose also. Painted on one side to resemble the outside of a house, bricks, windows, doors and all, it carries out the illusion and makes a play house that has all the charm of reality. These screens can easily be made at home and if one happens to have an old screen or two, the only expense would be for paint. A little thought and ingenuity in such matters will go far toward making a charming nursery without going to any undue expense. Whatever the arrangement adopted, the nursery should have fresh air, plenty of sunlight and simple furnishings which make it easy to keep clean as well as attractive to the eye.

The woodwork and walls of a nursery should be painted white or a light color so that it can be easily washed. Put washable rag rugs on the floor, curtains and cushions covered with gingham in large or small checks to harmonize with the walls and rugs, a table and chairs of a size suitable for little folks.



The children love stenciled patterns

The attic is a splendid place for a day nursery if it can be adequately heated in winter time. Being at the top of the house the children may play and make all the noise they like without disturbing the rest of the household. The attic is more adaptable to alteration than any other part of the house because it is frequently left unfinished with all the beams and rough boards showing. By nailing wall or compo board over the rough side walls the attic can be kept much warmer and free from draughts. The

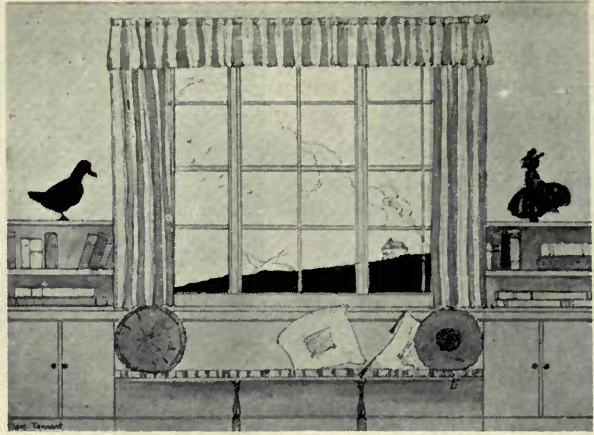
walls should be painted a light color and then they are ready for any form of decoration. The walls could be stenciled with animal designs, or Kate Greenaway figures, cut from old picture books, pasted around the walls above five feet from the floor would make an attractive frieze.



Furniture for the little folks

Exhibited at Troop School

A sunny attic could be developed into a most alluring nursery by painting the walls a cream white and scattering blue birds over everything, walls, ceiling, furniture and hangings. It could be made even prettier by building small seats under the windows and using the sides of the attic where the roof comes down very low for closets, where the children may keep their little belongings and learn early in life the habit of keeping their things in order.



Window seat in a child's room

However attractive the old fashioned garret may have been, with its vast store of accumulated treasure, the modern use of that portion of the house is even more delightful. The nursery rhyme, "rain, rain go away" has been forgotten except for the pleasant patter on the roof, by the children who are the possessors of such a present day attic play room as the one shown. It has been made over in a scheme of remodeling by New York designers, into a play room where any amount of good times may go on without disturbing the grown-ups below stairs. Wall coverings and hangings show quaint Greenaway figures, and each piece of furniture has been designed and decorated especially for this little group. The blackboard framed against the chimney piece is a happy thought.

The simplest and most sensible floor covering for a nursery is, of course, linoleum, it has toughness and durability, which is necessary to withstand the happy savageries of childhood, is washable and

can be secured in all kinds and color.

Just a word before closing about furnishings. Aside from beds the nursery really needs very little, a chair for a grown up, two or three little chairs and a table would do. Too many things around interfere and get in the way when the kiddies are in the midst of some wonderful game. Their toys and playthings must be allowed a certain amount of room. Nursery woodwork should be painted white or a light color to make a bright cheerful room, and also so the little finger marks and scrawled pictures can be washed off. Put washable rag rugs on the floor, simple curtains and cushions covered with gingham to harmonize with the walls and rugs. These with a table and chairs of a size suitable for little people—and there you have, at a comparatively small cost, a charming room where the children may play and study in a world of their own.



The Fireplace Nook

Katherine Keene

"The fireplace is a window into the most charming world I ever had a glimpse of."

*"Few people know how to make a wood fire, but everybody thinks he or she does. You want, first, a large backlog which does not rest on the andirons. This will keep your fire forward, radiate heat all day, and late in the evening fall into a ruin of glowing coals, like the last days of a good man. * * * Then you want a forestick on the andirons; and upon these build the fire of lighter stuff."—Charles Dudley Warner, in Backlog Studies.*

THE man with a wood lot is, this year, a fortunate man, and his family will bless him around the glowing fire in the fireplace which is saving furnace heat, yet keeping the family warm and cheerful. One sleeps better in a cool room than in a room that is too warm. Busied with the multitude of household duties the house is fairly comfortable when the thermometer does not stand very high. Absent all day doing Red Cross work, there is no reason why the whole house should be kept at full heat, if only one has a cozy, warm spot for the comparative leisure of reading and knitting. The wood fire is quickly built up, and by following Charles Dudley Warner's advice, kept all day, with the luminous windows into Paradise for the long winter evenings.

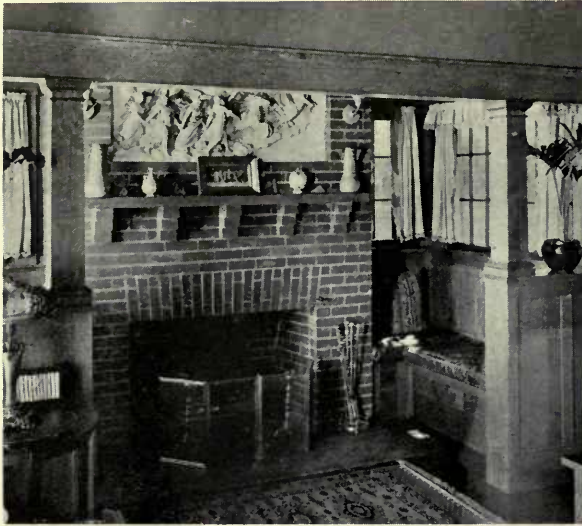
But the fireplace must be snug and cozy if it is to be easily made into a family center of comfort, even in the midst of a chilly atmosphere. The recessed fireplace has this particular advantage, that it is withdrawn from drafts. It is often low-ceiled, no higher than the door height, and so the nook is easily and quickly made warm. It is a charming feature of a room, and lends

itself to all sorts of individual touches.

A simple, brick-faced fireplace, wide enough for a seat at each end, set in a niche, the tile of the hearth extending over the floor of the niche, is shown in one of the illustrations. A window over the seat gives light. The decoration over the chimney breast has been especially prepared for the place, a charming bit of



A fireplace for comfort and beauty



A well lighted fireplace nook

out-door painting which stands like a view of the outside.

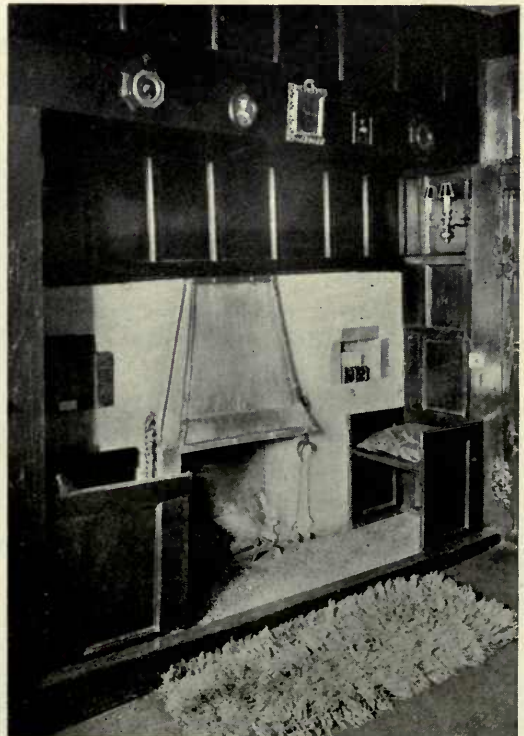
Another fireplace with a deeper nook has seats wide enough for a couch, well lighted by high windows all around. A cast of the Aurora is set in the overmantel, framed in the brickwork.

The fireplace may be deep enough for a real backlog which will drop into glowing embers at the end of the evening from such a fire as Charles Dudley Warner loved, opening the windows into another world; or it may be only a gas log; but this season we will hope that it burns real wood and that there is a wood pile available. One would almost venture to say that there is enough of brush, sticks, dead branches and undergrowth cluttering unused land within easy reach of the cities to keep a light fire in almost every fireplace that is prepared for it. We know of "faggot gatherers" only in pictures from the old world. They might be very popular here. Faggots bound into neat bundles and sold from carts along the city streets would earn many thrift stamps for growing boys and girls, and at the same time leave the ground from which they were taken in much more sightly condition. Let us hope for faggot gatherers.

The third illustration is a fireplace in an old English house. It is an ingle off the library of an English Inn. This is a fascinating old fireplace which fills the ideals of many people, who would like to have one just like it in their own homes. In truth it is a simple fireplace, and one the like of which would fit into many a home, perhaps without disturbing present conditions very much. The little wooden seats with the convenient niches, for books or a work box are fairly enticing.

The White ingle nook of the illustration is really a den. It has, like the English nook, a plastered surface for the fireplace, framed in wood.

The hearth is swept and the wood basket filled. The nook is well lighted, both by high windows over the seat backs and with side lights. The little glass knobs on the panels under the seats open the



A quaintly charming fireplace nook

space in an unusual way. It will be noticed that these panels under the seats set back at the floor line to give comfortable heel room. Nothing makes a seat more uncomfortable than a projecting quarter round on a square box seat. At the same time no space is wasted under the seats. The long panels are hinged at the bottom, with the glass knob for a pull at the top. In this

space may be kept additional wood for the fire, kindlings, pieces of drift wood to lay on for congenial lovers of the wood fire and the tales it brings to mind. Chil-



A lounging corner

dren's books and magazines may be kept in this space, or it may be fitted as a cabinet for records in the care of older children.

Save Garbage to Fertilize the War Garden

M. Roberts Conover

The disposition of garbage and of ashes is quite a problem, fallen leaves and grass clippings during their season add to it. Fertilizer for the war garden is often an expensive proposition. A compost bed prepared in a pit dug in the ground and covered so that it is not unsightly, as well as for its own protection, is suggested as a means by which one problem is made to solve the other.



WE cannot fertilize the War Garden as cheaply as was possible before the war if we must buy our fertilizers, neither have such fertilizers so high a fertilizing value, but we yet have resources which previous to the war we had ignored. Much of this is close at hand. Certain refuse results from the various processes connected with the maintenance of a home, and much of this refuse has distinct fertilizing value. What are they? Well, from the kitchen range

and furnace are coal and wood ashes. The latter is rich in potash, while the former, though containing potash in a lesser degree, contains iron, lime, magnesia, phosphoric acid, alumina, sulphuric acid, and chlorine. In every 100 pounds of coal ashes there are said to be from 4 to 8 pounds of valuable inorganic material which the garden vegetables need in their growth. Hence while the supply from this source would not be large, it is a great help toward added fertility. Where

the soil is clayey, the use of ashes greatly improves it. Then there are leaves, vegetable refuse from the garden, the short grass raked from the lawn after mowing, the cleanings from the poultry house, feathers from the dressing of poultry and—not to be despised—meat bones and any other animal refuse which may be available, ashes from the burning of brush and weedy growths, and the branches and rubbish which accumulate after the high winds of winter have broken the non-resistant parts from trees and shrubs. These materials are continually accruing throughout the year, and if a little forethought is used, they may become a valuable adjunct to garden fertility.

The ashes should be kept dry and separate until desirable to apply it. The affinity which exists between the inorganic and the organic forms results in a too rapid loss of nitrogen, to allow the ashy contributions to be merged with animal wastes for any length of time previous to using the manure. The ashes and manure may be combined immediately before their application to the soil, or applied separately thereto just before plowing.

It is better not to burn the leaves. They too are satisfactory, used as absorbents with the animal and vegetable wastes that are to be reduced by decay, to allow the partial waste by fire.

Such waste materials are readily composted in a heap which may be made upon the surface of the ground or in a pit dug for that purpose. If possible, have a cover such as would be afforded by the roof of a shed, but if this is not available, a thick covering of sods or earth will prevent such a loss of virtue as would result if left entirely exposed to the weather. If the site of the compost heap can be subsequently planted to vegetables, there will be a distinct advantage. Such a site is excellent for sweet corn, squash or melons. As a foundation for such a compost,

it is advisable to place a thick layer of leaves and upon this the grass trimmings, or straw, if available. Next the animal wastes may be added, interspersing with leaves from time to time. Where stable manure is available, or the cleanings from the poultry house, have the feathers and fresh meat bones in contact with it, to hasten decomposition. Fresh meat bones buried in horse manure will decay quite rapidly. A generous sprinkling of land plaster over the heap and a thick layer of rotted sods or earth will serve to fix the escaping elements from the decaying bone.

Fresh meat bones which are of unquestioned value as fertilizer, will decay in sawdust without the use of acids. They should be piled in a heap, well moistened with water and then covered two or three inches with sawdust. Without an outer cover of some absorbent there is great loss of ammonia, however.

Where one has oat-straw to add to his compost heap, the potash proportion will be greatly increased.

When the compost heap is large, close-packed and becomes dry, there is loss of value by burning or fire-fanging as it is called. This is due to the action of the anaerobic ferments which become intensively active in a close heap. This danger usually occurs in a large bulk of the rapid-heating animal wastes, as horse manure, etc. A thorough wetting down with water will check it, or a turning over with a fork so that the air checks the action of the ferments.

In the spring this compost should be worked over with a grubbing hoe, and chopped through and through until it is fine enough to be well distributed over the garden soil by broad-casting. It should then be plowed under. If this work is done in March, or about two weeks before planting time, the action of rains will aid some in the general distribution before seed-planting time.

The Industrial Art Situation



WE are an industrial nation. American machinery, the harvester, the tank and the tractor, are sought and prized by the European; while "imported" has given the stamp of approval to the American in everything in which design and color are prime essentials. Previous to the war American manufacturers depended on European sources for their design, for their designers, and also for a standard of taste. We have machines galore, machines which will perform any task likely to be asked of them. We have fine raw materials. The art faculty of the designer must create a soul for the product, so to speak, which he makes manifest in the finished product. This he may do by the use of his own fingers and some more or less crude tools, and we call it "craft work," and "hand made," or he may do it with the glorified tools and wonderful mechanism which we call machines. It is the creative mind back of the fine materials to which the results are due, whether pieces are produced one at a time or as many duplications as the machine is able to accomplish to the satisfaction of the mind that is back of it. It is when the machine is placed in command of an army of men and women so that they become even less intelligent machines that the finished product goes wrong.

Manufacturers who before the war came had long felt an ugly presentiment as to what might happen if their industries should ever be isolated from European sources of supply as to design and taste find that the day has come, before a preparedness program could be gotten under way. They had never advanced any educational propaganda; they had helped to found no permanent schools; they had not especially encouraged Amer-

ican designers. Neither they nor their patrons, the American public, had considered the value of the possible trademark: **American made and American designed.**

United States is the greatest industrial nation, the greatest master of the machine. When peace returns shall we send to Europe for men to provide food for these machines; to design our materials for our products? We shall have the greatest navy in the world. What shall we send abroad in these ships? What kind of work will "Made in America" stand for?

France has subsidized her art schools, and her museums are in close co-operation with her manufacturers, preparatory to the tremendous industrial development which will follow the war. England has her committees and her organization formed. What committees and commissions has United States put into the field to prepare our nation industrially? Millions of dollars rolled into France because her products were finer and better than those of people without her art sense. The artistic beauty of the finished product set a standard for its money value. "The industrial arts of France," according to a statement of the director of the Minnesota State Art Commission in 1914, "exceeded in their economic value in one year the total valuation of the American wheat crop." We need an Industrial Art Administration, with the efficiency of the food administration, to lead American products to the place they should hold in the industrial world.

There is a sinister look to the industrial map of Europe following the war. The prosperous cities of Belgium and northern France, one of the greatest industrial sections of Europe, have been

completely wiped off the map. In some places, we are told, only the curbing along the streets show where the towns stood. Every bit of machinery has been plundered and carried safely into Germany. The engines, electrical equipment, costly machinery, whatever was movable, has been shipped over the German line. But the German factories remained intact, their equipment not only intact but reinforced by the plunder from their former rivals, from whom no competition need now be feared for years to come. The provinces of France and Belgium which the Hun struck first, and to which he has systematically been laying waste for four long years, are, according to Mr. Frank H. Simonds, precisely the quarters whence heretofore came his sharpest industrial competition. With his military arm broken, the Hun was ready to make peace. With his hordes, broken and poverty stricken, translated from organized military to organized industrial servitude, he feared no industrial competition while Autocracy held control. With the defection of the German people, if

the Allies must clothe as well as feed the world the industrial problems are manifolded.

* * * *

The Metropolitan Museum of Art has taken steps to open their wonderful treasury to the people, not only of New York, but as far as possible to the entire country, by an important extension of Museum activity. Richard F. Bach, Curator of the School of Architecture in Columbia University, and assistant editor of Good Furniture Magazine, has been appointed to the museum staff for this extension work, including the fostering of American design in current manufacture of furniture, textiles and home furnishings. His position has been created so that he can render accessible the resources of the collections to all lines of workers and it will be his business to do this in terms of their own particular problems and requirements.

It is hoped that his office may become a veritable clearing house for all who may desire through him to make practical use of the Museum's rich collection.

The Smaller House Plan



HIS house was planned for building in a small town. It is an adaptation from a larger house, the rooms a little smaller in size; the sun porch omitted, and the alcove instead of another sleeping porch on the second floor.

In this case the actual cost of building was not of so much importance as the fact that it might be necessary at some time for the man who was building it to dispose of it. Under the circumstances it was necessary to plan something that would be salable in the locality and at a price not much above the average ability to pay.

Living room and dining room have no built-in features, aside from the inexpensive seats. The owner thought the average buyer would not care enough about an ornamental buffet to repay its cost. The opening connecting these rooms is arranged for French doors.

In the library it was desired to arrange for as many bookcases as possible of standard sectional width. The spaces are so arranged as to provide for seven sectional bookcases. These are indicated on the plan by dotted lines.

The stairway arrangement is the most notable feature of this house. Without going through another room, one can go



The brick porch gives a sightly entrance

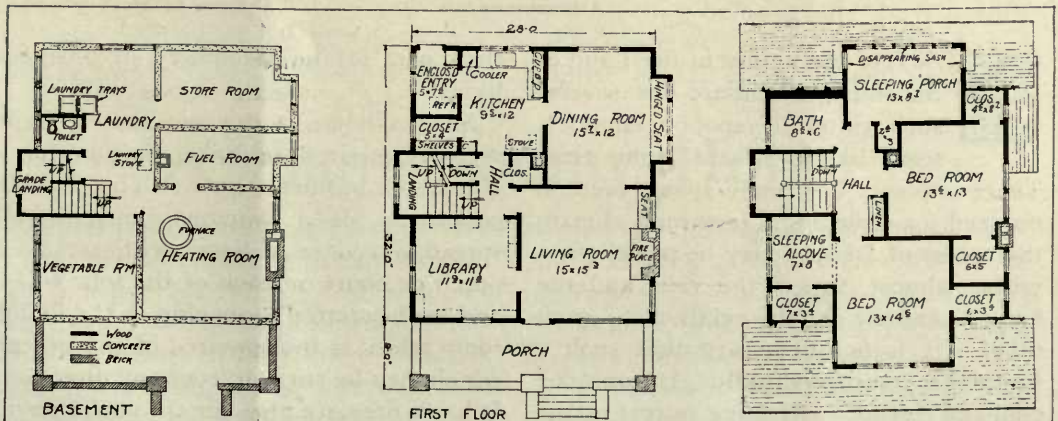
E. W. Stillwell, Architect

from all of the first story rooms, except the dining room, upstairs, out to the side yard or down to the basement. The hall, stair landing and grade entrance are all perfectly lighted.

The kitchen is not large but is very carefully planned to meet the requirements of convenience and direct communication. In the larger plan from which this was adapted a breakfast nook was built in where the closet with shelves

stands, between the stairway and the enclosed entry. An additional foot of width for this space was allowed in the first plan, which gave a sufficient width for small table and seat on either side.

The basement has all the facilities needed in any house. There is a store room that may be used for a shop by the boys. In placing the laundry tubs, it was thought that a good location would be under the refrigerator, so that it could be



drained into the same waste pipe, eliminating the run-over trouble that most refrigerators have. At the same time, the tubs have a good side light.

The shape of the roof makes considerable closet space at the front and back. The rooms, alcove and sleeping porch all have full square 8-foot ceilings. It is worthy of note that the plumbing of the bathroom and basement are in a line for the shortest possible runs of pipes. Both the sleeping porch and sleeping alcove

have openings which are fitted with sash that are balanced by weights, and these sash, by lifting up a hinged window stool, are made to disappear in compartments in the wall. For this purpose the openings are made rather high.

The exterior of the house is principally siding above a stuccoed concrete foundation. Shingles are used to finish off the gable ends above the window line. The porch work is brick and porch floors and steps are cement.

A Winter Residence in a Summer Climate



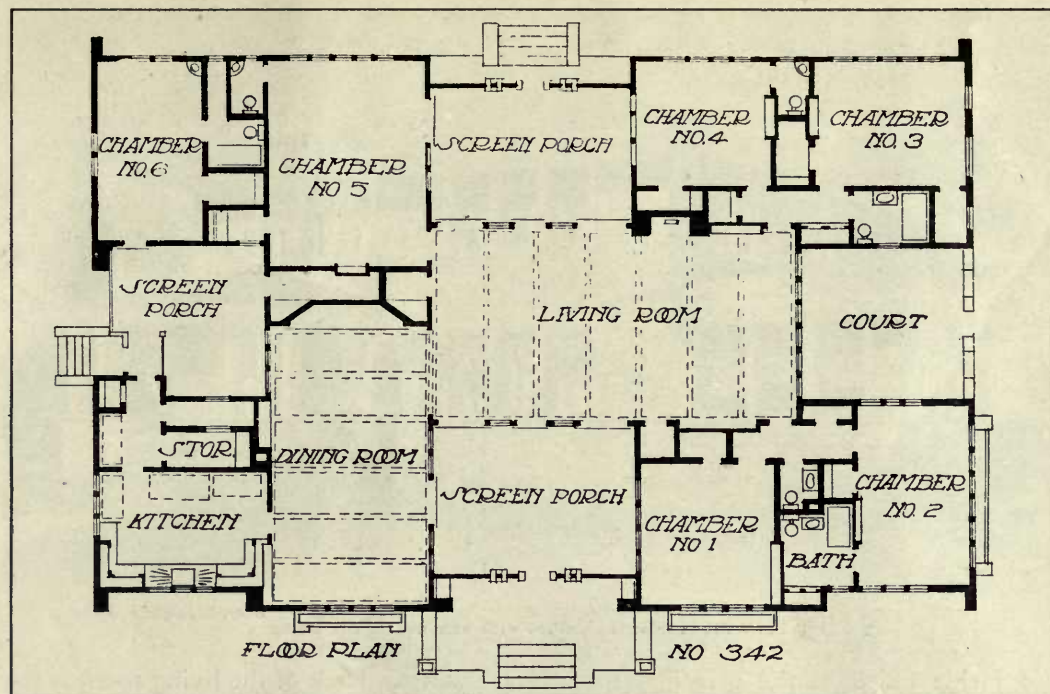
A dream come true

J. W. Lindstrom, Architect

SOME of the homes in the Land of Sunshine, and there are several such winter playspots in America, seem like a dream come true. There is plenty of ground space, there is no need for crowding. In a mild climate the rooms of a house may be placed anywhere, almost, to get the view and the breeze, and a certain relation to each other. It is not necessary that such a house be compactly built. It must be cool and restful, a charming retreat rather

than part of the machinery of business living.

Such a home is the one shown, built recently at Crooked Lake, Florida, for a Northern business man. The livable equipment of a spacious house is all spread out on one floor, with screened porch or court on each of the four sides, and each practically opening to the living room which is thus assured of any breeze which may be stirring from any direction. It has a fireplace also, for the cooler days.



The end of the dining room is not separated from the living room, though only the end is exposed, the greater part of the room being secluded by its location. Opening directly from the dining room is the comparatively small kitchen, well supplied with storage room and well planned and equipped with cupboard and work space, sufficient for all hospitality which is not taken to the club.

Each bedroom with its private bathroom is part of the dream,—which many people dream but which does not come true, alas, to the majority. Chamber No. 6 is the maid's room, opening from the

semi-enclosed screened porch by the kitchen.

Chambers No. 1 and 2 are the owner's suite and are very complete and convenient, with large window space and well-arranged closet room.

Chambers No. 3 and 4 make an equally well-arranged suite with well-planned built-in cabinets in addition to the closet.

Chamber No. 5 opens from the screened porch as well as from the living room, fitting well into any appointment to which it may be assigned.

The exterior is simply treated and painted white, in its lovely setting.

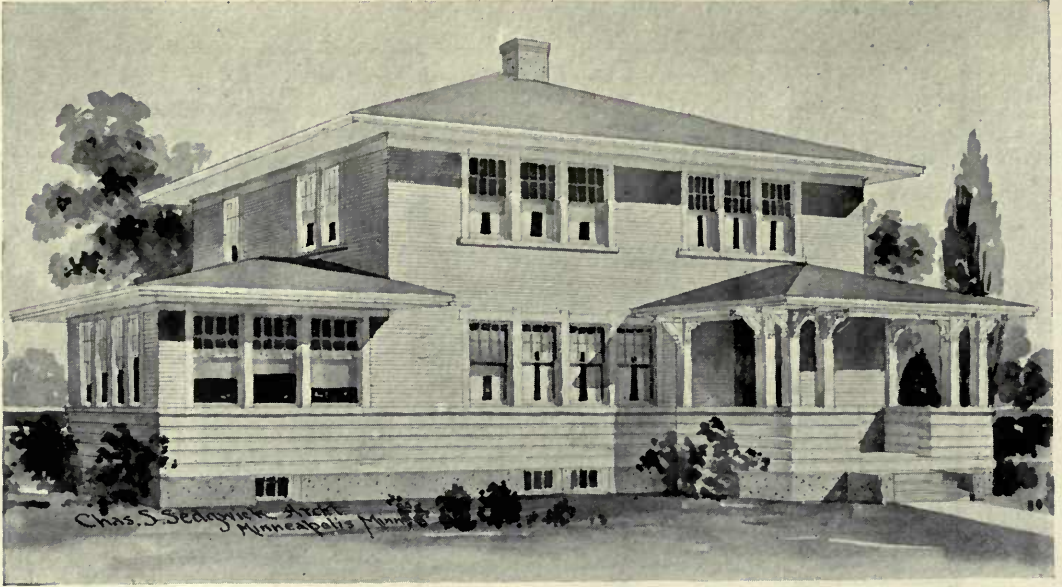
A Plain Roomy Home



HIS home was designed to give the most space at the lowest cost, using stock sizes for all windows and placing them in groups, fulfilling the wishes of the owner. There is a low-pitched shingle roof with wide projecting eaves. The rooms are of good

size, and all the modern conveniences that lend comfort and convenience have been incorporated. One central chimney carries large flues for the heating apparatus, fireplace, kitchen and laundry.

The house is of frame construction with concrete foundations. Hard wood is used

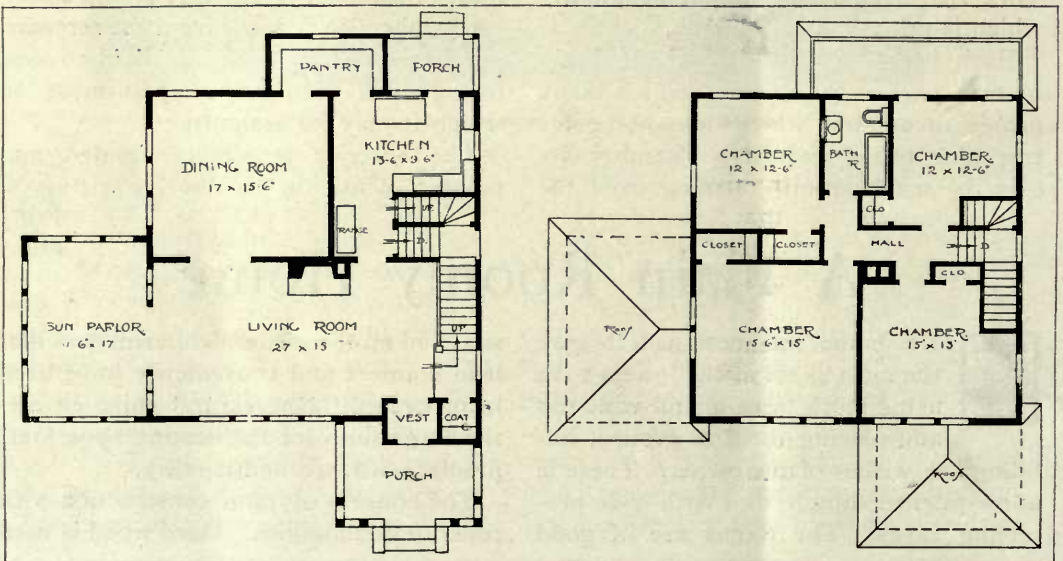


The white exterior is sheathed with wide and narrow siding Chas. S. Sedgwick, Architect

for inside finish in the principal rooms with oak floors for the first story. The kitchen is finished in white.

The entrance is through a porch and projecting vestibule, which has a coat closet beside it opening from the landing on the first step of the stairs. The living room is 27 by 15 feet with a fireplace on the center of the inside wall. A glazed sun parlor opens from the end opposite

the stairs. Back of the living room is the dining room with a wide opening between. On the other side of the fireplace in the living room is the door to the kitchen and from there are the basement stairs and the steps to the landing of the main stairs. The kitchen has excellent working space with its cupboards on either side of the window and good sink tables. A roomy pantry connects the din-



ing room and kitchen.

On the second floor are four good bedrooms, each with closets, some of which are perhaps a little larger than what is usually allowed in the way of space, and a well located bathroom. The second story is finished in second quality pine, painted white, and enameled.

The exterior walls are sheathed, pa-

pered and covered with wide fir siding up to the first story window sills. Narrow siding is used over the body of the house, mitred at all the outer angles. The exterior is painted in a light cream color, while all cornices, casing and sash are painted white.

The roof shingles are stained a dark reddish brown with creosote stain.

Attractive Homes

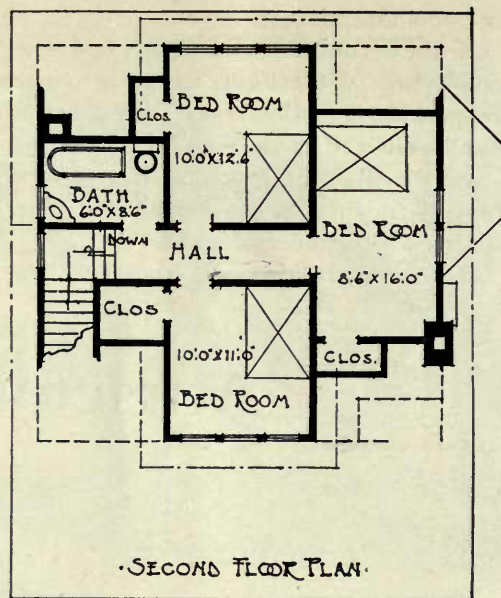
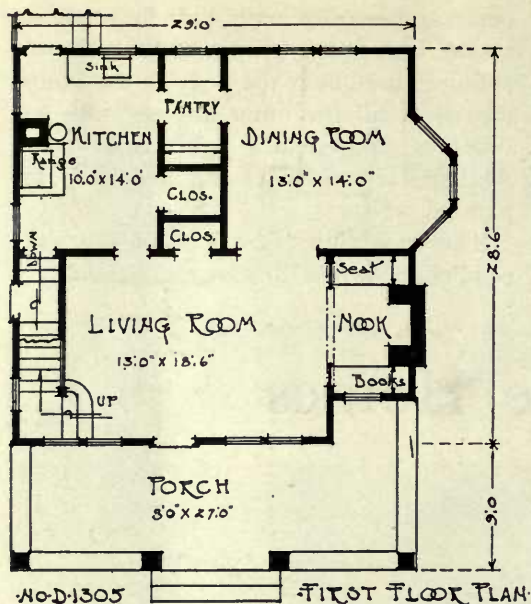


A vine-clad entrance

EVERY one wants an attractive home. What are the first essentials of an attractive home? That it is a home; that it is the present abiding place of a congenial family group. In these war-time days of cantonments there are many poor boarding-house rooms, or tiny apartments "where Daddy can get home occasionally," which in after years will be looked upon as the ideal of a happy home. Truly it is something other than "things" which make homes attractive.

It is perhaps equally true that the form

or type of a house does not always dominate its attractiveness. A thoughtful consideration of its appearance, with a little well-selected planting, accenting the livable qualities, will make most houses attractive, as far as the exterior goes. Growing vines, like charity, cover a multitude of faults. It is the picture value of the house in its surroundings which makes one of the features most attractive and inviting in a home. Often little things which mean little trouble and less expense will give an absolutely different aspect to a home.



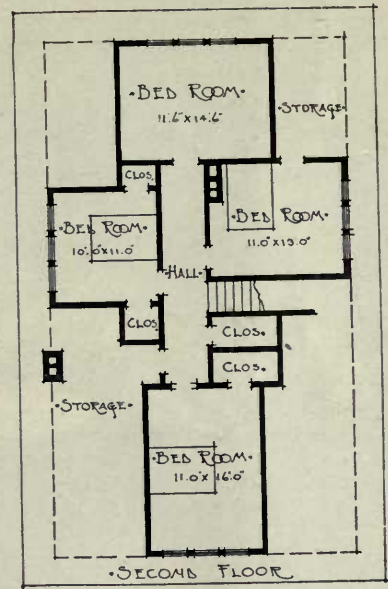
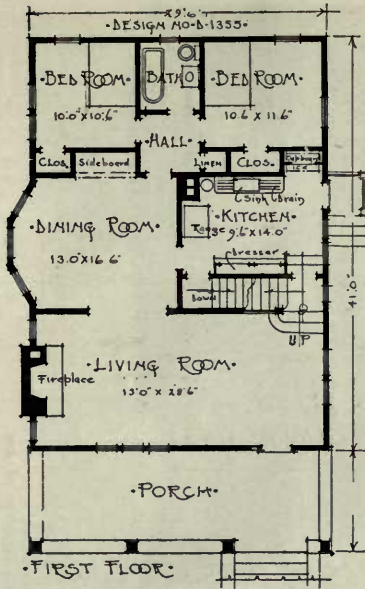
Such may be the reason for the attraction of the home here shown, which is an exceedingly popular design, and has been built many times in different parts of the country. It is quite usual in type, but is very well planned. The big porch is shaded by vines and growing things. The house is of frame construction, stuccoed to the porch rail.

The fireplace nook at the end of the living room is very cozy and inviting. The stairs lead up from the other end of the living room, with basement stairs from the kitchen. There are closets from both living room and kitchen, with a pantry between the dining room and kitchen.

On the second floor are three bedrooms



A home simple in construction



and a bathroom, with windows in the gables and dormers.

The second design has somewhat the same general plan. The stairs may be entered from either the living room or the kitchen. There are two bedrooms and bath on the main floor, opening to a small square hall.

The living room is large, being 28 by 13 feet, and has a fireplace in one end of the room.

On the second floor are four bedrooms with windows in the four dormers.

The exterior lines of the house are of the simplest construction. The walls are of stucco with white trimmings.

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I am more powerful than the combined armies of the world.

I have destroyed more men than all the wars of the nations.

I am more deadly than bullets, and I have wrecked more homes than the mightiest siege guns.

I steal, in the United States alone, over \$300,000,000 each year.

I spare no one, and I find my victims among the rich and poor alike, the young and old, the strong and weak. Widows and orphans know me.

I lurk in unseen places and do most of my work silently. You are warned against me, but you heed not.

I loom up to such proportions that I cast my shadow over every field of labor, from the turning of the grindstone to the moving of every railroad train.

I massacre thousands upon thousands of wage-earners a year.

I am relentless.

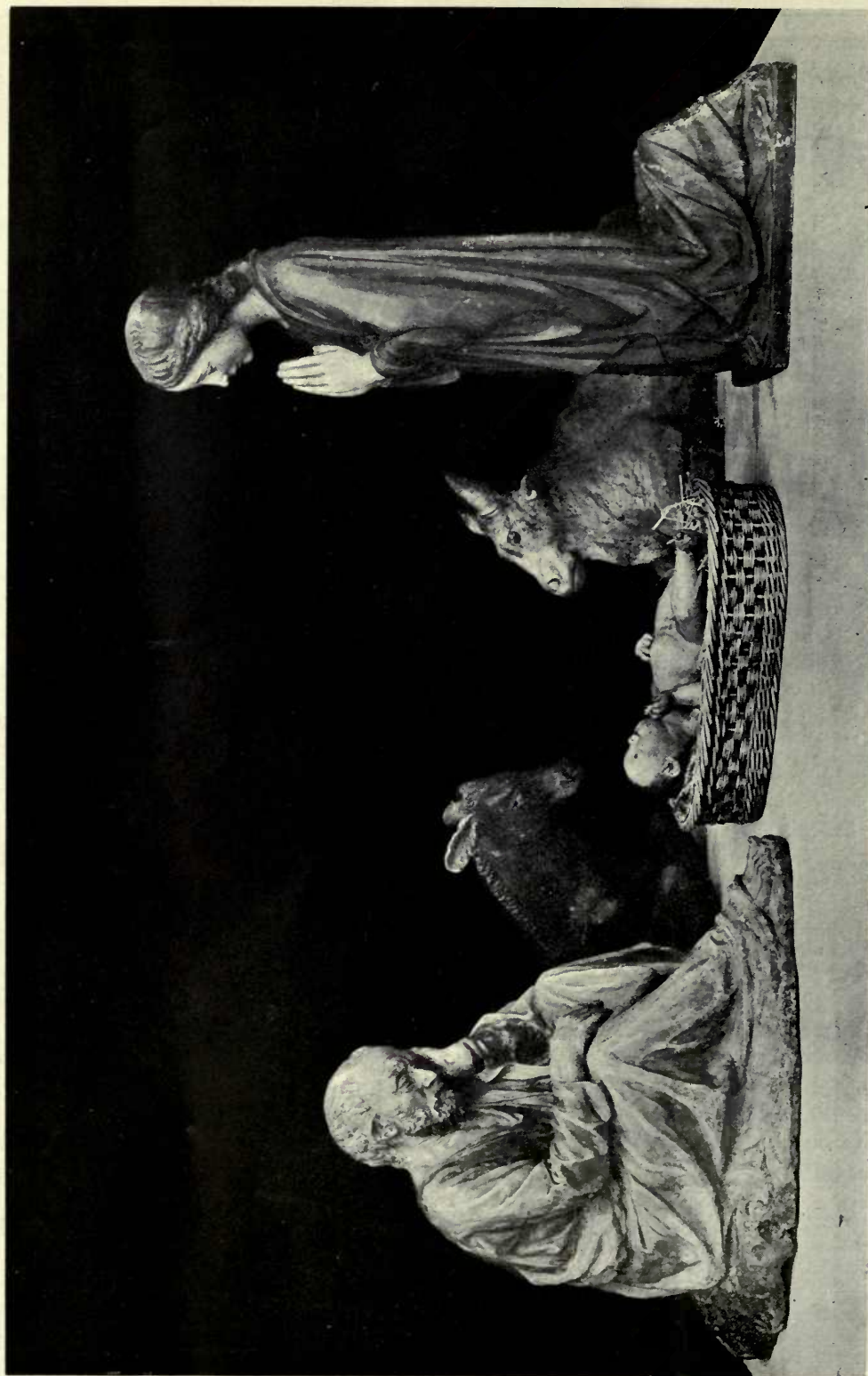
I am everywhere—in the house, on the street, in the factory, at railroad crossings, and on the sea.

I bring sickness, degradation and death, and yet few seek to avoid me.

I destroy, crush and maim; I give nothing, but take all.

I am your worst enemy,—carelessness.

—Toledo Blade.



The Holy Family, by Antonio Rosallino, now in the Metropolitan Museum of Art

INSIDE THE HOUSE

Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Christmas in War and Peace



T was the poor man of Assisi—everybody's St. Francis—who revived the use of nativity groups in the early part of the thirteenth century. For seven hundred years, Italian mothers have lighted the candles on Christmas eve in remembrance of the manger at Bethlehem, and in token of the Saint who called the birds of the air his little brothers.

The children of Assisi sometimes sing a verse based on the legend of the birds. It runs in this manner: "And the birds followed St. Francis, and he said to them, 'The loving Father feeds you, yet you neither reap nor sow. He gives you the water of the rivers and fountains to slake your thirst, and the valleys and mountains for your refuge, and the trees in which to build your nests. Sing little brothers, and

let every note be a song of praise.'"

At the Christmas season we seem to be drawn back to the older times and the older customs. The beautiful old custom of caroling on Christmas morn takes a hold on the fancy and leads the spirit into thoughts of peace and the simplicity of



Out door Christmas trees effectively trimmed by nature

INSIDE THE HOUSE

earlier times. In the same way these quaint groups take us out of our own times and surroundings and carry us back into the mists of the time that is long past.

The groups arranged by St. Francis were sometimes of carved and painted wood and sometimes of colored terra cotta, and included the Christ-Child, Mary, Joseph, the Ox and the Ass. Sometimes the work was that of unskilled peasants; sometimes of the best sculptors of

the day. Very devotional at all times were the quaint images, and often Mary was portrayed with a beauty not found in the canvases of the period.

In New York City is one of the most famous examples of these groups—the Holy Family by Antonio Rossellino, a sculptor of the fifteenth century. Within a “tabernacle,” kneels the youthful Mary, her slender hands clasped in adoration of the Child. A long blue mantle, partially concealing a red under-robe, falls in long,

Gothic folds. The hair is parted over a low brow, while the rapt expression of joy and wonder, once seen, is seldom forgotten. Lovely indeed is this Madonna of terra cotta—so long neglected in Italy, now so fittingly enshrined in the Gothic room of the Metropolitan Museum.

Joseph is depicted in a serious—almost anxious mood. The problems of the future hang heavily on the carpenter of Galilee. Of crude workmanship are the ox and the ass—so primitive, in fact, that they might easily belong to the century of the great Saint of Assisi.

When the Holy Family was first placed in the Museum, Joseph and Mary wore halos of the metal and the dear Bambino lay on a velvet cushion. Now the halos are removed and a basket is substituted for the cushion. The curators feel that this arrangement is more in tune with the spirit of the fifteenth century.

During the holidays, when the tabernacle is outlined with laurel, the big room takes on a finer meaning. Voices are lowered and footsteps softened. War and rumors of



The Rosillino Madonna, in the Metropolitan Art Museum showing the halo

INSIDE THE HOUSE

War no longer exist. The light of the world shines forth again. Then it is that an old carol, written in Rossillino's century, but in another country, comes to mind:


"He neither shall be born
In housen nor in hall,
Nor in the place of paradise,
But in an Ox's stall.
He neither shall be clothed

In purple nor in pall,
But in the fair, white linen
That usen babies all.
He neither shall be rocked
In silver nor in gold,
But in a wooden manger
That resteth on the mould.
Then be ye glad, good people,
This night of all the year,
And light ye up your candles
For His star, it shineth clear."

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.

PACE saving gifts are found in several shops and seem particularly fitting to send overseas or slip into the soldier's kit together with other last minute Christmas packages. Celluloid dominoes, thin as wafers, but with the usual markings, are among good things.

The Copley craft Christmas cards, made as may be imagined in Boston, and on sale in many places have a pleasing individuality. Of hand made paper with envelopes to match they show well spaced lettering and interesting color schemes. Owing to the high cost of paper, and the many demands for every



penny, the giving of cards will probably be greatly curtailed this season. However, it is well to keep in mind the gifted craft workers in all lines who have suffered keenly during the period of the War, and when possible, in the Christmas purchasing, lend the helping spirit and hand. In the Middle Ages, in time of war, the monasteries kept handicraft alive. While extermination is

hardly a possibility it is well to assist in keeping the craft fires burning, and after the war, if all predictions materialize, artists and artisans will come into their own in a manner hitherto unknown in this old world. May the glad time be near at hand.



INSIDE THE HOUSE

The "mess kit" or "pocket kitchen" is among the newest of the new war things and for more peaceful times, as well. It contains nine separate parts of aluminum, weighs less than two pounds, costing five dollars. With the "kitchen" are included twenty cubes of theroz or "canned heat."

ing, rather than for table use. Many people are doing without sugar in tea and coffee in the interest of sugar saving. There is usually the silver lining to everything, and more than one person has discovered a new zest in the morning or afternoon cup. The Chinese and Japanese



Three twine holders and two dolls of wood, by Esther Blanke

Several articles may be cooked at the same time and, as it cannot upset or explode, there are many practical advantages. For impromptu luncheons, Sunday suppers, boarding school spreads, automobile picnics, etc. The "pocket kitchen" is a handy, serviceable and inexpensive friend.

Milk crystals are among the conservations noted at a large grocers. Four level tablespoonfuls in a cup of water equal a cup of milk. The crystals are for cook-

have always taken their tea "straight" or, as one Oriental importer expresses it, "with the edge of the flavor unimpaired." How keen this edge may be lovers of fine tea well know.

One woman who makes tea every afternoon, drinking her cup alone, if no friend joins her, declares that one-fourth Orange Pekoe with three-fourths Ceylon is a good every-day combination. Half and half, fine Oolong and Orange Pekoe, she suggests for special occasions, but not nearly

INSIDE THE HOUSE

so beneficial for the nerves in the long run. Rock candy is better than sugar according to her theories and goes further. Never use milk, and cream only when a guest insists, making the tea a bit stronger to blend well with the cream, which should be as thick as that used for breakfast coffee. A slice of lemon pierced by a clove goes well, she finds, with Pekoe and Ceylon, but with the high-grade Oriental "plain" tea made by infusion, not steeping, and taken from the thinnest of China, is the way par excellence. A clever woman artist whose teapot is always bubbling on Friday afternoon uses a Samovar to heat the water and makes the cheering cup in a manner learned in San Francisco. The tea is the long leaf variety popular in cities where the Chinese congregate. Into a teapot of boiling water a handful of leaves are dropped. They unfold slowly with the heat. When they sink to the bottom, as they will, if all goes well, in five minutes, the tea is ready to pour into tiny cups. There is never any cream or sugar on this tea tray, nor was there before the war. There are rice wafers of Japanese make and candied ginger of Chinese origin for guests who wish a touch of sweet.

The tea is straw color and innocent in appearance, but those who drink it say it surpasses the blackest coffee for exhilaration.

In selecting a gift for the housekeeper try a pound or half pound of tea. There are boxes and baskets in which such purchases may be encased, or, if the gift is selected at an Oriental shop on attractive outer covering will be included.

The step from tea—to teapots, tea trays, tea canisters and tea balls is short, and the lure of one usually means the call of the other. The perforated "teaspoon" is newer than the ball and while less ornamental, a simpler and more practical article. When made of aluminum it is inexpensive and very handy for traveling. None of these tea-making schemes have any value unless the water is boiling. Merely hot water will not make a palatable cup.

In one of the allied craft shops, which continues in spite of war, many interesting novelties are seen in painted woods. Quaint figures holding, but deftly concealing, balls of twine appealed to the shopper as being particularly clever in design and execution, and full of Christmas spirit and dash.

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.



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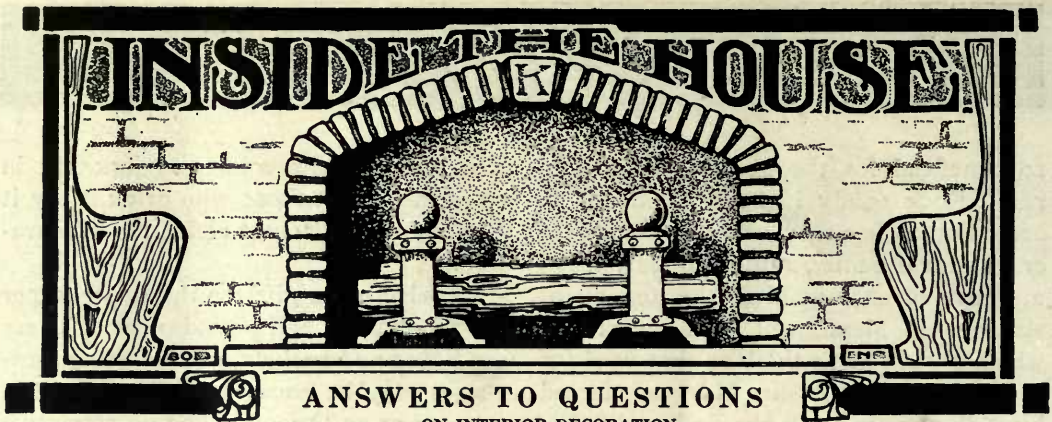
Send for a copy of one of our new plan books, either "Bungalows," containing 100 designs of moderate priced bungalows, or "Attractive Homes," containing 100 designs of story-and-a-half and two-story houses.

These designs are up-to-the-minute in detail and arrangement and incorporate the new features in home building, such as sleeping porches, sun rooms, built-in conveniences, etc.

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639 Andrus Building, 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.

An Unusual Home Interior.

W. H. F.—The writer is building a home and asks your assistance in selecting the painting, draperies, etc.

The house is laid off according to enclosed sketch, the second floor contains four bed rooms and bath room, the owner's bed room is 15 x 18 feet with fireplace, the other front room is 13 x 14 feet, other two are 12 x 13 feet with bath room 7 x 10 feet. The trim upstairs will be all in white with tinted walls. Would like you to suggest the colors for tinting walls, also hangings for windows, covering for furniture, etc.

The first floor is as shown on sketch, the living room, dining room and hall will be paneled 6 feet from floor in douglas fir with cornice moulding in angle where walls meet ceiling. The paneling will be finished with plate rail $3\frac{1}{2}$ inches wide with small brackets under. All floors are of douglas fir, stairway will be finished in same material. Would like walls tinted. All windows and doors will be painted white. Kitchen will be wainscoted up 4 feet with painted walls above.

The writer would be pleased to have you suggest colors for walls, paneling, etc., in fact, the whole scheme of the decorating is left in your hands.

The furniture will be all new and will be Mission made in our own factory, and would like to know what color to finish it to harmonize with the colors. Dark stains and rather dark finish on furniture are preferred.

The exterior of house is stucco, walls 10 feet high, with shingled gables stained brown, white trim, and green roof. The house stands on a corner lot, on a hill, and no other buildings are near.

Ans.—The following color schemes are suggested for your house and we will send samples in a few days.

Owner's bed room:

Old blue draperies, walls straw color, furniture stained old blue but showing oak silver grain, fireplace tiles straw color with narrow blue band.

Front bed room:

Wall light gray-green, draperies chintz, furniture gray-green stain.

Walls gray, furniture gray, draperies pink or yellow for one bed room 12x13.

Walls light cream, draperies and furniture lavender for the others.

Living room:

Walls dull gold, woodwork and furniture black with high polish, curtains flame color. Furniture covering, tapestry with all colors of room, also window seat cushions, with pillows of flame color and black. Hall, like living room.

Dining room:

Walls oyster color, woodwork and furniture brown stain with grain of wood touched in lighter color. Curtains brown gauze.

Kitchen, white and black:

Walls white, woodwork white, black stencil on walls around panels and openings, stencil silhouettes over tables, furniture white with black legs, curtains white muslin or marquisette.



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like this
is worth
\$100
a year**

YOU might not care to rent your attic after finishing it with Carey Wall Board but the point is this: If it can be so transformed that one room is worth \$100 annually to a renter it certainly is worth that to you in the comfort you and your family will get out of it. Thus, this economical improvement is justified in these conservation days.

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INSIDE THE HOUSE

Curtains for Casement Windows.

F. W. E.—I enjoy reading your magazine so much. I wish you would please tell me how to drape my casement windows and French doors, of which I send you a rough sketch. At present I have the living room and dining room windows draped alike with cream net over the glass and dark rose madras at both ends with valance running clear across. This is on double rods attached to the top facing. But I am unable to open the casement windows without considerable difficulty.

For the fireplace windows I have one width of net and madras on either side on one rod attached to the top facing. What length should the curtains be?

I have shades on the top facing of the casement windows, but don't like the arrangement.

Ans.—We should not advise a valance on French windows. Take the net off entirely and treat each sash of the window separately with a little rod just above the glass and let the curtain reach to the sill. The very newest and prettiest material is a gauze silk, the color that looks best in the room, then you have no trouble opening the windows.

Must you have shades? We do not use them now if we can help it. Instead a pair of heavy curtains at the outsides maybe drawn across at night, if there is room enough beyond the windows at the extreme sides when drawn back.

Back Numbers

A file of back numbers of **Keith's Magazine** makes a good reference book on Homebuilding matters. While they last we will send them post-paid for 25c a copy or 3 for 50c.

KEITH'S MAGAZINE
MINNEAPOLIS, MINN.

Otherwise, I should have the shades at the bottom of the sash to draw up through a pulley, under the silk curtains.

The French doors are treated like the windows excepting that we use a rod at top and at bottom to keep the curtains from blowing between the doors when they are open and shut.

You can use a valance and side curtains at the dining room windows if you like, with net next the glass.

A Charming Color Scheme.

B. F. W.—Under separate cover I am sending plans for my new home. Will you kindly advise what colors or color combinations I should use in the decorations?

The front faces east, woodwork is quarter sawed white oak in living room and dining room. William and Mary furniture in the dining room. Upstairs woodwork is birch with maple floors.

The northeast room will be my sister's and I have colonial walnut furniture for it. The southeast room is my own and the southwest room my son's; both will be newly furnished.

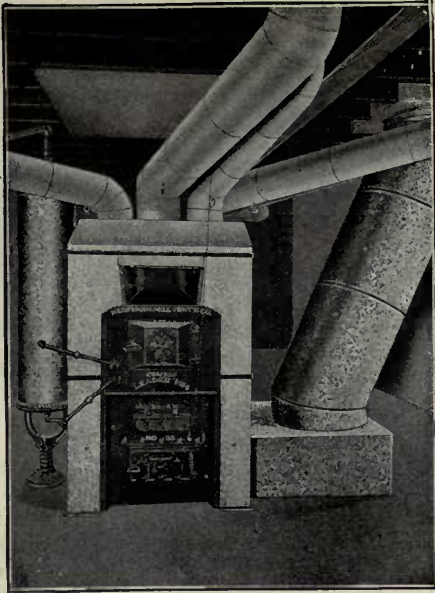
Ans.—In the living room, with its white quartered oak, you can use a wonderful flame color gauze silk for the curtains and tapestry furniture covering.

In the dining room a dull greenish-blue for hangings, with tapestry paper of old English design on the walls, woodwork stained like furniture or a little lighter.

In the sister's room with walnut furniture, a chintz with creamy ground almost tan, and conventional design in bands of reddish-pink flowers. This can be used for bed covering as well.

For the son's room, you might use modern painted furniture in old blues and browns with blue draperies and bed covering. Walls tan and woodwork a shade darker.

For owner's room, either white enamel furniture and woodwork with yellow hangings and paper with yellow birds or flowers. Or you can use mahogany furniture and orange draperies and paper with orange and white tones.



A HESS Welded Steel Pipe Furnace showing hot air pipes, air supply and tank heater. We make pipeless Furnaces also.

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without any knowledge or intent, has boosted the Hess Welded Steel Furnace by switching house owners off from the use of hard coal and imposing upon them the necessary use of soft coal and other fuels, to which many fuel consumers are not accustomed. Few furnaces have stood the test of this change as well as the HESS.

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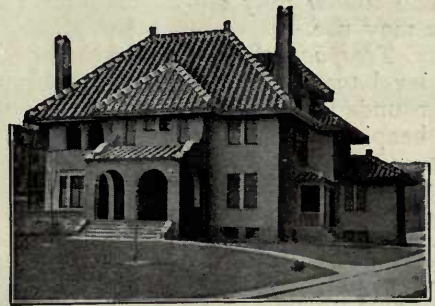
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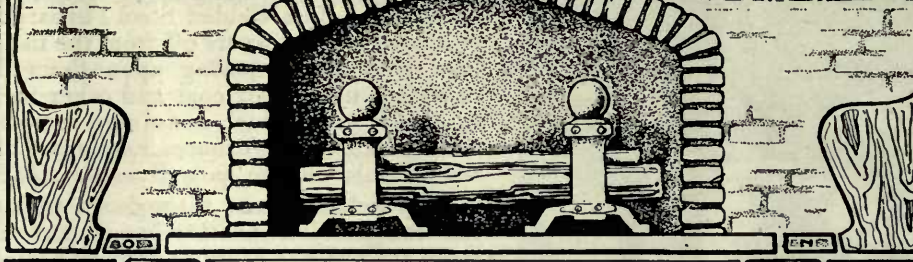
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INSIDE THE HOUSE



THE TABLE AND FOOD CONSERVATION

Eats vs. Sweets



YEAR ago patriotism called for Christmas sweets without sugar and these pages were filled with rules for dainty concoctions. This year we are wondering why we used to think candies so necessary to our happiness. Now since the sugar ration has been raised from 2 to 3 pounds a month per person we feel almost guilty in using the additional spoonful a day. The items which follow may show just how much one may use.

Teaspoons per Pound of Sugar

96 level teaspoons = 1 pound
48 rounded teaspoons = 1 pound
32 heaping teaspoons = 1 pound

Daily Ration, Three Pounds Per Month

1 day, 1½ ounces; or
1 day, 3¾ level tablespoons; or
1 day, 1½ round tablespoons; or
1 day, 9 level teaspoons; 3 level teaspoons for beverages, 2 level teaspoons for all cooked foods for the meal; or
1 day, 9 half lumps (1 by ⅞ by ⅜ inches), one-half lump three times a day in beverages; one lump equivalent to the sweet in food at each meal.

Corn Syrup Taffy

2 cups yellow corn syrup
3 tablespoons lemon juice
1 teaspoon grated or scraped lemon rind
1 teaspoon vanilla

Carrots for Marmalade and Puddings.

The idea of "substitutes" looms so large in these days of H. C. L. that we some-

times dub as "substitute" vegetables and foods when really new uses have been discovered. We may say that we have discovered the finer qualities of carrots. Their color and consistancy when properly prepared make them a welcome addition to puddings, salads and even marmalade. Popular Science Monthly advises their use as a substitute for eggs in puddings. "The carrots are to be boiled until very tender and falling apart, then drained, mashed, and pressed through a coarse cloth or strainer. This pulp is then introduced among the other ingredients of the pudding and the eggs omitted, with the resulting pudding as light and palatable as where eggs are used." The housekeeper is wise to test this for herself.

Carrot marmalade has been tested with excellent results.

Carrot Marmalade (Mock Orange)

3 cups carrots chopped fine
2 lemons chopped fine
4½ cups sugar
5 cups water

Cook down until it thickens, remembering that it thickens more as it stands.

The Passing of Afternoon Tea.

Unnecessary eating, used essentially as a means of entertaining friends, is under the ban of the food administrations of all the Allied countries. England and France the two countries where afternoon tea and after-theatre suppers held almost the prestige of national institutions before

We have Conserved Food to Win the War: Now we must Conserve Food to complete the Victory in the succor of the multitudes of helpless peoples from whom the Hun hand has been forced to lift. Literally millions of people in Russia and the East must starve before the next harvest but for the food we can send them.

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is easily installed in the place of unsightly basement windows, or built into new foundations. It is absolutely burglar proof. The glass door can only be unlocked from the inside and gives ample light to the basement.

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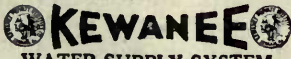
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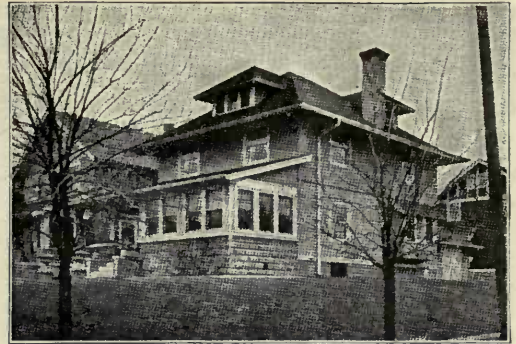


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INSIDE THE HOUSE

the war, have long ago taken steps to prevent waste of food, as entertainment.

This does not mean that the Food Administration casts a disapproving eye on social gatherings, but rather that we should find some other means for entertaining our friends than wasting food in spoiling their digestion.

Busy people will gather and eat one of the regular meals together; good food served without ostentation or elaborate preparation and service. Since so many of our good doctors have gone to war, and with the epidemic still abroad, we must guard our own health. Eating lightly, together with sufficient exercise, are the means recommended for keeping one's health intact.

The "little lunch," or a "little supper" may become a very satisfactory substitute for "refreshments," and be as simply served. With a chafing-dish or electric toaster grill dainty little suppers may be served. The fireless cooker may be used to keep hot such dishes as must be previously cooked.

For Chafing Dish

- (1) Creamed Oysters with Mushrooms
Cornmeal Sticks Pickles
Apricot and Marshmallow Salad
- (2) Hard Boiled Eggs, creamed, served
on toasted brown bread
Green Salad Thousand Island Dressing
Nuts Grapes

- (3) Baked Bean Rarebit
Brown Bread Toast
Frozen Pudding Coffee

In Fireless Cooker

- Cream of Tomato Soup
- Shrimp Salad
- Victory Rolls (only two apiece)
- Indian Pudding with Raisins

For a Grill

- Golden Brown Corn Oysters
- Lettuce Salad with Russian Dressing
- Baked Apples with Thin Cream
- Raisin Brown Bread and Butter Sandwiches

Baked Bean Rarebit

- 1 cup grated cheese
- 1 cup milk
- 1 cup baked beans, mashed

- Slices of Boston brown bread toast
- 1 tablespoon butter or butter substitute
- 1 egg, slightly beaten
- A little salt and mixed mustard

Have the toast ready and hot. Cook in a saucepan or chafing-dish over hot water. Melt the cheese in the hot fat. Add the seasoning and then the milk gradually, stirring until perfectly smooth. Then add the mashed beans and slightly beaten egg. Pour at once over the hot toast.

Frozen Pudding.

- 1 quart milk
- 2-3 eggs
- $\frac{1}{4}$ cup sugar
- $\frac{1}{2}$ cup Karo
- Salt, few grains
- $\frac{1}{2}$ teaspoon vanilla
- $\frac{1}{2}$ cup chopped nuts
- 1 cup raisins cut in small pieces

Make a soft custard of the milk, eggs, sugar and Karo. Cool, add vanilla and nuts and fruit. Freeze.

Golden Brown Corn Oysters.

Grate the pulp from ears of any cooked sweet corn or rub canned corn through soup sieve, and to each cup allow one egg beaten light, one tablespoon milk, one tablespoon flour, one teaspoon melted butter or butter substitute, one-half teaspoon salt. Mix all together and drop by spoonfuls on a hot greased griddle and brown on both sides. A little uncooked corn pulp is a great addition to these cakes.

Thousand Island Dressing.

One ingenious housekeeper makes dressing for any combination of green vegetables in salad by adding chili sauce to her plain mayonnaise until the desired color or flavor is obtained.

Indian Pudding.

- 5 cups milk 1 teaspoon salt
- $\frac{1}{3}$ cup cornmeal 1 teaspoon ginger
- $\frac{1}{2}$ cup molasses

Cook milk and meal in a double boiler twenty minutes; add molasses, salt and ginger; pour into buttered pudding dish and bake two hours in slow oven; serve with cream. Serves eight people. Raisins may be added.

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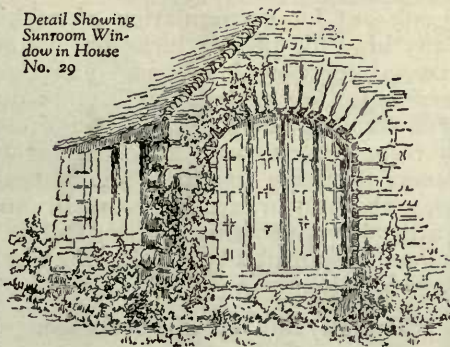
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Building Material

AND NOTES ON

Heating, Lighting & Plumbing

Comparative Fire Losses

THE conflagration shown in the cuts, from United States to Holland tell their own story. What causes the fires in the United States? Carelessness; so say those who have investigated the matter.

Here are a few of the little careful things which might prevent house fires this winter, when every effort is being made to prevent wastage of any kind, as drawn out by the Sheet Metal Journal:

"Particular attention should be given to the points where pipes pass through walls. At such points, the pipes should be separated from the wall by a thimble. This should be of galvanized iron, double-walled and ventilated, its diameter at least twelve inches greater than the pipe.

"Look after stovepipes in the attic. Many fires have been caused by storing wood, paper, etc., around them. The diagram illustrates a guard that can be made by any sheet metal contractor."

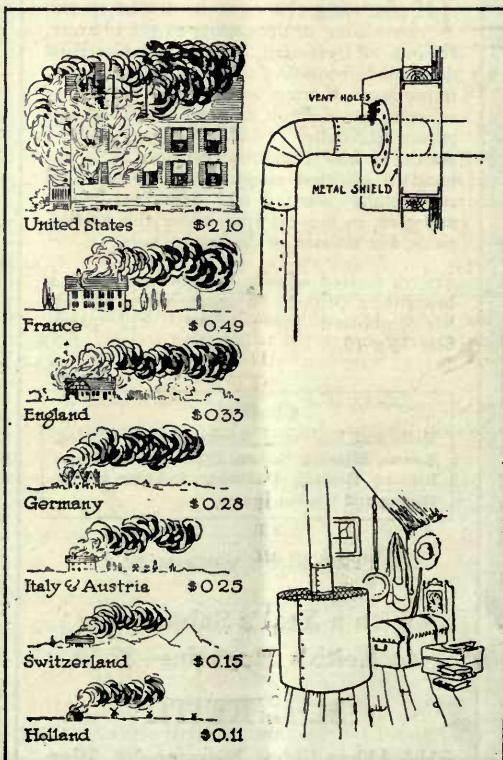
Look out for accumulation of rubbish of any kind for therein lurks fire danger. Make a point of inspecting your own premises for fire hazard, just as you would if you should be held financially and morally responsible to your neighbor for any damage from fire starting on your premises, with no insurance for yourself. Such an attitude would bring a closer feeling of personal responsibility, in the interest of fire prevention.

The Psychology of Insurance.

Just imagine that you had no insurance on any of your property, and that it was

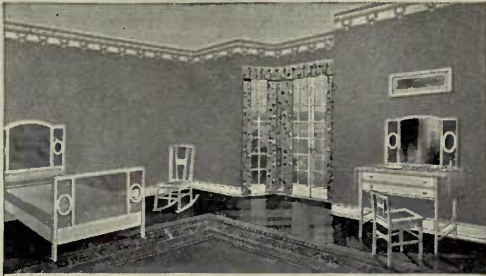
not possible to get any; what would you do? Why not do anyway?

Insurance is practically a banking proposition. There is no necromancy about it which transforms the wastage of your fire loss into new capital. The fire damage is



Courtesy Sheet Metal Journal

Comparative fire waste. Many fire hazards are around stoves and chimneys



The room when new



The same room a few months later

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absolute loss. Those who pay the insurance premiums must create new value sufficient to cover the losses. The insurance companies take money from thousands and pay it out to hundreds. They have built up a complicated system for the distribution of costs as against value measured by the hazard. "Rates mean fire prevention, fire protection means rates; one makes a standard the other measures it." You can make your own rates. Insurance companies pay losses near a quarter of a billion, yet it is estimated that only 70 per cent of values destroyed are insured. The fire waste exceeds the total yearly output of gold, silver, copper and oil. It would build the Panama Canal every year. In our carelessness regarding fire we kill at least a thousand and maim over 50,000 people a year. In the recent fire disaster among the North Minnesota forests as many people were sacrificed in a few days.

Fire insurance, with its necessarily high rate, is perhaps the greatest tax in the country, certainly the one with the least economic value to the country as a whole, notwithstanding its tremendous value to the person insured. It is virtually a premium on negligence and carelessness. Much of the fire waste would be stopped but for the psychology of insurance and its seeming protection.

A Story from Berlin, with a Moral.

It is other peoples' homes that the Germans burns, not their own. Vienna and Chicago are about the same size. Their pre-war fire losses were about 1 to 10. The annual per capita fire loss in Berlin was 30 cents, in Chicago, 3 dollars. What causes most fires? Carelessness, of course. It was stated, before the crusade for Red Cross salvage, that probably seventy per cent of all fires is to be found in the carelessness with which waste material of an inflammable sort is permitted to accumulate.

A pre-war story from Berlin has its points of interest. An American staying

for a short time in Berlin was awakened by smoke and found fire in the ceiling of his dining room. The blaze was extinguished with chemical apparatus without any water damage, and without any needless destruction.

The next morning a careful examination by officials showed that the fire started from a hot coal which had dropped from a stove in the attic and rolled upon an unprotected wooden floor.

"The tenant proved that the stove was an appointment of the building, provided by the landlord, and that it was neither his duty nor his privilege to change it.

"The landlord showed that he had recently purchased the building under the usual guarantee that all laws and ordinances had been complied with in construction and appointment; that this stove had not been changed, and that his attention had not been called to any condition involving a fire risk.

"The builder from whom the owner purchased was then called and had to admit that he was responsible for the setting of the stove as the police had found it, and that he had violated the law in neglecting to provide a suitable metallic hearth of the kind and dimensions required."

The damage to the furniture and property of the tenant was assessed against the original owner, the builder, together with the estimated cost to the city of responding to the alarm and extinguishing the fire and an additional fine as a reminder that the laws must be obeyed. He was not required to pay damages to the present owner who was considered negligent in not having discovered the violation of the law on his property.

"Such laws and such enforcements explain the per capita fire loss of 30 cents in Berlin and \$3 in Chicago. American so-called 'freedom' pays for its independence in a fire waste of a quarter of a billion dollars a year, to say nothing of the loss of life and the high taxes made necessary by the existence of such conditions."



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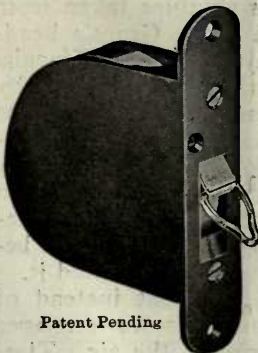


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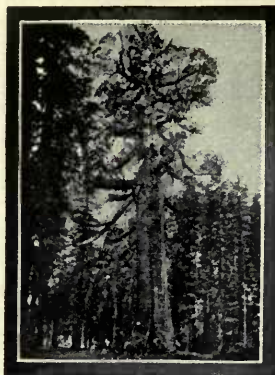
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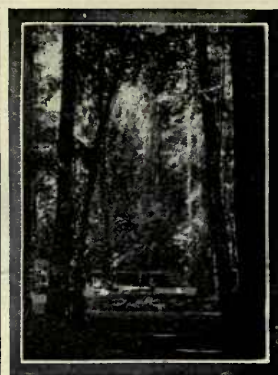
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WOODS

AND

HOW TO USE THEM



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.

Redwood in Home Building

REDWOOD (*Sequoia sempervirens*) grows on a little strip of the California coast extending inland from 10 to 30 miles, reaching from the northern boundry of the state southward to a little below Santa Barbara. The redwood tree grows to a height of 150 to 300 feet, with a diameter from 3 to 15 or even 20 feet at the base. The trees grow very close together and will average from 75,000 to 100,000 board feet to the acre, which latter is the record yield per acre. Redwoods grow in what is known as the fog-belt, and thrive only in excessive moisture.

Redwood finds its largest use in general building. It is used for all kinds of construction and finishing purposes. It is particularly good for all exterior work, especially siding and shingles, on account of its great durability. It is used for mill work because of its comparative freedom from swelling and shrinking with atmospheric changes, when thoroughly seasoned.

Redwood is a very soft, light, straight-grained softwood of great size and durability. In proportion to its weight, for it is very light, it was the strongest of any wood tested by the United States Forest Service. Redwood ranks close to longleaf pine in resistance to end crushing.

The heartwood varies in color from a

light cherry to a dark mahogany. The narrow band of sapwood is almost white. The wood is generally straight-grained and is comparatively light and soft, though individual pieces may be very hard and heavy with an irregular grain.

Those who know redwood best claim that it is weather resisting to an unusual degree; that it is practically impervious to decay and that it is fire resisting to an extent quite unusual in other woods. Homes which were built in Humboldt and Mendocino counties of California on redwood foundations more than fifty years ago have been examined and the original sills are said to be as sound as when laid. Barns built as early as 1855, sided with unpainted redwood boards and covered with shingles and shakes, do not show deterioration on exposure to weather. It is stated that shingles taken from the roof of General U. S. Grant's headquarters at Fort Humboldt, California, after 40 years' use, while worn thin by the wind-driven sand, showed no trace of decay. For this reason it is recommended that redwood shingles, and this applies to any long-lived wood, be put on with zinc-coated cut iron nails, as the usefulness of the shingles can not last beyond the life of the nails which hold it.

It is claimed, in fact, that instead of deteriorating, redwood grows stronger with age and exposure to the air. Tim-

(Continued on page 352.)



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She wants your name — and yours — and yours — the names of all her children.

So, stand up, you men and women of America — stand up and be counted.

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bers taken from a house built on the Berkeley campus 30 years before did not show the slightest signs of decay, the ventilation having been excellent about the wood. When the house was wrecked to make way for improvements the timbers were tested with the result that lumber taken from this house built in 1874 showed a longitudinal crushing strength a fourth greater than redwood which had been air seasoned for two years.

Owing to its singular freedom from rosin and pitch, and more particularly to the presence of a rare and characteristic acid, redwood ignites reluctantly. It is stated that no forest fire, no matter how severe, ever destroyed a redwood forest or killed a mature redwood tree. At the same time, it is pourous and easily absorbs water to such an extent that it will not readily burn, which quality assists in extinguishing fire once started.

It is noted as a remarkable fact that the area of the great conflagration in San

Francisco in 1906 was fringed in places with unburned redwood houses and railroad freight sheds, where it had been possible to stay the sweep of the fire. It receives a severe test in the logging. Because of the enormous size of the redwood tree the logs are very heavy, a 16-foot butt log weighing from 30 to 50 tons, according to the size of the tree. After the trees are felled the bark is peeled, top branches cut off, and this "slash," as the logger calls it, seriously hampering his work in getting out the logs, is set on fire. The giant redwood logs come out of this terrific heat with only a slight scar.

For interior finish of the home, redwood is an extremely beautiful wood. Because of the width of the panels and the beauty and variety of the grain it is particularly good for wainscoting or paneled walls. The surface finishes beautifully and gives a fascinating range of choice as to tone. While taking a beautiful finish it is what cabinet makers call an "easy-working" wood. If properly seasoned and worked the tongue of the grain does not tend to rise on a flat or slash grained board. The handsomest and hardest redwood to be used for interior finish comes from near the butt of the tree. A discriminating selection will always repay the householder in any kind of wood which he is about to use. Redwood's beauty for interior finish lies in its individuality, its own soft, warm tone and the color possibilities in the various finishes which may be given to it. The figured slash grained panel may be framed in stile and rail of vertical grain.

To many people "the loveliest finish of all is no finish." A thin coat of white shellac, however, does not materially change the appearance, and with a wax finish gives a more satisfactory surface, if the natural color is to be retained. The silver gray stains cancel the reddish natural tone of the wood when the color scheme requires a different tone.

So far as the beauty of the surface is concerned, redwood need not be coated with paint any more than oak or mahogany. If a painted or enameled surface is desired, however, no wood takes paint better than redwood. The lack of pitch and the absorbent qualities of the wood not only allows it to take and hold paint well, and also gives a fine enameled surface.

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Of Keith's Magazine on Home Building, published monthly at Minneapolis, Minn., for October 1, 1918.

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 be 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:

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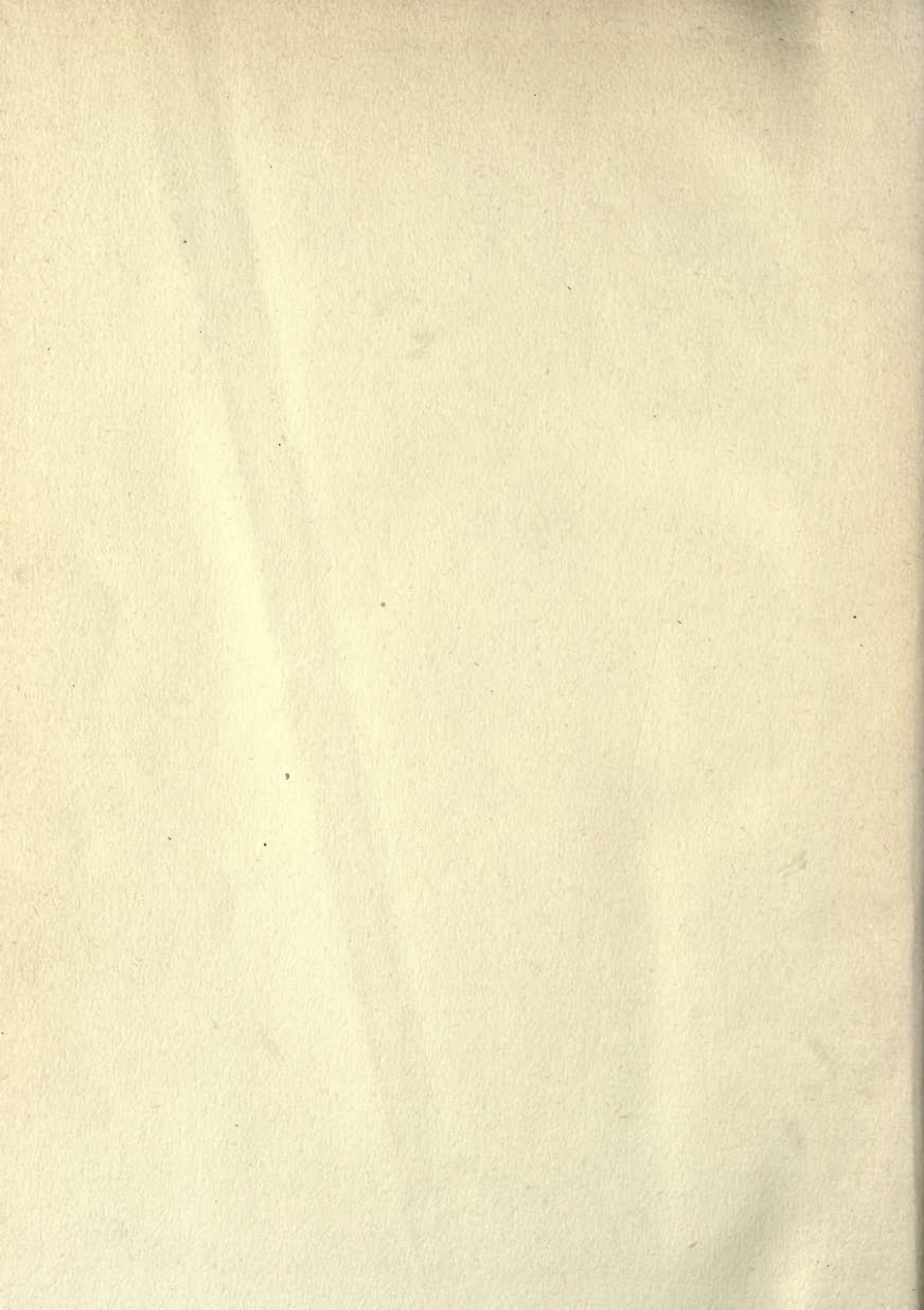
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