CONTENTS FOR JANUARY, 1920

Page

Just a Word—Good Building ........................................ 2
Modern Homes vs. Dump Sites—Warfield Webb .................... 5
The House That Grew—Vandercook Walsh .......................... 9
The Enclosed Porch—Anthony Woodruff .......................... 13
The Hooked Rug—C. B. MacLean .................................. 15
Being One's Own Interior Decorator—Alice Phoebe Eldridge .... 18
The Bungalow Planned Like an Apartment ........................ 21
The Economy Bungalow ............................................. 23
An Attractive Little Stucco Home ................................ 25
The Square Eight-Room House ..................................... 27
Well Planned Homes ............................................... 29

DEPARTMENTS

Inside the House—
Decoration and Furnishing—Virginia E. Robie, Editor
Three Rooms—Studies in Color .................................... 33
Found In the Shops .................................................. 36
Answers to Questions on Interior Decorations .................... 38
Table and Food Conservation—
The Food Program .................................................. 42
Building Material and Notes on Heating, Lighting and Plumbing
Building For Fire Prevention ....................................... 46
Woods and How to Use Them
Gray Toned Woodwork ............................................ 50
Book Reviews
The Practical Book of Interior Decoration ......................... 54
An attractive entrance where vines have been effectively used
NE practical betterment plan in the scheme of modern home building has been given a practical test by a man with vision in regard to home building, and the same thing can be done elsewhere by other men who are eager to bring about better homes and at the same time add revenues from waste places in the cities. There are today a number of these dumps, waste sections,—forgotten opportunities that are to be found in and about practically every city and town. They are eyesores to the community. They are not bringing any revenue and they are depreciating the surrounding property. In fact, they are dead losses to the community and should be wiped out because of their unsightly character.

How many cities today possess such spots that can be turned into beautiful home sections with a little expenditure, coupled with some art, and the builder's genius? What cannot be done for such unsightly localities? In order that this dream may become a realized fact there is, of course, something more than a mere hope or a plan demanded. We might plan and idealize and picture in our minds the vast changes that can be brought about,
but if we go no further than this it will not benefit any city one iota. There must be some tangible step taken; something that will turn these pest spots into the ideals that we hope for, and this has been the idea, and a realized dream, too, of one man in a city of the Mid-West.

The man who has carried out this betterment scheme is not a builder. He is more of an artist; a man with practical ideals and logical ideas. And furthermore, he has given the best proof of his conceptions by what has already been accomplished in that city.

This physician to sick real estate, as he calls himself, is not a man who can draw plans and build homes. He is an artist identified with a large concern that has for its ideals the manufacture of beautiful and artistic pottery. This very training that has perhaps had something to do with his reaching out, as it were, into fields that were barren of artistic environment and by the mental picture he saw, helped in the achievement that would bring this waste place, which was a disgrace to the city, into a realization of the real meaning of home and its proper appreciation. There is the other view to take also; that of realizing some added value for the property and of enhancing the charm that ever comes with the building of attractive homes in any section, where the future offers at least something of merit.

This idea, as noted by Mr. Joseph Phillips, has the advantage of upbuilding a city and thereby increasing its inhabitants, and also adding revenue for the conduct of the municipal affairs of the city. It is necessary to have the cooperation of the men and institutions of finance and of the realization that this means a most potent development to any community. The plan encourages home builders, and wherever there are home builders and home owners, there also can be found a happy, prosperous, and progressive city. High rents are not a material aid to any city. The ideal municipality is that made up of homes that are owned by the residents, and that are looked upon with that individual home pride that does so much to add to the artistic and monetary value of the locality.

In discussing the matter, Mr. Phillips said: "I am in favor of taxing rent payers in such a way as would force such people to own their homes. I know how the rent pays the taxes indirectly, but I would add a direct tax which would place a premium on home owning. Convert the present vacant lots and dumping places into attractive residential sites, and invest Cincinnati capital in the building of homes for Cincinnatians, and our tax duplicate will assume such proportions as will more than take care of all expenses.
for running the most approved and modern forms of city government. Naturally this is just as applicable to any other city. The idea is a practical one.

Mr. Phillips continues, saying, "I believe there are four ways in which this housing crisis may be overcome. First, by persuading private capital to enter the building field. And here let me say that building materials and labor will not soon be cheaper and there is every indication that they will go higher.

"The establishing of a system of city, state, and Federal loans which would enable the builder to get money at a fair rate of interest would be a great help. "Grant a remission of taxation on improvements made within a definite period instead of penalizing the improvement by increasing taxes. Arrange a program of home building and even of municipal apartment house construction, if this is deemed necessary.

"The war is over and the peril of imperialism and Pan-Germanism has passed. First among our problems now is adequate housing facilities and the building of homes by the thousands for rent payers who are neglecting civic obligations and opportunities for individual betterment."

So he put into practice his ideas of bettering the waste places, and, selecting one of these, endeavored to obtain local capital for putting it into effect. He was unsuccessful and finally obtained the capital from outside sources and built the Forest Glen Apartments. They are improved with the latest ideas in some respects, and are a wonderful addition to what was at the outset a barren waste. The assessment in this case was raised from $3,000 to $131,000, and is today one of the show places of the city. Then he brought about another change in property that was of less monetary or artistic value. This was a gaping ravine, and today is a section of modern homes. The same idea can be put into effect anywhere. There is needed, however, the capital with which the work must be done.

This latter is the vital part of the topic. There is today much valuable property...
well located that could be transformed into spots of both beauty and value to the community. First there must be an interest aroused in order to make this first a hope and then a realized dream. It demands that money be raised for the purpose. Why not the arousing of the men who have cash to invest and that can find no better means to bring sound and profitable returns than by improving property, to make the project a financial as well as civic success.

According to Mr. Phillips' plan, this could be done by raising a fund of $1,000—000—a small sum, he says, in comparison to any of the local subscriptions to the five Liberty loans—which would at the same time pay a profitable return on the investment and so far increase the tax duplicate as to free such city from financial embarrassment. This is a logical way to arouse that love of home in the minds of our American people. Make the love of home a higher ideal, and go into the waste places and the dumps and the unsightly nooks and bring to them a beauty that will work miracles toward the realization of ideals that will do so much to increase our love of country, and to make the family life of America a greater asset to the betterment of all mankind.

The photographs show a group of attractive homes, built on a former dumping ground, as this same plot of ground appears today. They also show the Forest Glen Apartments which are on the tax duplicates for $131,000. The old vacant lot was formerly assessed for $3,000, and was unproductive of revenue at that. Other ravines and dumping grounds have been transformed by the "Phillips Plan" into the site of modern homes within the reach of the wage earner.

Porch and Lawn

New York home builders are finding that a porch and well-kept lawn are important adjuncts to their homes and in the suburbs real estate men say that a porch and attractive grass plot add $1,000 and sometimes much more to the selling price of a small house. A well-propor-
The House That Grew
Vandervoort Walsh

RCHITECTS, as well as other people, dream about the kind of home they hope to have some day. But they have the advantage of being able to place their dreams on paper. The writer presents here his little home, in the hope that it will be helpful to young people in planning houses for themselves.

It occurred to him that he could build his home on the instalment plan by erecting a small house, carefully planned for future artistic growth. He saw plenty of houses that had started as little shacks and been built up to large living-places, but the final results were hodgepodge affairs, made without definite plan.

He therefore dreamed about the kind of house he would like to live in, and then cut it down, here and there, until he had a little house that could be built for about $1,900 in normal times. Then a complete plan was worked out by which this little house could, by additions through the years, be made to grow into the house which he cherished in his imagination.

He found that it could be done in five distinct stages. At every stage of the game the house would look complete and artistic, and at no time would it look unfinished. The time between the steps of growth could be as long as the builder's pocket-book required. If a period of hard times came, and he wanted to save, he would not have a big instalment bill to pay or a large mortgage interest to meet, for his house would be, as far as it went, his own. In other words, when he built the first small step of his home, he would be able to own it without mort-

So interesting is this story of the dream of a young architect, and how it came true, showing that it is possible to plan a house in such a manner that it can expand in a symmetrical and intentional way that we have requested, and wish to acknowledge the courtesy of the Popular Science Monthly in its presentation.
gage, because it cost very little, and then he could enlarge it as his savings permitted, and still avoid a mortgage.

Now, the perspective views of the various steps of this house will prove that each one shows a house complete, and surely the picture of the final house gives no hint of the way it grew. The same is true of the plan. At each step, the house is complete in its equipment, and yet it grows logically.

The pictures show this house to be built of white-painted clapboards; but this is not necessary. A stucco, or brick-veneer, or shingle surface could be used. The singles would cost about 5.3 per cent more per square foot than the clapboards, the stucco about 32 per cent, and the brick veneer about 52 per cent more per square foot. But it must be appreciated that although this seems like a very great difference, it is not really so much when you consider that on the total cost of the house an increase of only about 7 per cent would be incurred by brick veneer, which is the most expensive. In other words, the cost of the material on the exterior walls is a very small part of the cost of the house as a whole.

In order to make additions as simple as possible, it will be noticed that the outside walls are divided into panels by wood pilasters. In this way, the house can be increased by units. The same precaution is taken with the roof. A horizontal board is carried around at the top of the first floor, and when the roof is lifted for the second story, this board acts as a belt course from which to begin the design of the second floor. If brick or stucco were used, these same panels of wood could not be dispensed with, for they are the secret of making new additions simple.

In the beginning the house has only three rooms and a bath, as may be seen in the "first step"; but it is a very comfortable and cozy little place, as the picture shows. The outside dimensions of it are 23 ft. 6 in. by 29 ft., and the kitchen wing is 12 ft. 6 in. by 14 ft. It has a porch with an entrance in its narrow end, which, it will be noted, becomes the main entrance of the next addition. There is also a back porch and ice-box entry, and a stairway to the cellar, where there is a laundry. The dining room and living room are combined, which is not at all a disagreeable arrangement when economy is desired. A fine big bedroom, with a large bath and closet, adjoins. Of course, it must not be overlooked that there is also a small attic. It is a little doll
house, perhaps, from the outside, but inside it is much more livable in than the usual four-room apartment. Now, it will be noticed that everything in the building of this house is arranged for expansion when the time comes. For instance, the chimney is built high enough so that when the day comes for building a second story it will not have to be altered. The porch is also built of as solid timbers as the rest of the house, in anticipation of the next step, when it will be converted into part of the living room. The floor does not have the usual slope of a porch floor, but is prepared to be the under floor of the new room.

The ceiling joists also are designed for the future. Instead of making them of light 2x6-in. timber, they are 2x10-in.; for some day they will be the joists of the second floor. Open spaces are boxed in the wall also, for the easy installation of future plumbing and steam-pipes for the second floor.

The door from the living room to the porch is designed so that, when the next addition is made, it can be removed and placed between the present porch columns under the entrance hood. The window on the porch will also be removed from the partition and used in the bedroom of the new extension. The roof is so built that it can be easily raised when the time comes. This is done by having rafters rest on a double plate. The upper plate is bolted to the lower, and can be quickly released when the time comes. The rafters are spiked to the upper plate. When the roof is lifted, the jack-screws raise the upper plate, when the bolts that hold it to the lower plate are released, permitting an easy upward movement of the entire roof. The under plate remains in position, and serves as a foundation of the second-floor walls. The cornice line is built so that the raising will not destroy the appearance of the building. In the cellar is a sectional steam-heating boiler which permits of the addi-
tion of new sections as the building grows.

Now, let us suppose that after a number of years enough money has been saved to complete the next step in developing the house. It will be seen in the plan that a living room, a bedroom, and a new porch and chimney are added. The living room extends out from the place where the old porch was located, so that a new porch is necessary, and this is provided at the corner of the dining room. To supply a closet for the new bedroom, it will be noticed that the closet that served the old bedroom is divided in half, it having purposely been made deeper than necessary. A door is also cut into the partition to give access to the toilet. The main body of the house in this second step is 30 ft. wide. The front door opens into the living room, and is now permanently located.

The third step is not so costly as the second, and it probably could be made soon after the second. It gives an additional bedroom and porch. In this stage the house is a very complete little bungalow, and is quite satisfactory for many years of waiting. The next step is a costly one, since a second floor must be added and the roof raised.

But, as the years go by and the results of prosperity pile up, the thoughts of extending the house sky-ward may be very welcome. Now, in order to do this, some means must be provided for getting upstairs. A stairway and a stair-hall must be built. Since the plan has had this in view from the beginning, it is not difficult to secure the space. What was formerly a bedroom can now be divided into a hallway and pantry, and the bath room can be cut down to the size shown, to serve as a downstairs lavatory.

In this fourth step only the roof over the central part of the house is raised. The pictures do not show this, but it is easy to see if the roofs of the wings shown in the picture of the fifth step are blotted out with the hand. It will be noticed that by lifting the roof of the central part of the house three new bedrooms are added, two toilets, and a sewing room. On the exterior at the front, two large columns and a pediment over them are erected to tie the design together and give dignity to the house. It is not necessary to build the railing around the top of the porches; this can be added when the final step is taken, which consists of raising the roofs over the two wings.

When this last step has been reached, and the wings on the second floor have added two new bedrooms and a back stairway, the house is complete.
The Enclosed Porch

Anthony Woodruff

INTER with its blanket of snow, its glitter of ice in the brilliant frosty sunshine, its crunching of snow under wheels, and its whistling blast of wind that sends the blood tingling,—all this is a delight to the lover of winter sports and outdoor vigor. It gives a wonderful background to the cozy warm room with its shaded lamp and blazing fire, for an evening by the fireside after a day in the open. But to the "stay at home" people the winter season is a different matter, with only its few hours of sunshine each day, and it is to such people that the enclosed porch, made warm and comfortable,—except perhaps in the most severe weather, comes as an especial boon.

A flood of sunshine in the house is becoming a necessity to our happy living. If the windows in the house are not large and plentiful a sun room or enclosed porch of some kind is often the simplest solution of the problem. An open porch which is glazed gathers the sunshine and cuts out the wind, can be comfortable

A fireplace in the sun room is most acceptable
during the sunny part of the day without much more heat than what comes through an open door from the rest of the house. With the coming of severe weather, however, a porch without a basement under or an insulation for the floors and without tight windows can hardly be kept comfortable.

The enclosed porch has, in the colder latitudes, developed into the sun room which is an integral part of the house and is as warmly built as is possible, but always with the pleasing sense of bringing summer outdoors into the house, even in winter.

The sun room has developed its own types of treatment and is really quite set apart from the rest of the house in the latitude which may be given to its finishing and furnishing, all of which adds to the sense of freedom which it inspires. Continued from its porch treatment a tile or brick or even a concrete floor may be used. In the latter case a good color and finish is given to the surface coat to give a satisfactory floor.

A fireplace in the sun room is most acceptable, and a brick fireplace with the chimney breast carried to the ceiling makes an attractive feature of the room. The tile or brick hearth is simply a continuation of the floor.

Flowers and vines and potted plants usually make a real part of the treatment. In fact the sun room with its steam heating pipes and tile floor easily develops into a livable conservatory. The lattice, so often a feature of the sun room figures notably in all of the accompanying photographs; though with a very different treatment.

In one case it is a trellis for the potted vines which are trained and growing over it. The cement or stone window ledge makes a place for potted plants and growing things, while ferns and palms find their own place in the decorative scheme. Windows are made of any type, double hung sliding sash or types of swinging sash, which have the advantage of opening a larger part of the window space, and making the room more open when no enclosure is desired.

French doors almost invariably connect the enclosed porch or sun room with the living rooms, giving the sunny vista whether the doors are open or closed.

Plenty of sunshine in our houses is re-creating the American people, adding both to health and to the joy of living. Grosvenor Atterbury, the architect who has built so many charming country homes, says "Persons who live in dark
rooms can not appreciate art.” "Americans are great lovers of beauty,” says Edward Robinson, director of the Metropolitan Museum, “and take great interest in art.” These progressive men speak of art in the big sense in which people are living it in these days; the sense in which “Artists are the official interpreters of life,—responsible to the people.” They tell us that the people all about us,—we ourselves are artists, artists who live their art, and the “artists,”—painters, poets, musicians, are the interpreters. They are so endowed that they are able to give expression to the dumb art about them; to give expression to their times and the people among whom they live. Sincerity and truth are the foundation elements of art as of living, as we express ourselves even in the things closest to us do we develop to greater things. The beauty in our homes becomes the greatest asset of the nation because it means individual development,—the basis of Democracy.

The Hooked Rug

C. B. MacLean

The hooked rug of our grandmothers has come into popularity again. Since it is one of the most practical pieces of “fancy work” a woman can do, it has a double reason for being. Modern rugs of this kind are no better designed than some of the rugs made by our grandmothers, and one questions if the colors may be as lasting as those dyed by the old-school housekeeper in the traditional ways. An interesting rug made some twenty years ago, is shown by photograph. It is one of many rugs made by a most unusual old lady
who has now passed her century mark, but is still knitting with busy fingers. She is Canadian and the design of the rug is emblematic of Great Britain and Canada. The center of the design represents the British Isles. On a background of grayish white the rose of England, the thistle of Scotland, and the shamrock of Ireland, all in natural colors, are bound into a wreath, nicely designed and well balanced. The maple leaf of Canada, in autumn colorings, fills the corners. This rug is about two feet wide and proportionally long, perhaps a little larger than the usual hooked rug of today.

The secrets of nature were open to this old lady, as they had come to her in her youth from those skilled in the making of dyes from herbs and growing things. Not only had she made these rugs, but she had made the dyes and dyed the material. For any color she wished to use she knew how to make it; from herbs, from roots, from the bark of trees, from growing things. For each she knew what would produce the most lasting color and the best tone, and how to extract it. For instance her yellow dye was made from the skins of onions.

We talk of vegetable colors, but what do most of us know about nature and her colors, brewed in her growing things, held there for those who know how to take and how to use them.

Hooked rugs are made with a back of burlap through which woolen strips are hooked, in loops through the burlap; the design being worked out in these tufts or loops of color. The design is first stamped or carefully worked out on the burlap. Woolen strips are dyed in the colors demanded by the design. These may be made of old material or new, used garments or new goods may be dyed and cut into strips. A bent steel prod barbed on the outside of the bent head of the point is used to hook the strips into loops through the burlap.

Where new goods is to be dyed and used, the best material to get is an unbleached twilled flannel, weighing about three and a quarter ounces to the yard. This fills in rapidly, and the threads of the sheared twill unravel a trifle and produce a velvety surface. The strips should be about a quarter of an inch wide for this weight of material. The dyed material is cut into yard lengths. It is then cut lengthwise, never crosswise, for the strips to be hooked through the burlap into the design.

For the best results the flannel should be all-wool, as cotton will not hold color to the same degree, and a small admixture of cotton will allow the color to fade.
To test wool, take threads from the warp and from the woof and burn separately. Cotton burns quickly, leaving no ash or odor. A little crisp ash and a smell of burnt wool results from burning a thread which is wool.

It is best to have the flannel unbleached as the sulphur used in bleaching affects the dye; nor should the goods be exposed to the hot press finish.

Modern dyes are so easily obtained and handled and the finished product, in many cases, used for so short a time that most people do not inquire as to the origin of the dye, whether it is vegetable or otherwise, and they are not surprised to have the colors fade. But in making anything which is so real a creation as a rug the colors should be good and lasting, and the design carefully worked out, both as to color and as to design.

A group of modern rugs are shown, giving several different types of design. Such a rug lends itself especially well to the child's room, as the designs may be worked out to fit the bed-time stories, or to give form to the childish ideas.

The design may be conventional or natural, within the limits of the construction. The design must be made in the hooked loops and so must be kept comparatively large in scale. The width of the strips precludes details. Bold, strong designs should be chosen. Simple arrangement of line and form against broad masses of color are most effective. A study of Oriental rugs will show how the few colors may be interchanged and arranged, and the value of a firm line separating the pattern from the ground.

The revival of the hooked rug is due largely to a group of craft workers, among whom Miss Annie Hope is mentioned, who feel the creative value of such work to the workers, while at the same time they are producing something of indus-
A parrot rug

trial value. There is the feeling that women are really happier when they create (make) for themselves some of the things which they have about them.

The hooked rug is made on a frame on which the burlap is held taut. Since these rugs are usually small, as they are made now-a-days, an adjustable frame may be made of a convenient size to handle, but should be large enough for any rug which may be desired.

The frame consists of four parts and should be of soft wood. The pieces are two inches wide, an inch thick. The sides are four feet long, with a row of half inch holes at equal distances, about three inches apart down the middle, from each end. The cross pieces may be from seventeen inches to two feet. The frame is not unlike an old fashioned quilting frame, except that it is much smaller in size. Strips of heavy twilled cotton cloth may be tacked firmly on the inside of each piece in the same way as with a quilting frame, to which the burlap can be sewed to hold it firmly in place while the design is being hooked. One frame was made adjustable by pegs fixed near the ends of the cross pieces fitting into the holes. In order to keep it squared pieces a foot long were nailed across the end pieces fitted to come flush against the side pieces when the frame is put together. A wooden button is screwed half an inch from the edge of these cross braces. This button is turned to cover the end of the peg holding it securely in the holes. The burlap, with the pattern carefully worked out on it is attached to the frame. The rags have been dyed and cut ready for hooking to fill in the pattern.

Being One's Own Interior Decorator

Alice Phoebe Eldridge

The rooms certainly looked hopeless, the living room, the long hall and the dining room, one papered in a pale and sickly green, breaking to a dark tone in the other rooms. Surely, something could be done, must be done, as such an effect as this was impossible and no surroundings can be so hopelessly ugly as to be incapable of improvement, if only enough time and thought be given to them.

The background must be changed, such a color as this green would kill any furniture or picture placed against it but that, of course, lay out of my hands to do—that is, literally, though I have heard of
women who paper their own rooms with some success. I could, however, decide upon the color scheme of the rooms and choose my paper. Much of the rest of the "interior decorating" I intended to do myself. In fact, it was absolutely necessary that I be my own workman, as my purse had not the magic capacity of the purse of Fortunatus, and could not be stretched to provide for the furniture and the design which I coveted for my home.

As the house was not a large one and the living room, hall and dining room opened out one from the other, I decided to have them papered and painted all alike so as to give the effect of greater space and roominess.

The paper chosen was a dull gray oatmeal, and the floors were painted black. Instead of having the woodwork a dead white, always so hard and cold, it was tinted a warm ivory. So the eyes did not have to meet three broken and different designs in a comparatively small space, but were soothed and rested by the unity of the whole scheme.

I had some good, old pieces of furniture, of beautiful, time-softened oak, and they fitted without effort into the living room. There was no problem to be solved regarding that. But the dining room, I had nothing for it, and not only does one necessarily need quite a few pieces of furniture to fulfill the uses of such a room, but I wanted it to be dainty and attractive. To be forced to eat breakfast in the midst of ugly surroundings starts the day off in the wrong manner, just as surely as to eat luncheon and dinner in an unattractive room sets the nerves on edge and impairs the digestion. I was determined not to give myself and my family a false start every morning nor to impair their digestion by an inartistic setting at meal times, and, so determined, I attempted a startling experiment; startling because I had never before tried

my hand at such work and had, in fact, considered myself stupid at doing any such things.

I went to a department store and bought plain, unpainted kitchen furniture: one large table with drop sides, one small oblong table with a drawer, and a half dozen chairs. At a second-hand man's I purchased an old chest of drawers, and a mirror, whose glass was in good condition, but whose frame was a forlorn sight. With this collection, far from beautiful or even suggestive of beauty to be, I went to work, choosing a daring scheme, even while I wondered if I would live to regret it.

First, I was forced to sandpaper off the old paint and varnish upon the chest and the frame of the mirror, since I did not wish to use varnish remover. This was the meanest part of all my work. Then I painted every bit of the furniture black. After the two coats of paint were thoroughly dry I stood aside and surveyed "my job;" so far all was well, but, this had been comparatively easy going; the rest of the pudding, so to speak, was yet to come.

I am not an artist and I cannot do free-hand drawing, but I wanted to have a design upon the furniture of a small orange and gray bird upon a gray branch. I had planned to use the design upon every corner of the table and of the chest, in the center of the top of the mirror frame, as well as in the center of the bar across the backs of the chairs. In a book I found a picture of a small bird, just the size I desired, and cut a cardboard pattern from it, then, laying that flat upon the furniture, I outlined it with a sharp knife. The rest was easy, using a very fine brush to fill in the small bird with orange tail and feet and beak, gray breast and the little gray branch.

Just the corners of the furniture I outlined in orange as well as the grooves of the table legs, covering all with a final
coat of good shellac. Then I rested, yes, really satisfied.

The table, with drop sides, is, of course, the dining table, the small one is transformed into the service table, while the chest of drawers naturally fills the place of a low-boy, and above it hangs the mirror, quite removed from its previous second-hand condition.

I had collected for years attractive prints, old and odd ones, of no great value, I suppose, but interesting and unusual, these I had framed in narrow, black frames and, hanging against the gray walls, they gave to the room a decidedly distinguished appearance.

One problem still faced me unsolved, the window curtains. So quaint and old-fashioned and, really, just what is in such present demand, did my little painted set look that I decided to carry out the quaintness of the idea in the curtains. White ruffled ones I made to hang next to the glass, such as were in use in Colonial homes, while for the inside curtains I bought an orange and white checked gingham.

Gingham as window curtains may be an innovation, but I dared to use it elsewhere, perhaps going on the theory that one might as well be killed for a sheep as a lamb. During the hours between meals the drop sides of the table are let down and across it is a long runner made from the same material, with covers to match upon the serving table and the low-boy; this set is replaced, at times, by one made of unbleached linen, embroidered in orange cross-stitch.

When the room was finally completed and I saw the doubting and even scornful attitude of my family and friends change to wonderment and open praise I was thankful I had dared to make this initial leap into the, until then, undiscovered country, and had undertaken my own interior decoration.

At first, as was only natural, the paint was too brilliant, but with the constant use this furniture receives the brilliancy has toned down and the new look has completely vanished, so completely that I am frequently asked by strangers, who do not know that this was my maiden effort at hand painting furniture, if the entire set is not one of my grandmother's.

So successful was the dining room that I decided to have painted furniture in the bedroom on the second floor. The room is large and the ceiling cut into by the roof. I had a tiny case of drawers to stand between the beds and a larger case, which had good drawers with wooden knobs, and there were the two beds. These were all painted a soft light gray, with the design in colors on head and foot
boards, and a smaller design on each drawer, and for the ends of the larger chest of drawers. A little running spray was also used on the beds. The dressing table and chair we had bought and we used wicker for the comf'y chairs, with cushions of cretonne the same as the curtains at the windows. Over the larger chest of drawers was hung an old-fashioned set of hanging shelves. My painted furniture looked very well, the windows were bright and sunny and yet someway the room was ordinary, and I was not quite satisfied. When Aunt Nancy came to make us a visit and saw my painted furniture, rather to my surprise, she seemed to feel quite at home with it. I found that what was to me "the newest thing" carried her back to an earlier period. While she liked my dining room, yet it was the bedroom that particularly appealed to her. But she said, "Why don't you put a canopy over the heads of the beds, like they used to do?" Then I was satisfied with the room and she loved it.

I could not photograph my own dining room because the furniture was black and I could not get a good light, but here is a photograph in another dining room where a simple piece of furniture was enameled gray and, with the straight line chairs, made a charming room.

The Bungalow Planned Like An Apartment

HE well planned tiny apartment, as it might be built into a bungalow, was shown in several versions in November. Herewith are shown slightly larger apartments, with separate dining rooms, built into separate bungalows in the same way. This discussion is based on the study of the floor plan, in the endeavor to give the maximum convenience and living comfort in the smallest practicable space, and hence at the minimum building cost.

The first series showed a good living room equipped with a "disappearing bed," one bedroom, bathroom, a small kitchen and dining alcove. The plans shown here have a regular dining room instead of the dining alcove.

Such bungalows set around a central garden or court may have a central heating plant, caretakers and even maid service in common, such as are supplied in the better class of apartment houses. They may have a general garage, with a mechanic in attendance, if there is work to assure him a sufficient number of hours a day. They may even have a Club dining room and delicatessen service quite as
completely carried out as in any apartment house, or club with cottages about it, such as have been found so successful for summer resorts or for the tourist season. Why should not this kind of project be carried out for all the year living? It gives the advantages and convenience of the many-storied tiny apartment, with the freedom of the individual home. The co-operation of many householders; or the service of a progressive management, can give the freedom from care in the matter of house-

hold details, the solution of the service and heating problems and other matters, the harrowing nature of which has tended to herd masses of one-time home owners, or free householders, into the towering apartment houses; with rent for three rooms equalling that once paid for an eight roomed house.

Any one who is familiar with the various types of the so-called disappearing beds will study these plans with an appreciation of the elastic quality which they add to an apartment or to a suite of rooms.

In the upper plan the entrance is from a recessed piazza through an entry into the living room. There is a coat closet from the entry. The living room is of fair size, 21 by 13 feet, with a fireplace and bookcases. It is fitted and furnished
in the usual way, and has a cased opening to the dining room. At the farther side of the living room is a dressing room with a dressing table built-in under the window. This dressing room also opens from the bedroom. The width of the dressing room is sufficient to allow for the bed which has "disappeared" from the living room, as it stands, unused, in case it is reserved as a "spare bed."

The two rooms together with the dressing room make a very livable family suite; all toilet articles and dressing accessories finding a place in the dressing room.

In case it is desired to use the disappearing bed regularly, the dressing room may be reserved for use with it, closing the door to the other room and getting communication with the bathroom through the closet, an additional door in which has been placed for that purpose.

The Economy Bungalow

The clipped peak of the gable is effective

The difference in bungalow styles is amazing. No other style of architecture presents so wide a range for selection.

Here is a house with typical bungalow lines, but showing the influence of the popular Colonial style as applied to small homes. This is seen in the round columns, lattice and white trimmings.

The American bungalow in its recent California development is no longer darkly stained. If the body is stained the trim is always smoothed and painted—not rough as at first. These have a rough siding with a light gray finish, pure white trimmings and green roof.

The plans are made with a basement, enclosed stairway, etc., making the house suitable for reproduction in any locality having a variety of climate—hot and cold.

The first bungalow is 40 feet wide and 32 feet deep for the main part of the house. The second is longer and narrower; 33 feet wide and 45 feet deep, and is especial-
ly planned to be economical in the building. The roof lines are simple, but with louvres under the ridge.

If one has a lot of 60 feet or more, a wide-front bungalow should be selected. A broad front offers better opportunity for individual design.

This is a home that is distinctive because of its simple lines, clean-cut detail and careful window treatment. The clipping off of the gable peaks to shorten the long ridge line to just the correct proportions is something an observer naturally doesn't think much about, but it is a mighty effective element of the design.

The arrangement of rooms is far different from most 5-room houses. In accordance with the present-day tendency,
the living room is extra large. The kitchen is centrally located, yet is well lighted. All other rooms are of good size and all principal rooms get light and ventilation from two sides. The bedrooms have unusually good closets with a closet from the hall and a linen closet in the bathroom.

A bungalow attic is necessarily low, but if made accessible by only a steep stairway, like this one, it is very useful. In the plan a flight of cellar stairs goes down from the kitchen to a basement that is about one-half the area of the plan. In the south and other sections where a cellar is not desired, the stair space can be used as a store closet.

Many 5-room houses are not planned for the attachment of a sleeping porch, but this one has one incorporated as an integral part of the plan. As it connects with the glassed-and-screened back entry, it can be made to serve as a third bedroom.

There is a coat closet and a broom closet.

On account of the high cost of building, the other house has the minimum of built-in equipment, but everything that is necessary. Instead of one of the long interior halls that are so expensive, this plan has just a small square back hall that provides all necessary accessibility.

The entrance is from the porch to the living room, with one bedroom opening from the living room. French doors shut the dining room from the living room. There is an attractive built-in buffet.

Beyond the dining room is the small central hall which connects the other two bedrooms with the bathroom and the kitchen. Notice the seat under the window between the cases in the bathroom.

The kitchen is particularly well arranged with its sink under the windows and the small cupboard at the left-hand side and a larger cupboard near.

An Attractive Little Stucco Home

HE small home which, at the same time, gives all the room that is needed without any unnecessary labor in its care is in great demand. The home shown in this photograph and the accompanying plan is just such a home. The house is small in exterior dimension, and since the cost of a house may be approximately figured on the basis of its cubic contents, it follows that every inch of space in the exterior dimension either in size of plan or in height, adds to the cost of the finished house. While it is not possible to figure in any way what would be the cost of one cubic foot of the size of a house, yet it gives a very helpful basis on which to work in some ways, as for instance, to find the maximum size which might be built for a given sum. In this way the prospective builder can get some idea whether he can build a house of the size his family will need for the amount at his possible disposal. Figuring on the basis of the cubage is entirely emperical. It is merely the average which those building one type of a house constantly, find that a series of such houses have cost, reduced to the unit of the cubic feet of contents. It has been found to give more consistent results than other units which have been tried. Sometimes estimates are made on the unit of the square foot, but this does not take into account the height of the story, and must multiply the area by the number of stories. Any such basis
The planting is effective against the stucco

J. W. Lindstrom, Architect

of estimate must change constantly and it is only when the figures cover a large number of jobs that it has any value at all. For instance, some of the government housing, taking a great mass of the work, shows a cost of about 30 cents per cubic foot. Some other recent housing on private initiative has figured about 20 cents a cubic foot. This gives something of the general range of building at the
present time. Your builder can put these figures beside the work that he is doing or that he is figuring and it may help to get a little understanding of the building situation.

The home which is here shown would be economical in construction and is very well arranged as to plan. The living rooms open well together, so that there would not be the shut-in feeling of the small house. French doors to the sun-porch extend the vista, even when cold weather keeps them closed, saving the fuel which would be needed in attempting to heat such an open room. The stair arrangement is excellent and the kitchen is well planned and convenient. The enclosed entry makes a good place for the refrigerator, and keeps much cold from the kitchen, or to put the matter more exactly, the entry keeps the heat in the kitchen instead of allowing it to waste through the single door and its constant opening.

On the second floor are two chambers, one of which is especially pleasant in size and arrangement of closet space. The other, while small, will take the bedroom furniture. The sewing room is a very convenient place for many other things as well as sewing, with its outside windows and with the door opening to the balcony.

The exterior of the house is of stucco with shingle roof and gables. With the awning it is a good arrangement for a house with west frontage, which has the sunshine during the short days of the winter.

The Square Eight-Room House

The accompanying design shows an 8-room house built on plain, square lines. It is frame construction, with concrete foundations, full basement. The outside is finished with cement stucco or a magnasite plaster. In a house of this general shape the greatest convenience is accomplished at lowest cost. The roof is simple and plain in design, with eaves extending across the front. End gables and the smaller gables at front and rear afford light to the third floor.

The entrance is through a porch, which may easily be glazed if desired. The vestibule lies between the den, on one side, and the living room on the other. Columned openings throw the width of the house open through the hall. The main stairs are back of the den, accessible from any part of the house. Under them are the basement stairs leading from the kitchen, with a grade entrance from the landing. A conveniently placed toilet room opens from the hall, beside the stairs. A good closet also opens from this hall.

The living room and dining room open together. Both are lighted by grouped windows. There is a well-arranged pantry between the dining room and kitchen. Cupboards are recessed as is also the buffet in the dining room. The refrigerator is on the rear enclosed porch.

The house is well built and finished with hardwood for main rooms. Oak is used in the living room, dining room and den, with enamel finish in the kitchen and pantry.

On the second floor are four chambers. A balcony opens from the rear chamber. The other rooms are well equipped with closets, the larger front room having two. There is a linen closet and also an extra
closet opening from the hall. The stairs are continued to the third floor, where there is good space for storage, and one or more rooms could be finished if desired.

The arrangement of the rooms in this house is best suited to a south or east frontage. The main house, exclusive of porches, is 30 feet wide and 28 feet deep. The basement story is 8 feet, the first story 9 feet and the second story 8 feet 6 inches in height.

A stucco and timber house

Chas. S. Sedgwick, Architect
HE incorporation of the garage into the plan of the house has many advantages, not only saving space on the lot, but allowing heat and light to be connected directly into the garage. It is also most convenient for the man who runs his own car. A sleeping porch has been arranged over the garage, a frequent and most admirable arrangement.

The projection of the sun room balances that of the garage. The hooded entrance is centered between them, and opens directly into the long living room. The plan is unusually well arranged. It has the popular long living room with an
open fireplace at one end of the room and the sun room opening from the other, with a wide opening and presumably French doors. The dining room is also connected by a wide opening, so that the rooms open well together.

The recessed buffet in the dining room is cleverly placed in plan, giving a good closet space beside it for coats opening from the hall leading to the second floor. The basement stairs are under the main stairs, opening to the garage at the grade level. The rear entry has steps to the outside as well as to the garage. It has also place for the refrigerator. The kitchen is compact and well arranged.

The stairs to the second floor are conveniently placed.

The second floor is very compact in its arrangement. The small square hall gives access to the three bedrooms and the bathroom. A linen closet also opens from it. Each bedroom is a corner room with windows in two directions giving cross ventilation.

The exterior of the house is stucco with white trim. The gambrel roof gives good height to the second story, with its big central dormers.

Old fashioned blinds on the main body of the house are a pleasing adjunct to this quaint design. The pergola roof of the sleeping porch is also an attractive feature. It will be noticed that the sleep-inch porch is kept low and subordinated to the main house. It is entered from the stair landing. There is a closet on the landing which may be used in connection with the sleeping porch.

This home is particularly satisfactory; both in its planning and room arrangement and in its exterior appearance. Its broad frontage gives the long living room extended by the sun room, with the garage, easy of entrance at the side. The whole scheme is very well worked out.

Very different is the second home shown in this group, yet not less practicable for those who prefer to live on one floor. Good rooms may be finished under the roof in this plan if desired, or these rooms may be finished later. The main body of the house in the first plan is 24 feet wide and 30 feet long with the sun
room projecting some 5 feet beyond. The second house is 28 feet wide and 36 feet long, with no projections except the porch terrace.

The entrance is through the sun porch into the living room. This living room is nearly square with windows filling one side, and the dining room opening beyond. The stairs go up from the living room, with the basement stairs under them leading from the rear entry between the kitchen and dining room. The kitchen is small but well arranged. Cupboards fill one end of the room, and place is made for the refrigerator under the high cupboards in the corner.

The sleeping rooms are very compactly planned, each opening from the small hall which connects with the living room, and which makes the bathroom accessible. While the bedrooms are small wall space planned and well constructed, thought and money expended in full measure, often the difference between the especially attractive home as it is approached, and the plain house, depends upon the success of the planting which has been placed about it, or the lack of thought which leaves it barren and unprepossessing.

The exterior of this house is stucco and brick. Vines have been trained over the stucco, and the window box at the attic windows is unusually successful. There is a cornice projecting on brackets over the entrance, and a wide overhang projecting well over the terrace.

The planting against the background of the brick work makes this home unusually attractive.

When a home has been built, carefully
Entrance to a New York house

Frederick J. Sterner, Architect
Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Three Rooms---Studies in Color

The repose, the quiet, the calm, if you will, of the first of these three rooms which I know, are difficult to put into words. They are unusual characteristics in an American house. One hardly realizes just what qualities produce this restful effect. The room is of generous proportions but space alone does not give repose. The color scheme is wonderfully harmonious, but serenity means more than a charming combination of color. The furniture is of unusual interest, but "interesting" furniture does not always mean harmony. "Interesting" furniture has turned more than one house into a museum.

The restfulness of the room lies in its eliminations—what the owners and the architect have left out. The value of large spaces unadorned by pictures or casts, and the beauty of flat expanses unmarred by decorations, have been fully understood. These unusual characteristics give to the room its charm, its distinction, its quiet. Added are beauty of proportion, architectural balance and harmony of color. Could a room thus endowed be otherwise than serene?

Circassian walnut forms the trim. The narrow wainscot, the over-doors and over-mantel, show a charming grain and color. The wood has been chosen for its uniform grayish brown surface, rather than for the rich markings found in much Circassian, and which give to it almost the character of tiger-skin. Here the wood is a delightful tone—too warm for gray, a little cool for brown, harmonizing with the old pinks and ivories of the room.

The walls are stained deep ivory, into which a suggestion of pink has been rubbed. The brocaded hangings at the French windows are faded old pink. Rugs and cushions repeat this color without a disturbing note. The furniture is mainly French and Italian walnut. The French pieces which predominate are of cane in simple Louis XVI designs; the high-back Italian chairs are of late seventeenth century patterns and fit well into their background, giving a certain dignity which the Louis XVI furniture alone would not reproduce. This influence is further strengthened by a long table of the earlier period. A beautiful old chair upholstered in Gothic tapestry in blues and greens strikes a substantial note. It takes a rare feeling for line, color, and harmony to furnish a room with examples of several periods and have the result of charm and repose. It requires less talent to follow one style, than to combine successfully several styles. The first needs a highly trained decorator who
knows his art to the minutest detail; the other demands travel, discrimination, a technical knowledge of what may be blended, and what, for lack of a better term, we call decorative tact.

The second room is paneled in mahogany. The color of the wood is the warm golden brown seen in early Chippendale furniture and quite removed from the reddish tones of modern mahogany. The panels are unpolished and finished in the flat, without moldings forming an effective background for the few pictures, which are of the Impressionist school. There is a fine color harmony in these canvases. They are in greens and blues and soft purples; a marvelous Zorn shows a woman in a bluish lavender gown partly concealed by green foliage. The tones of the gown are repeated in the shade of a tall brass lamp and in a pot of hyacinths placed in the window. From every point in the room the blues and greens and warm purples are reflected; in the rugs, in the upholstery, and over and over in the pictures; in a big Monet, in a Vonnoh, in a Cazin, and in a tender portrayal of a mother and child by Blommers. These canvases are framed in plain dull gold, a tone which is intensified in the deep yellow silk curtains at the windows. The room with its mahogany walls and subtle color harmonies shows the "decorative tact" of which we were speaking.

There is a good deal of white here. The fine mantel is white, so is the ceiling; so are the columns which divide the room, and so, also, the old-fashioned shades at the windows.

In the mahogany room are many beautiful textiles. Opening from this room is the music room and at the door hangs a portiere of Genoese velvet of a golden amber, edged with a narrow band of Gobelin blue. Another rare bit is a Renaissance piece of pale yellow cut velvet, bordered with old silver lace. This forms a setting for an antique brass jar in which primroses are growing. The flowers are arranged with striking effect, and accentuate in each particular some charming color combination as the lavender hyacinths near the Zorn picture and the pot of yellow jonquils near the deeper yellow of the silk curtains. Flowers used in this way are doubly effective and add a quota of beauty to a room already generously endowed. Scarlet geraniums, red roses, or vivid carnations would have detracted from the extreme refinement of the room.

The furnishing of this home accords a striking example of rare and beautiful things put to every-day use. Many of the
articles are collectors’ pieces, but they do not have this character, so perfectly have they become a part of the life of the house. It is a gift to do a great deal with a little—to furnish a house with inexpensive things and attain success. It is a rarer gift to furnish a house with costly furniture and sumptuous textiles and preserve simplicity; to so place a velvet hanging from some old Renaissance palace that the color alone is noted and not the fact that only the favored few can possess it; in a word, to combine priceless things so that the price is forgotten.

Room number three is a library. It is paneled and beamed in wood of greenish cast. Between the beams are inserts of greenish gold toning in with the trim and the same color is carried over the walls. The curtains are of crimson silk of the real Empire shade, a color seldom seen in modern rooms. There are many things belonging to the First Empire—a beautiful old French table, several chairs and a small collection of miniatures, including Napoleon, Josephine, Madame de Stael and Madame Recamier. The miniatures are arranged on small shelves let into the wall on either side of the bay window, a convenient device for small volumes, curios, etc. It is an ideal book room with its comfortable chairs, firm tables and deep crimson notes of color. The bookshelves are flush with the walls and form part of the decorative treatment of the room. Over the mantel are three etchings by Seymour Haden, each framed by the moldings of the paneling.
The glow of the curtains is repeated in a flaming cyclamen growing in the window. A great English authority has said that crimson is the library color. It shuts out the outside world; it does not lead the eye to landscape features beyond; and it has the power to bring very near the things which it encloses. In most English libraries, it must be remembered, there is little wall space unfilled by books. What little crimson appears is balanced by bindings, by paneling and by strong vertical divisions, such as pilasters and columns. Crimson used in small inter-
sections has quite a different effect from where it extends above low book-cases to the ceiling. Libraries hung in red in this country are seldom successful. Anything but the most superficial chat about books would be out of the question. Serious reading would be impossible, for the over ruddy walls are distracting—and distraction is not conducive to repose. But in the past we have been fearful of color, holding too often to tints. Do not be afraid of a good brave tone, but use it rationally.

**Found in the Shops**

"**NEVER throw anything away,**" is the advice of a well-known decorator. "However old it may be, there is a practical certainty that it will come into style again. It would not surprise me to see in a few years that black walnut furniture was again in demand, hideous as we thought it at one time. A fashion needs only a certain period of repose to come into vogue again."

These observations were made in the course of a conversation about the renewed favor of cornices.

"Twenty years ago a curtain cornice filled with horror persons who followed fashion in furniture. Cornices were popular long before the Victorian period, though they are commonly called a Victorian ornament. It was during the second half of the last century that they were discarded as not being in keeping with modern taste, and curtains began to be hung directly from the brass or wooden poles still in use.

The returning favor of the curtain cornice has followed in the wake of the old-fashioned room. A new country house, which is supposed to represent the last word in tasteful and unostentatious decoration, had all its rooms supplied with cornices made of the same cloth as that which was used for the window curtains.

Silver cornices were seen in one shop, with accompanying curtains in Gobelin blue decorator's taffeta.

Even more admired are the old-fashioned brass and gilt cornices of colonial days now found in both antique and reproductions. Like so much colonial art, these cornices show very distinct evidences of French influence, and there are even patterns that date as far back as the days of Louis XV. Whether cornices were used in that period is by no means certain, although it is probable that, in the homes of less wealthy families, they took the place of heavy tapestry and brocades used in the palaces.

All the patterns are French in origin, although some have been simplified, as most of the foreign designs have been for American use. The chaste and simple styles are much more attractive and much more appropriate to American conditions. An imported Louis XV cornice would not be so well suited to an American drawing-room as one of the modified form. There are probably old cornices
of this kind stored in garrets which will not come to light until it is better known that the fashion has returned to favor.

These cornices are especially effective in country houses when the curtains under them are of chintz or some fashion of the period in which these cornices were used. It is not necessary to draw back the curtains, although this was undoubtedly the custom when these cornices were the fashion, as the use of the curtain-holders shows. These are also manufactured now to go with the curtains. They were as common as the cornices at one time, but, like them, went the way of all such decorations.

Naturally, such simple curtains are usually made of cotton and silk, as the design is not suited to a costly material.

For bedrooms the brass and gilt cornices may be used without sash curtains, and simply with the white cotton or muslin curtain falling directly from the cornice. This is especially pretty when the white muslin curtains are ornamented with a ruffle at the edges. This ruffle should not be less than three inches deep.

In this case, it is better to go contrary to the old traditions of the cornice and let the curtains fall straight, not drawing them back, but making them serve also for sash curtains. For heavy curtains which are to be drawn back there is a brass prong which is modeled directly on the old-fashioned pieces once thought a necessary part of all window equipment."

In Japanese trifles a number of small bags were noted—and bags, by the way, are growing smaller with the decline of the knitting needle—in which the colors were silver gray, dull blue, black and taupe.

American pottery makes an excellent showing this year. You may select the "Bowl Shop" output in plain tones of yellow, old blue and soft green, the familiar blue and gray "crackle" glaze of "Dedham," the varied shapes and colors of "Marblehead" or the well-known greens of "Teco" and "Gruby"—not many of the latter two are on the market now for these big factories now devote much time to architectural commissions. It is growing difficult to find the old "Gruby" forms designed by that gifted artist, Kendrick. When a specimen is located it is a good plan to secure it for the value will increase with the years. Kendrick pieces are based on natural forms, also they may be distinguished by the waxey quality of the glaze.
Gray Walls.

J. R. B.—Our new house faces north and the fireplace is in the west end of the room, in the openings are French doors. The woodwork throughout the house is white with dull brown mahogany doors. Our living room rug is velvet in beautiful shades of mulberry, black, tan, blue and green, the effect of all gray. Would it be right to tint the walls a lighter gray than the rug? It is a north room but I could use rich mulberry hangings. The furniture is brown dull mahogany. We have the overstuffed davenport in the same colors as the rug and a davenport table. I cannot get small rugs to match my 9x12 rug. What shall I do? The opening into my dining room is 8 ft. Should I curtain the French doors? I wanted brown mahogany Queen Anne furniture for my dining room. Would you use a chair rail in the dining room? Please suggest color schemes for dining and breakfast rooms. I think a blue rug would be very pretty with the mahogany furniture, and how would it do to have the walls blue and gray? Would ivory wicker be right for the breakfast room? The front bedroom is furnished in ivory and the back with Circassian walnut. What colors shall I use for walls, rugs and hangings in these rooms? I get most of my ideas for both house and garden from your magazine and enjoy it very much.

Ans.—We have carefully considered your plans and letter and offer the following suggestions. First, with regard to the wall treatment, you would find it almost impossible to get a flat gray surface that would harmonize with that shimmery gray of your rug, as I visualize it. But there are papers, broken, irregular lines that give the effect of a plain wall, yet shade and blend, as a hard and fast wall tint can never do. We should use one of these and there is added advantage of being able to try the paper with the rug beforehand. Such a gray wall with the warm mulberry hangings you suggest, and little touches of black, in fireplace fittings, lamp bases, etc., would make a beautiful room with your handsome furniture. The French doors should have thin silk or gauze, shirred on small brass rings, top and bottom of the sash, and then pushed together in the middle so as to cover about half of the sash. This gives an effect of screening without entirely shutting off the view of the dining room, and is the most accepted treatment.

If your rug were a real Oriental, it would not matter, of course, if the additional smaller Orientals were just like it or not. But as it is a domestic rug, an attempt at a match will be worse than something entirely different. There is a rug carpet called the Rego Wilton, a splendid quality of rug with a heavy pile, which comes in mottled effect—in different colorings. There is a gray in the colors which I think would be in harmony with the general tone of your rug. I would suggest an arrangement, using your rug in the center, and a long narrow rug on each side of it.
Either of the blue rugs you describe for the dining room would be excellent. Then have a chair rail, with a plain, grayish blue wall below and a Japanese paper above—gray, with rose green and blue suggestions intermixed, and the brown mahogany Queen Anne furniture. Do not have ivory wicker in breakfast room, but tint the walls a pale, primrose yellow, order an unfinished table and chairs and paint them a deep blue, with green and yellow lines on backs and arms for decoration. Have a plain rug of green fibre, such as for porches.

Paint your kitchen wall yellow, with a moulding about $3\frac{1}{2}$ ft. from floor and below that paint the wall a dull, tawny, darker yellow. Put chintz curtains in breakfast room, combining the blue, green and yellow—you will have an interior like a dream and practical, too.

In regard to the bedroom. The north room with ivory furniture should have a deep but soft rose wall and rug of deep rose, grayish tan and cream. Curtains of cream voile, with side drapes of rose sunfast, ivory ceiling. With back room, facing south, the Circassian walnut would look lovely against a wall of soft old blue, with deep blue rugs, white muslin curtains and hangings and chair covers of old time chintz—little stiff Nosegay of old fashioned flowers on grayish background.

In a Damp Climate.

W. C. C.—I am building a bungalow and cannot decide on my color schemes. To begin with, I will have to use the

Advice by Mail

in all branches of interior decoration and furnishing. Two dollars per room. Samples and complete color guide.

ANN WENTWORTH
former Decorative Editor of
"The House Beautiful"

461 Fourth Ave. New York City
furniture I now have, with the exception of a couple of new rugs, all new draperies and curtains.

As we have a rather damp climate, plastering is not as satisfactory as Beaver Board, so all my walls will be of Beaver Board with small strips where joined—panel effect. I prefer that these strips be painted the color of the wall, in order to give a more solid effect. I think all other woodwork will be in old ivory enamel, except in the kitchen, where it will be pure white. My kitchen is to be blue and white.

Will use no paper unless it is in the breakfast room. The paper I have selected has white ground with a large gray leaf, rather a tapestry effect, with a small touch of rose. I had thought of having the strips on wall and all other woodwork here of very light gray enamel. I have a table with drop leaf, enameled in gray. On each cupboard door and on drop leaf of the table I had thought of having one rose stencilled. Would have side curtains of cretonne with large roses over plain white glass curtains.

I have a rug that was given to me. It is an Oriental and has every color under the sun, but blue, yellow and dark red predominate.

Ans.—Your plan of painting the panel strips of walls the color of the walls is excellent. Both these rooms are very scantily lighted—being so deeply shaded by the porches—and the tone of the paint should convey an effect of light, at the same time tone in with the old ivory woodwork and with the blue and tan rug—which we advise to be used in dining room. From your description we would say this rug is a Chinese Oriental, and such a rug is often used with handsome old mahogany or antique furniture; it is also appropriate with old ivory. It demands a rather elegant environment. We think it will be delightful in the dining room with hangings of plain blue Sun-Ray cloth at the windows, and chair seats of blue velvet. It is not at all necessary to use the same hangings in these rooms, though the walls must be the same. The French doors can be veiled with the figured lace used for glass curtains. Get your new rug for the living room, and it should be one large one. You may have to wait and have it made, to get the right color in such a size. We should have this rug a deep old gold, with border or not, as you can. Then use old gold side hangings at the windows in the Sun-Ray material. If you cannot get this material, we suppose Sun-Fast will have to do, but it has become very common.

Your floor lamp is fine and the mahogany wing chair should be re-upholstered in old gold. You see these rooms now are in perfect accord and the pale tan wall and ivory wood work a fine setting.

We think the breakfast room, as you have planned it, would be charming.

We should put the dark green rug in guest room, which needs a cool treatment, and here would make an exception to the plain wall. We have seen lately a paper carrying sort of garland of green grasses and flowers in one broad stripe effect down the center of each width of the paper—a cream ground. We would use this as a panel, as a width of paper would just cover each space, and paint the strips like the woodwork, old ivory. Then, with plain apple-green Sun-Fast curtains, the room would be a dream.
A Complete Scheme.

G. C. B.—I am enclosing a plan of our cottage as it will be when remodeled into a modern bungalow. The woodwork is hard pine and has been varnished. I had thought of the old ivory woodwork for living room and dining room. I am to have new hardwood floors; how should they be finished?

Ans.—Would use ivory casement cloth, which will take the place of two sets of curtains and is newer and more elegant with the ivory woodwork.

I have indicated on my sketch how you can throw out a two-foot box window in the dining room, which will relieve the boxy look and will give you a fine place for a built-in sideboard and china closets underneath. The room is twelve feet wide and this box should be eight feet long, with a row of four windows over the sideboard. You can perhaps use the old windows elsewhere, or the contractor can take them. It will not cost much more than to buy a sideboard, and will be worth five times as much in looks and convenience. Have little short curtains which just clear the sills, of the rose colored silk or voile tied back at the windows.

Now the guest-room furniture can be either old ivory or brown mahogany, as you prefer. If the ivory, get it in a deep tone, not cream color. I would have a dressing table and a chiffonier, but no bureau. Also get the bed to match and not brass. Have a straight, low chair for the dressing table and one easy chair in ivory wicker, upholstered in pink and blue cretonne.

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The Food Program

Elsie M. Fjelstad

The new year is here. It brings the same old problem, "what shall we have for dinner?"

Some folks do not consider meal planning and food preparation a problem. They depend on the butcher to give them a certain variety of meats. To their meat dish they add potatoes, fixed in one way or another, a vegetable, and usually pie as dessert.

This is all very well and good if one's tastes for food should coincide with the food the bodily machine needs; what is termed proper food. However, it is to be vouched for, that such coincidences rarely exist and that folks do not eat the right amount of the right kind of food.

This point is readily proven by a brief glance at the amount of sickness that exists. Did it ever occur to you that practically all sickness and disease may be traced directly or indirectly to improper food? Did it ever occur to you that the human body, like a machine, must have fuel? Just as a machine turns out imperfect results if it is fed improper fuel, so the human body turns out imperfect results if it is denied the proper food.

The human body is probably the greatest machine there is, and as such, it is able to combat a certain amount of the wrong kind of fuel. When we think of how many bodies are fed improper food we can, by using our imagination, estimate just what the human body would be able to accomplish if it always had the right food in the right quantity.

The big point is now, however, to learn all we can about food, food preparation and meal planning. During the coming year this Department will be devoted to just such a study. Different phases of food will be discussed as they are taken up in schools and institutions where food is scientifically studied and applied to practical experience. The discussion in this department as thus outlined will include discussions of the classification of food, and their digestion; carbohydrates, including starchy vegetables as potatoes and rice, creamed soups, batters, doughs, and bread; proteins, including meat, fish, chicken and eggs; and fats, including deep fat frying and other points. Each discussion will be illustrated with menus and recipes.

Foods are classified according to their uses in the body. Milk, eggs, meat, legumes, fish and nuts, come under the class of proteins and their function in the body is that of tissue builders and energy producers. Starchy foods, such as potatoes, rice and onions, also sugar, and sugar foods as candy, come under the class of carbohydrates and function in the body as energy furnishers.
Cellulose, which is the stalky part of vegetables and grains, is an important food. Lettuce, cabbage, and coarse grains yield cellulose. This food is important because it furnishes the bulk to the food which is necessary to stimulate the organs to a proper functioning. A diet of soft or liquid food does not force digestive organs to function and a diet of more stalky foods is preferable. Stalky foods thus aid digestion by adding bulk.

Then there are fats. Butter, lard, and suet are examples of fatty foods. These foods also give energy to the body.

Certain minerals as iron and calcium are necessary parts of a well-balanced diet. Iron is needed for the blood, calcium is needed for the teeth. There are others also. These minerals are obtained from such foods as lettuce, cabbage, spinach, carrots, and the like.

Water is probably the most important body food. It is important in its task of dissolving food and carrying it through the body.

Besides, there are vitamins, known technically as Fat Soluble A and Water Soluble B. These vitamins are considered necessary to body growth. They are found in butter, certain vegetables, and certain meats.

Now we have seven foods, carbohydrates, fats, proteins, cellulose, minerals, vitamins, and water. Each one of these seven foods should be found in every single meal.

The folly of having meals without each one of these foods is readily seen on illustration.

Each one of these foods is acted on by special agents and special organs in the body. Non-functioning of any organ leads to inability of that organ to function. This is what happens to digestive organs and agents if they are not given the food on which they are supposed to act. A crippled digestive tract lays the foundation for any of the diseases which are "going the rounds." A well-fed, healthy digestive organization, however, is able to easily throw off the cold to which one may be exposed, and to repel the germs which may attempt to find lodgment. No better defense against such epidemics as the "flu" can be given than a thoroughly healthy
body. It is only the duty of an intelligent person to keep the body invulnerable to such attack.

Following are some well-balanced menus. Try them. The rules for many of these have been given in earlier numbers of this Department, though most of them are so commonly used as to need no explanation.

**Breakfast.**
- Oranges
- Cream of Wheat
- Buttered toast
- Coffee

**Luncheon.**
- Potato soup
- Whole wheat bread
- Stewed apples
- Molasses cookies

**Dinner.**
- Hamburger steak
- Baked sweet potato
- Creamed carrots and peas
- Bread
- Butter
- Bread pudding with raisins

**Breakfast.**
- Scrambled eggs
- Bacon
- Soy bean muffins
- Coffee

**Luncheon.**
- Cheese and nut sandwiches
- Dates
- Buttermilk

**Dinner.**
- Creamed salt cod
- Baked potatoes
- Boiled onions
- Bread
- Butter
- Rice pudding

**Breakfast.**
- Oranges
- Puffy omelet with bacon
- Toast
- Coffee
- Doughnuts

**Luncheon.**
- Creamed salmon on toast
- Baked bananas
- Boston brown bread
- Pumpkin pie

**Dinner.**
- Consomme (soup stock)
- Baked halibut with egg sauce
- Potatoes on the half shell
- Buttered string beans
- Tomato salad with French dressing
- Baked apples
- Cookies

**Breakfast.**
- Grapefruit
- Cornflakes and milk
- Toast
- Butter
- Coffee and cream

**Luncheon.**
- Cheese souffle
- Corn muffins
- Canned apricots
- Chocolate cake

**Dinner.**
- Vegetable soup
- Pork chops
- Glazed sweet potatoes
- Mashed turnips
- Cold slaw
- Rolls
- Butter
- Apple tapioca

**Breakfast.**
- Baked apples
- Boiled egg
- Toast
- Coffee

**Luncheon.**
- Scalloped corn
- Fruit salad
- Rolls
- Sugar cookies
- Milk

**Dinner.**
- Meat loaf
- Tomato sauce
- Browned potatoes
- Boiled onions
- Bread
- Butter
- Gelatine with cream

**Breakfast.**
- Graham muffins
- Grape jell
- Omelet
- Coffee

**Luncheon.**
- Macaroni and cheese
- Lettuce salad
- Graham bread

**Dinner.**
- Swiss steak with gravy
- Browned potatoes
- Mashed turnips
- Graham bread
- Butter
- Cottage pudding

**Breakfast.**
- Prunes
- Grapenuts
- Toast
- Coffee

**Luncheon.**
- Bean soup
- Corn bread
- Chocolate pudding with thin cream

**Dinner.**
- Lamb stew with vegetables
- Whole wheat bread
- Pineapple-cheese salad
- Custard pie
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Building For Fire Prevention

The old truism of the ounce of prevention must be multiplied many fold in its application to fire prevention which runs in multiple progression until it reaches the conflagration stage, when men are helpless, though it may have been merely a half extinguished match in a pile of rubbish at the beginning; carelessly insulated wires, or a defective flue. Nothing can withstand the intensity of the conflagration once it is started; but a very small amount of careful workmanship, or thoughtful provision might have prevented the whole direful catastrophe.

It is not so much new materials and new methods which are necessary in this matter of fire-safe building as the use of a little intelligent common sense in the use of the materials which have been at our disposal for a period of time. Many of the new ways and new materials have very considerable advantages, but it is the thoughtful use of the materials at hand that will bring a measure of fire protection, if such a thing is ever to come to this proverbially careless American people. Nevertheless the tests have proven that if the people once feel the necessity, anything becomes possible; and even our tremendous fire waste could be reduced to a negligible quantity if once popular sentiment were thoroughly aroused.

In the meantime it is up to the builder and to the owner of buildings in the process of construction to prevent the erection and construction of new fire hazards. Surely if care would seem to be worth while anywhere it is in the building of the home into which a man takes his family and his intimate belongings.

Special attention should be given to these parts of the house: Chimneys, openings through partitions or walls, floors, roofs, and stairways. If these could all be made fire-safe, and no rubble were allowed to accumulate as a breeder of fire, the actual fire hazards would be vastly reduced. If a match or a little fire could burn itself out where it started without growing, it would be a small matter. The first effort in fire prevention is to confine the possible fire to the place of its origin.

Chimneys and defective flues are perhaps the greatest fire hazard, and the most difficult to discover once the building is completed with poorly designed and constructed, flues. So long as the fire and the intensity of the heat is confined within the chimney it is safe. Chimney walls that are too thin and mortar falling from the joints are usually the first cause in defective chimneys which should have been prevented in the first construction. Continuous flue lining within the brick chimney is the first precaution to be taken, but even with flue lining specified the construction should be carefully watched unless a first-class and dependable builder is doing the work. Owing to irregularities in the line of the flue, the flue lining is sometimes omitted just at the hottest part of the flue, where it is most needed,
A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

See that your home is built right. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

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unless the brick work is thick, as, for instance, the throat of the flue.

Fire-stopping in the walls and partitions at every floor is the next important precaution. Plates, or planks, should be laid under the studding of all walls and partitions effectually closing these walls from the basement or the floor below. Open partitions create flues from the basement which any fire which might start and carry it directly to the roof, when without such a flue it might have smouldered and possibly have died out.

A fire resisting floor between the basement and the first story would seem a most logical precaution, even at an added expense, though it seems to be one seldom taken.

The use of metal lath and cement plaster is being used as fire protection in all parts of the building—for inside or outside walls, or both; laid over the rough floor before the finished floor is laid; under the roof and around the stairways, or in special construction.

Stairways and halls should always have the protection of metal lath and cement plaster. Specially should the under side of the stairs be given this protection. The booklet on "Dwelling Houses," issued by the National Board of Fire Underwriters, is a code of advice for fire protection in building the home with which all homebuilders should become familiar. Fire-resisting paint is another material which has not received the consideration which it merits, considering the way it has stood under government and other tests. The Forest Products Laboratory has been testing these paints covering a period of years with very satisfactory results, the data for which is available on application. This is one of the many things to which this wonderful laboratory is devoting its research department in the interests of the people.

"The Builder as a Fireguard" is the terse phrase used by an architect in the interest of better construction which should be taken as a slogan in the great constructive program which lies before the builders of this country.

To Remove Soot.

The following plan for removal of soot is suggested by the Minnesota Fire Marshal Bulletin:

"Put the fire into good condition with a substantial body of hot fuel. Common salt, thoroughly dried, is then thrown or sprinkled onto the incandescent fuel bed in a quantity depending entirely on the size of the furnace. In the case of a house heating furnace, one pound at a time is ample. The dampers are kept open so as to maintain the furnace temperature and the salt is allowed to remain until the fumes have entirely disappeared."

"Immediately upon charging the salt, the furnace becomes filled with dense white fumes which may require as much as half an hour to entirely disappear. If results are not secured on the first application, it should be repeated as many times as necessary."

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Gray Toned Woodwork

HE soft tones of gray finished woodwork which are so much in favor now are lovely and give an especially good setting for many kinds of furniture. Many woods are susceptible of an attractive and artistic finish in gray effects. Either straight or bird's-eye maple make a handsome finish when toned in gray. The effect known as silver gray is well adapted for use on oak, chestnut and other open grained woods. Frost oak is also a modified gray which looks well on open grained woods.

Given a gray tone is the one way in which oak and some of the more strongly marked and open grained woods can be used with mahogany.

All woods do not take a gray stain in the same way, and an especial treatment is required for some kinds of wood if a yellowish or greenish tone is to be avoided.

The color scheme for the interior decoration and the type of furniture to be used should be fairly well decided before the specifications are completed which determine the wood finish of the room. Certain types of furniture and the wood of which they are made, in order to have good results require woodwork which will harmonize. If the woodwork is to be given a gray tone, for instance, some kinds of wood will take a gray stain better than others. The fact that gray stain is to be used will influence the wood used for the finish. On the other hand if the kind of wood is already determined, a special treatment of that wood will be required to get the best results. Forethought in the matter will always bring more satisfactory results. If wood is to be toned gray it should not come as an afterthought when the work is nearing completion. Other things being equal, the fact that the wood is to be stained gray is a strong factor in the selection of the wood. Data concerning the different woods which take gray effects well are here gathered.

Oak.

Oak is one of the most satisfactory woods for a gray toned effect. It takes a gray stain in a very satisfactory way and makes a very rich and beautiful finish. The gray tones enhance the beauty of the grain giving it depth and variety. No other wood perhaps retains to such a degree, under any finish, the texture of its woody structure and the sense that it is "wood." That is perhaps one reason why oak is so loved as a building wood, and the sense of satisfaction which it gives in a room. No two woods will take the stain in the same way, nor will the same stain
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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give the same effect when used on different woods. Quarter-sawed oak and plain oak differ in effect almost as much as some woods differ among themselves, as the quarter-sawing brings out the bright streaks, or flakes, giving a much more pronounced figure. When given a gray stain this difference is perhaps even more pronounced, the quartered finish being flecked with the lighter tones of gray.

While an oil stain is used for some of the antique effects, for the grays and silver grays the acid stains are more often advised, which, with a white paste filler, tones slightly into the greens.

**Cypress and Douglas Fir.**

Some of the strongly marked woods showing considerable figure take a gray finish in a pleasing way. As in all cases, to get satisfactory results the manufacturers' instructions should be scrupulously followed, or expert workmen should be employed. Careless workmanship will spoil any job.

Cypress is a wood of unusually beautiful grain and the finish given to it should take this fact into consideration so as to obtain all the beauty that is in the wood. Fir has a very pronounced grain, and it also takes beautiful shades of soft grays and greens. Elm also takes a gray stain in a nice way.

**Birch.**

Being a close grained wood, birch does not require filling. A silver gray tone is obtained with an acid stain alone. On red birch this takes a lovely mouse gray that has a peculiar charm of its own, and it is considerably warmer than the majority of grays. Birch is one of our most satisfactory woods for interior finish and can be given practically any tone desired, to the most delicate tint of gray.

**Red Gum.**

Selected for figure, red gum resembles circassian walnut, or it may be selected for its even grain and color tone and it takes a beautiful silver gray or smoke tone. It is one of our beautiful finishing woods which is growing in favor.

**Soft and Yellow Pine.**

From time immemorial pine has been a favorite wood for finishing the home. The Colonial home was built and finished in white pine, all thoroughly painted. Now we have pine from the different parts of the country covering a wide variety in wood. Southern pine is harder than some hardwoods. In fact, pine can be given any type of finish, but as in all finishing woods, the best results are secured only using the right kind of stain and finish.

The popular silver gray effect requires special treatment, differing from the other color effects, and for most kinds of pine is best obtained with an acid stain. Acid stains are primarily intended for hardwoods, rather than for soft woods, but are usually recommended for the gray stains on soft pine.

Southern yellow pine requires special treatment to give the best effects when a gray stain is desired. Experience seems to teach that a satisfactory silver gray effect can not be obtained by the use of an oil stain, shellac and varnish or wax, as both shellac and varnish and even wax tend to cause a greenish cast to appear, due to the slight color in the finishing materials. The manufacturers have prepared special finishes by which effects are obtained with one special coat which used to be obtained with several coats.
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Hep. Practical Book of Interior Decoration, by Harold Donaldson Eberlein, Abbot McClure and Edward Stratton Holloway, published by J. B. Lippincott Company, has just issued from the press and answers the many questions which are constantly being put to us. It is a beautifully printed volume with seven color plates and many illustrations showing interiors of practically every type.

It is in three parts, the first of which treats of the historic period decoration of England and France, and includes Spain and Italy. The third part gives the assembling of various styles. Both parts are fully illustrated, showing many beautiful interiors.

The second part, however, is one which makes a wide appeal as it is devoted largely to the presentation of general principles with such subjects as "The Basis of Successful Decoration," "Color and Color Schemes," "Walls as Decoration and as Background," "Floors and Their Coverings," "Windows," "Arrangement and Balance of Furniture," "Decorative Textiles," "Artificial Lighting," "Pictures and Their Framing," etc.

To quote from the foreword: "History is a treasure house of the crystallized experience that has slowly evolved in past ages, a treasure house ready for us to draw upon at will. The limit of our taking from its stores is marked only by our capacity to receive. This is especially true of so concrete a subject as interior decoration where many enduring examples of the best achievements of former generations in that field have been preserved for us practically intact.

"The truest and sanest originality is the product of a gradual evolution and rational adaptation to present needs of the most obvious and applicable precedents established by our predecessors and tried by the searching test of time. Such originality, too, is largely an unconscious process."

"But why trouble one's self about styles of the past, may be asked. Because there we find a beauty unapproached by modern designers. With the decadence of the Empire style the art of great furniture-design died, and we still await its resurrection."

"Interior decoration is not a mystery. It is the use of enlightened common sense. Experience leads us to the conviction that even those who are unskilled in home arrangement have more intrinsic ability in this direction than they realize, and it is the aim of the present writers to aid them in using that which they possess."

"Most persons, when they see a thing, have a fairly good eye for balance, distance and scale; their difficulty usually has been that they have not looked and considered."

"A fault continually manifest is the failure in many instances to consider the house as a whole. Instead of the clean, coherent effect which should everywhere be evident as the result of a well-mapped decorative scheme, is felt a fitness of purpose, a lack of grasp. The individual rooms may be charming, but the fact that they have been separately considered, strung like beautiful but incongruous beads upon a string, is often but too plain."

"The temporary craze for some particular style is responsible for much of this; the householder furnishes a room or two in the manner then in special fashion, or commissions a decorator to do it, and a year or two thereafter, that vogue having had its little day, other rooms are done, also in the style which is then 'just the thing,' but in a style which is likely to be totally at variance with the first."

"Such crazes are fostered for trade purposes. Art is a matter of sanity and equilibrium—worthy interior decorators recognize no such thing as the fad."

"There may be choice and preference, and it is the aim of this book to lay before the householder and the decorator facts and principles that will enable choice to be arrived at intelligently; so that they
shall be the honest expression of the individual temperament, and not mere whim or a temporary 'liking' to be effaced by the next attraction that grasps the attention."

"As such an intelligent choice and appreciation must be based on knowledge, and as decoration by any method or in any style is a whole, its parts being intimately related and inseparable, it is urged that no decision be made or work begun until that knowledge be made one’s own. Special attention has here been given to making its acquirement easy through simple, systematic and logical arrangement and treatment, but the contents of one chapter should not be acted upon until the others also have been studied. If a window cannot be curtained without reference to the other furnishings of the room, to the room itself, the others in the house, and the exterior of that house—and it cannot—then it is plain that these other things should be taken into account before we curtail the window.”

“The work of interior decoration is not a task that can be undertaken in a haphazard manner and accomplished with creditable results. Nor can it be achieved by the whimsical following of fads. It requires thought, judgment, calm planning and sanity. Its ultimate object, to enrich and beautify the home which is the nucleus of social life and the cornerstone of the state, is a service in which architect and artist, decorator and householder alike, may engage with justifiable pride.”

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ON HOME BUILDING

CONTENTS FOR FEBRUARY, 1920

Just a Word—Building Material Supply ........................................... 60
The Story of a House—Harriet Keith ................................................. 63
The Overmantel and Fireplace—John Howard Martin ......................... 68
Scarlet Doorways of Old New York—Adelaide Curtis .......................... 70
Practical Little Breakfast Rooms—Charles Alma Byers ......................... 74
"My Own Home" Book—E. M. Watson ................................................. 77
How Would You Change Your Home in Rebuilding? ............................. 80
A Small Colonial Home ................................................................... 82
Bungalow For a Larger Family .......................................................... 84
A Cottage Bungalow ....................................................................... 86
Two Stucco Homes ........................................................................... 87

DEPARTMENTS

Inside the House
Decoration and Furnishing—Virginia E. Robie, Editor
   The Treatment of Doorways ......................................................... 91
   Lighting Notes ........................................................................... 94
Answers to Questions ........................................................................ 96
Household Economics
   To Open Dampers With An Alarm Clock .................................... 102
   Can Washing Be Made Easy? ....................................................... 102
   To Protect the Hands .................................................................. 104
Table and Food Conservation
   Soups and Soup Making—Elsie M. Fjelstad ................................. 106
Building Materials and Notes on Heating, Lighting and Plumbing
   Building a Basement Later ......................................................... 110
Woods and How to Use Them
   Questions From Keith's Readers ............................................... 114
Book Reviews
   Flora—A Book of Drawings ........................................................ 118

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The Story of a House

Harriet Keith

Here are some things that people are never tired of hearing about. Some stories, that, like the little boy, with Uncle Remus and Brer Rabbit, they call for again however often they are told. One of these stories is the story of a house, or rather the building of a house. There is no end to the fascination of this theme. It has perennial charm. For way down at the bottom of their hearts, everybody wants a home; and you can't have a home without a house. At least, those poor people who call a flat, or an apartment, or a hotel, home, have only a pathetic travesty of the real article and—to use expressive English slang—they "jolly well know it" even if they won't admit it. Is it true that pure laziness is responsible for flat and hotel life? It is more trouble to have a home. But who ever got anything worth while without trouble? Would that the old wholesome atmosphere of home cares and duties would return and save us from the dry rot of six-hour days, no furnace to tend, no meals to cook, no kiddies to love and do for,—only clubs and golf and movies—ad libitum. It looks, though, as if even the flat dwellers would be forced into homes. Our cities are becoming so congested people will simply have to build homes a little farther out from the heart of the city.

This may prove the salvation of the country, for a man with his own home
and family about him, and with a bit of
garden to tend, is not running around
with the crowd that wants to destroy
property.

But to get back to the starting place—
it is because everybody likes a story of a
house, that we are showing a very de-
lightful and livable home, recently built
in a fine neighborhood in the city of Min-
neapolis.

These home builders wanted plenty of
breathing space, a chance to see the sky
between waving tree-tops, instead of look-
ing out on area courts and fire escapes,
so they went out far enough, but not too
far—to set their house on a generous
lot with 75 ft. additional ground on one
side for a garden. An arched gateway
opening on the driveway, connects this
garden with the house garden proper.
This larger garden at the side is enclosed
by even taller growths of cedar, high-
bush cranberry with its bright scarlet
berries, hydrangeas, rosa rugosa, and
inside these secluding walls are all man-
er of rare and lovely plants and a wealth
of blooming shrubs. The garden is still
young, and many of its features are as yet
still in the making.

The house itself,
in this setting of
"rus in urbe," sug-
gest the country
while enjoying city
comforts, is a digni-
fied, stucco exterior,
of good mass, sim-
ple but pleasing lines
without frills or fads
but strongly indi-
vidual, with a home
feeling reaching
even the passer-by.
Color relation and
the texture of ma-
terials have been
thoughtfully consid-
ered in working out
the designs, and the result is a warm, soft
blending rather unusual in concrete con-
struction.

No porches or awnings interfere with
the play of flickering light and shade on this charming facade. No projecting balconies break its satisfying mass and line. Creepers run up the corners and at the sides of the chimneys, but do not smother the house. The three quaint dormers relieve the monotony of the long roof line and light the attic.

The roof shingles of dull, reddish slate, the warm tones of the deep red, rough-surfaced brick facade used for the main entrance and the broad terrace and steps, the dark green of the shutters on the second story, even the bronze color of the boxed gutters—combine to produce an effect quite different from the ordinary cold and colorless plaster exterior. The clever design of the front entrance gives an arched recess of the red brick and is an interesting treatment. The repetition of the arch across the facade in the succession of long many-paned windows flanking the entrance, is an effective architectural feature. These long, low-set windows and the broad brick terrace bring the out-of-doors very close. Any undue prominence of the red brick is relieved by laying it in inch-wide points of gray mortar in a diagonal pattern, reminding one of the courtyard of some old English mansion. It seems a house made for sun and shade, and for the wind in waving tree-tops, especially as we note the two tall slender poplars that stand close up against the white south wall and hold the great white end-chimney in close embrace.

Entering the arched vestibule, with its bricked walls and tiled floor, we come into a wide center hall that runs quite through the house and opens out through French doors into the real garden seclusion—the back yard. It is shut off from the garage by a high wall and hedge and a delightful paling-gate is set into the wall for convenience of access to the garage from the quaint little flight of steps leading down from the rear hall.

Here is a charming plot—sweet grassy spaces enclosed by sheltering trees that stretch encircling branches over it, and by tall hedges, planted in tumbling profusion of arbor vitae, lilacs, hollyhocks, rose-red spirea, etc., while gay nasturtiums, Prince's Feather and snap-dragons are heaped about in low, irregular masses.

The interior of the house sustains the same note of quiet richness and restful dignity that marks the exterior. The oak woodwork throughout the lower floor and the upper hall is carefully treated with a very slight stain which merely deepens the natural tone of the wood and gives
no impression of a stain. It is waxed and rubbed to a satin smoothness and the resulting soft, velvety tone, almost grayish, blends in and forms a harmonious framing for the walls, which except in the living and dining room, have been uniformly treated with a gray wash of velvety softness. The plaster, first covered with canvas to protect it from chipping and cracking, was given three coats of paint, then a stippling of the soft, warm gray that tones in perfectly with the wood trims. This unification of walls and woodwork through the house has the effect of increasing the apparent spaciousness in the generously planned rooms and imparts a feeling of restfulness to the whole interior.

The living room walls are oak—paneled to the ceiling in a warm tone of brown, with an ivory tinted plaster ceiling. Six French windows to the floor, many paned, flood this large room with light and remove any sense of sombreness from the heavily paneled walls. The windows are fitted with Venetian shades in a natural linen of a creamy, bisque hue in a weave of alternate open and close meshed stripes. There are no lace curtains, but side draperies of rose and gold brocade lined with ivory satin are tied back with heavy silk cords and tassels. This same brocade is used to line the portieres of deep rose velvet in the opening to the hall, and also to upholster a large fireside chair and the seat of a stately high backed chair in walnut and antique cane. Two smaller arm chairs are covered with a small patterned wool tapestry in plain old blue, while the big, over-stuffed davenport that flanks the farther end of the fireplace is covered with a Florentine wool tapestry in gorgeous coloring on a black ground, a reproduction of ancient hand woven Italian tapestries. The oak floors throughout the hall, living and dining room are overlaid with Geneva rugs. Their deep, heavy pile and soft sheen, taupe in color, with an undertone of rose gives an indescribable softness. These rugs were made to order in sizes to suit the rooms. In the living room are laid several Persian Iran rugs in their lovely coloring of rose and blue and cream. The blue note is still further accentuated by the deep blue marble facings of the fireplace. The tall antique bronze of fire dogs and the bronze light fixtures carry out the rich detail. All the moldings of the paneling and woodwork are kept down to a low, flat relief and against this quiet background, high lights of vivid color are given by Hitchcock's paintings of Holland scenes. In one of these mention should be made of a wonderful piece of color showing tulip fields in their gorgeous scarlets, yellows and rose, abloom along Holland dykes. The blue water a mass of floating petals blown over from the fields. The opposite wall shows another Holland scene—
"Going to Market"—a girl in a blue and white gown, carrying on her head a low, broad basket filled with rose and scarlet blooms—against a background of leafy bluish-greens. There is a Venetian scene too, with its vivid coloring the intense blue of sky, the vine-draped pinkish walls, the black gondolas—and underneath this stands a single lustrous, pearl and rose porcelain vase. We mention these details because they are the things home builders want to hear about, and that help to clarify their own ideas, especially as in the case with so many—when the intending homebuilder is far from art centers and skilled decorators.

In the dining room, while the same treatment of woodwork and floors prevails, the walls have been hung with a wool brocade in a French design of a soft, mauve tone, delightful in color and texture. The harmony between these walls, the soft, satiny, grayish tone of the oak, the softly blended rose and tan of the rug, the rose of the velvet hangings of that indescribable shade which is neither mauve nor rose but a blend of both—is a rich but subdued ensemble.

There is a quaint, high, narrow fireplace with facings and shelf of oyster white artificial stone; the andirons are washed with antique silver and the electric light fixtures have the same antique silver finish, with shades of gold colored silk lined with rose.

The furniture was especially made to order. It is of Jacobean design, but with a true artistic sense of fitness, while the type is preserved, the style has been lightened in some of its features to suit the dimensions of the room and its feeling of delicacy rather than grandeur. The carved insets in the high back of the chairs were hand carved and the wood stained to harmonize with the tapestry of the chair seats, specially woven in rose and gold: The hangings of the wide arch into the hall are of the rose velvet, through which we pass into the wide hall treated in the charming simplicity of the Italian style, with its plain plaster panels and moldings in low relief. A splendid carved Italian chair, its high back and seat covered with Italian cut and brocaded velvet—a thing now unobtainable—in gorgeous coloring and bold design—furnishes a high light of wonderful quality in this classic hall.

Great simplicity and restfulness characterize the treatment of the upper floor. Except in the hall, where the oak finish of the first floor is carried up—all the rooms are finished in ivory enamel, with walls treated as below with canvas covering and painted the soft gray. But the ivory wood is deep and rich and satin-smooth, and the walls are soft and velvety. The difference in the rooms is brought about by the color in the furnishings; one room having deep blue rug, hangings and mahogany furniture, one rose color and paneled ivory furniture.
The furniture of the owners' bedroom is very interesting. It is walnut, in rather a dark finish in what is called the Riccardi style, by the artist-craftsman whose specialty is hand-wrought, beautiful furniture. Besides the restained, lovely carved finish of the head and foot boards of the twin beds, there is an oval inset in each of delicately modeled polychrome work in an open floral design, the wood of the flowers and leaves softly colored in dull reds and greens and finished in lacquer. One can scarcely imagine anything more refined or charming. Of course, such work comes high, each bed costing $250. But craftsmen no longer work for glory, or love of art alone—as in the 17th century, but want big money, like all the rest.

Taken as a whole, the charm of this dwelling consists first in the intimate relation of the house to the surrounding out-of-doors, which has never been lost sight of, and also in the thoroughly symmetrical and well balanced treatment of the exterior; and lastly in that fugitive and evasive thing called quality that pervades the interior expression.

The Overmantel and Fireplace
John Howard Martin

The strictly utilitarian use for the fireplace may be a thing of the past in our super-heated apartment houses,—not the less so perhaps during seasons of coal famine; even in our homes it is a good deal of a luxury. Nevertheless to such an extent does the imagination, if not its usefulness, demand a fireplace in the satisfactory room, that we are hardly satisfied to complete a house without one. How far it is the fireplace that we are demanding and how far it is the architectural feature of the overmantel as a central feature in the treatment of the room, it might be hard to determine. Perhaps some light may be thrown on the subject by noticing how many gas logs are installed in fireplaces, some of which are built large enough to take a backlog or perhaps a stick of cord wood. Not that we fail to realize the cheer and comfort of a gas log, an installation which gives not only the comfort of warmth, but also its cheeriness; but that a big fire opening, wide and deep and high, is not only unneces-
sary for a gas log, but such an installation may be a bit incongruous, with its great projecting chimney breast, such as was required by a roaring fire of logs.

When we are really building for a gas heater installed in the wall, the opening is small and high and is flush with the wall of the room, though it may be tiled around the opening and even for a hearth, and makes a very attractive feature.

It is quite possible that the mantel and even the overmantel is quite as important in the room as the fire opening, and we may frankly admit the fact. The possible use of the fireplace a few times in the year, and the much vaunted ventilation which it brings to a room (even when the damper is closed to prevent too much draft,) gives it full reason for being. The fireplace gives a focal point about which to center the interest in the decoration, and also to gather the family living, in the grouping of the furniture. In the matter of interior decoration the fireplace and chimney breast usually becomes the dominating factor in the interior design of the room. The finish of the room in the matter of wood work finds its climax in the mantel, with a special feature in the treatment of the chimney breast, or else this bit of wall space above the mantel becomes the most important in the room, making the place for a valued picture or perhaps a bas-relief.

With a paneled wainscot a continuation of the panel work across the chimney breast is a logical treatment, with perhaps a special emphasis, such as is obtained in the use of the old English form of "linen panels" giving almost the effect of a pilaster on the corner in the oak paneled mantelpiece shown. The contrast of the plain with the "linen panels" is effective, as is the flattened lines of the Tudor arch of the fire opening, with its light surface tone and nicely molded lines of the arch.

So strong an appeal in the last few years has our own national type of architecture, the Colonial, made upon the people that it has even effected our natural love for wood work, finished to give the beauty of the grain and line of the wood, and a painted or enameled finish has been used in some of our handsomest homes.

Two colonial mantels are shown both of which have excellent treatment. Both are paneled and enameled; both have Colonial details in the mantel and in the cornice treatment. The first has rather an unusual feature in the center panel of the chimney breast, which carries well with the candelabra of the side lights. The treatment of the mantel shelf is well studied and restful.
The other Colonial fireplace which is shown is a living room fireplace, and is built for a real wood fire, with a fire opening large enough for a log back of the fire. The whole chimney breast is one big panel in the Colonial way. The line of the wainscot cap is indicated on the corners, though interrupted by the window seats on either side of the fireplace. The objects chosen for mantel adornment follow conventional lines with good effect.

"The mantel shelf is one of the chief sources of decorative peril," to quote from The Practical Book of Interior Decoration, lately out of press. "It is almost as seductive a temptation to decorative indiscretions and overloading as the broad top of a sideboard. Only the firmest resolve and devotion to the invaluable principle of restraint will save it from a cluttering accumulation of things that would better be elsewhere. Sedulously shun a number of small, trifling gim-cracks and refrain from displaying photographs thereon."

"When there is no mantel shelf, the danger is entirely obviated. When there is a shelf, one must carefully study the nature of the overmantel treatment before venturing to place any movable garniture on it. Some overmantel treatments demand that very little be placed in front of them, and the intrusion of conspicuous garniture would be an unpardonable impertinence; others again admit of more latitude in the disposition of movable garniture. In any event six unalterable principles must be faithfully observed: Restraint, Suitability, from which Dignity follows as a corollary; Propriety of Scale, Symmetry, Concentration, and Contrast."

This is perhaps as good a classification as has been made, and a careful study and application of these principles will assure good results, with a sense of restfulness and of dignity, yet with a variety of interest.

Some Doorways of Old New York

Adelaide Curtiss

WASHINGTON SQUARE and its immediate vicinity holds a fascination to those who love Old New York, and who, in imagination or in history, go back to the period of its glory in Colonial and early republican days. Here are many fine old houses, which have been handed down from generation to generation and are still tenderly preserved. These attract architects and artists to the neighborhood, where they draw inspiration from these fine old
mansions. Greenwich village, New York's "Latin Quarter," is not far away, and though sometimes considered faddish, much good work along artistic lines is nevertheless wrought out here.

The photographs show some of the fine old houses in the vicinity of Washington Square and lower Fifth Avenue, regions beloved by such writers as Washington Irving and later, George William Curtis. Some of the buildings around quaint Gramercy Park also deserve especial notice.

Still another most interesting section of early New York where admirable types of old buildings are found is Chelsea Village, a region bounded by Eighth Avenue and the Hudson River, between Nineteenth and Twenty-fourth Streets. The name of this locality was derived from the title of the homestead of Captain Clarke, a veteran of the French and Indian wars. This house passed to a descendant of the original owner, Clement C. Moore, the author of that classic beloved of childhood (as well as by those of mature years), "'Twas the Night Before Christmas." Erected in 1750, this venerable mansion was rebuilt about 1800, but was finally torn down in 1852.

A number of unusual types of early houses can be found through Chelsea Village, but perhaps the most striking are the "Chelsea Cottages" and the row of tall houses constituting "London Terrace." Two other ancient dwellings a little further to the south have gambrel roofs and outside stairs. One of these is a "hidden house," which is reached through the "hole in the wall," —a rear alley. It originally faced a road used as a short cut from Greenwich Village to Chelsea.

One of New York City's Colonial houses which is deservedly famous is the often-pictured Jumel Mansion. This beautiful Colonial house, where several historic personages have temporarily found lodging, and where some important events had their background, is near Broadway and 160th

Showing the Dutch door of the Philipse Manor House, built 1745
Street. It was formerly known as the Roger Morris House, from the fact that this comrade in arms of Washington had built the structure, in 1765, as a wedding gift (it is said) for his bride, Mary Philipse. Notwithstanding its many changes of ownership the venerable building, of a somewhat more pretentious type than those we have been considering, remains fairly consistent in style. The little height of ground, on which the mansion stands, overlooks the Harlem River, and much of the upper portion of the city, and is a center of interest to numbers of people who daily visit the spot. It is now maintained by the city as a museum for Colonial relics. One authority says of it:

"It was occupied by Washington as headquarters where he formed plans for defending the Heights and for blocking the passage of the Hudson River.

"From a period before the Jumel purchase, the house was the resort of French emigrés. Louis Napoleon, Jerome and Joseph Bonaparte were at various times guests of Mme. Jumel, who died in 1865."

Other famous guests of the old house in Washington's time were John and Abigail Adams, Alexander Hamilton and other celebrities. The photograph shows one of its simple yet beautiful doorways.

In the nearby city of Yonkers is found another most important architectural landmark. This is the Philipse Manor House, erected in the latter part of the eighteenth century, but in which is incorporated a part of the original structure, built over a century earlier. This venerable mansion is now used as the Yonkers city hall.

Generally speaking, the more elaborate the doorways of these old houses the later the date of construction. This was not always the case however. The builders touchingly attempted to follow the classic prototypes of the mother-country, and the result was usually happy. Professor Hamlin in his well-known "History of Architecture," says:

"The majority of the early New England houses were of wood, more compact in plan, more varied and picturesque in
design than those of the South, but wanting somewhat of their stateliness. The interior finish of wainscot, cornices, stairs, and mantelpieces shows, however, the same general style, in a skillful and artistic adaptation of classic forms to the slender proportions of wood construction. Externally the orders appear in porches and in colossal pilasters, with well-designed entablatures, and windows of Italian model. The influence of the Adam and Sheraton furniture is doubtless to be seen in these quaint and often charming versions of classic motives.

"It is noticeable that the veranda or piazza was confined to the southern states, but that the climate seems to have had little influence on the forms of roofs. These are gambrelled, hipped, gabled, or flat, alike in the North and South, according to individual taste."

Of importance, too, and possessing marked characteristics, are the buildings constructed by the colonists from Holland, which are still to be found where the Dutch had settled. These ancient structures, or their immediate successors, which imitated them, are usually remarkable for their unpretentious appearance, their generally "homey" style. The hipped roofs are low, with spreading eaves, the walls are very thick, and the whole house, with its great fireplaces and huge chimneys, seems built for "solid comfort." The doorways of these Dutch houses have, too, their own idiosyncrasies. They are not as elaborate in design as are those to be found among the houses which followed English models. The Dutch doorways also are almost invariably divided into two parts, a picturesque feature which allowed the upper part to be opened while the lower was fastened. The Philipse Manor House at Yonkers has interesting doorways of this type. The study of the early buildings of our country and the often-times neglected architectural survivals sometimes found in our older cities, is a subject of great fascination and is a valuable study as well, since so many of our newer homes are being built along similar lines.
HERE was a time when the breakfast room was regarded as a sort of luxury, and recommended only for the costly home. It is now getting to be made a utility of very definite worth, and especially so in the home where the housework is done by the housewife herself. Made as attractive as it may be, it also becomes a very enjoyable addition. Hence, the popularity into which it is rapidly coming even as a feature of the small house, seems doubly merited.

In the first place, the breakfast room undoubtedly saves labor by saving the larger regular dining room from the usual constant use as well as by being less prominently situated. At least, it enables the regular dining room, which frequently is quite closely associated with the living room, to be the more easily kept in order. Being smaller, as well as more shut off, it also requires less work. Moreover, because of its seclusion, it is to be especially appreciated where the breakfasting of the different members of the family is irregular. At the same time it need not be reserved for use for the morning meal only, but often, if the family be small, may be utilized for dining purposes at all times except when guests are entertained. Anyway, it not infrequently will serve very satisfactorily for luncheon.

To prove thoroughly enjoyable, in addition to its serviceability, the room must be attractive in finish, decoration, furniture, and so forth, and should not appear as if slighted simply because principally intended for the private use of the family. In fact, it should especially effect cheeriness—possess an atmosphere of brightness and airiness, and yet of coziness. The woodwork, therefore, is quite commonly finished in white or old-ivory enamel, although occasionally in some very light-tinted stain, while the wall treatment will either be similarly light or consist of patterned paper or hand-decorating of flower-like colors. The furniture is frequently of wicker, which always appears particularly appropriate, as well as helpful toward bringing out the desired effect. Wicker may also be had in so
many different styles and shades of finish, enabling one to exercise considerable individuality of choice. The painted or enameled kinds of furniture, however, are likewise suitable and very often used.

The breakfast room is always small, as compared to other rooms, and its dimensions in the cottage-like home are invariably especially small. In fact, it is sometimes as small as seven by nine feet, and it rarely, save in the house where floor space is quite unlimited, need be larger than eight by ten feet in size. Yet the room should be exceptionally well supplied with windows—preferably to such an extent that at least one of its walls is given over almost entirely to glass. If the room is to become the bright and cheery place that it should be, a liberal admission of outdoor light is very important.

Perhaps it is well to add, in this connection, that occasionally in the building of the very cheap homes of today, where construction costs make strict economy necessary, the regular dining room is being omitted entirely, some very small room like the ordinary breakfast room taking its place. In such cases, this little room naturally serves the family for all the meals of the day, and when company is entertained for dinner the regular living room is brought into temporary dining service. This arrangement generally seems to prove quite satisfactory, and, incidentally, means a rather substantial saving, both in building cost and later in housework.

As suggestions for planning, finishing and furnishing the breakfast room, we are here presenting a number of illustrations which merit somewhat careful study. Some of them, it will be observed, possess built-in china-cupboard combinations that doubtless will be found especially interesting.

The illustration to which attention is first invited shows a small breakfast room that is finished in white almost entirely. The woodwork is done in white enamel, and the walls, save for a very delicate vine effect at the top, which is hand-executed and composed of green and pink shades, are painted white. The door to the room, however, is of mahogany, while a bright patterned rug covers the floor. The breakfast table and chairs are of wicker, left natural, and therefore are almost pure white. A small built-in buffet, which is composed of two narrow china-cupboards, with glass doors, and a separating section of drawers and shelves; and which is recessed into the wall, leaving an arched effect above, constitutes a particularly convenient and enhancing feature of this room. The single lighting fixture, it should be noticed, consists of
A Colonial breakfast room

comprises the lighting fixture, and outdoor light is admitted through a group of four long casement windows.

The next illustration is of a comparatively light-finished breakfast room that contains a china-cupboard and drawer-and-shelf-cabinet combination set diagonally across one corner, suggestive of the Colonial style. For a very small room, where the floor space is valuable, this little built-in feature is especially well planned and located. The woodwork of the room is done in old-ivory enamel, and a neat little plate-rail tops a sort of paneled wainscoting effect. The wall space between the paneling wood strips is covered with paper similar to grass cloth, and above the plate-rail the walls are papered in an indistinct pattern of white, light buff and varying shades of bluish-gray. The furniture is of the wicker type, the natural color of which in this instance is a very light shade of cream. Flowered side drapes and lace curtains are used at the windows, and the floor is

an inverted white dome, with delicate decorating that corresponds charmingly with the hand-done pattern of the walls.

The second picture illustrates a room that possesses white enameled woodwork but a wall treatment of comparatively dark character. Here again a sort of paneled wainscoting, with a plate-rail above, finishes the lower part of the walls, the panels of which consist of grass-cloth paper of old-blue shade. The paper used for the walls above the plate-rail suggests tapestry, and is figured predominantly in tan and dull blues, while the rug covering the floor brings out similar colors. The furniture in this case, which also is of the wicker or reed kind, is stained a rich tan shade. A plainly designed built-in sideboard and china-cupboard combination, finished in white enamel to match the rest of the woodwork, is located near one of the corners of the room. An inverted white dome
covered with a rug of dark colors, with the blues predominating.

The last illustration shows a room that serves both as a breakfast room and as a sun room. To transform it from the one into the other is naturally a very simple matter, for its furniture, which is of wicker, of natural cream shade, is quite well suited to either. The room is somewhat narrow and long, and one of its longer walls is given over almost entirely to nearly full-length windows, while French doors at one end and an ordinary wood door at the other give access to a well-lighted living room and the kitchen, respectively. The woodwork is done in old-ivory enamel, and the walls are covered with paper suggestive, in pattern and colors, of the garden viewed from the windows, while grass rugs are used for the floor. This is, indeed, a very serviceable and enjoyable room.

From all the foregoing and from the accompanying illustrations, it doubtless will be realized that the small breakfast room can be made a very desirable and serviceable home addition. Briefly, it requires but little space, saves the housewife considerable work, and when attractively finished and furnished makes a particularly delightful place for starting the day pleasantly and cheerfully. Indeed, it is most commendable to serious consideration, in many different respects.

"My Own Home" Book
E. M. Watson

Start one of these clippings books today.
From having your "Own Home Book," is only a step to having your Own Home!

Wats the gorgeousness?" As Clarice opened the door she spoke with merry treble, and laughed her usual "music bubbles" laugh. Elizabeth raised a downy head from her work, like a surprised chicken, and then put two Chinese idol paperweights over a bundle of clippings that were stirred by the breeze of the open door.

"Ladykin, I repeat 'Why this glorious gorgeousness?' Why these samples of wall paper, these bits of colored silks, these most wonderful pages from the finest magazines this old earth offers? Why the very intense pinkness of my ladykin's cheeks?"

Quiet little Elizabeth glowed with pride and held out towards Clarice a large cretonne covered volume filled mostly with blank pages. However, here and there were clippings pasted in it. Elizabeth thereupon commenced to explain:

"I've a hobby—it's the universal hobby of girls—it's a home. Everyone aims to build sometime. The homing instinct is within all of us and if it isn't the homing instinct, it's a love of constructing something, and a sort of pride in things self-planned and self-executed, I guess. Anyway, folks want to build. I call it a universal hobby. By the way, in the front of that book I have pasted a few clippings—editorials about this building instinct and the love of home: how they run parallel."

"But it may be a weary wait, Betty-person, before you really build," Clarice protested.

"That's why I couldn't wait, so I started this book. I am calling the book 'My
Own Home' and it will perhaps be more
my own home than anything I really build.
I may marry a poor professor instead
of a wealthy stock broker," she laughed,
"I felt that maybe a prince may never,
ever come along on his charger, or in
his car, however they do come nowadays
—and so decided to build, by my spin-
sterly self, a perfectly ideal, yet a per-
fectedly possible place. It is likely I shall
start three books: one a mansion, one a
shack, and one a middle-between resi-
dence, but so far I've just started the
middle-between one, of a sort that per-
haps I could buy myself,—if crops are
good.

"For almost a year I had been saving
pictures of small houses and finally sorted
out one that I felt that myself and my
imaginary family could buy. It was sim-
ple and didn't have many architectural
whims: substantial-looking yet quiet and
plain. It was as seriously necessary for
me to positively settle on one plan as
it would have been if I had actually been
building with brick and timber, Clarice,
for I couldn't have all of those fine,
tempting houses, so I had to choose one
of them.

"Before selecting my house plan I
looked for several things—a big family
room downstairs, a downstairs bedroom,
and a roomy kitchen, a porch leading
from the dining room and livable hall-
way. I found a plan which included these
features, an ingle nook, built-in book-
cases, and a hallway that isn't just so
much 'lost space.' After studying the
design selected I found that every room
was well balanced, each room a picture
in itself, and forthwith laid away all the
other illustrations to pass on to someone
else.

"I have pasted my selected plan in the
book, and have left blank pages to cover
sketches of different rooms. You will
notice that the upstairs has a recreation
room-library combination heated with a
big fireplace, economically connected with
the chimney from the kitchen below, and
that there are three bedrooms and two
baths, besides a sewing alcove with wall
cupboards in it, on the second floor. You
will notice downstairs there is a break-
fast room, and that this opens on the
dining room making it larger, and that
there is a big porch, a real living porch
accessible from the end of that livable
stairhall and from the dining room, too.

"Yes, those blank pages will not only
be given to elevations and further speci-
fications, but to actual figures, bills of
material, and the like. You see, this is
as practical a venture as if I were really
going into the thing in deadly earnest.

"Just go through my index, for I have-
n't finished the book;—in fact, it is a book
to which one can add constantly, as one
would add to a house. It is a book that
grows and is subject to some changes,
and becomes more detailed. I have start-
ed with the house and have a section of
the book for every single room, for the
attic, for the cellar, for the garden, and
for the walks. I have even a section for
the garage, and for the dog house.

"Take for instance my cellar, see how
I have divided it into furnace room, root
cellar, canned fruit room, laundry, and
shop, for a cellar shop is one of the ideas
I have always clung to. The man must
have a warm place to 'putter about.'"

"How about your clippings?" asked
Clarice.

"They are mostly all advertisements,
but some of them are articles clipped
from magazines, particularly those color
pages showing interior decorating plans.
I will show you my reception hall, that
big, livable stairhall running from the
front door to the big living porch back,
and how I decided on decorations. I
found this stone blue, that is receding
yet cheerful, that makes a narrow room
seem larger, and so I 'keyed' my room to
that, selecting wee cuts, little samples
and the like from pictures, and pictures of fabrics in magazines. You see, I have samples of all of the fabrics for the draperies, and wall coverings.

"In the back of my book is a big envelope for miscellaneous articles—notes and clippings, mostly—why the living porch should be given over to the maid twice a week; how a dumbwaiter may be built to carry coal from the cellar; how to build a safe into one's fireplace; how to make a door so the ice box may be filled from the outside; how to place radiators so they won't occupy wall space needed for furniture; how to swing doors so they won't interfere with traffic; how to plan a sink with two drip boards (one for dishes to be washed and the other for the clean dishes); and oodles of other 'how-to's' that would open anyone's eyes. You'd be surprised, Clarice, how much folks don't know about building houses. Even to placing the number of the house where the porch light shows it, and to putting built-in supply boxes in the bathroom, and a built-in window seat which is also a supply box in the upstairs hall, and drawers in cupboards, and shoe shelves in clothes presses, and how to have one bedroom that can actually become a hospital room, and how to make a tile floor for an outdoor living room;—all those things are in my book. Ideas for a home-made garbage incinerator, and advertisements of store ones that would be better; plans for a place to keep flower and garden things when they are not in use, and ways one can lay out a thirty-foot square to make a real vegetable garden—oh, Clarice, the practical, bread-and-butter ideas that one cannot remember are all to be put into 'My Own Home' Book."

"Elizabeth, it's just splendid."

"Of course, I am just doing it for fun—now. It is only human to collect things: people love to bring things together, and everyone has one collecting hobby or another. It it isn't snapshots, it is postage stamps. This sort of collecting is building me an ideal as to how I shall live. I can talk intelligently with married friends now, and can have some ideas myself about home keeping even if I am an 'old maid.' It has dawned upon me that a girl doesn't have to be married to have a home and be independent: if she earns her own living she can have ambitions to have a house, and be womanly and homey without a husband. Of course, a very good husband would be fine, but the misfortune of not finding one should never keep a self-supporting girl from having her own little home if she can afford it. If she can't, Clarice, she can enjoy this sort of place-of-dreams," and Elizabeth pointed to her bright cretonne covered folio. "She would have a better chance, I'm thinking, from just having such a book."

"It would be a lovely thing to put into a hope chest—I'd like to have one. Tom and I have been engaged for so long, now—since before the war. Such a book might make him wish to build a home, now the war is over and he is back in civilian activities again. It will be good for both of us."

"I'll make you one for your birthday, Clarice; that is, a cover, with indexed pages and envelopes, all to fit into a big box of rough clippings. You must begin now to clip your own advertisements and articles, and put them into the box, and when you come to decide on this or that thing for a room slip the clippings in place and then when you and Tom both are agreed that, for instance, the front bedroom should have the black walnut suite that was grandma's and yellow wall paper and bronze wall scones, you can put in your sketches and ideas. It will be fun for both you and Tom!"

Elizabeth put out her hands. "I'd like to put such a book into the hope chest of every girl; and I'd like to see the boys
start them too, for that matter,—boys who are interested in building and construction. Such books represent ideals, the kind of ideals homes are founded on.”

Clarice laughed, “Come, Betty-person, over to our house, tonight. I’d like to have you meet my brother Richard. He’s an architect, by the way, and I’ll venture he’ll give us both ideas for our houses. My other brother is an advertising man and what an array of model kitchen cabinet pictures and refrigerators, and all sorts of household needsfuls he has illustrated in his portfolio.

Elizabeth nodded shyly.

“A little later,” Clarice went on, “we can have an exhibit of our books, when we all get them started.”

“I’d like to get mother interested—since dad died she has just stayed in this great big, shadowy old house and a nice sunny new one would be better for her. Or she could use some of the ideas cheering up this one—the advertisements and articles read in this way just make one wish to do homey, cheer-up things. Aunt Sarah owns quite a bit of property, and I’d like to get her interested, too. She might have a book for every house she owns and just revel in being an up-to-date property owner. Instead she is just a mistrusted landlady. It seems such a lovely little enthusiasm.”

“You come over and talk to my brother Richard,” Clarice laughed. And a few minutes later as she left her friend she was sniffing the air, as if she smelled the perfumes of romance.

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**How Would You Change Your Home in Rebuilding?**

Would you change your plan if you were rebuilding?” This is the question put to the owner of the attractive home shown in the photograph. It was so pleasing in appearance, both outside and inside, that it seemed to be just right. The plan was very simple; too simple, so the owner said, for it had no dining room separate from the living room, and she much preferred being able to serve a meal without disturbing her orderly living room, especially if guests should call before the dinner had been cleared away. Then, too,
the kitchen was not roomy enough to be quite satisfactory, and she would like more cupboard or closet space.

The first plan shows the present arrangement. The living room, 13 feet 6 inches by 23 feet in length, served for dining room as well. In the attractively furnished room a “gate-leg table” was appropriate either for dining or for living room use. The kitchen is small, 11 feet by 8, and yet not smaller than many housekeepers are using with satisfaction. However, a little different arrangement might make it seem more roomy as it is used.

The small house is what most home builders are wanting, not only because of the smaller building cost but also because they are easier “to keep” satisfactorily. This is certainly small for the comfort and convenience which it gives: 26 by 24 feet on the outside, which the sun porch extends by 8 feet and for a width of 12 feet.

We have rearranged the floor plan, within the same dimensions, increasing it only by the projection given to the
dining alcove, which is placed between the living room and kitchen, opening into the kitchen, but so arranged that only the alcove and the cupboard beside it can be seen as the door opens. We should like to call special attention to this cupboard, which has doors on both sides. It forms one side of the alcove by the sink where dishes can be placed in the cupboard as they are washed. Doors on the other side make them accessible to the alcove or the dining end of the living room if that is to be used. The working shelf space is open on the sink side of the cupboard, the living room side being paneled flush with the doors.

To make a slight rearrangement of the stairs, space back of the first steps in the original plan is added to the kitchen so that it has more available space, making the dining alcove possible, as well as giving more cupboard space. It is surprising how many people can be served comfortably in such an alcove, and how attractive it can be made, especially with windows on three sides.

The living room plan is unchanged.

The fireplace on the central wall gives place for a flue for the kitchen range in case wood or coal is to be used, as well as the flue for the heating plant in the basement, in addition to its own flue.

On the second floor are two attractive bedrooms and a bath room, with a linen closet opening from one side of the hall and storage space on the other side of the stairs.

The exterior of the house is so attractive as to be the notable house of the block in which it stands. The hood over the entrance and the extension of the roof over the sun room give good lines and compose well together.

The projection of the sun room makes possible still another arrangement of plan by which there might be a separate dining room. This would take the rear half of the living room for the dining room and extend the living room across the front of the house, widening the sun room to the same width and making it a part of the living room. The fireplace could stand on the wall between the living and dining room.

A Small Colonial Home

A n attractive little Colonial home is shown in this photograph, with a plan that is a little out of the usual, and very livable.

The porch is really a sun room entirely enclosed but with the outside wall space filled with windows. This space might be glazed with some form of casement windows, in case one wanted the porch to open more fully.

The entrance is through a glazed vestibule into the living room, the projection of the vestibule forming an alcove at one side of the room. The room is symmetrical, with doors on either side of the fireplace at the end of the room, opening to the sunporch. Wide French doors separate the dining room from the living room with a projecting bay opposite the fireplace, when the two rooms are thrown together.

The kitchen is planned with the modern idea that the wall space in the kitchen is much more useful than floor space. The built-in alcove with seats and table increases the wall space, allowing the sink to be placed against the back of one of the seats. The small cupboard near the range with the open table space between the cupboards will be found an especial convenience for the cook. Cupboards and work table beside the dining room
An attractive little Colonial home

J. W. Lindstrom, Architect

door are in the best place for convenient service to the dining room. The refrigerator is placed beside the kitchen door and can be iced from the porch on the outside.

A small-central hall leading from the living room connects the rooms with the bath room. Stairs from the basement and to the attic are placed beyond the living room, the basement stairs leading from this hall.

The den and chamber make a suite of rooms, probably used as a sitting room and sleeping room. The chamber could be used as a den or office with an outside entrance from the porch, by reducing the size of the closet so as to get the entrance beside it.

There is a central chimney in one corner of the kitchen, and a clothes chute in the same wall. There is a closet opening from the hall and there is a linen closet in the bath room, which really seems a logical place for a linen closet. Two good closets open from the rear chamber, and it has cross ventilation.

The exterior of the house has been given a very simple colonial treatment, with the entrance terrace covered only at the entrance. This porch has simple Doric columns and a pediment over it with the cornice broken and set back. There are the traditional side lights on either side of the door.

The exterior is white cement stucco with white painted trimmings. The foundation walls and terrace are of concrete.
Bungalow For a Larger Family

Roomy without being large  E. W. Stillwell, Architect

No matter how styles in houses may change, the story-and-half plan will always be much in demand.

For convenience and ease of housekeeping a one-story plan is admittedly the best. For a large family, however, such a plan might occupy too much ground and, beyond certain limits, the cost begins to rise out of proportion to the cost of the house that has a part of the rooms in the second story.

In open locations, as in the country, first story sleeping rooms are about as desirable as second story rooms, but there are always some who prefer the latter.

The bungalow type will always have certain advantages over any other architectural style. The obvious simplicity and ease of construction spells lowest cost. The genuine bungalow style as developed in California, has the most "homey" atmosphere. The houses are the most comfortable during the heated season, because the extended roofs give the effect of increased depth of porches and afford considerable protection to the walls.

It seems as though only a few houses of a comparatively inexpensive type are planned to accommodate the traditional size American family. The home which is here pictured will do so and yet the house does not seem large.

The living room and the dining room are good in size, with French doors between them. A breakfast alcove is conveniently placed between the kitchen and dining room, also opening from the small central hall. This alcove may be used as a butler's pantry when a larger company is served in the dining room. Notice how carefully the kitchen has been planned. There are two bedrooms on the main floor, each with roomy closets. These as well as the bath room and kitchen all open from the central hall. The stairs
also lead up from this hall. On the second floor are two additional bedrooms and a sleeping porch, also a toilet as well as storage space.

The house is a typical frame house with two-third basement. The peculiar method of siding a California style bungalow lets the wood run down to within a few inches of the grade line, but the floors are the usual height above grade. The newly revised plans for cold climate reproduction, however, show the standard high concrete wall.

The span of the roof over the depth of this plan gives full height to 8-foot ceilings in second story rooms.

The house is stained rather darkly with the warm bungalow colors.

A Cottage Bungalow

HERE is a small convenient cottage of four rooms, being 32 feet across the front and 28 feet deep, exclusive of the front piazza.

The piazza is symmetrically placed with the entrance, at the center of the house, through a vestibule. A coat closet, lighted by a high window, is placed by the vestibule. The living room is 20 feet long and 13 feet wide. There is no dining room. The kitchen is, however, 14 feet by 9, and the rear porch is enclosed.

Two bedrooms with good closets between them fill one side of the house, a central hall connecting with bathroom.

There is one central chimney to accommodate the heating plant in the basement and the kitchen flue, if one is needed. A fireplace could be placed on the center of the long wall of the living room with an additional flue in this chimney.

There is a full basement under the house, with concrete walls and cement floor. The basement stairs lead from the kitchen with an outside entrance on the
landing at the grade level. The stairs to the storage space in the attic are over the basement stairs, also leading from the kitchen. Cupboards fill one end of the kitchen with a window between the high cupboards. There is space for the refrigerator on the rear porch, which is screened during the summer months and glazed in winter.

The inside finish of the house is Washington fir; the floors are of oak or of maple, with linoleum in the kitchen. The steps at the entrance are of select-ed, hard burned "texture" brick. The outside of the cottage is finished with wide "Colonial" siding up to the window sills, and cement stucco for the upper part of the wall. The trim at the heads of the windows is carried as a continuous band around the house, and half-timber strips make a frieze above the windows to under side of the roof. All outside trimmings are painted white. The cement stucco is given a pebble-dash finish, and the roof shingles are stained.

This small cottage of four rooms has the essentials of comfortable living contained in small space. The construction is of the simplest type, without unnecessary breaks either in roof lines or wall.

So compactly is it planned that it can be kept in order with a minimum amount of labor. The communication between the rooms is close, so that no steps are wasted in getting from one part of the house to another.
Two Stucco Houses

The attractive little stucco bungalow, which is the first of this group, contains a surprising amount of room, as may be seen from the plan. The inviting porch extends across the entire width of the house, and is sufficiently enclosed to give a certain amount of protection. The living room is but little less than 30 feet in length by half its width, with projecting windows and a deep flower shelf at each end of the room. On the center of the inside wall is the fireplace. A columned opening joins the living room and the dining room. A projecting bay of windows with the built-in buffet under them closes the vista.

The stairs lead up from the living room, with a landing up three steps. A door on this landing leads to the kitchen, giving access to the stairs from either part of the house. The basement stairs are under the main stairs, opening from the kitchen.

A breakfast alcove is built just off the kitchen, with a table and seats, where it may be conveniently served, or equally well used as a little retiring room from the kitchen. A maid can use it as her little sitting room, or the housekeeper can have a little shelf of books, and a place for keeping her accounts, where she can attend to these, or prepare her paper for the next club meeting and watch the dinner, cooking at the same time.

The kitchen is well arranged, with the sink and cupboard standing together, where dishes may be put in place without carrying them. It is also within reach from the range. The refrigerator stands in the enclosed entry.

On the second floor are three bedrooms
and a bath room. The space under the roof is utilized for closets.

The finish throughout the house is of Georgia pine, with Georgia pine floors. There is a full basement under the house and a furnace is installed.

The stucco surface of the house extends down to the line of the grade without the usual offset and watertable between the basement wall and the first story, adding much to the appearance of the house, since it has the bungalow effect under low hanging eaves. The wall surface is too short in height to be broken to advantage.

The second house of the group, however, while smaller in area, has the effect of a higher house and so the brick
foundation wall, and header courses at the watertable line gives an agreeable base course for the house. This house is only 26 feet square, exclusive of the sun room. The entrance is through a porch into a small square hall from which the stairs lead to the second floor. It also has an entrance from the kitchen to the stairs and three steps leading to the stair landing, similar to that of the bungalow.

The living room stands between the dining room and the sun room with openings by which the rooms may be thrown together when desired. It has a fireplace with windows on either side and a window from the porch, giving cross ventilation. The kitchen is well arranged and well lighted with cupboards standing beside the sink.

well lighted and with closets. The bathroom at the head of the stairs is fitted with a linen closet.

This house is designed for the most economical construction without sacrificing either convenience or attractive appearance. The brackets of the entrance porch, flower boxes and rafter ends of cornice are the only ornamental details, On the second floor are three chambers, but dignity is lent by the well-designed roof lines, both of the main house and the sun room.

The sun room extends across the full width of the living room and opens from it by means of French doors. The wide dining room opening allows of a vista from front to rear of house and gives an air of spaciousness most desirable in a small house.
Where portieres of heavy materials repeat the coloring of the curtains
Decoration and Furnishing

VIRGINIA ROBIE, Editor

The Treatment of Doorways

PORTIERES and curtains are kindred subjects and are usually selected after the wall-covering is in place. Often they are of the same color as the curtains, but usually of heavier material. Portieres have their place, but it may be truly said that they have in the past received an undue consideration. Their original purpose was to serve as a protection from draughts, not to conceal ugly woodwork nor to separate two conflicting wall treatments. Often the portiere was made a convenient makeshift to conceal defects which had little excuse for existing. As a purely ornamental feature the portiere was always out of its element, and as such it has now lost prestige.

In that unfortunate era of our decorative art, sometimes termed the “gilded rolling pin,” rooms were painfully be-draped. Every mantel was concealed, every table hidden, even picture frames had their outlines softened by a “drape” or “throw” of some kind. Doors naturally were concealed as much as possible and great ingenuity was expended on the hangings. Windows and doors were sometimes overlaid with canton flannel, embroidered mummy cloth, and other materials of which the rising generation is happily ignorant.

Yet people wondered why the then present generation was not as robust as a previous one. The real wonder is that people survived at all in rooms as poorly lighted and ventilated as were these be-curtained and be-draped rooms. A reaction against all this drapery gave us the curtainless window and the undraped door. People who once used Paisley shawls as portieres converted them into piano covers, until taste decreed the coverless piano.

Draperies undoubtedly have their place, but their use must be founded on a real need. We are now living in the era of the useful, having passed the age of the purely ornamental. That the “bare” room may be carried to extremes is undoubtedly true. It is a discriminating person who discovers the golden mean between the overdone and the underdone room. Thanks to the architects, it is no longer necessary to conceal defective woodwork, and if the decorator has chosen an effective color scheme, it is no longer imperative to separate two conflicting wall treatments by means of a hanging.

The portiere has undoubtedly served a useful purpose in the past, concealing and separating where concealment and separation should have been unnecessary, but now, with better woodwork and better wall treatment, it is often a doubtful necessity. As a purely ornamental feature its excuse for existence is slender. There is little to say in favor of a portiere just
as a portiere. If the woodwork of a door is well designed it is a pity to mar its beauty, and if it is not, a drapery is merely a compromise.

During the past decade a great change has taken place in the interior trim of houses. There is little to be concealed; in fact, the well-designed woodwork is too ornamental to cover. Again, color schemes are often so well chosen that a house gains in beauty rather than otherwise by the vistas which would be impossible if draperies were used. Many houses show portieres at all the openings, but are seldom used, except as a protection from draughts, or when, for instance a living room and dining room are connected by a large opening, when, for the sake of privacy, a portiere meets a definite need. A good deal might be said against these large openings and a plea set up for the return of the door, real doors, not the folding or sliding variety, but old-fashioned doors with well-designed fitments and showing the skilful treatment which characterizes the rest of the trim. This is an architectural question, not a decorative one, but architecture and interior decoration are sister arts, and it is sometimes difficult to draw the line.

There are arguments for and against the doorless doorway. The large opening has marred many small houses and has undoubtedly added dignity to dwellings of a different stamp. We show in one of our illustrations two connecting rooms, where a large opening has been well handled. There are no portieres. Had the color harmony been less satisfac-
factory, had the walls clashed, the architectural arrangement would have proved most unsatisfactory.

Where portieres are used often good results are gained by matching the walls, or if curtains are in contrast to the walls, by matching the curtains. It all depends on the effect desired; whether the draperies are to be made a part of the wall treatment, or whether for the best decorative effects they are to present a decided contrast.

One dining room paneled in white has curtains and portieres of blue brocade. The rug is plain Gobelin blue, the furniture mahogany, and the fixtures are silver. Another room in this house has walls of deep ivory; all the draperies are old pink, repeating the tones of several oriental rugs. The hall is white, with hangings of palest yellow. The house is large and the entire decorative and architectural scheme is exceedingly broad and simple.

Where a deep tone is used on the walls a textile repeating that color will give an effect of harmony. With a figured paper the color of the background can be repeated with safety. Occasionally a portiere of tapestry proves most successful, the colors blending with the scheme of the room; not old tapestry, as that is too valuable to use as a hanging, but a good foreign or American example of modern weaving which can be purchased at a nominal sum.

Portieres for bedrooms form a separate topic. Often these are necessary at doors leading into the hall, and may, if well chosen, add to the comfort and beauty of a room. Cretonne and chintz, repeating the color pattern of the walls or used in connection with plain or striped wall paper, are very attractive for door hangings, especially if the curtains are of the same material. There are charming and endless combinations for bedrooms. When a room has many doors a portiere is often a great convenience, but in all bedroom schemes the aim should be to preserve simplicity. Many draperies should be avoided as they interfere with health as well as with harmony.
Lighting Notes

In the home, local illumination should be supplied by a small lamp near the individual, general illumination by lamps placed according to the shape and size of the room," said an expert recently.

"Of great importance is the manner of general illumination. If the light is badly distributed, some of the architectural features will be exaggerated at the expense of others, and proportions will be greatly altered. If the light is skilfully distributed, even a room which is badly proportioned can be made to look beautiful. A room too long can be shortened; a room too high can be made to seem lower.

"The candle power of light sources is limited by the height of the ceiling. In a low room, powerful lights or groups of lights are not permissible, because they come too near the eye and also because they are too nearly on a level with the eye. The eye is protected by lid and lashes from down-shining light; against light that comes at an angle near the horizontal it is poorly protected, and against light that comes from below it is helpless. The worst cases of sudden blindness are caused by the white sand of the seashore and the snow-covered fields of winter. The general illumination of low rooms is necessarily accomplished by small units, evenly distributed near or at the ceiling. If ceiling and walls are light in color, wall lamps, the light of which is reflected up, can also be effectively and economically used. The efficiency of wall lamps is greatest when they are mirror-backed and in a low-ceilinged room. In a high-ceilinged room they are effective for local illumination only, with reflectors to throw the light down.

"In large, high
rooms, central lighting is to be preferred. The height of the lamps above the floor should be proportioned to the height of the room, and reflectors should be used, if necessary, to bring the mass of light lower down. When the bulbs in a chandelier point down, most of the light is distributed in a field horizontal with the chandelier; when the bulbs are at an angle of 45 degrees, much of the light goes to the ceiling. The smaller the room and the higher the chandelier, the greater the necessity for reflectors.

"For a room both small and low, one small lamp will supply both local and general illumination. Other rooms need wall brackets or table lamps in addition to ceiling or central lights. To make a wall seem to recede, light it brilliantly. Mirrors and large pictures tend to produce the same effect. A small room, brilliantly lighted, appears more spacious than a larger room dimly lighted.

"If a room is too low in proportion to length and width, light the ceiling more brilliantly than the walls. If a room is too high, leave the ceiling and upper walls in comparative obscurity and light the middle and lower walls brilliantly. It is never desirable to light the floor of a room brilliantly. The floor should seem solid beneath the foot, and made of solid materials. The brighter it is, the less apparent solidity it will have.

"The arrangement of lights naturally varies according to the use to which the room is to be put. In a dining-room the light—not too brilliant—should be concentrated on the table, in such a manner that none of it shines in the eyes of the diners."

Coming from an authority whose time has been devoted to solving lighting problems, these suggestions have decided value.
Selecting Furniture.

G. R. M.—In planning to furnish a small home of four rooms I have as the only piece of furniture at present a mahogany piano. Should the table and most of the remaining furniture for the living room be of mahogany, or can it be of something else which will not mar so easily? Could you suggest the style of table most practical, and also suggest what to have for a couch, as the living room may have to serve as an extra sleeping room occasionally? I shall greatly appreciate any suggestions you may give me. I enjoy reading your magazine and find it very helpful.

Ans.—It is not at all necessary that the piano should match the other furniture. We should select furnishings for the future, and not just for this flat. However, we would avoid very large, heavy pieces. Why not choose willow for the sitting room, as that is always pretty in small homes and would be perfectly all right with the piano?

Painted wicker furniture, upholstered in cretonne of rich coloring, is much the thing now. For instance, we just saw a living room furnished in wicker painted a rich, rather dark blue. The chair seats and backs, cretonne with the same blue and other colors on a tan ground. The couch was wicker also, upholstered the same. Also the writing desk and library table, only these last had tops of wood painted the same deep blue. The couch could serve as a bed in an emergency.

Sometimes a flat couch is made with box spring, the whole upholstered in velvet or tapestry, with four large square pillows standing up straight against the wall, for a back. This makes a luxurious bed. Of course, folding davenports are used, but they are clumsy, ugly and not comfortable.

An Interesting House.

J. H. D.—We are building a brick veneer residence, colonial in style, the floor plan of which we are sending you herewith.

We are readers of your magazine and are interested in the decorative department. Our dining room is a southwest room, furnished in early English, of a brownish cast. The woodwork will be birch, red gum or walnut, stained dark to match the furniture. What rugs, light fixtures, and wall decorations should be used? Will say that we do not want painted walls.

All of the downstairs, except kitchen, will be finished with same wood, stained dark. What suggestions would you make regarding these rooms? What color would you use in the kitchen?

The upstairs will be enameled in the old ivory. In the southeast bedroom, being the large room, we will use bird's-eye maple; the other rooms are not determined upon. Will be glad to have your suggestions regarding furniture, rugs, etc. We would also like suggestions regarding window draperies. We will use hardwood floors throughout.

Ans.—You have quite a house to fur-
nish. You say it is brick, colonial style. But inasmuch as the woodwork of lower rooms and the early English furniture do not particularly suggest this style we will make no attempt to carry it out.

We should use a foliage or landscape paper, all in shades of gray, with perhaps hints of dull rose or blue showing faintly, on the dining room walls, letting it run from the baseboard to the ceiling molding. No plate rail. You can, if you wish, run a flat 3-inch molding around at chair height. Have ceiling tinted pale gray, and use old blue draperies and rug. The chair seats would look nice in blue leather or tapestry with blue in it.

In the living room and library, we would use a soft grayish tan all-over design, sort of Japanese tapestry, with deep ivory ceiling. Rugs and draperies of old rose or mulberry. In the hall, a stronger tapestry design, introducing some color.

The kitchen woodwork should be white enamel, walls painted buff above 3½-foot wainscot of cigar brown, and white ceiling. The bird’s-eye maple in southeast bedroom will tone in well with deep old ivory woodwork and wall in soft pale tans, with rose hangings and deep rose in tan rugs. The northeast bedroom would be lovely with an old English chintz paper—gay little nosegays on a gray ground—and walnut furniture. The southwest bedroom, silvery gray grasscloth, mahogany furniture, and blue rug and hangings. Ivory tinted ceilings.

An Old House Made Attractive.

M. D. C.—Will you please help me in what seems to me almost a hopeless task? We have just bought a little old frame house in the country; my husband says it is impossible to make the rooms look artistic, but I want to “show him.” I must do all painting myself at the least possible expense.

All our furniture is fumed oak, with chair seats of brown leather. The woodwork in the house is painted dark green. The dining room seems to be my biggest problem. It has one south window and one north window, the latter looking onto the apple orchard. I want to buy wood in strips 3 inches wide and a quarter of an inch thick, and nail on the wall to
form panels, with a narrow plate rail above. I wish to paint the lower two-thirds of the wall, enclosed by these woodstrips, dull blue, and the wall above the plate-rail bluish gray. This leaves me undecided whether to enamel my woodstrips, doors and window trim ivory or gray, a little darker gray than the upper wall. As the walls will be done in flat paint, will enamel for the woodwork be best, or paint? What colors would you introduce into cretonne for window drapes? We have to buy a new rug for this room; would gray or blue be better? I can design and make my own stencil patterns, so would you advise me to use stencilling for decoration on dining room walls, below the plate-rail in each panel? I had an idea myself of finding cretonne with a design of nasturtiums and making a stencil similar for the wall panels, or else of using gray Russian crash for my curtains and valance, with a nasturtium design stencilled on.

The living room faces west, and has two west windows and a large glass in the door. The woodwork is painted very dark green. Do you think I might enamel it ivory, or would paint in ivory or cream be better? With my fumed oak furniture I have a large wicker rocker stained green, and two straight wicker chairs the color of light oak. Do you think I could enamel these successfully?

Our little house was formerly a dairy, and there is a cement milk-house about two yards from the kitchen door, which we shall use as a sleeping-room until we can afford to build on to the house. It is about 12 feet square, with casement windows, rather high up, on all four sides. The trim is painted white, but inside walls and floor are just natural smooth cement. Would you advise me to paint these? The sleeping-house stands in the apple orchard.

The house outside is painted very light gray with white trim, green roof, and black window frames. The front door, brand new, is a golden-oak horror ornamented (?) with glued-on scrolls and whirligigs. I intend to chip these off and leave the surface plain—then should I paint the door white, dark green, or gray like the house? I think I shall make the window frames (now black) green, and have a couple of lattices in green, on bare spaces of the south wall.

Ans.—You surely have work in front of you and will need all your enthusiasm. Some of your plans are very good indeed, some are impracticable. First, you seem under a misapprehension about the use of enamel. Enamel is simply paint with varnish in it, to give a gloss surface. To cover your dark green woodwork will require at least three coats of paint, and then a coat of enamel if you wish to enamel. It is an easier surface to keep clean, but ivory enamel is not suited to your heavy oak furniture. It will be a very expensive and laborious proposition to enamel all that woodwork. Also, painted walls cost more than paper, and then are not artistic. These are our suggestions.

We like your idea of the nasturtiums for dining room. Our advice is to put one coat of paint—a lighter, reseda green, on the woodwork and to use a paper in nasturtium design for the panels below plate-rail; the plate-rail and wood strips to be the color of the rest of the woodwork. You can tint the wall above a soft gray with paler gray ceiling. Your gray crash curtains with nasturtium border stencilled will then be admirable. Have the rug in tones of green, or a gray rug with border of green. This will give you a charming room at the least expense and effort, and it will harmonize with the oak furniture.

We fear the woodwork in living-room must be repainted, and we should choose a soft gray in Flat-tone paint. It will take at least three coats to cover the dark green. It is unfortunate that the wall paper is in tans, as tan is not agreeable in a room with all those west windows. We think you should put a paper in self-tones of gray on the wall. Many elegant new homes are now done with gray woodwork and gray walls all through, using different colors in the furnishings. The brown leather chair seats are hard to har-
monize, but the gray is the best harmonizer, unless you use browns. We would not attempt to change the brown wicker chairs, except by new seat and back cushions, but the dark green one we would paint or enamel a darker gray than the woodwork. The blue that you proposed for dining room should be used on these chairs and in window hangings, but do not have walls or woodwork a “bluish gray.”

We should leave the black window frames as they are. You are quite right to remove the glued-on ornaments of the front door, but the brown stain is not objectionable when it is sandpapered down and given a coat of oil.

We should leave walls and floor of the milk house bedroom as they are, only using one large rug on the floor that will nearly cover it. Then make it gay with bright apple blossom cretonne curtains.

The outside lattice can be either green or white like the trim, preferably the latter. Vines will furnish the green.

For the Homecoming.
K. P. B.—Just before the war, we received valuable assistance through your service department in decorating our new home and which we expected to complete at that time. Dr. B——, however, entered the service, which put a stop to “fussing” up the home and also necessitating our cutting down all expenses absolutely not necessary, so all fixing up of the interior of the home was put off. Major B—— is now on detached service at the University of Dijon, taking a post-graduate course, and expects to sail the middle of the month. I am desirous of “fussing”

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ANN WENTWORTH
former Decorative Editor of
“The House Beautiful”
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up as much as possible, and am coming again to you.

At that time, I wrote you about our sun parlor in gray stain, and you submitted a beautiful piece of glazed chintz with clusters of geraniums and fuchsias with here and there a tropical bird, whose plumage was in a beautiful shade of blue.

I am wondering if you could secure some now, and if it would be beyond one's purse in price, since things have gone up. Would like to make shades of this with a valance of some inexpensive material to correspond with the blue of the bird.

Our living rooms are in the warm brown tones, while the dining room which opens off of it is in the dull blue fabrics you recommended, with a warm tan or soft maize tan color above rail, and ivory ceiling. The woodwork in both rooms is oak finished in early English, with red oak floors stained a warm brown, a tobacco brown acid stain, and waxed. The fireplace is in the dull reds and browns, or rather the reddish brown tapestry brick, with a smooth chocolate tile at the base. Book cases are built on either side with the leaded glass doors corresponding with the casement windows just above the book cases.

Ans.—It is pleasant to hear from you again and to know you were so well satisfied.

In regard to the glazed chintz for shades, it can be had again now, though it could not last year. The price has doubled. That identical pattern could not be duplicated, but very similar coloring and design can be had.

In regard to dining room curtains, a figured material would be excellent with the plain walls. There are figured Sunfasts and a new broad striped material in Sunfasts. It is expensive but very beautiful. Half a width would answer each side of window and no valance across top be needed. One of the gay striped or figured cretonnes would also be good there. Your house must be attractive.

Painting the House.

H. F. M.—For the house I am building from your plans, I will use a slate surfaced shingle in place of wood shingles. I will also use half-inch re-sawed cedar siding, and the outside walls will have building paper but no wood sheathing.

Will you be good enough to tell me about painting interior and exterior? Also draperies, and any other helpful hints? I have built thirty-eight houses in the last ten years, but am not too experienced to ask advice.

Ans.—We think the exterior of your attractive little house would be pleasing with the siding painted a light leaf brown, the shingles in the gables simply oiled. The trim white, including the wide bargeboards of the roof cornice and the surface beneath. Porch floor and steps the leaf brown of the walls, porch ceiling pale green.

You do not mention the wood to be used for interior finish; but if painted, we would have either white or pale gray enamel throughout and tint the walls soft gray, slightly deeper and warmer shade, with white ceilings. In a small interior, such a unified treatment of the rooms is more satisfactory than different colorings.

The color note can be given by the rugs and hangings. We suggest a taupe gray rug for the living room with black lines and border, and fireplace facings of dark red smooth faced colonial brick, laid in white mortar, with shelf and frame same as other woodwork. Hangings of mulberry. In the dining room a blue rug, with blue hangings. French windows between living and dining room.

<table>
<thead>
<tr>
<th>Decorative Service</th>
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<tr>
<td>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.</td>
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to study heating apparatus and to look about you and learn what the various heating devices are doing.

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I find that it goes much further and is handier to use.

"Next I stamp my clothes up and down with a vacuum washer. There are many brands of these washers on the market. They all work on the same principle and are ridiculously cheap. I only paid 27 cents for mine (but that was several years ago), and it has been worth many times that to me; it is really indispensable once you have used one, as it saves three-fourths of the rubbing by hand.

"Five or ten minutes of working the clothes up and down is long enough if thoroughly done. I then wring the clothes out, rubbing only those pieces which have very soiled spots. I then put them all in the boiler for fifteen minutes. In the meantime I put the more soiled white clothes through the same process.

"After all the clothes have been through the boiler, I rub them lightly through a clear rinsing water, then rinse in bluing water, wring and hang out to dry.

"The secret of their clearness is in the first soousing in hot water—the hotter the water the more quickly and effectively the dirt is removed—and the different changes of water; which are more effective and certainly less tiring than much hard rubbing.

"Men's blue work shirts and children's rompers and overalls can have much of their dirt removed with the vacuum washer in this solution in the same way."

To Clean a Copper Boiler.

To clean a copper boiler moisten a cloth with kerosene, and rub it over the outside when the boiler is hot. The stains and smoke will disappear like magic, leaving a clean surface which may be polished if desired.

To Strengthen a Scallop.

If scallops are stitched all round, on a machine before buttonholing it tends to prevent tearing between the scallops, and also gives a firm edge. A second row of buttonholing which takes up just the thread at the edge of the first line of buttonholing prevents the edge from fraying every time it is washed and also strengthens the scallop.

A Winter Clothes Line.

The clothes line is a wire one so that it can be left in place all the time, and in winter an extra line, a cloth one, is used. This has several harness snaps strung on it. One is tied to one end, the others are put at intervals of two or three yards. The clothes are pinned to this line in the house, taken out and snapped to the wire line and the last end tied to the far post, so as to be stretched out straight. This makes away with cold fingers when putting out clothes and broken clothes when bringing them in as they are brought in on the line.—Farm, Stock & Home.

To Protect the Hands.

Many a woman would not object to any kind of housework if she could at the same time keep her hands soft and white. Much may be done by so planning that the hands can be kept out of water and dirt as much as possible. Rubber gloves and a dish mop will help some, and wearing old gloves while doing "dirty work" will help a good deal. Here is another thing which will help those who find glycerine healing and soothing to the hands. Rub glycerine well into the hands before putting them into water when a long or a hard job is to be done. This oil added to the skin makes a waterproof coating for the skin until it is gradually absorbed by the action of the water, and the natural oil is retained for that length of time. Some kind of oil should be rubbed into the skin again on the completion of the work.

To Darn a Stocking.

Some ingenious mother has discovered that she can use black mosquito netting as a foundation for darning the big hole in son's stocking, making the darn much stronger and saving considerable time in the operation.

A Hint About Bread Crumbs.

Old bread that is to be saved for use in dressing, etc., takes up a great deal of room when it hardens in slices or loaves. Why not put it through the meat grinder, dry out in the oven and pack in glass fruit jars?
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Soups and Soup Making
Elsie M. Fjelstad

The value of soup as an important class of food is often underestimated by Americans, though its usefulness is fully appreciated by many peoples from the old countries, who prepare a large part of their food in the form of soups, and which they make the main part of the meal, instead of an accessory as with us.

Soups are an important food. They may be classified into two groups: clear soups, as those made from soup stocks, and cream soups, which, whether they are thickened with the vegetables from which they are made or by the addition of a thin batter or thickening, are essentially carbohydrates—one of the principal types of elemental food. Carbohydrates are the starchy foods; potatoes and such vegetables, breads and batters of all kinds; so it is easy to see the importance of the soups, as carbohydrates, which function in the body as energy producing fuel. It is from this fuel, derived from food, that the body—a human machine—is enabled to function. It feeds the fires of life and makes it able to work and play.

Clear Soups and Cream Soups.

The decision as to which class of soup shall be used depends on the occasion where it is intended to serve them. Clear soups should be served before a meal of the heavier type such as a dinner. Thus served, they act as a condiment. In other words, they stimulate the digestive organs to action. Creamed soups have a different purpose. They are served rather as the main part of a meal and form a desirable dish for luncheon. This is an important distinction.

Clear Soup.

The successful preparation of meat stock, from which clear soups are made, depends on extracting as much as is possible of the flavor of the meat. This calls for long, slow cooking.

Cheaper cuts are most often richest in extractives, substances which flavor the soup. Beef ranks first as regards utility and economy in soup making. For the best soup a three to one proportion of bone to meat is desired. This condition is obtained when the meat is taken from the fore or hind shins.

In preparing the soup the meat is cut into small pieces to expose the greatest amount of surface to the water. Part of the meat may be browned first in order to give color to the soup. The meat and bone is first allowed to soak for about an hour in cold water. It is then put on the stove, brought slowly to a boil and simmered for from 5 or 6 hours. Usually one quart of water is allowed to each pound of meat. Vegetables, seasoning, and spices are added during the last hour.

If the stock is cooled quickly it may be preserved better. When it is cold the
fat hardens on top, thus excluding air and also bacteria.
To clarify soup it may be strained; or egg and egg shells, cooking in the soup, will harden and entrap any floating particles.

**Bouillon** is made from lean beef. It is delicately seasoned, and usually served clear.

**Brown Soup Stock** is made from beef highly seasoned with vegetables and spices.

**Consommé** is made from two or three kinds of meat—veal, beef and fowl—highly seasoned and usually served clear.

**Lamb Stock** is delicately colored and served as mutton broth.

**White Soup Stock** is made from chicken or veal, and is delicately seasoned.

**Cream Soup.**
Cream soups are made from vegetable juice or pulp or fish and white sauce. They are very nutritious, due to the milk which they contain.

<table>
<thead>
<tr>
<th>Liquid Flour</th>
<th>Fat</th>
<th>Salt</th>
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**White Sauces.**
Thin (cream soups) 1 c 1 tb 1 tb ¼ t.
Medium (scallopeds dishes, vegetables, dried meats) … 1 c 2 tb ½ tb ¼ t.
Thick (croquettes) 1 c 3 tb 2 tb ¼ t.
Stiff (souffles) … 1 c 4 tb 3 tb ¼ t.

1 c. is one cup; 1 tb is one tablespoon; ¼ t. is one-fourth teaspoon. Note the relationship between the members of the series, one to one, one to two, one to three, and one to four. (Remember proportions by relationships.)

**Methods of Combining of White Sauces.**
1. Mix flour with cold liquid. Add to hot liquid and cook until thick. Add fat last.
2. Melt the fat. Smooth in the flour. Add scalded milk by thirds to the flour mixture.
3. Melt the fat. Smooth in the flour. Add the milk cold and all at once.

**Relative Amount of Thickening Required.**

<table>
<thead>
<tr>
<th>Cornstarch</th>
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<tr>
<td>Flour</td>
<td>3 tb.</td>
</tr>
<tr>
<td>Arrow root</td>
<td>1½ tb.</td>
</tr>
<tr>
<td>Potato starch</td>
<td>1½ tb.</td>
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</tbody>
</table>

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**Beef Stock.**
Two pounds meat, bone and fat.
Two quarts cold water.
One-fourth teaspoon celery seed.
Five peppercorns.
Two cloves.
One-half bay leaf.
Two and a half teaspoons salt.

**Corn Chowder.**
One can corn.
Four cups potatoes, cut in one-fourth inch slices.
One and one-half inch cube fat salt pork.
One sliced onion.
Four cups scalded milk.
Three tablespoons butter.
Salt and pepper.

**Cream of Pea Soup.**
One-half can peas.
One tablespoon sugar.
One-half tablespoon salt.
One cup cold water.
One slice onion.
One tablespoon butter.
One tablespoon flour.
One cup hot milk.
Salt and pepper.

**Pea Pureé.**
One cup milk.
One tablespoon flour.
One tablespoon fat.
One-fourth teaspoon salt.
One cup peas.
Put peas through a sieve and add to the white sauce, which has been prepared by the method preferred.

**Vegetable Soup.**
One cup milk.
One-half tablespoon flour.
One-half tablespoon fat.
One-half cup vegetable extract.
Salt.
Cook vegetables by extraction method (with a large amount of cold water). Add to the hot prepared white sauce.

**Cream of Asparagus Soup.**
One can asparagus.
One bouillon cube.
Four cups milk.
Four tablespoons butter.
Five tablespoons flour.
Seasoning.

**Cream of Peanut Butter Soup.**
One cup milk.
One and one-half tablespoons peanut butter.
One and one-half tablespoons flour.
Seasoning.

**Oyster Stew.**
Four cups milk.
One pint oysters.
Two tablespoons butter.
Seasoning.

**Cream of Tomato Soup.**
Two cups canned tomatoes.
Two tablespoons sugar.
One quart milk.
Four tablespoons flour.
One-eighth cup butter.
Onion and seasoning.

Many cooks heat the tomatoes and add a touch of baking soda, letting it boil for a minute or two, before adding milk, to prevent curdling.

**Cream of Baked Bean Soup.**
One and one-third cups milk.
One cup mashed baked beans.
One and one-third cups water.
Four tablespoons flour.
Two tablespoons butter.
Seasoning.

**Cream of Spinach Soup.**
Four cups milk.
Two tablespoons butter.
Two tablespoons flour.
One cup cooked spinach.
Seasonings.

**Potato Soup.**
One cup milk.
One tablespoon flour.
One tablespoon fat.
One-fourth teaspoon salt.

Potatoes are the best examples of a starchy food. It is for this reason that potatoes often supply the starchy dish at meals. Other foods in the same class as potatoes and which should never be placed on the same menu with potatoes are rice, sweet potatoes and macaroni.

Housewives usually peel their potatoes, probably because their mothers peeled potatoes before them. Science has proven, however, that more of the value of the potato is saved if it is cooked with the skin on.
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Building Material
AND NOTES ON
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Building a Basement Later
J. L. Ashlock

I'm not a concrete contractor. A couple of years ago I scarcely knew concrete from sawdust. Now I do. I think also that every man of moderate means who owns a home and desires to keep it in good repair, should know a little bit, at least, about concrete. He can have lots of fun with it, and, also, can increase the value of his property by laying a bit of yardwalk, a few steps here and there, a bird bath, and so on. In fact, concrete will go about anywhere that any other material would, and will stay a lot longer. It neither rots, shrinks, swells, and does not need paint. Properly put, it stays put for all time.

The contractor who built my small five-room house didn't put the foundation down far enough into the ground to enable me afterward to excavate a basement and have the floor of the basement level with the bottom of the stone foundation. So I did the excavating myself later, laboriously, with the aid of a shovel, a pick and a wheelbarrow. It made after-hours work which I liked, and which I thought would be good for an office man.

After the digging was done, I found that all the way around the bottom of the foundation rested on a weak bank of earth from two to four feet above the basement floor. This narrow soil bank would soon dry out, crumble, and probably give way, and down would come a section of the stone foundation. To make the foundation solid I had to put it on a solid footing level with the basement floor instead of on an earth bank above the floor.

I began my work with concrete by reading everything I could lay hands on that dealt with the subject. In so doing I became edified, academically speaking, on the subject of concrete. Having finished academics and theory, my next step was toward practical experience.

I bought crushed rock and sand by the cubic yard, and cement in bags that weighed a hundred pounds each; made a tight-bottomed 4x8 mixing platform; and was ready.

Beginning near the basement entrance I dug underneath the foundation, making the hole two feet long and as far back under the foundation as the latter was wide. A man who knew a lot more about concrete and foundations than I, told me that I could take out more soil than this without endangering the stability of the foundation above the hole; but I feared greatly, and stuck to two feet.

The back side of the hole and its two ends made three sides of my concrete "form" under the two-foot section of stone foundation. The fourth, or exposed side, I made of rightly sized boards that were solidly braced to stand the pressure of the fresh concrete.

I wheeled the mixed concrete down a plank into the cellar, and shoveled it into the hole, bringing the boards higher up
UNEVEN HEAT

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The left diagram shows uneven heat distribution caused by draughts and air currents sifting in thru unprotected doors and windows. Also loss of heat on lee side of house thru same channels. On the right the diagram shows even temperature thruout—the result of Chamberlin Metal Weather Strips.
as I did so. The last part of this operation was tedious, for the space between the top board and the bottom of the foundation was narrow. I shoveled the last bit in with a coal shovel, and tamped it back good and solid against the back side of the hole. Making the concrete solid under the foundation stones was the most critical part of the task, but by doing much tamping I succeeded.

Having filled this hole under the foundation in the manner described, I dug out another two-foot hole just two feet further on, and poured in a concrete "plug," as I termed it. I kept on till I had four concrete plugs under the foundation at intervals of two feet each. By this time, the first concrete plug was set, and so was the one beside it, two feet away. I dug out the two-foot section of earth between the concrete plugs of similar size, and poured in concrete. Thus I proceeded.

Working this way during evenings, a Saturday afternoon occasionally, and a little bit on Sunday once in a while, I now have reached the beginning of the end in this job, and my house is setting on a new foundation. I did every bit of the work myself. I knew nothing at all of concrete when I first thought of the scheme; and in the whole operation, my house or the foundation has not settled so much as the breadth of a hair.

One thing leads to another, when one is in the concrete business, even if all by himself. So I now have nearly finished laying down a concrete floor in the basement which is pierced by a drain through which laundry waste is discharged. I have had more fun than a little out of the task. When I sell this home, if I do, I certainly won't stutter when I tell the prospective buyer that the foundation is first class and never will settle.

**Fuel Value of Wood.**

In heating value, one pound of good coal may be taken as the equivalent of two pounds of seasoned wood, says the Bureau of Standards, Department of Commerce. Allowing 80 solid cubic feet of wood to an average cord and assuming the sticks to be well seasoned, a cord of hickory or other heavy wood is equivalent in heat value to one ton of coal. For lighter woods, as cedar, poplar, spruce, white pine, two cords are its equivalent.

Equal weights of dry non-resinous woods give off practically the same amount of heat in burning; that is, a ton of dry cottonwood will give off as much heat on burning as a ton of white oak. Highly resinous woods, like some of the pines and firs, have an appreciably greater heating value per ton, because a pound of resin gives off twice as much heat in combustion as a pound of wood.

When buying wood by the cord, it must be remembered that different species vary greatly in weight per cubic foot, so that a cord of hickory has considerably more fuel value than a cord of soft maple. A cord of seasoned wood contains more wood than a cord of green wood, because of the shrinkage in seasoning.

The amount of moisture in firewood influences not only the vigor with which it burns but the amount of heat actually given off. Therefore, to obtain a standard cord of wood of the greatest fuel value, thoroughly dry wood of the heaviest kind, straight, and large in diameters, should be selected. As a rule, the softwoods and the lighter woods burn more readily than the heavier ones.
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Questions From Keith's Readers

Specific problems which are encountered, either in the building of the home in the first place, or in the changes and improvements which are made from time to time, together with the solutions which are offered for their solution, are always of more value to the person who is meeting a similar problem, than a more general discussion of the same subject. So this month we are giving the inquiries relative to woodwork; its treatment and finishing, both inside and outside the house, and the answers which have passed through the departments of Keith's Magazine.

Oak and Mahogany.

F. G. T.—We are building the brick and stucco bungalow shown in Keith's Magazine not long ago.

The woodwork and floors in living room, dining room and sun parlor will be oak. The other rooms will all be in white with maple floors.

We have several pieces of mahogany furniture—piano, davenport, straight back chairs, etcetera—which we will have to use for a while.

Of course I know perfectly well that oak and mahogany do not go well together, but I am in hopes that with your assistance I can bring the two into harmony with drapes and rugs.

We have enlarged the living room. The breakfast room will be more on the order of sun parlor. There will be French doors from dining room to sun parlor, and perhaps to kitchen, also from dining room. The opening between dining room and living room will be ten feet wide.

The brick is a dark red and black mottled, and the stucco will be gray, medium dark.

Please suggest color for roof and window trim, too, to go with the red brick and gray stucco.

Ans.—Mahogany furniture may be harmonized with oak woodwork by matching it in tone. Another way is to use a very light weathered gray stain on the oak—putting on a light application of the stain, then a couple of coats of wax, rubbing each coat. This treatment produces a soft effect which does not conflict with mahogany and is equally good with walnut or fumed oak furniture. The floor should be treated the same.

We fear you will regret a ten foot opening between the living and dining room; as there are times when it is very desirable to shut off the dining room. We advise French doors there and not into the kitchen.

We suggest a dark gray stain for the room shingles and white sash and window trims.
The Exterior Color.

V. G. S.—I have a California type bungalow under construction at the present time and would appreciate any suggestions that you can make regarding its exterior decoration.

The house has only one floor. It is strictly a bungalow, not a semi-bungalow or a story and a half house. The home I am building has rafters, verge boards and brackets. The front porch is laid up of veneer brick of a red tan shade, as is also the fireplace chimney. The windows are out-swinging casement sash with wood bars for a distance of one foot at the top. The outside walls are four-inch cedar siding with wood corner board.

I am thinking of staining the roof with a nut brown shade of creosote stain. Now I would like to have you tell me whether paint or stain is best for the walls of the house and what color of either would be best. I have three-quarter inch beaded ceiling, the top side of which serves as

A House Like This One

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roof sheathing at the lower ends of the rafters, and am thinking of varnishing this ceiling with a transparent exterior varnish. Would this be right?

Regarding the casement sash, how would you advise painting or staining them, especially the bars in the sash?

Ans.—We would paint the corner boards, the window trims, the rafters, verge boards and brackets, the nut brown color of the roof stain. We would simply oil the exterior walls, as red cedar looks very pretty treated so in connection with brown trims. You can either varnish or oil the exposed roof sheathing; perhaps the varnish is best there.

We would paint the casement sash, bar and all, cream or brown.

A Dancing Floor.

H. E. M.—We have seen many good hints in your valuable column.

We have just had oak floors put in our house and I am not sure of a proper way to care for them. Floors have been sanded thoroughly, shellaced and waxed. How should one clean them? Will water injure the finish? Will dancing on such floors injure them? Our town often gives little house dances and as I have ample floor space would enjoy entertaining, but would not like to ruin the floors.

If I use a 25-lb. waxer, would it be necessary to have a professional wax the floor every year?

Ans.—In regard to care of your oak floors. You have had them properly finished, but if they have had only one coat of wax, we advise a second coat and polishing with the weighted brush, before any dancing. The dancing will not hurt them, provided they are kept well waxed and rubbed. It is always better to have two coats of wax put on when new floors are finished anyway; one coat is not enough for a good job.

If you have your own weighted brush, you do not need a “professional waxer” at all, as you can do it perfectly well yourself; but once a year is not often enough to wax floors, it should be done every three or four months to keep them nice. Some people go over them with wax and a brush every month.

Do not use water on them, but have a cotton mop. A broom will not remove the dust. Once in awhile you can wring a cloth out of water, so it will be only damp, not wet, and wipe up the floors, polishing off with a dry cloth as fast as you use the damp one, and put on a little wax and rub them. Waxed floors dislike water as much as cats.

Woodwork for the Bungalow.

R. D. H.—Our new bungalow will face south, living room to west, dining room to east. Should oak woodwork in living room, hall and dining room be finished natural with a rubbed finish, or would pine be better with birch doors, and woodwork finished in old ivory, doors brown mahogany, in all rooms except bath, which is to be white enamel, and kitchen, fumed oak finish? Our living room furniture is fumed oak. Also please advise whether this room should have paneled wainscoting. I can't have beam ceilings on account of cost, so would a heavy molding or cornice around the ceiling be in good taste?

If we can't have oak floors and woodwork on account of cost, please suggest a good finish for pine. We have little children and I want it to be serviceable as well as in good taste. Old ivory woodwork washes off nicely and the dark doors would be a help. Can narrow pine flooring be finished to resemble oak?

Ans.—First, as to finish of interior woodwork: If oak is used, we suggest a light stain rubbed in and either oiled or waxed—no varnish. If pine is used, then it should be stained a fumed brown stain, toned to your furniture, and waxed. In either case, the oak floors should be afforded even at the cost of leaving out something else. They will pay in the end. We do not like varnished floors for living rooms; they should be shellacked and waxed. Bedroom floors can be finished with a good floor varnish; maple is a good wood for bedroom floors and costs little if any more than pine.

We should not care at all for beamed ceilings in such a bungalow. A cornice molding would be very good. We would suggest a soft gray tint for walls and gray brick for fireplace. The wood paneling in dining room would also be a good feature. We hardly think ivory woodwork would be suitable for living and dining room with your furnishings, but it would be good in the bedrooms and bath. Do not use fumed oak in kitchen of all places. If you do not want white enamel, then varnish the natural oak, but as you say, white enamel is easy to clean.
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**BOOK REVIEWS.**

Flora—A Book of Drawings.

HILDEGROD is the period of infinite fancy; when every nook and corner is filled to overflowing with the varied life of the child world, created by the child mind from the stray thoughts and sentences which penetrate from the grown-up world outside themselves, but from which they are securely insulated by their own peculiar aura.

Childhood talks a language of its own, which other children understand, but which is a dead language to the grown-up, unless it is learned by sympathetic, thoughtful association with the child mind; for which most people do not think they have time, nor do they take the trouble. It is too much like trying to live in the child’s doll house. Yet the occasional excursion of the grown-up into the child world is often one of great privilege and pleasure. The normal child imagination is so untrammelled by self-consciousness, and uninfluenced by what others think, as a coercion of their own thought, until it later becomes impressed upon them.

Could the child set down for us a portrayal of its own world from day to day, the stories which it plays out, in all manner of conditions; the flowery meadow, with no blank or bleak spot anywhere, filled with growing things, with flowers, with fairies, with rabbits and birds and frogs; what a picture it would give us, freshening our own inner world. Its misericordia, and bitter waters; its angels and dancing children, its divine delight, runs the gamut of life.

A twelve-year-old child, Pamela Bianco, has given the sensation of the year in England, critics tell us, by an exhibition of pictures, held in the Leicester Galleries in the spring of 1919. As a testimony of its worth, the sales ran over five thousand dollars. “She possesses a sureness of line, an economy of means, a delicious sense of humor, and a grasp of character and sense of beauty, which lie altogether beyond the range of mere great talent, and can be matched only in the early works of some of the great masters.” John Sargent has said that her drawings show as much genius as Beethoven’s first sonata, written when he was eleven years old.

Flora,—A Book of Drawings, published by J. B. Lippincott Company, is an inspiring volume which grew out of this exhibition. A selection of the drawings are reproduced—a number of them in color. They are accompanied by sympathetic poems that Walter de la Mare was inspired by them to write.

The volume is truly pre-Raphaelite, showing how the art of the ages has developed, as it has in this child mind, and which she has so well expressed.
## CONTENTS FOR MARCH, 1920

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just a Word—Is the American Home Passing</td>
<td>125</td>
</tr>
<tr>
<td>The Adaptable Flower Box—Marion Brownfield</td>
<td>127</td>
</tr>
<tr>
<td>Covers Under Glass—Helen Newman</td>
<td>130</td>
</tr>
<tr>
<td>The Modest American Suburban Home—Franklin Boyd</td>
<td>131</td>
</tr>
<tr>
<td>Refinishing Old Furniture—Julia A. Wolf</td>
<td>134</td>
</tr>
<tr>
<td>Suggested Planting For the Small Flower Plot—Adeline Thayer Thomson</td>
<td>137</td>
</tr>
<tr>
<td>Our Home: Some of Its Conveniences—Ella S. Witherill</td>
<td>140</td>
</tr>
<tr>
<td>A Well Designed Cottage</td>
<td>142</td>
</tr>
<tr>
<td>A Comfortable Home</td>
<td>144</td>
</tr>
<tr>
<td>A Small Five-Room House</td>
<td>145</td>
</tr>
<tr>
<td>Brick and Stucco in Combination</td>
<td>149</td>
</tr>
</tbody>
</table>

### DEPARTMENTS

**Inside the House**
- Decoration and Furnishing—Virginia E. Robie, Editor
  - The Decorative Possibilities of Costs                      | 151  |
- Answers to Questions                                          | 158  |
- Table and Food Conservation                                   | 162  |
- Cereals as a Food—Elise M. Fielstad                          |       |
- Household Economics                                           |       |
- Ironing as "Fancy Work"                                      | 166  |
- For the Laundry                                               | 168  |

**Heating Notes**
- Increased Efficiency For the Warm Air Furnace                  | 170  |

**Building Material**
- A Roof Talk—John Upton                                         | 174  |
- Working to Dimension                                           | 176  |

**Woods and How to Use Them**
- Relation of Woodwork to Furniture                             | 178  |
- What to Avoid in Wood Finishing                                | 180  |

**Splinters and Shavings**
- What We Can Learn From the Report of the Housing Corporation   | 182  |
The whole community may share the owner's pleasure
The Adaptable Flower Box
Marion Brownfield

The old, old custom of growing plants in a box just outside a window sill, has many practical modern adaptations that are cheerful and artistic. The nice part of any outdoors window box full of "growing things" is that the whole community may share the owner's pleasure in it.

"Even a small garden is better than none," says the lover of green growing things, and none need despair, for a green oasis in a desert of glaring cement can be maintained by using the adaptable flower box or tub, either of wood or modeled in white cement. Boxes holding small trees can be placed almost anywhere, and they have the advantage of being movable! Why shouldn't boxes of almost any shape or size, holding either shrubs, flowers or vines growing upward on little trellises, be set along pavements or driveways now so dreary for lack of a little green? They would not require a great amount of care and would at the same time give a grateful spot of greenery when it would otherwise be impossible.

A certain home was saved from a naked north wall, to which the closeness of the cement driveway condemned it, by the use of flower boxes set quite far below the window sills, and glossy green corosma will soon retrieve the situation.

With plaster, or light faced brick, the soft green of hanging vines does much to modify glare. Even the department store has window boxes, added to its attractions. These extending around the sides of the building that have a street exposure, result in an unusually artistic business building, that is seen at its best in perspective a block away.

The problem of the average business place, where the tenant wishes to give his shop the touch of green that nowadays marks the exclusive place, is to find a bit of soil to grow it in. It is here that the window box, or adaptation of it, is useful. A pair of window boxes, which are quite unique, stands in front of the windows of a small hotel. They are...
made of rustic bark and are veritable little plant stands that hold privet in a charming little hedge before the window, giving to the hotel a totally "different air" for its presence. Window boxes on legs, so to speak, are worth placing before many windows either in the shop or home. Besides dressing up a window sill, a window box of this type would help "furnish" a porch if set before a window looking upon it.

The window box idea is certainly growing in favor, for every new building nowadays is very likely to make some provision for it, from the driveway to the roof garden. Flats, apartments and hotels substitute window boxes for real gardens through necessity, for "along the dense packed cities," where "every leaf is a miracle," the window box is proving a practical plan for transforming commercialism into a city beautiful.

For the practical side of making a window box garden grow well, one must plan sufficient room for the roots of the plants chosen, good rich soil, and plenty of water not only to make the plants grow, but to keep the green foliage fresh from city dust. A choice of plants depends upon the exposure. A protected corner increases, by radiation, the heat plants get from sunshine. Various roof projections are apt to protect window boxes from rain, also. That is why window boxes need frequent and generous soakings. The average box is begun well, but so neglected afterward that it does not flourish as it might.

To get good results from the very start, an easy way is to fill the box with rich soil and set into it plants well grown in pots. Some window boxes are indeed successful with a quantity of potted plants merely set
into the box deep enough to hide the fact that they are not growing there naturally. Potted chrysanthemums, especially of the pom-pom variety, set in pots into a window box in the way just described, make a very beautiful autumn window box. The advantage of this kind of a window box is that potted plants can be taken indoors whenever frosts or bad weather threaten injury.

Most everyone loves the gay, colorful window box. Even the Chinese make their window boxes in the balconies of picturesque old Chinatown, cheerful with red or pink geraniums. Growing flowers that almost anyone can plant successfully in an ordinary window box, with sun at least half the day, are nasturtiums, sweet peas, coreopsis, petunias, pansies, marigolds, larkspur and candytuft. In general, however, plants with rather large blossoms, that will last, show to the best advantage in a window box. Petunias, marguerites and geraniums are among these. A pretty combination is red geraniums with pyrethrums. Another combination that looks well in most any situation is flowers that stand up and vines that hang down. Any of the above named flowers will combine well with the following vines: English ivy, woodbine, myrtle and Wandering Jew. Pink ivy geranium with either green and white leaved myrtle or sprengeri (fern) is an effective combination.

Sword ferns and begonias make a combination well liked, but for the green that will droop gracefully from a high window box, myrtle, woodbine and sprengeri are among the best.

Ferns lend such a woodsy, cool look to any spot, especially when in a rustic looking holder of rough bark or cobble-
Trailing vines in the flower box

Trailing vines in the flower box

stone, that for a north window, where they thrive so well, they are always a pleasing choice.

There should always be something fragrant planted in the window box. For this purpose there is nothing sweeter than heliotrope. This plant loves sunshine and will grow in any sunny exposure, and can be fitted into any color scheme.

One should avoid planting things which make a tall growth in porch or window boxes unless a screen for privacy is desired.

Plants which do not grow over a foot in height, or can be kept back to that height, are preferable for windows; from a foot to eighteen inches will do admirably for porch boxes. In either box, trailing vines should always appear, and in some places climbers also can be used.

As a number of plants are to be crowded into a comparatively small space the quality of the soil is of moment; preferably it should consist of good fibrous loam—that from the under side of the sod being best, a little black leaf mould and old, thoroughly rotted manure fully incorporated with the soil. The boxes should be filled quite full.

And “where there’s a will there’s a way,” for almost anyone can have a bit of green with such an adaptable thing as a window box.

The beautiful part of the flower box idea is that it is simple and inexpensive, adapted to the mansion or to the humble cottage.

Covers Under Glass

Helen Newman

SURPRISINGLY effective and inexpensive decoration to place beneath the glass covers on dressers, bureaus, etc., is easily made by cutting out parts of the design from the cretonne used in the room, and arranging them in a graceful pattern, directly on the wooden tops. Adjust glass carefully, and the effect is precisely as though painted on the wood. This is particularly good with enameled finishes, and may even be applied to larger pieces.

For example, the table of a breakfast set, which was painted gray, was fitted with a very practical glass cover, under which was laid a stunning arrangement of black baskets with wreaths of gay flowers, all cut from a yard-long remnant of printed linen. Be careful not to use too much, but balance the design evenly, and connect it, if possible, with floral sprays, which may be pieced together from individual blossoms. The design may be varied indefinitely.
The Modest American Suburban Home

Franklin Boyd

In the great country homes of America may be found some of the most successful architectural work in the country. Charming bits of detail surprise one at every turn, in these well designed fine homes—bits of detail which develop logically from the plan or from the environment, but which do not allow the plan or the general layout to be sacrificed in any way in order to develop these charming bits. But it is not only in the great houses that we find charming homes. Some of the very modest American homes have that inviting sense of hominess without which a house, no matter how beautiful in design, bespeaks itself as an "Institution" of some kind, and tends to repel the very thought of living within its walls.

The group of homes shown in the illustrations which have to a happy degree this pleasing sense, and which differ widely in line and materials, are entirely modern in their treatment. They are all influenced by the pervading popularity of the Colonial types in that they are all white or nearly white in color and that they have "blinds" at the windows. They all show the effectiveness of simple roof treatment. The projecting eaves drop low over the second story windows. In the first illustration the eaves are raised slightly in a dormer effect in order to give full height to the windows under them. Yet there is good storage space on the attic floor, with small windows in the gables. The clipping of the peak of the gables is effective in this as in the following illustration with the long roof. In both cases the roof is extended, bringing the eaves over the porch on one side.

The house shown on the cover the first part of the year has brought some comment and two views of it are shown here. It is the simplest and one of the most economical types in building, that of the
rectangular plan. The exterior shows the general arrangement of the interior; the entrance into a central hall, with the arched stair window at the rear. French windows open to rooms on either side of the entrance. Porches form wings at either side.

The hooded side entrance may be seen in the other view of the house, and beyond it the lattice enclosed service yard, which stands between the house and the garage.

The planting at the side and rear keeps its beauty in winter as well as summer; the evergreen trees being even more effective in a setting of snow. The planting about the porches and French windows is luxuriant, and on one side forms a screen to the window.

The trellis is made a feature in the last photograph of the group here shown. It frames the entrance and covers the stuccoed surface of the chimney where it is exposed. While the awning gives a protection to the recessed porch it is rather unfortunate that it was not raised when the photo was taken so as to allow the Colonial columns and entablature to be seen. The shingled exterior gives a much softer tone than a wall of painted siding.

The influence of sunlight and light in the selection of the color for buildings, and the appropriateness of the white walls of the New England farmhouse, which
KEITH'S MAGAZINE

has set the type for much of our modern building, is interestingly discussed by John Taylor Boyd, Jr., in the Architectural Record under the heading of Color of Architecture in Sunshine. He says: "The New England light is the most matter of fact, bull's-eye light that I believe may be seen in the world. It is metallic in its glare, showing up every detail ruthlessly, without any softening edges or mellowness of form, without depth or poetry or atmosphere. This is not to say that poetry and romance are not to be found in the New England landscape. Not in the noon sun, perhaps, but on damp or misty days, and at sunrise and sunset." * * *

"The appropriateness of the white walls of the New England farm house is much explained if we understand the hard light of the north. Though not an imaginative coloring, white goes well in most landscapes, either in an atmosphere that tends to disappear, leaving color to exist chiefly as local colors, or where there is radiance in the sunshine. The walls become touched with a faint, clear, often violet shadows; or a golden or greenish light. * * * The olden New Englander was poetic when he introduced his white archi-

With shingled wall, and blinds at the windows

tectural elements of fences, posts, gates, trellises, and summer houses into his gardens, where they gleam most appropriately in dainty, exquisite touches. * * * The classic orders are never so vital as in Italy or America, for they were designed for brilliant sunshine and clear skies." He adds: "Let architects think not only of the local coloring of materials, but of the light in our American landscape, and its effect on the colors on buildings."
EARLY all of us like old furniture and the collecting of it is not necessarily expensive, if one knows where to look for bargains. Many enthusiasts have joined in its search, and it is safe to say that almost every old attic in the country has been ransacked at least once by treasure-seekers — either dealers or collectors. As a result, many fine pieces of old mahogany have been brought to light, and after refinishing, are occupying places of honor and distinction once more.

It is safe to assume that when you have found your old piece, it will be suffering from instability. The first thing to do is to go over it carefully, and reglue all the joints. Scrape off all the old glue, put on fresh, and clamp the parts together tightly with cabinet-maker's clamps, and leave them till the glue is thoroughly dry. Scrape off the surplus glue that is forced out of the joint. It is well to put on new casters, and if the pieces are heavy the new ball-bearing casters will be found much better than the ordinary kind. The old brasses, if you are fortunate enough to secure them, should be removed and repolished. If the piece has wooden knobs, as sometimes happens, they may be replaced with reproductions of the old-time brasses, that are to be found in some of the larger hardware stores. Glass knobs are worth while, and should be retained. If the piece is a bureau or a desk, the drawers will generally be loose, and the runs badly worn. The old runs should be removed, and new ones, of hard wood, put in their place.

The draw slides should be planed off, and thin strips of hard wood screwed on. The drawers will pull easier if the runs and drawer slides are rubbed with a piece of tallow, paraffin, or soap.

It may also be necessary to replace broken or missing parts. Practice is
necessary to enable one to do this work neatly; the only suggestion that one can offer in this connection is that in order to secure well-seasoned wood for this purpose, is that by visiting firms that make a business of tearing down old buildings, one can sometimes secure good mahogany panels for almost nothing.

After all repairs have been made, the next step is to remove the old finish. There is always varnish to scrape off, sometimes paint. Boiling water and washing powder applied with a stiff brush may sometimes be used to remove old finish, but this method is not recommended, for the reason that the hot water may loosen the glue in the joints, and if used on the veneered piece, will cause the veneer to swell, and to separate from its base. There is always danger that the washing powder will bleach the wood, turning mahogany, for instance, to a dingy yellow color. There are various brands of paint remover that may be used. These do very well, if used with care. The remover is brushed on, allowed to stand for a moment, and then the finish is scraped off with a putty knife. It is well to apply the remover a second time, and to wipe off the last vestige of the old finish with a cloth, or better still, with a handful of steel wool, such as painters use. After using varnish remover, it is wise to wash the surface with turpentine, or benzine, and allow it to dry thoroughly before applying new finish.

Though the process takes much longer, you will find the best way of all to remove old finish is to scrape it off with a well-sharpened knife (putty knife). There is a knack in sharpening a scraper properly. It is easy to describe, but not at all easy

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Old fashioned "cornices" for curtains are again finding favor

A good old mirror is valuable. Glass knobs should be retained
to do. The best way is to get a painter or cabinet-maker to give you a lesson. The idea is to file the edge of the scraper square across the end, in such a way that a burr edge is turned over. It is this burr edge that does the cutting, and when it is flattened back it is again turned to a cutting position with the point of a steel burnisher. Sometimes broken glass is used, but it is not as good as a steel scraper. The important thing to remember, is to take off every particle of finish down to the bare wood.

After scraping it will often be found that the wood of the different parts of the piece are of different shades. This is sure to be the case if repairs have been made. In order to darken mahogany, dissolve five cents' worth of permanganate of potash in boiling water. This makes a quart or more. Apply with a brush to the light portions of the wood. It is well, in order to avoid darkening of the wood too much, to use the solution very dilute, applying it several times, until the wood is the exact shade desired. The permanganate is not a stain. It seems to burn the wood, and must not be used too strong.

There are two methods of refinishing. A bureau or desk may have a shellac finish, rubbed down, while a table top, which may have hot or wet dishes set upon it, should be rubbed to a hard oil finish, which will show no marks. To get the hard oil finish, brush on a mixture of raw linseed oil and turpentine, mixed in the proportion of two parts oil to one part of the turpentine. Allow this to stand for a few minutes, then rub off the sur-
plus oil with a clean cloth. Repeat this process several times, at intervals, being careful to not get too much oil on any particular part of the table, or that part will sweat, as it is called. After several coats of the oil have been applied, and they have had a chance to dry in slightly, go over the table-top with an iron weight, wrapped in a soft cloth, and rub to a polish. This will not come immediately, but patient work, and an occasional rub with oily cloth, after the table has been put in use, will eventually give the desired result. Table legs and pieces of furniture not exposed to heat and moisture, may be finished in shellac. First apply a coat of oil, as described for the hard oil finish. Then go over the piece with a thin coat of white shellac. When the shellac is dry, sandpaper slightly with a fine sandpaper. This will, of course, remove the shellac, except what has gone into the inequalities of the wood. Then put on another coat of shellac, rubbing down as before, until four or five coats have been put on, and rubbed down. For the last rubdown, use powdered rotten-stone and oil, applying it with a piece of haircloth. Rub only hard enough to kill the gloss of the shellac, and to secure the dull satiny finish that is so pleasing. Rub off the surplus oil and rotten-stone with a cloth. These directions apply to refinishing old mahogany.

Suggested Planting Schemes For the Small Flower-Plot

Adeline Thayer Thomson

INHERENT in the heart of most women is the love of flowers. Many a woman, indeed, largely derives her cheer and inspiration from the culture of a tiny flower-plot glowing with gay colored blossoms, and few are actually too busy not to be able to steal a little time from the crowded round of household tasks, for the tiny flowering spot somewhere in the home yard. No woman should allow herself to become too busy for the culture of flowers. In this she is not only making her home more attractive to the passer-by, but she gains for herself rare pleasure and a much needed relaxation from household duties. She realizes a tonic from the life-giving out-door exercise.

It is high time to begin one’s flower-garden in earnest, buying the seeds as soon as possible—though, of course, not planting them until Jack Frost has finally taken his departure. Mid-May is the safest time for seed sowing for most locations, though, of course, planting is indulged in much
Larkspur is beautiful in massed planting

earlier in the season in the southern states.

Many a flower lover is puzzled regarding what varieties to plant that will give the quickest and most satisfactory results and, at the same time, provide a display that will be harmonious in color effects. Perhaps the following suggested combinations of flowering plants may prove helpful.

A Rainbow Collection of gay annuals planted *en masse* may be depended on to give a beautiful display both in point of color harmony and in generous harvest of blossoms. Such a collection, too, will provide a display from mid-June until frost appears late in the fall. The following varieties may be used, all of which belong to the annual class of plants: Sweet Alyssum, Mignonette, Phlox Drumondii, Poppy, Petunia (White Mound), Cornflower (blue, pink and white), Larkspur, Candytuft (Empress), Ageratum (Mexicana), Calendula, French Marigold, Aster (white), Summer Cosmos (white), and Giant Cosmos (white). The seed of this collection may be mixed and sown broadcast in the flower-plot, reserving the Sweet Alyssum and Mignonette for the foreground plantings, or it may be sown with *varieties of a kind* together, *in the order given* (on account of the height of the several varieties and harmony of color effect), one behind the other. The latter plan is advocated for a small display: flowers always being far more effective in close plantings of a variety than when found blooming here and there among other kinds of blossoming plants. Poppies and Cornflowers present a very forlorn and bedraggled appearance after the full height of their flowering season is over, and at this time should be pulled up and thrown away. Salvia plants raised elsewhere for the purpose, and transplanted to fill in the spaces left by the Poppies and Cornflowers, will add a flaming bit of color lasting until the whole display gives sign that winter is come.

With the perennial varieties of plants a very beautiful showing is made with pink and white Hepaticas, white Bloodroot and purple Violets for the foreground planting, with purple and yellow German Iris, Lemon Lilies, flaming Oriental Poppies, white Garden Heliotrope, pink and white Pyrethrum, white Shasta Daisies, sky-blue Delphiniums, Phlox, and pale yellow Agrostemma, planted as directed above. It is well to bear in mind that though the perennial plant means a more expensive outlay than one required by the annual, and may not be depended on to make a satisfactory showing the first season of planting, once in the ground the perennial is there for a lifetime, ever increasing in size and loveliness of effect as the years roll on, while the annual plant must be seeded anew each season.

Yet, for quick effects the annual plant brooks no rival and the beauty of the blossoms borne are the equal of any. For many planting schemes, and especially for use on rented property, the annual plant is the most consistent. In many such yards the soil is exceedingly poor, having been used as a dumping heap for ashes, tin cans, et cetera. Even such ground, however,
holds possibilities of being transformed into a place of real beauty, for there are a number of quick growing annuals, highly attractive, that will thrive in almost any condition of soil, if but given half a chance. The following varieties are dependable for such soil: Portulacca, Calliopsis, Calendula, Balsam, Phlox Drumondii, Escholtzia, Four o'Clock, Petunia, Verbena, Poppy, Dwarf and Climbing Nasturtium, Bachelor Button, and Poppy. The Petunia is an unusually valued annual, no variety excelling it, perhaps, in its rich yield of blossoms, combined with length of flowering season, and adaptability to all kinds and conditions of soil. At the same time there is no annual causing more havoc in the color harmony of a display than is created by this same Petunia. The plant boasts a range of many colors, but is especially rich in tints of mauve, violet, purple and magenta,—colors all right in themselves, but which must be used very cautiously in color combinations of the garden. Confining oneself to the delicate shades of pink borne by the Petunia,—Rosy Morn, and the white variety, White Mound,—is by far the safest plan, unless the Petunia is to be used entirely alone, then mixed varieties planted in masses are always exceedingly effective.

Other annuals and perennials always beautiful in masses of a single variety are: Aster, Salvia, Pansy, Ageratum, Scabiosa, Marigold, Zinnia, Schizanthus, Phlox Drumondii, Poppy, Empress Candytuft, Calendula, Escholtzia, Nicotiano, Sweet Alyssum and Summer Cosmos, among the annuals; and Pyrethrum, Iris (German and Japanese), Mullein Pink, Phlox, Primrose, Delphinium, Agrostemma, Platycodon, Japanese Anemone and Oriental Poppy, among the perennials.

Take time, make time, for the outdoor culture of flowers, for there is no agency to be employed giving a greater return of joy for the small amount of attention given, than is revealed by the tiniest flower plot unfolding bud and blossom in the sunshine.

A wealth of color will be created by the Petunia, if only a sunny location is given
HEN we went to house-keeping we bought a little house. A short time after this, my husband's health failing, I went back to the office where I had previously held a position, where indeed I had met my husband, who was then employed in the mechanical department of the same concern.

After his health was somewhat restored, I continued to work until our combined earnings should be sufficient to enable us to go into business, which we did, continuing together in business until the summer of 1917, when a nervous breakdown being threatened, we sold our home.

Prior to this, a beautiful building site, overlooking St. Andrews Bay, having been offered for sale, we had purchased it, with the intention of sometime building a home on it, and after a few weeks of rest and travel, we came here to carry out that intention.

For years we had been looking over house plans, but had never seen anything that just suited us. Neither of us had ever had any training in draughting, but together we planned a house for a family of two according to our own ideas of compactness and convenience.

Our lot being shaded by grand old oaks, none of which we wished to lose, we measured the ground size we could get between the trees. This gave us 30x48 feet. We admire the bungalow type, but do not like it built flat upon the ground, so decided to put a concrete basement, which stands five feet out of the ground, under the entire house. This has a concrete floor, is dry, light, and airy, and besides containing the fuel room and heating plant, laundry, store room for trunks, garden and other tools, there is room where we expect to install an amusement room with a home pool table. Instead one or two bedrooms could be finished off if desired, so light and airy is it. Of course this bungalow plan could be used without the basement.

Located on a bluff overlooking the Bay, exposure to salt water spray during
storms, and the dampness of the atmosphere at times, causes outside woodwork to deteriorate rapidly, and makes frequent painting necessary. For this reason, as a question of ultimate economy, we brick veneered the house. The large screened-in front porch makes a real summer living room, and adds greatly to the comfort and attractiveness of the home.

The house is heated by a circulating hot water system, lighted with electricity, all lights being controlled by wall switches. Water is furnished by an excellent air pressure system which brings the water direct from the well, and gives pressure for sprinkling and fire protection. Sewage disposal is by means of a fine septic tank system. Thus, with the exception of gas for cooking, we have all the conveniences of the city. In lieu of the latter, I have an excellent oil stove.

A number of built-in features add to the attractiveness and convenience of the interior, such as book-cases having glass doors, partially separating the living and dining rooms; double china cabinet in the dining room, with glass doors and plate glass shelves, between the two parts of which there are three drawers for silver and linens. Above these drawers is a sliding mirror panel, hung with weights, opening into the back of the kitchen cabinet on the opposite side of the wall. The kitchen cabinet has cupboards above the table part. Below there is a set of three drawers and a compartment for cooking utensils, and bins for flour, meal and sugar. These bins have the best arrangement I have ever seen. On the bottom of the door, which has strong hinges, is a shelf, a quarter of a circle in form, very well braced. On this shelf is set movable bins, or cans, which swing out into the room when the doors are opened.

In the pantry passage-way from the kitchen to dining room are the stairs. A cupboard is built in beside the refrigerator with place for clothes hamper.

The back bedroom is used also as sewing room and office. For this latter purpose it has a built-in five foot desk with pigeonholes, the front being a drop leaf to form the writing table, three drawers below. A disappearing bed on rubber tired wheels, with the head of the bed forming a panel below the drawers of the desk, pushes under the floor of the bath room, as shown on the plan. On account of this, the bath room floor is elevated, and reached by steps from the hall. An air shaft in the wall, with shaft from the basement connecting to create a suction, thoroughly ventilates the space occupied by the bed when not in use. At one side of the writing desk is a typewriter desk, with drop leaf, and filing cabinet below.

The sleeping porch has the foot of the bed hinged to brackets built into the wall, the head suspended by chains from the ceiling, so that by means of a pulley it may be turned up out of the way when not in use, the bedding being secured by means of three canvas straps quickly
hooked across. The floors of the front porch, sleeping porch, and kitchen are of red unglazed roofing tile, so are easily and quickly cleaned.

The tank in the kitchen, affording hot water for that room and the bath room, has an oil heater attached, but is also connected with a coil in the firebox of the heating plant in the basement, thus furnishing hot water without extra expense when the house is heated. A separate flue is built into the side of the chimney from the heating plant in case a heating stove should ever be desired in the dining room. An outside opening in the side of the chimney near the bottom, closed by a cast iron door, affords opportunity for easily cleaning the chimney and keeping it free from soot.

The large closet from the rear bedroom has a small window, placed high enough to be out of the way, for ventilation and light during the day, while a drop electric light is a convenience which is appreciated by any woman who has hunted for some article in the dark, or carried in a kerosene lamp, to the danger of hanging clothes.

A Well Designed Cottage

HERE is a great demand at this time for "modern" cottages which may be built on a city lot, or for the small suburban home. They must be convenient and have all the modern improvements. Such a cottage is shown in this design. It is planned for an east frontage. Both living room and dining room are on the front, while the sun parlor has east, south and west windows.

There is a good entrance piazza, screened in summer and which may be glazed in winter. The entrance is through a vestibule into one end of the dining room, with the door to the hall directly
opposite, so that a member of the family could come in and go to another part of the house or up stairs without disturbing a group in front of the fireplace or in the sun room. French doors separate the living room and the sun room, but instead of swinging as is customary, these are built to slide into the partition between, leaving a plain opening when they are pushed back. Connected with the fireplace in the dining room is a central chimney from the basement, a flue from which is used by the heating plant.

Beyond the living room and dining room is a central hall, from which the stairs to the second story lead, and under it basement stairs, with a grade entrance. Every room on the first floor may be reached from this hall, giving very close communication. At the end of the hall is a good bath room. On the left is a bedroom and on the right of the hall is the kitchen, complete, with cupboards and rear porch, refrigerator space, et cetera.

The second story has two good sized chambers, each with large closets, also a fine sewing room with windows in the front dormer. The toilet room is at the head of the stairs. There is an open balcony over the sun parlor with a glazed door opening onto it. The ceilings of the second floor rooms are full height, but the roof drops down on either side of the dormers, giving a low appearance without cutting into the ceilings of the rooms. Attic stairs are shown.

The first story is finished in hardwood and the second story rooms have Washington fir with a natural finish.

There is a full basement under the whole house with concrete foundations. A separate chimney may be built for the kitchen range if so desired.

The exterior of the house is very pleasing in its design, and with several years’ growth of planting and vines would make a home charming in appearance as well as convenient in arrangement. It is veneered with a dark “Texture” brick up to the sill course of the first story windows. Above the brick the walls are stuccoed on metal lath, with a pebble dash finish. The stucco is a light cream color and the cornice and casing strips are painted white. The roof is stained green.
A Comfortable Home

It is always interesting to see how a plan can be expanded to give more room without materially changing the type. Last month we showed a bungalow for a larger family, which was similar to the one here shown but with two additional rooms on the first floor. In that plan the living room was placed in front of the dining room with a wide opening between them, while on the other side of the house three bedrooms and a den, which could be used as an extra bedroom, were placed.

The home shown by this photograph and plan is very compactly planned for the number of rooms and makes a very comfortable home for the usual family. There is a fireplace in the living room with glass doors on either side, making the room comfortable in any season.

The breakfast alcove is very well placed, between the living room and the dining room, with a convenient cupboard in the corner. This alcove also opens to the hall, accessible from any part of the house.

In this central hall are stairs to the second story, with the basement stairs under them. This hall gives excellent communication between all the rooms.

The closet space in this house is unusually well studied. Each bedroom has a closet rather larger than is usual in the small house. There are two closets from the hall in addition to the linen closet which opens from the bath room. There are two cupboards in the kitchen, a cool cupboard, such as are always built into the California bungalow, and a sink with wide sink tables under the double windows. The refrigerator and broom closet are placed on the enclosed rear entry.

On the second floor are two good bedrooms, a toilet and a sleeping porch, with good closet and storage room on this floor also.
The exterior of the house is gray with white trimmings and cornices. The porch is very inviting. The stone work of the porch wall is repeated in the chimney, and adds an attractive feature. The planting has been very successful.

A Small Five-Room Home

GOOD sized living room opening to a moderate sized dining room; a convenient kitchen; a fairly roomy chamber, with one or possibly two good closets, and easy communication with the bath room on the first floor, and with two chambers and hot and cold water on the second floor, sums up the requirements of the usual small American family.

Such conditions are found in the home shown here. Almost a bungalow in appearance, yet the dormer and gable windows find good height and the second floor rooms have a good head room.

The sun room, which is completely glassed and is in fact a part of the house unless perhaps in extreme weather, is extended to the front of the living room, and can be entirely shut off if desired, serving simply as a pleasant entry during the very coldest of the winter season. There are good groups of windows in the front of the living room as well as high windows on either side of the fireplace. At the opposite end of the living room are the stairs, also a closet which may be used for coats. Beyond the living room, and near the fireplace, so as to be reached by its warmth, is the dining room.

The small yet quite sufficient kitchen opens directly to the dining room. Upper and lower cupboards with serving and work space between fill one side of the kitchen. The refrigerator is placed beside the entry door and the basement stairs.

Opening from the dining room is the
downstairs chamber, while a tiny passage way connects it with the kitchen and bath. A linen closet also opens from the passage. The central hall so usual in houses of this type, and which acts as a communication between the rooms so that it is not necessary to go through one room in order to get to another, has been sacrificed in this instance in order to have the space in the living rooms of the house. For this reason the stair landing cuts slightly into the ceiling of the chamber. But the chamber is of good size and has a closet larger than usual. How the space inside the four walls shall be utilized is a matter of individual choice,
influenced very definitely by the elasticity of the purse.

Though very unpretentious in appearance it is at the same time an attractive little home. Yet not so small but that it will accommodate the average family.

The exterior is of stucco with a darker trim, verge boards and exposed rafters. The peak of the gable is clipped with rather good effect.

Brick and Stucco in Combination

The logical way to get color in our buildings is through the use of building materials, which themselves have color, rather than a color which is applied and must be replaced from time to time. The desire for color gives an added reason for the use of at least a touch of brick work in so many of the newer homes. Brick is always a good building material, and has been since the most ancient times. Yet the last few years have, perhaps, brought more changes in the processes in the manufacture of brick, and in the product itself, than many centuries previously. Practically any color can now be obtained in brick. With its more solid color tone and sturdy texture it makes a fine foundation course for a house, whatever the superstructure may be.

Great variety in color schemes and in design may be obtained from combinations of stucco and brick, whether the brick is used for foundations or for insets.
Two larger homes are shown in the group this month, yet they are as compactly planned as a cottage. In the first house the brick foundation is carried up to the sills of the first story windows, with a coping of cement. It is a very homelike design, made attractive by the unusual treatment of the entrance and the pleasant sun room on the front. The brick work with cement cap has been employed with good effect in combination with stucco, and small details have been carefully thought out, as the front base-

ment window give evidence. It is these well-considered details that make the difference between good and inferior house planning.

On the first floor is the usual large living room of the up-to-date house, with fireplace and flanking bookcases at one end of the room. A wide cased opening leads from living to dining room, opposite which is the built-in-buffet and china closets.

The stairs are opposite the entrance, and the basement stairs are under them, leading from the passage between the living room and kitchen and easily accessible from both. The kitchen is well equipped with cupboards. A work table may be placed under the windows if desired. The refrigerator stands by the outside door.

On the second floor are four fair sized chambers and bath room.

Trellises are used effectively on the second of the homes shown. The cornices, trim and trellises are all painted white. The trellises give support for the vines, which are already well up to the second story.

The embellishment has been very effectively given here by latticework and inserts of brick. These little brick inserts are a feature of many of the cement houses erected in semi-tropical climates and add greatly to the artistic effect by supplying the touch of color so necessary to relieve the dead gray of cement work. The entrance portico, also, shows a Spanish mission feeling, with its heavy buttresses, brackets and lanterns.

The plan is quite spacious and this effect is heightened by the wide openings at either side of the entrance hall which give vistas entirely across the house and out through the sun room.

A good sized coat closet is placed under the stairs, at the end of the entrance hall. Quite a roomy breakfast alcove is placed
between the kitchen and the dining room. This may be reached from the hall also. The kitchen is well equipped with well arranged sink and cupboards. The sink is placed under the windows with drain boards on both sides of the sink and the cupboards at one side. The refrigerator stands at the head of the basement stairs. There is a grade entrance on the landing of the stairs.

On the second floor are four bedrooms, each with good closets, and bath room. A wide linen closet opens from the hall on the second floor.

The exterior walls are of frame with metal lath and three coats of stucco, so that while the appearance of this house is very good and compares favorably with many of greater cost, it is not expensive to build.
Living room in a country home near Boston where plaster casts are used with admirable effect
Decoration and Furnishing

VIRGINIA ROBIE, Editor

The Decorative Possibilities of Casts

It has always seemed to me that plaster casts from the decorative standpoint are neglected. On the other hand, I have frequently seen rooms which were marred by too many small things in plaster. One big cast well placed will contribute a certain dignity difficult to obtain in any other way.

It is possible to find a wide range of subjects including antique, renaissance and modern, with many sub-divisions. Some of these are particularly fitted for classics, others for living rooms, dining-rooms or bedrooms.

Casts in bas-relief will have more decorative value than casts of statues, although an occasional place may be found for a fine Greek or Roman example. Perhaps the "Winged Victory"—the Nike of Samothrace—is best known of classic statues. It has been reproduced by the thousands. Yet never seems common, so perfect is it of its kind, with that splendid suggestion of movement in the broken wings and beautiful drapery. The original is in the Louvre, where are also the Venus of Melos, and that less familiar Venus—the lovely "Genetrix."

Other desirable things in the classic line, suitable for a living room or library, where a larger simple effect has been secured, are the Apollo Belvedere, the Lemnian Altena and the Minerva of the Vatican.

Of figures expressing action should be mentioned the "Discus Thrower," "The Wrestlers" and the "Flying Mercury." The latter belongs to the Renaissance, though often classed as antique. This spirited Mercury—"Hermes," if we follow the Greek name rather than the Latin—is the masterpiece of that great Italian, Giovanni of Bologna, and almost as well known as the Victory. If we begin the fascinating study of Renaissance statues we shall hardly know where to stop—so many seem fitting for a quiet, spacious corner in a bookroom. Some, of course, are too heroic for the average house, suggesting a gallery, as for instance, Michelangelo's "Night and Day," or his "Morning and Evening."
Appropriate for many places are the Tanagra figurines, which bring us back again to the antique. It will be remembered that these are the statuettes the originals of which have caused so much discussion in two of our largest museums. Discovered at Tanagra some years ago, the question has arisen over and over as to the genuineness of five of the figures. But the charming reproductions in American plaster carry no question marks and are at home in many surroundings. All the subjects enumerated need an uncluttered background. No statue is interesting in cramped or confused quarters. There is something about it—representing as it does the golden age of Greece or Rome, or that wonderful age of human achievement, the Renaissance that demands order and harmony. For this reason every school room needs at least one cast. The influence is far reaching and will not end with the school day. And so it is in that larger school, the home.

In the boy's room, in the girl's, in the playroom, even in the nursery, carefully selected examples will prove of lasting benefit, stimulating imagination and leading on a little later to fascinating regions in history, mythology and art.

We do much to provide color harmonics for the child. Should we not make
equal efforts to surround him with harmonies of form and line?

The Renaissance has contributed many beautiful things for the child; Donatello's cherubs, the bambini by Andrea della Robbia, the children in the Canto ria frieze by Lucca della Robbia, and the numerous madonnas with the Christ child, by both Robbias and their contemporaries.

Very fitting are the "Young Tobias" by the elder Robbia, and the many lovely children and cherubs by Ghiberti.

For children of older years, the bas-reliefs of the Parthenon frieze offer a host of suggestions, and so do the panels of Thorwaldsen's "Tri umphal Entry of Alexander into Babylon." These two great sculptures, so far apart in time of production, so closely related in heroic conception, are splendidly adapted to the living-room of the house, where their appeal will be to every member of the household. Inasmuch as the living room belongs not to one individual, but to the entire family, all adornments planned for its walls should have a universal interest.

There are sixteen sections to the western frieze of the Parthenon and twenty-two in the "Entry Into Babyl on," several examples of which are illustrated. These sections, before the war, ranged in price from six to twelve dollars each in the largest set, which in the Alexander series, covers, in its entirety, about eighty feet. One of the sections over the fireplace in an average living room is of sufficient height and breadth.

The Parthenon frieze comes in three sizes. The smallest set makes an interesting decoration arranged in four or six sections above a
book shelf. There are numerous and attractive arrangements which may be made with various details.

Probably the Cantoria frieze is among the best known of bas-reliefs, particularly the two panels called "The Singing Boys." As a matter of fact, there are singing girls, quite as worthy of admiration, and there are trumpeters and players of symbols, of drums, of flutes and of tamborines.

For music rooms, the Cantoria has always been a favorite, particularly the "Boys Singing from a Scroll." In a few cases the complete composition in ten panels has been used. As with the classic frieze, the sections may be purchased in special sizes.

In my illustration of a living room may be noted two panels of the Cantoria, one seen through the opening of another room and one at closer range. Here is
shown a background particularly adapted to bring out the decorative value of a cast. The walls are sand finished plaster in a warm gray, the furniture is on frank, direct lines, the trim broad and simple. Branches of leaves form, with the bas-reliefs, the principal decorations.

The sand finished or rough plastered wall makes an admirable setting for a cast. Burlap and heavy textiles are also good. A fine grade of plain paper is likewise effective. Figured walls, as a rule, are not so harmonious, yet I recall a room papered in a bold design in three shades of yellow where several casts made a charming enrichment. Over the fireplace being one of the Lucca della Robbia’s madonnas. Above low book cases were six of the Tanagra figurines. Between two windows was the bas-relief “Victory,” from the Trajans’ Column, Rome, not a magnificent fragment like the “Nike of Samothrace,” but a complete composition.

Several rooms come to mind where casts have been made an integral part of a fireplace, notably the well known relief, “Homer and the Nymphs” and the popular “Aurora.” The latter is modeled from the famous picture by Guido Reni, and while beautiful in plaster is, after all, a canvas subject.

Speaking of the Trajans’ Column, there are at least fifty details from this superb sculpture, all of which offer many possibilities. The medallions of horses are very spirited; the head of Caesar wonderfully impressive; finest of all perhaps is the “Victory” medallions. All these things—from one of the greatest triumphal monuments of all time—make most interesting decorations for a man’s room.

In fact, the whole subject of casts in relation to wall treatment opens up a delightful field. The Thorwaldsen panels and plaques alone could be so chosen to contribute something to almost every room in the house. Naturally one does not wish to overdo the matter, but the great Thorwaldsen should be more carefully studied. The Alexander casts are but a small portion. There are lovely
nymphs, cherubs, cupids, etc., the seasons and other allegorical subjects.

For bedrooms, Thorwaldsen’s “Night” and “Morning” would be fitting—so would William M. Hunt’s “Flight of Night,” although here again we find a sculpture reproduced from a painting—although on bolder lines than “Aurora.”

It would not be fair to leave out Jean Goujon, or Glodion, or Giraud, who have modeled so many times in a spirit of joyousness. Of bas-reliefs in conventionalized ornaments, the panels, reproduced from tiles in the Alhambra, should be mentioned, and the many shields and coats of arms copied from the metal work of Cellini.

Animal subjects also deserve a passing word. The latter may be found in quantities, from the “Lion of Lucerne”—Thorwaldsen again—back to the antique, and down to the present day.

All ornamental plaster is more effective when toned an ivory or deep cream color; even sepia may be used with good results sometimes in the shadows, but the amateur, unless gifted above the average, will find it more satisfactory to leave the toning to an expert. Usually it is possible to choose between several tones when the cast is purchased. Caproni, of Boston, to whom I am indebted for most of my illustrations, gives the following advice about cleaning plaster:

“When casts have been treated with ivory finish, or some other preparation which fills the pores and renders the surface hard and smooth, first wet the piece with lukewarm water; then dip a wet sponge or bristle brush in dry pearline and rub the cast all over quickly. After that rinse with fresh water, not allowing the pearline to remain on long. Soiled casts which have no hardening finish can be cleansed only by an experienced person.”
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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.

Old Walnut Finish.

T. B. O.—Recently I became a subscriber to Keith's Magazine, and am finding it quite helpful. Regret that I did not know about it sooner.

As per your offer to help your readers, I am enclosing a rude outline of our floor plans. We are building a story and a half brick bungalow. I am absolutely devoid of artistic ability, but do know, after a thing is completed, whether it looks right or wrong. I want suggestions as to proper and pleasing background for furnishing, and what kind of furniture is best suited, especially for living room. We will have hardwood flooring on parlor, living room and dining room. Pine, I suppose, everywhere else. I suppose we will use pine for woodwork. Now, what trim would you suggest when one does not want white or ivory enamel? What color would be most tasteful for walls? Would sliding doors or French doors be preferable for connecting rooms? We will likely have French doors opening onto terrace from dining room.

Please study my problems out and send me suggestions, as to walls, rugs, hangings, furniture, etc.

We have a quantity of solid walnut doors, mantels, stairs, etc., taken from the old house. Would you use it or not? I have old-fashioned walnut parlor furniture. How would a walnut parlor appeal to you?

Ans.—First, in regard to use of old walnut doors, mantels, etc.—by all means use them. Old walnut is highly prized these days. With your large living room, the parlor seems superfluous. Could you not convert it into a library, and still place the piano there? If there is enough walnut for both these rooms, it would be delightful. We are sorry you do not like an ivory finish. Antique ivory is exactly right for woodwork to go with the walnut doors and furniture. The rest of the woodwork could be painted a soft gray—not blue gray—except in bathroom, which should be white enamel, with bath room walls painted ivory. Many new homes are now treated with gray stains or paint for woodwork and gray walls with white ceilings throughout, using this as a background for different colorings in furniture and hangings in the different rooms. The effect is elegant and restful.

We like the French doors opening on terrace, and they would be attractive between living and dining rooms.

Gray Weathered Oak.

J. P. B.—Will you please give me some hints on interiors for the house I am building? The house faces south, has large south porch and living room on south.

We have thought of using rose and gray in living room or a deep blue. Floors and woodwork will be oak. Please suggest a finish. Fireplace of brown mottled brick. Kindly suggest color for dining room. We have a rug in tans, browns and dull blues for dining room. Could I use a tan or taupe for dining room and
gray for living room? Walls will be tinted. The walls are plain with heavy cornice molding.

Also please suggest treatment for boy’s room with east exposure, hardwood floor, with Navajo rugs in red and gray.

Ans.—Your rooms are spacious, and will require large rugs. We infer that you have yet to purchase rugs for the living room. Owing to its peculiar shape, we advise them made to order, using a rug nearly square, about 10x12 across the east end of the room, and a long, narrow one to match along the stair wall. We would get these rugs in a taupe gray, and tint the walls a lighter, warm gray, a gray with yellow in it, not a blue gray.

With this wall and floor the deep rose will be very good indeed.

In regard to finish of oak woodwork, there are gray stains now on the market that are very pleasing and a change from the everlasting brown. We would stain very lightly, so the effect would be almost a gray weathered oak—and then wax and

Wore Better Than Paint

Biloxi, Miss., Feb. 20, 1916.

"My residence, completed two years ago, stained brown with great root with your stain, in so perfect condition as the day stained. From the fall to this time Mr. Creosote Stains, Biloxi, has not been repainted, as numerous houses, painted, on the beach, were.

J. D. ODENAL.

Cabot’s Creosote Stains

wear as well as the best paints in all climates and better than paint in the south because they cannot crack and peel off as paint does there. The colors are soft and rich, much handsomer than paint, and the Creosote penetrates and preserves the wood. You can afford to use Cabot’s Stains.

Cost Half as Much as Paint

You can get Cabot’s Stains all over the country. Send for stained wood samples and name of nearest agent.

24 W. Kenzie St., Chicago. 525 Market St., San Francisco.
rub. This finish would be lovely with the gray wall and taupe rugs of living room and harmonize with either dark oak or mahogany furniture.

In the dining room you could tint the wall a pale greenish tan, that would not conflict with the woodwork, and use old blue window draperies. The only disturbing note in this scheme is the brown mottled brick of the fireplace. You can of course stain your woodwork brown if you prefer it, and have pale tan walls in living room also.

Wide Openings.

C. W. M.—I am enclosing diagram of our home and would appreciate your advice in regard to redecorating parlor and library. Both rooms are about 15 feet square, on the south side of house.

With doors six feet wide and open most of the time, I want to know if these rooms should be papered and woodwork painted alike? Parlor furniture is rich mahogany Colonial sofa and chairs upholstered in satin damask.

Ans.—Yes, the rooms that open out into each other should be painted and papered alike, to give an effect of unity and spaciousness. Paint the living room old ivory to match the dining room, and use an unpatterned paper in light tan since it is the best background for paintings.

I should not advise over-hangings since you need all the light you can get. For this reason, purchase glass curtains of cream net or voile for both rooms. A more unusual material that would serve the same purpose is a gold silk gauze. However, if the over-hangings were made to hang outside the glass and over the trim by placing the rod brackets at the extreme edge of the casing, not very much light would be sacrificed and the trim would be hidden and the effect of the windows (which I judge are not very wide) would be widened. For the latter treatment I should advise a silk velvet or velour to match the rug. Buy plain tan rugs darker in value than the tones of the wall and the trim.

Long Curtain Rods.

J. R. N.—Please tell me how I can get long double curtain rods to use as one over three windows? These windows are the usual size, but three are put right together on front of living room. I would want shorter rods like these for casement windows.

Ans.—You can have half-inch brass tubing cut the lengths you desire, and some kind of head fitted to the ends, for the long rods extending across the three windows. You can get this wherever they carry curtain and upholstery materials, or possibly in a hardware store.

The ordinary brass extension rods are suitable for the casement windows.

Advice by Mail

in all branches of interior decoration and furnishing. Two dollars per room. Samples and complete color guide.

ANN WENTWORTH
former Decorative Editor of "The House Beautiful"

461 Fourth Ave. New York City

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The importance of cereals as a food can hardly be overestimated. They are eaten in many homes more or less as a matter of course, perhaps, or because the family has a special fondness for oatmeal or cream of wheat.

Cereals are an essential food, however, belonging to the class of carbohydrates, which are starchy foods and which are very important in the body as energy furnishers.

Families that do not have a very definite place on their menus for cereals should realize their importance and see that cereals are made a usual dish rather than an occasional one.

The most commonly known cereals include corn, wheat, oats, buckwheat, rye, barley and rice. These cereals are found on the market in cooked and uncooked varieties of food. Wheat occurs uncooked in the following forms: Whole as whole wheat; ground as bran and graham flour; cracked as cracked wheat; granulated as cream of wheat and farina; rolled as Pettijohns. It is found cooked as shredded wheat and puffed wheat.

Corn is found cooked in the following forms: Whole as pop corn; ground as cornmeal and corn flour; cracked as hominy; granulated as cornstarch and cornmeal. It is found cooked as in post toasties, corn flakes and in puffed flakes.

Oats are found on the market, uncooked, ground as oat flour; rolled as rolled oats; cracked as cracked oats.

Rice is found ground as rice flour; granulated as rice meal and cream of rice; whole as rice. It is found cooked as puffed rice.

Whole uncooked barley occurs as pearled barley; ground, as barley flour, and granulated, as cream of barley.

Rye may be found ground, as in rye flour; granulated as in rye meal and rolled as in cream of rye.

Buckwheat occurs uncooked and ground as in buckwheat flour.

It is not an easy proposition to cook cereals correctly. Cereals are composed of starch, protein, mineral, fat and cellulose. Cellulose is the rather fibrous portion of the cereal. This cellulose must be cooked in exactly the right way or it will be tough and stick in a person’s teeth. The biggest idea in cooking cereals, then, is to soften the cellulose. Together with that comes the breaking down of these cellular walls which seem to form a sort of coating around the real cereal. In addition to the proper cooking of the cellulose, the starch must be properly cooked, water must be added and all ingredients must be conserved.

Cereals as a Food

Elsie M. Fjelstad
INSIDE THE HOUSE

A well-cooked cereal should be soft and moist; should have good color and flavor; should not be lumpy; should have a good shape and the fibrous part should be perfectly tender.

A double boiler has proven the most satisfactory way to cook cereals. The double boiler provides for long, slow cooking. It cooks by steam and consequently the mixture cannot reach the boiling point. As a rule long, slow cooking is best for all starchy foods.

This is the approved way to cook cereals:
1. Put on salted water and heat to boiling.
2. Add cereal gradually.
3. Boil 3 to 5 minutes.
4. Put over boiling water and cook several hours until done.

Proportions of water to cereal vary. The tables on the following page should prove helpful:

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It uses neither Closet nor Wall space.
It really disappears.
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And you can have them in every room, upstairs and down—practical casement windows that permit wide unobstructed view, that afford perfect ventilation and are storm proof and draft-proof when closed.

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do away entirely with rattling, sticking, leaking and other troubles of ordinary hinged casements.

They open outward out of the way—don't interfere with screens—are self-adjusting—easily moved to any point in the opening—stay rigidly where placed.

Furnished complete for any type of building, stock mill work, factory fitted, with patented hardware, ready to set into the openings.

Let us send you full information and interesting pictures of artistic window effects.

Whitney Window Corporation
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Minneapolis, Minn.
<table>
<thead>
<tr>
<th>Cereal</th>
<th>Measure of Pound Raw</th>
<th>Measure of Pound Cooked</th>
<th>Price</th>
<th>Cost of Serving</th>
<th>Water Required</th>
<th>Salt</th>
<th>Time Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat—</td>
<td>2 ¾ c.</td>
<td>8 c.</td>
<td>$0.15</td>
<td>.009</td>
<td>4½ c.</td>
<td>1½ t.</td>
<td>2 ½ hr.</td>
</tr>
<tr>
<td>Cracked</td>
<td>2 c.</td>
<td>12 c.</td>
<td>.15</td>
<td>.004</td>
<td>6 c.</td>
<td>1⅛ t.</td>
<td>½ hr.</td>
</tr>
<tr>
<td>Farina</td>
<td>6 c.</td>
<td>12 c.</td>
<td>.17</td>
<td>.004</td>
<td>2½ c.</td>
<td>5⅛ t.</td>
<td>1 ⅛ hr.</td>
</tr>
<tr>
<td>Pettijohn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oats—</td>
<td>6 c.</td>
<td>12 c.</td>
<td>.15</td>
<td>.004</td>
<td>2½ c.</td>
<td>5⅛ t.</td>
<td>2 hr.</td>
</tr>
<tr>
<td>Rolled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rye—</td>
<td>6 c.</td>
<td>12 c.</td>
<td>.10</td>
<td>.009</td>
<td>2½ c.</td>
<td>5⅛ t.</td>
<td>2 hr.</td>
</tr>
<tr>
<td>Rolled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barley—</td>
<td>4 c.</td>
<td>12 c.</td>
<td></td>
<td>.006</td>
<td>2⅛ c.</td>
<td>5⅛ t.</td>
<td>3 hr.</td>
</tr>
<tr>
<td>Cream of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Whole cereal weighing 1 pound to two cups—One portion cereal to four portions water.

Starchy cereals weighing 1 pound to two cups—One part cereal to six parts water.

Cereals weighing 1 pound to four cups—One part cereal to two and one-half parts water.

One teaspoon salt to one cup of water.

From this table it is readily seen:
1. That cereals swell, when cooked, from two to six times their volume.
2. That a serving of cereal costs at the most .004, which is a very small fraction of a cent.
3. That cereals require from one to four hours’ cooking.

Rice is one of the most important cereals. It is important because it can be used in a variety of ways. Its importance may be readily proven by calling attention to the fact that the Chinese people have rice as their main food. It is, in fact, the only food in a great many families.

In American homes rice is often used as a potato substitute. This practice became common during the potato shortage. Served with meat and gravy, it is very appetizing. Rice should not be found on the same menu with potatoes, however. They are both so high in starch content that the body, a human machine, gets too much starch if they are eaten together.

Rice is served as a vegetable—Spanish rice for instance. It is served as soup and as dessert—probably the most common use.

There are two ways of cooking rice, despite all cookery theories. The Chinese people boil it in a large quantity of water for 20 minutes. They use one cup of rice to 9 cups of water. The advantages of this method are that it takes less time and the product has a very appetizing shape.

The usual way to cook rice is to take one cup rice to four cups of water and cook for a long time in a double boiler.

Ordinary breakfast cereals are served usually with whole milk or cream and sugar. Some common ways of preparing rice include:

**Rice Fondue With Crackers.**
One tablespoon uncooked rice.
Four tablespoons grated cheese.
One-half tablespoon milk.
One egg.
Four crackers.
Seasoning.
Heat the milk and beaten egg. Add the rice and allow to cook until a little soft. Add the cheese and when melted, the seasonings. Serve on the crackers.

**Rice With Cheese and Tomatoes.**
One cup uncooked rice.
Eight ounces cheese.
One pint canned tomatoes.
Cook the rice in the tomatoes. When slightly tender add the grated cheese and bake until brown.
Better Doorways Make Better Homes
R-W Hangers Make Better Doorways

Did you ever stop to consider seriously the advantages of sliding doors for the wardrobe—pantry—parlor—in a modern home?

The wardrobe doorway is frequently in such position that the householder finds it necessary to replace the swing door with curtains. Pantry door problems like the one illustrated can often be solved by the use of a sliding door, as is likewise true of parlor doorways.

Disappearing doors hinged on Richards-Wilcox hangers move easily and silently. Cannot slam, cannot interfere with each other nor with fixtures and furniture. Accessible adjustments correct binding due to settling walls.

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your house at minimum expense and with maximum satisfaction, with the

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Simply built, stays in order, is easily cleaned, burns any fuel with best results because of its longer fire travel. Send us your plans. No charge for laying out a Heating System.

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Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

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The World’s Largest Makers of Metal Ceilings, Magic Shingles, Metal Roofing, Siding, Rolling Doors, Metal Lockers, etc.
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CINCINNATI, OHIO
Ironing as "Fancy Work"

IT SOUNDS almost like a joke, doesn't it? But it is—or was formerly—no joke for me," said my friend. "With six daughters, and a small income to keep them even sanitarially clean, not to attempt crisp daintiness, seemed almost beyond my hopes for them."

"Washerwoman after washerwoman had given up the job in despair," she explained, "while laundry prices were decidedly more than I could compass. Yet tub dresses were so evidently the prettiest and cheapest things for my energetic half dozen. Even with the use, wherever possible, of crepe underwear which could be worn without ironing, the labor and expense of keeping clean appeared appalling, and the hours of daylight were never long enough to get that everlasting ironing out of the way."

"Finally, however, I had an inspiration and decided to make 'fancy work' of what had been rather tragic. I sent everything to the rough dry laundry. Then I arranged so that my electric iron could be connected in the living room or on the screened porch, according to weather conditions, and had a low ironing-board constructed in order that I might sit in a rocking chair at the work. The rocking chair is a great addition to my pleasant evenings for it is not alone comfortable, but it gives a certain degree of the freedom and variety of movement one has when standing. Moreover, anything dropped on the floor may be easily retrieved from its insignificant height.

"Comfortably installed thus, therefore, I do my ironing in the evenings as another woman does her tatting or embroidery. Meanwhile my husband or one of the girls reads aloud and the other girls shake out and straighten the pieces in preparation for my ironing, brush fringe, or pull the laces into shape. If I discover a rent or rip while ironing I pass the garment over to one of the older girls, who mends it at once and returns it to me for a final smoothing touch of the iron. Another runs ribbons in the beadings, replaces missing buttons and sorts the work, laying it in piles all ready to place in the bureau drawers.

"Our 'evenings at the ironing board' have become most enjoyable and educational, for the girls have learned to mend thus under my instruction and now—as they grow older—often take my place with the iron."

"Meanwhile the readings of the father become more entertaining and instructive. The unwonted words are at once explained and many points discussed at length.

"The children are, in fact, a bit disappointed if the invitation to some frolic or treat interferes with these family evenings."

"I imagine I hear my country sister say, 'Yes, that's lovely, if you can use an electric iron and are able to send your washing out.'"
ENTERTAINING in your own home is a pleasure. The service and arrangements are yours, just as you want them. Your house is attractive because you built it and it reflects the good taste of your wife and yourself. No apologies or explanations of the landlord’s mistakes are necessary.

Arkansas Soft Pine

is an economic, practical aid to home lovers who want to build this year. It furnishes a lower cost structure, and more particularly a moderate priced yet perfect woodwork for interior use, whether your choice be white enamel or otherwise. Send at once for our fascinating folio on home designs and how this wood may be used to your advantage. Copy will be sent with our compliments.

Arkansas Soft Pine Bureau

342 Boyle Building · Little Rock, Arkansas
"Well, if I had no electricity, I'd use the other kind of irons in the same way and have the children fetch and carry them for me to and from the kitchen. And there are hand washing machines as well as electric in these modern days."

For the Laundry.

Sprinkling clothes with hot water instead of cold, a good housekeeper tells us, makes the work of ironing much easier. The moisture is spread more evenly and quickly.

To wash lace, cover a bottle or fruit jar with white cotton cloth, or with linen. Pieces of old table cloth or napkins make a good cover. Fasten it smoothly to fit the shape of the bottle. Wind the lace around it, carefully basting both edges to the linen, to keep each point and scallop in place. Wash the bottle as you would any garment. It may be washed and boiled with the table linen. For fine lace use a pure, mild soap, and boil in soft water. Rinse thoroughly and dry in the sun. When it is "bone dry" clip the threads carefully and remove from the bottle. If carefully done the lace should look like new.

A good way to dry a sweater is to hang a piece of mosquito netting out flat and place the sweater upon it so that it won't be doubled up.

Hang your hose up by the top and save the toes, and they will dry in better shape.

A blue denim cover to fix over ironing boards saves the white cover and is very good to use when pressing suits. Wash the cover first to be sure the color is fast.
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For a few hundred dollars you may add a few thousand dollars in the sales value of your residence, if you make a liberal use of Red Gum, "America's Finest Cabinet Wood," for trim, panelling, wainscotting, and timbered ceilings. With Red Gum trim artistically used you can give to your own new home much of the charm of the wonderful residences of two hundred years ago. The wise man in this practical and unpoetic generation is he who, when building, not only produces an architectural atmosphere pleasing to himself and his family but who, at the same time, has his weather-eye open for the point of view of the unknown man to whom he may sometime want to sell the house. Fine interior woodwork (Red Gum Woodwork) is just so much sales insurance. It puts your house in "Class A" of general desirability—at very small expense. Red Gum costs less than any of the other recognized cabinet woods—improves with age and is easily kept in beautiful condition. Its finishes are manifold.


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Increased Efficiency for the Warm Air Furnace

Experimental Tests

SINCE a large percentage of the small residences, perhaps 75 or 80 per cent, use a warm air heating installation, the problem of reducing the system to a definite and scientific basis is a matter of general public concern. Tests on the warm air furnace have been in progress in the engineering experiment station of the University of Illinois, at Champaign-Urbana, since October 1918. The results of these experiments are now being made available.

"Between three and four million warm air furnaces are now being used in the homes of this country," says Professor A. C. Willard of the Heating and Ventilating department at the University, who is in charge of the work.

"There is an estimated shortage of 1,000,000 residences in addition to the annual building program of 385,000 homes. When that is made up thousands of new warm-air furnaces will be installed. It is imperative, then, that this heating system be put on a scientific basis.

"The warm-air furnace is the furnace for the small home, say of eight or ten rooms. For the larger establishment, that is, for any building covering more than 1,200 square feet, a single warm-air furnace is impracticable. It is cheaper to install and cheaper to run than any other type; and with it heat can be more quickly increased and reduced."

Moisture Necessary for Health.

A part of the future program of the investigation will have to do with the study of humidifying mechanism of this type of furnace. "Maintaining sufficient moisture in our home concerns both our health and our pocketbooks," says Prof. Willard in this connection. "Dry air is harmful as to the mucous surfaces of the head and throat. But farther than that, it is ruinous to the furniture. Chairs will fall to pieces and pianos cannot be kept in tune in parched atmosphere. It is deadly to plants, and it saps the life from the leather, books and furnishings.

"If the air in a room is sufficiently humid, it will condense on the window panes when the outside temperature is 30 degrees or lower. Unless there is frost or steam on the windows under these conditions, the room air is too dry. The warm-air furnace, moreover, is the only type which is capable of readily supplying the average house with moist air. It also has the further advantage of serving as a ventilating system, for, by means of the cool-air recirculating duct, the air is kept moving through the entire house."

The furnace investigations are under the general direction of Dean C. R. Richards, head of the college of engineering and director of the experiment station.

"In the middle of the concrete floor of the great factory-like building which is the experiment station, among strange engines and whirling belts rises a skeleton three-story house. Its floors are interlaced with the ten huge arms of an ordinary warm-air furnace, which stands, octopuslike, in the make-believe basement. The apparatus reproduces as nearly as possible the conditions obtaining in an average ten-room house; the basement pipes are wrapped with asbestos and the wall pipes, or stacks, are encased in plaster board. Each terminates in an ordinary wall register, placed vertically. In addition to this main plant,
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A coal chute is important. Once built in, it should last for many years without breaking, or getting out of order. It should be strong enough to withstand the rough usage that coal men give it. Kewanee “Armor Plate” Coal Chutes are designed and built to overcome all the faults of coal chutes that experience has brought to light. It is all-steel! And not expensive.

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on which the major tests have been performed, are several pieces of auxiliary apparatus for the purpose of testing and correcting instruments used in the experiments.

"The results, which embody facts of vital interest to the coal-burning and furnace-heated public, were discussed by Prof. Willard in his office at the laboratory.

Important Question Answered.

"'Why are our first-floor rooms so hard to heat?' furnace users are continually asking. The answer to this question is the second significant phase of our work. We have found that leader pipes to first-floor rooms must be materially enlarged. With the present moderate-sized pipes, downstairs rooms cannot be comfortably and economically warmed.

"The warm-air furnace is a gravity device. Theoretically, the warm air is forced through the pipes by the greater pressure of an equivalent column of cold air being heavier than heated air. The pipes are fuel of the first floor are low, consequently there is not enough pressure to drive the heat with any force. On the contrary, the heated air traveling to the second and third story rooms is impelled by the weight of a correspondingly longer column of air. The result is that gravity drives the air with greater velocity to the upper floors. The problem is to warm the first floor." In this connection he extended this word of warning to the householder and the furnace installer: "It must be kept in mind that a furnace should be supplied with plenty of air. This can be done most economically and successfully by running a large recirculating sheet metal pipe between a register placed in the first floor and the cold air inlet to the furnace. It must be as short and as direct as possible, must be free from elbows and must have an area equal to the sum of the areas of all the warm-air leader pipes. If the recirculating connection is restricted in any way, the furnace may become a 'breather' and take some of its cool air supply through one or more of the first-floor leader pipes. This condition is a common defect, which still further interferes with the heating of the first floor.
Winter Has Taught This Lesson

That homes that were not Chamberlin Metal weather stripped were hard to keep warm. For draughts were ever present—cold air currents sifted in around the doors and windows. Costly heat escaped increasing fuel consumption.

Chamberlin Equipment prevents all this. It pays a profit in fuel economy and what's more it assures comfort and even temperature—a vital factor in the health of the family. For it effectively seals up the cracks around the doors and windows—keeps the cold out and the heat in.

Because Chamberlin Metal Weather Strips keep out air currents they serve as a protection against soot and germ laden dirt so prevalent at this time of the year. In fact they are an all year 'round necessity.

They are guaranteed for an unlimited period and installed by expert Chamberlin weather strip mechanics. Immediate service is assured thru Chamberlin branches located in the principal cities throughout the country.

Chamberlin Metal Weather Strips can be applied to casement windows, sliding windows, doors and French windows—wood or metal sash.

Plan your weather stripping now. Our booklet "26 years of weather stripping" will help you. Write for it.

Chamberlin Metal Weather Strip Company
112 Dinan Building, Detroit, Mich.
"A Roof Talk"
John Upton

S THE roof is one of the most expensive as well as one of the most important parts of a building it should receive more careful thought than is generally given to it.

In the question department not long ago, one man asked about a shingle roof, how long it should last and about painting it. Another asked about painting a tin roof.

The life of a shingle roof depends on several conditions, the quality of the shingle, the way they are nailed on, or the lack of nails (which may have a lot to do with it) and so on.

Life of a Shingle Roof.

We have here shingle roofs which have been in service almost twenty years and are apparently good for several years more, and this without any painting or stain.

Then we have those which have already been in service twenty-five or thirty years and are still good, but they have been well painted.

On the other hand, one house here, which had been built about 16 years, had to be reshingled simply because the shingles were not properly nailed, there being only one nail in a shingle, and hardly that.

While the different kinds of roofing material are many and would seem to be suited to every condition, there is probably none that has given more general satisfaction than good shingles, rightly put on. You will find many men who will advise you to use shingles provided there is sufficient pitch to the roof and others will tell you that you can not get any better roofing for the same cost. The main objection to shingles is that they are liable to take fire from some adjacent building, but it would seem that fire-proof paint could overcome this.

Painting.

As to painting a shingle roof, the time to do it is before the shingles are laid. They can be dipped into a thin paint or stain, or some preservative substance. Only the lower half need be dipped. They should be placed on a rack to dry and then rebunched.

Nails.

If you use good shingles and paint or stain them it may be that they will outlast the common nails and you should use a zinc coated or galvanized iron nail for fastening them on. These cost about twice as much as the common ones but they are a good investment if they double the life of your roof. In painting a roof of any kind it pays to use a good quality of paint. Regular roofing paint generally costs less than the best of the house paints. I question if there is any economy in using the latter.

It is becoming quite the thing to paint galvanized roofing after it has been on some five or six years and for this one can use common paint or a paint made especially for the purpose.
Frame Houses Made Safe

Frame houses cost less and are attractive. And they can be made fire safe by using METAL LATH as a base for stuccoing and for the interior plastering. The small meshes of Kno-Burn METAL LATH hold the plaster firmly, even in the face of intense heat, and the steel is non-combustible. Thus every wall and ceiling becomes a veritable fire stop of steel and cement.

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Include in those plans the BUILDING AGE,

the monthly publication which contains—every month—full page colored perspective drawings with plans, constructive details, and condensed specifications, also photographs of recently completed unique and unusual houses accompanied by full working drawings.

You will also find many valuable suggestions for residences of moderate-cost type and ideas which will add to the convenience and comfort of your new home.

Consult the advertising pages before buying—you will find them a veritable market place for material.

Special Offer

To enable you to judge for yourself the value of the contents of BUILDING AGE, we are glad to make readers of Keith’s this special offer:

The price of 12 issues (1 year) is $2. We will mail you the next 6 important numbers ($1) and copies of 2 current issues—8 numbers in all for only $1, if you will write mentioning this offer and enclosing $1. (Canadian postage 25c or foreign postage 50c additional.)

When writing just say, "I accept Special Offer in Keith’s." Or tear out this coupon and mail with your name and remittance. Do it today!

BUILDING AGE
243 West 39th St. NEW YORK CITY
Working to Dimensions.

When rooms are figured with an odd number of feet for the inside measurement, they are economical in the use of dimension timbers for floor and ceilings. Stock lumber generally comes in even lengths of feet. Twelve, fourteen, sixteen and eighteen are the usual lengths carried every place where lumber is obtained. For the most economical use of dimension timbers, bearing partitions should be set a little less than these even lengths so that they may have good bearings on the walls. For example, a room figured 14 feet for the inside dimension requires 16 foot beams in order to get the bearings on the partitions set 14 feet 6 inches on centers, which would be necessary to give 14 feet for the inside measurement of a room, with 6 inch frame walls, the usual type of small construction. This wastes 12 to 18 inches of each timber. Figure it out and see how much this means—in a given place. Rooms figured for an odd number of feet, inside measurement, allow dimension timbers to be used economically.

While the strictest economy in the use of lumber will not affect a very large percentage of the cost, it will cut out the unnecessary cost to the owner and in addition to that it will tend to conserve good lumber. The ends of boards and dimension timbers cut off and wasted in this way are from the best of the lumber, and while on each job it may not be a large item in one case, yet all told over the country it is a tremendous matter.

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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.

Relation of Woodwork to Furniture

Quite as important as the exterior design of a house is the interior finish. In fact, the interior of the house, its finishing and furnishing, really takes precedence of everything except the plan itself. The interior finish is usually controlled or influenced largely by the furniture which is to go into the room. Whether the furniture is yet to be purchased, or whether treasured furniture, either antique or newly bought, is to be transferred from the old home to the new; in any case the furniture supplies the key to the interior finish of the room.

So largely is mahogany furniture in use at the present time that in considering the finishing of the home a setting for mahogany furniture takes first importance. The idea of mahogany as a wood of a brilliant red hue, has happily passed, giving place to something nearer the natural color of the wood. True mahogany, and the fine old woods which have come down to us in antique Colonial pieces of furniture had a beautiful undertone of reddish hue which grew rich and darker with age. With the growing scarcity of true mahogany, other woods of similar nature and appearance have fallen heir to the name. Today, mahogany— even in name—is practically almost out of the question to the average home builder. At the same time favor has turned to a lighter woodwork in combination with mahogany, and enameled woodwork, running to a deep ivory in tone is much used with mahogany furniture. Birch or gumwood and other woods may be given a brown strain which will make them excellent in connection with mahogany, but where these are used be sure not to speak of them as "imitation mahogany" for such is not the modern intention. They are beautifully finished birch or gum wood, as the case may be, worthy of association in their own right even with regal mahogany.

One of the most essential points relative to good woodwork is the care which must be given it at each successive stage of the work if the finished result is to be as good as it might be. Carelessness or ignorance at any point may cripple the work and bring flaws which will become a constant if not an increasing annoyance. No householder wants, or will, knowingly place himself in the attitude of constant apology.

Woodwork which shows roughened places and flaws; which opens at joints, and perhaps shows light streaks where the stain did not reach the two parts at the joining; parts that are warped out of
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is one of the best of exterior trim woods. Many careful judges think it the very best of all woods for outdoor use. Its extraordinary resistance to all rot influences makes a strong appeal to the thrifty mind. Its popularity with the public is based on a growing knowledge of its worth.

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true; no saving in first cost or time saved in the first finishing can compensate for such lifelong annoyance. Getting into the house a week earlier certainly is not a sufficient reason for the bad results of rush work.

**What to Avoid in Finishing Woodwork.**

When the new home is finished and ready to move into, then comes the question as to how the furniture is going to look in its new situation. The business of “getting settled” is always arduous. It is a time, sometimes of satisfaction in the accomplishment, sometimes of heartbreaking disappointment. Points that have been overlooked or unconsidered jar on the nerves. Sometimes an expert must be called on in order to find where the trouble is, which may be a very small thing, easily adjusted. If the fundamentals are right the details can be more easily made right. If the mind has been fixed on the same thing during the process of planning it will probably all come together in the right way. But if the home-maker has gone in fancy from one fad to another, or if she has selected points that she liked in the homes of her friends and tried to embody a number of them in her own plans, it will probably produce a very unrestful interior—more or less a jumble of unrelated things.

The most essential thing to be considered is the relation of the interior woodwork with the furniture. The woodwork should have a good, rich finish, toned to the color of the other wood in the room, or else it may be painted or enameled in contrast.

Here are some “Don't’s” which an expert Interior Decorator has given:

Avoid a natural wood finish, too light, or crude in tone.

Avoid any of the red stains.

It is usually better taste to select even grain in a wood. Panels may be selected for figure in the grain and treated like a picture in a frame; but this should not be allowed to dominate a room so as to give it a sense of restlessness. In general avoid a pronounced grain.

Avoid a “shiny” surface. A glossy varnish should be rubbed to a dull finish. When a polished surface is desired it should be a soft, satin-like finish, rather than a shiny surface, which will be marked wherever it is touched. The ideal finish is that which is constantly rubbed by the hands to a softly polished surface.
There are two things you want of the wood you put on the outside of your house—long life and the ability to "stay put". In these respects there is a vast difference in the various woods on the market today.

Nature didn't make them all alike. She made some good for one use, and some for another. If you will select woods with regard to their fitness for particular uses, you will experience no disappointment.

White Pine

Three centuries of building in America have brought out the fact that no other wood so successfully withstands exposure to the weather as White Pine.

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SPLINTERS AND SHAVINGS

Report of the Housing Corporation—What Can We Learn From It?

The United States Housing Corporation, in serving its war purpose, has produced and compiled, as a by-product of its activities, a most valuable collection of data. The report of this corporation, issued by the Department of Labor, calls attention to this data, presenting much of it in compact form, so that the public may have access to it, as it states, for use in attacking again the housing problem, which is no less important in the times of peace; and which is one of the absolute necessities in the period of reconstruction.

The building of the small American home has always been an unrelated thing, unstudied in its relation to other things about it. It has been a law unto itself, an individual unit which neither asked, nor permitted co-operation or advice from without itself. As a result our American cities and their suburbs have been permitted to grow and straggled along at the impulse, or interest, of any individual or company which has found it a fit field for speculation. "Build to Sell" has been the slogan, with what results we know.

The housing shortage which faces the nation and threatened the very life of the industries during the war, was not a new thing, as many people apparently believed, arising out of war-time emergency. The war simply localized and aggravated a widespread, chronic and steadily growing trouble of peace times, and one which still persists. The inadequacy of housing of every type, and its exceedingly high cost is one of the threatening features of the present high cost of living.

The data which had been gathered and tabulated by the United States Housing Corporation is a mine of facts which will well repay the most careful study. It is set forth so that the public may have access to it for use in attacking the problem of housing which is growing more important as the time goes by, and which is pressing not only the nation but also the individual for solution—and gives especial point to the "Own Your Home" movement.

Maple Sugar.

With the first promise of spring and the surging of sap in the trees comes the time for the sugar camp and the "sugaring off" so familiar in the tales of the older generation.

Vermont maple trees have been carried down to bobbin factories and veneer mills so fast, and men have been lured away from the farms in such numbers that neighborhoods once famous for quantity as well as quality of their maple sugar now produce less and less every year.

Will maple sugar soon become a thing of the past, associated only with a flavoring bought of the druggist? Shall we sacrifice real maple syrup to the bobbin factories and veneer mills?

Maple sugar is precious, but it is still possible to get it, pure and unadulterated, by sending back to some of the "down east home folks," who are still making it as the sugaring time comes around.

The maple flavor is elusive. It can be lost through careless handling and poor utensils, can be destroyed by the wrong machine methods, and injured in tin or poorly constructed containers. Air can dry it out to a tasteless, colorless sugar, or moisten it to the fermenting stage. But the real, old-fashioned maple sugar and syrup is worth all the care it requires.

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CONTENTS FOR APRIL, 1920

Just a Word—Fire Waste and the House Shortage ........................................... 188
The Cottage-Bungalow—Anthony Woodruff .................................................... 191
A Few Breakfast Room Suggestions—Marion Brownfield ............................ 194
A House an Architect Built for Himself—Charles Almo Byers .............. 197
The Ideal Kitchen—Nancy D. Dunlea ............................................................ 201
A Labor-Saving Bungalow—E. P. Jinkins ...................................................... 204
Attractive Homes .................................................................................................. 207
Two Bungalows .................................................................................................... 210
An Up-To-Date Bungalow .................................................................................. 212
New Stucco Bungalows ....................................................................................... 213

DEPARTMENTS

Inside the House
Decoration and Furnishing—Virginia Robie, Editor
  Furniture for the Bungalow ................................................................. 216
  Found in the Shops ................................................................................. 219
Answers to Questions ....................................................................................... 222
Table and Food Conservation
  Vegetables; Their Place in the Diet—Elsie M. Fjelstad ...................... 225
Household Economics
  Home Cooking ............................................................................................ 232
  Preserving Eggs in Water Glass ............................................................. 232
Heating Notes
  Research Work in Furnace Heating ......................................................... 236
Building Material
  Conservation in Building Materials ......................................................... 240
  The Pointed Wall ....................................................................................... 242
Woods and How to Use Them
  The White Interior ..................................................................................... 244
  Forest Wastage .......................................................................................... 246

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The Cottage-Bungalow

Anthony Woodruff

So much discussion has developed over the term "bungalow," its definition and origin, and just what a genuine bungalow may be that the term has lost its first great significance. Its first lustre has been somewhat dimmed and the issue befogged by the quibble over terms, though the ideal which the term represented has not only remained clear but has developed more definitely, and now holds place in the hearts of the nation of home lovers, even more secure than in its early popularity.

The term "bungalow" at its best, to express it in very modern language, stood for efficiency; conservation of effort, in its saving of steps and labor saving devices; economical first cost,—through building only what the family really needed, without making provision for "entertaining"; convenience—through the thoughtful use of the latest and best ideas in labor-saving equipment; and in addition to the advantages gained by these matters of elimination, a positive sense of brightness and of life inside the house;
plenty of air and a pervading sense of cheer, and with all that charm which belongs to the sense of personality at home in its own surroundings.

All of these desired things may belong to the small home, irrespective of its general plan or type. Whether it is all built on one floor or whether it is two full stories in height is not an essential point in the charm of the home. It is a much more subtle thing than can be encompassed by the number of stories or even the extent of space.

There are, doubtless, a thousand small houses built for every large house. While the American love of display, the national passion for big things which neglects or despises the little things. We must do what we can to eradicate the popular notion that art should be spelled with a capital A and means something costly for the few, something showy to be bought and applied from the outside, instead of something inherent, an essential part of our living and thinking and doing; a quality as necessary and natural in little things as in big things.”

The group of bungalows which is shown here is very far from any seeming attempt at display. It is the sim-

many of these large country homes are very beautiful, yet in any broad sense the beauty and charm of the country at large depends far more on the character of the small houses than on the beauty of the large homes. The great streets of palaces on one side cannot counterbalance the slums on the other side.

As has been said, “We need to fight simplicity of their treatment which makes their greatest effectiveness. This is particularly true of the cottage shown in the frontispiece. The outline of the plan is indicated in the upper corner, showing the general arrangement of the rooms. The big window under the gable is the especial feature of the room and, indeed of the exterior.
In each of these cottages, or bungalows, as one may choose to call them, the cutting of the glass, the trellises about the entrance or over the porch, or the roof treatment has been given especial emphasis. In fact, it is these details which give the charm to the small home, and their effect cannot be over-emphasized. Fortunately, it is not only to the new home that they may lend their grace. Any little cottage may be transformed by a little thoughtful care.
OST modern homes today have something in the way of a breakfast room. Some of these places for the morning meal are merely cozy kitchen nooks and others are as large and elaborate as the regular dining room.

Expense, however, does not always mean an attractive breakfast room.

There are a number of things to consider in planning one. The very first, it would seem, should be the exposure, so as to insure morning sunshine, for this makes even the simplest breakfast room cheerful. For this reason, either an east or a south exposure is much to be preferred to a west or north room.

Good windows make a great deal of the charm of this room. These are a chief feature in the first illustration—a breakfast room said to be the most charming in Southern California. Any room that can look out on a garden might be called blessed. But the breakfast room especially is most attractive when pleasant green growing things can greet the eye the first thing in the morning. A whole meal is pervaded with peace and calm, sometimes, just because of the view. The windows, too, in this room pictured, it will be noticed are very simply curtained, which lets in plenty of sunshine as well as air.

After the exposure has been carefully

One of the most charming sun rooms in a charming land
planned, the color and decorative scheme of the room itself are next in order. Blue breakfast rooms have been a fad for some time past. Many of the most charming rooms have very attractive decorations in other colors. Gray and rose is a suggestion. Pale green and yellow or cream is another. The exposure, too, should influence the colors chosen. Yellow would be too warm usually for a south room, but soft pale green very pleasing.

Both of the rooms pictured, like sun parlors, need no tint or paper, because composed of woodwork and windows, and how effective is such simplicity!

As for breakfast room furnishings, there is a wide variety to choose from. The most popular type of breakfast room furniture being at present, perhaps, the simple sets of white or light colored enamel. Most of these consist of a small round table and four chairs of almost severely plain design. These chairs, with backs just slightly slanted backward, and a few upright spindles, and legs with no rungs, are among the most inexpensive, and are really as attractive as some of the more elaborate designs. Many of the smaller breakfast rooms or nooks have built-in furniture consisting of two built-in seats on opposite walls, a table, and sometimes a buffet or china closet. If this place for eating is merely an alcove opening off the kitchen it is a very convenient feature to have the table movable both for cleaning day, and for use on occasions in the kitchen proper. If such a table has casters so it will slide easily, and even a built-in drawer, it may be used for half a dozen such purposes as ironing, preserving, a little dressmaking while a busy housewife has an eye on the dinner in the kettle nearby, and even a meal outdoors on the porch or lawn during a hot spell. The built-in furniture is apt likewise to be white enamel. But if it is necessary to furnish the breakfast room with "regular furniture," and it is desired to do it artistically, and yet inexpensively, enamel furniture is still just the thing.

Odd pieces on good lines, if given just the right color, will make the room as pleasing and harmonious as can be. In one modest breakfast room, an ordinary pine kitchen table with two drop leaves was enameled black, and with a few touches of bright colored flowers, was extremely effective as well as up-to-date. A gate leg table, sometimes called an English breakfast table, many of which can be found in somewhat dingy oak finish in second hand shops, are very good looking freshly enameled for the modern breakfast room. If black enamel is chosen, it is best used in a sunny south room where it will not seem in the least depressing. Other enamels very good in style are apple green, Dutch blue, dove gray, cream, yellow and even orange with some conventional motifs added in black.

One thing to give special consideration in planning the furniture for this room is the size of the table. Many a housekeeper has one that is too small! It thus makes a meal, perforce, a "course" affair with many trips for dishes that would otherwise overcrowd the table. As many families use this room, in which to eat all but company meals, a table large enough for practical everyday use is sensible, and a table capable of being expanded with boards is not to be scorned in the home where there is a large family and the homemaker must do all the work. To further save her, the decorated table mats of oilcloth, so much in vogue, are both pretty and practical for the breakfast room table.

The Windsor chair is a charming addition to this room and makes the arm chair usually given the head of the table.

The furnishings of the room in the first illustration is an agreeable change from light things and is pleasing because it harmonizes so well with the background. This is something to consider—furniture
that harmonizes perfectly with woodwork and walls.

Wicker furniture is also much liked. Many of the tables in these sets have glass tops placed over cretonne, and while more costly than the plain wooden tables, do away altogether with the necessity of table linen and its laundering, not to mention worry over hot dishes spoiling the fine polish of the table.

The bric-a-brac in a breakfast room should be very limited. A side table or tea wagon with the really necessary service aids, perhaps an attractive serving tray and a fruit basket, flowers and plants ostrich ferns, and a few begonias. The trough was water-proof and the plants gave the room a delightfully refreshing green. Some of the up-to-date ferneries of wicker filled with plants and placed before windows give much this same effect. Also a home painted bench, shelf or stand for ferns is a worthwhile addition to any breakfast room.

The second illustration shows how a porch may be glassed in to make a breakfast room. With double windows on the south, it is warm for winter; and with screens, delightfully cool and "out-doorsy" for summer. The palms, ferns, bird cages are the best choice. Overloaded plate rails are quite taboo. One of the most restful breakfast rooms the writer has ever seen, had a window seat converted into a zinc-lined trough which held a dozen or more potted plants, sword and cretonne curtains help lend the illusion of summer to this room in the winter time. Many a side or back porch close to the dining room, kitchen or pantry could thus be converted into a pleasant room so practical for everyday use.
A House An Architect Built For Himself

Charles Alma Byers

HOWN in the accompanying illustrations is the little home of a western architect, designed and built by and for himself. It is therefore especially interesting as showing his own ideas exclusively, for naturally there were no client's wishes to be incorporated. He was restricted only by the sum of money at his disposal for building purposes. Otherwise—and possibly even this limitation constituted no realized handicap—the little home doubtless represents "his dream come true."

The house should be found interesting for still another reason—to the prospective builder. It is the embodiment of economy, both as to building cost and as to the use of the floor space. In the first place, the plan dispenses with the usual dining room, as ordinarily provided. Yet, as thoughtful consideration of the plan should make clear, this departure from custom has in no way been an impairment to the convenience or desirability of the home. Furthermore, the arrangement is
Showing the breakfast room beyond

compact and practical, the space being utilized only for rooms and features for which there is actual use.

The house, outwardly considered, presents a very attractive and pleasing appearance from whatever angle it happens to be viewed. Belonging to the so-called Colonial bungalow style, of a more or less modified interpretation, it not only is particularly neat and artistic in structural lines generally, but also has some exceptionally well-handled detail work. A combination of entrance porch and open and pergola-covered terrace extends across the front, which, from the pergola-covered end, reaches out into a section of plain pergola and terminates in a porte-cochere. The entrance porch, in which the Colonial influence becomes most pronounced, has a roof extension supported by simply designed round wood columns, painted white, similar to the ones introduced in the pergola work. This combination of porch and terrace is floored with cement and has a foundation of dark red brick, to match the rather massive brick chimney on the outside at one end. The pergola is eventually to be covered, partially at least, with vines, and thus made into a very delightful outdoor lounging retreat.

Other attractive details consist of the little rose-ladders or trellises that decorate the front walls, the lattice-like flower boxes beneath the front windows, the tiny dormer ventilators in the front slope of the roof, and the clipped gable peaks. The outside walls are of narrow resawed siding, which, together with the rafter end and posts, are painted white, and the mildly pitched roof is shingled and painted grayish-green. The trimming, however, is in French gray—which, in conjunction with the white walls, the
grayish-green roof and the red brick work, produces a particularly effective color scheme.

By referring to the accompanying floor plan, it will be observed that there is one large room extending across the entire front. This room, which is thirteen by twenty-six feet in dimension is primarily intended as a living room, although also, that leads into a small breakfast room. It is this room that, at all ordinary times, constitutes the real dining room. It is but nine by ten feet in size, however, and hence utilizes very limited floor space. Comprising a sort of special extension, it has windows, arranged in groups of three and consisting of one of the casement type on either side of a stationary window, in each of its three outside walls. It is therefore bright and airy, and yet always cozy and comfortable. A tiny china cupboard, with an open shelf and a drawer below, the whole elevated some distance above the floor, is a feature of each of the two outside corners. Besides being connected with the buffet-end of the living room, in the manner stated, this little room is also directly connected with the kitchen.

In the other end of the long living room there is an artistically designed fireplace, of the Colonial type, its hearth consisting of deep buff tile, its facing of grayish-buff tile and its mantel-shelf of wood. At each

on special occasions, when several persons are being entertained at dinner, it may also be used as a dining room. Hence, in order that it may the better serve for the latter purpose when necessary, it is provided with a specially designed built-in buffet, located in one end of the room. This buffet, with its small china compartments, its six drawers, large and small, and its three mirrors, is, in fact, a feature that adds materially to the attractiveness of the room, even were it not also a utility.

To the right of this buffet there is a door of glass, serving as a full-length window, and to the left is a swinging door, of glass

Book cases beside the fireplace
side of this fireplace, as will be observed from one of the illustrations, there is a small built-in bookcase, equipped with glass doors and with a two-thirds window above. This room has inverted dome ceiling lights.

In addition to the built-in features already mentioned, the house's interior designing includes a dresser combination, replete with drawers, cabinet with shelves, mirror, and box-seat, in the bath room; a linen cabinet and a water-heater closet, in the connecting hall; roomy cupboards, draught cooler-closet and the other usual conveniences, besides a plaster hood for the range, in the kitchen, and also a pair of stationary laundry trays on the rear-entry porch, while each of the two bedrooms has a good closet, with a small window.

The interior woodwork is of pine throughout. In the living room it is finished in old ivory enamel, Colonial style, and elsewhere it is in white, either paint or enamel. All walls are, of course, plastered, and those of the living room, hall, breakfast room and two bedrooms are papered, in neat and effective patterns and colors. In the kitchen and bath room the walls are finished, to the top of the windows and doors, with a smooth, hard plaster coat and enameled like the woodwork. Hardwood floors prevail in the living room, breakfast room and hall, and pine in the other rooms. The plumbing fixtures are attractive and of the latest design, and the bath tub is built-in.

The bungalow is located in California, and has no basement or cellar, but one could easily be included in the design. The house is heated by a gas-radiator heating system built into the floor. This little home was recently completed in Los Angeles at a cost surprisingly low, even with the present prices.

Homes without the customary large and special dining room, as a matter of economy in the building cost, and also as a help to lighten the work for the housewife, have been considerably advocated in the last few years. The little bungalow shown here is a good illustration.
The Ideal Kitchen
Nancy D. Dunlea

The ideal kitchen is difficult to describe because to each person the ideal differs with her own ideas. Of late there has been a certain slight, but well defined tendency to furnish the kitchen according to the individual thought, making it pretty and comfortable, sometimes in marked contrast to the hygienic severity that domestic scientists seem to regard as sanitary and efficient. The white enamel cabinet kitchen is undoubtedly a great improvement over the old-fashioned sitting room kind of kitchen where a red cover graced the table, a braided rug lay before the sink and a mirror hung above a shelf with a comb and brush close by. On the other hand, the scientific kitchen, where the professional cook, that is to say the cooking teacher, lecturer or dietitian, spends practically all working hours, is not just ideal for the average home woman, who spends happy days in her kitchen. The up-to-date food laboratory, where chemists, doctors and scientists determine food values and effects, furnishes ideas for the clean, neat and convenient kitchen. The labor saving, comfortable, pretty and individual kitchen must be worked out by the home maker for herself. She may get help from stores, exhibitions and fairs, from home expositions, magazines and especially from other thoughtful housewives. The resourceful woman gathers ideas from all these places and adapts or modifies them to suit her own taste and requirements, and therefore, produces a kitchen that is, for her, ideal.

There is a fad, now, for south and east kitchens, because they make such cheerful sunshiny rooms. However, this often-times sacrifices sunshine for the living room where the whole family and their friends have both their rest and recreation. A kitchen is always warm because of the more or less constant cooking and laundry work going on there. A north light is really very dependable to work by. A cheerful, fresh-looking kitchen is easily secured by having light walls and plenty of windows.
After the exposure is planned then the arrangement of its most important furnishings the stove and sink is to be planned. Of course the stove must often go where the chimney gives fireplaces to advantage, for the rest of the house. But it should be arranged in a light, step saving position. The hood built down over the stove, as shown in the last illustration is a feature of many kitchens built today and is to be recommended. It keeps much of the smoke, steam, odors and gas from the rest of the room. Hot water boilers, nowadays, are usually enclosed in a closet near the stove, accessible to the housekeeper or plumber, if necessary, with a door that opens easily and sufficiently wide.

The sink where the dishes are washed is quite as important as the stove where the meals are cooked. The present tendency is to build the sink and tables right across one side of the room with plenty of windows above, drainboards both to the right and left of the sink proper, and drawers and cupboards beneath, except for the space which allows “open plumbing” as required by law. Certainly every sink should have a drainboard to the left, even if the right hand one must be omitted in a small room, for every housekeeper knows that as the right hand washes dishes, the left hand naturally drains them to the left. To have only a right hand drainboard is decidedly “waste motion,” which every kitchen planner, nowadays, studies diligently, to avoid. But a sink should have drainboards at each end. The material for these drainboards is somewhat a matter of taste and pocketbook. Wood drainboards, so easily rotted and darkened by water, have been largely supplanted by those of tile or composition finish. This finish usually backs up the sink all around the faucets and wherever water would be likely to splash, and so is strictly clean and sanitary.

After the room is planned, the treatment of walls and floor is one of the first problems to consider. Probably the great majority of modern kitchen floors are covered with linoleum. Most women prefer this covering to cement, tile, or wood floors. It is more resilient and warmer, to stand upon, which is a vital consideration for any woman standing much in her work. Also, it is comparatively easy to keep clean and nice looking. A maple floor, oil finished, is sometimes used, a pine floor simply painted is the least expensive. Brown, gray, yellow, green or blue are colors chosen for it. It may be covered with linoleum, when desired. Linoleum is perhaps one of the most satisfactory floor coverings.

Tinting of cream, buff, or gray has been popular until recently, for kitchen walls, but rough fin-
ished tint is decidedly dust-, smoke- and grease-catching. An oil tint, which is really an oil painting that gives a hard smooth finish, is much to be preferred though it is more expensive. To give this smooth finish to walls, which is so much more sanitary and consequently cleaner and daintier looking, there have been many smooth wall coverings manufactured. One of these is a very glossy finished wall paper (often designed in patterns resembling tiles) and another is the well known "Sanitas" wall covering manufactured by linoleum people. The paper, first mentioned, has the disadvantage that it is affected by steam more or less.

For light, when working at the sink, both windows and electric fixtures are provided. All these rooms shown have plenty of air and day and night light. The last is quite a consideration with many a woman now, who is professionally occupied during the day and must keep house after dark.

Cupboards are usually planned to utilize every available space, and cupboards close to the ceiling and floor do this. All sanitary ones have doors to keep out unnecessary dust. Special cupboards for dishes, cooking utensils, provisions, an ironing board, cleaning utensils such as a broom and mop, and a cooling closet, are desired by most women.

The good points of the modern kitchen are its step saving arrangements on a limited floor space and its cheerfulness due to light walls, woodwork and sufficient windows. To this end, the outside, and sometimes the door opening into the pantry or dining room is frequently filled with glass. The glass inset in such a door is both very pleasant and practical for it can add a wonderful amount of extra light, say on a north exposure. Shades or curtains can be added as desired.

Other features worth adding to the modern "ideal kitchen" concern the furnishings. There should be a mirror, high stool and a comfortable light armless rocker. The mirror keeps the home-maker prepared for an emergency such as a ring at the door bell, and is also a reminder to smile! The high stool, so back saving when dish washing, ironing or preparing food, can usually be sawed off just the height to be useful and yet shove under the kitchen sink when not in use. As for the armless rocker this is a great comfort for the minutes when food on the stove must be watched by the woman who longs to sew or read a bit, and can do so at the same time, by this strategy.
HIS winding walk, with its little flare of friendly cobbles, says: "Will you come in?" "Yes, thank you, I believe I will." And when you reach the terrace at the end of that great, spacious porch you feel that you've found a place to stay. About then the owner will meet you at the door with a glad hand and lead you right into the lovely living room. Seated in a big, comfy chair, you will find yourself gazing at the cobblestone fireplace. After you have noticed the unusual beams of the ceiling, and the lighting fixtures, possibly you will notice the little office near the front door with space for a big roll top desk, and you feel a desire to see more. You may, builder-owner and this is a new house and it embodies some new ideas. You think you'd like to see the dining room? Well, you can't. Thereby hangs the tale of this house. There is no dining room. You see that plain, paneled door at the extreme right? It leads direct to the kitchen, which fact will be appreciated forty times a day, more or less. To the right of this door, back of those beautiful French doors with the delicate curtains all covered with bluebirds, is a delightful alcove with a dining table large enough to accommodate a good sized family. Presently, one of those French doors will be opened and pushed back against the opening leading to the kitchen, where, to your surprise, by means for you're a friend of the for you're a friend of the

Then the kitchen door will be swung

"Will you come in?" Conrad Chaney, Architect

E. P. Jinkins
through half a circle and will likewise latch in another opening—the one from the kitchen to the dining alcove. Dinner will then be served. In the midst of the meal, you may notice, when the madam needs an extra dish, she simply opens a little door in the china closet between the alcove and the kitchen and takes a dish from a spot where it had been placed by opening a door on the kitchen side of the closet. This alcove was planned as an immediate economy of space and an eternal saving of effort in housekeeping. About 50 per cent of what would ordinarily be dining room space is added onto what would otherwise be a cramped living room and the result is this fine big room, 14½x21 feet. Another 25 per cent of erstwhile dining room space serves as the office. A hat and coat rack with mirror hangs on the wall of this little room, to take care of the wraps of the casual visitor. The china cupboard at this end of the living room could very appropriately be used as a bookcase. It is possible that some dinner party might overcrowd the dining alcove. The dining table would then simply be pushed out into the big living room where there would be plenty of space and the china closet would be found in the right place. So, you see, to be able to accommodate an occasional and unusually large party at dinner, it is not at all necessary to be burdened with other-
wise useless space and furniture in a dining room.

Walk right into the kitchen. Partly because of the labor-saving plan, you will find it in order. The drain board, very properly, is on the left of the sink. The kitchen cabinet is placed by the big double window and just under the window is the built-in refrigerator with provision for icing from the steps, without the ice man even coming onto the screened porch, which porch, it will be noted, is shielded from view in front by the projecting alcove.

Now come across the hall and take a peep at that tiled and spotless bath room. See how the recessed tub is sunk into the floor? That puts the plumbing connections all in the basement. The shower and tub faucets are on the wall, and over the tub and the wash basin are recessed tile soap trays. Opening from the hall is the family coat closet and a large linen closet. The door to the linen closet has a full-length mirror and is raised about six inches from the floor, where the clothes hamper starts and extends into the basement.

The bedrooms downstairs, both of which open to the sleeping porch, are well supplied with windows and closet space.
A sleeping porch in the apple trees

Upstairs, besides plenty of well lighted attic space, there are two good bedrooms with a bath room between them, and at the head of the stairs is a large, family work room accommodating a sewing machine and a drafting table, the latter for house-planning.

The house is 28x38 feet and is built on a 40-foot lot. While the biggest idea about this particular house is the absence of a dining room, yet the real test of the artistic attainments of a bungalow builder is his ability to construct a porch. This 11-by 23-foot fabric of cobblestones, cement, and exposed timbers will pass muster in most any company of front porches. But now just step around in the back of the house a minute. See those wide, overhanging eaves, brought right down low? They are the real making of a sleeping porch—make it habitable in any weather. Fortunately, this porch is on the east side of the house, so that it is shielded from the worst storms and casement windows in the north end keep out the cold winter winds. Forgetting about the winter winds for the moment, make a note of those trees. As it happens, they are apple trees. Just imagine taking a sail in the “Wooden Shoe” on that porch some night in apple blossom time!

Attractive Homes

PEOPLE are beginning to recognize that the sun is the great physician and that sunshine and fresh air are the greatest antiseptic agencies as well as the finest tonics,—with practically all the curative effects of the many kinds of nostrums which used to be administered by the grandmothers when the “kiddies” of that generation were beginning to show signs of spring fever. With this realization, our houses are being filled with windows, the
more windows, the more air and sunshine.

This attractive cottage has been very successfully worked out. The sturdy brick piers give a sense of solid dignity to the entrance, which is at the side of the porch leaving the front lawn unbroken. A screen of shrubs gives a seclusion even to the front porch.

This house has a broad frontage, and only two rooms in depth, giving windows on two sides in almost every room.

The entrance is at one end of the living room, with glass doors opposite opening to the well planned central hall.

The living room is larger than is usual, 32 feet 8 inches by 16 feet, with a wide fireplace on the center of the long wall. The dining room is reached through glass doors. It opens directly both to the kitchen and to the breakfast room, which latter is conveniently located and equipped with cupboards. The entry is well arranged with the broom closet and place for the refrigerator. The clothes chute and draft cupboard are well placed.

One bedroom and bath room is on the first floor with two good closets. In the bath room, in addition to the usual fixtures a case of drawers has been built.

On the second floor, with many outswinging casement windows, are four good sized bedrooms. Each room has large closets and storage space under the roof in addition. The bath room on the second floor is large with a case of drawers not unlike that on the first floor.

Wide siding is used on the side walls, or shingles might be used with a similar effect. The trellises are covered with vines and the planting adds much to the pleasing appearance of the place as a whole. The garage is beyond the house. The strip of green in the center of the driveway adds much to the effect.

Quite unique in its effect is the little home shown in this group. The way the shingles are laid at the cornices gives the effect of thatch, and together with the
carefully worked out details of portico, windows and entrance, makes it a home decidedly out of the ordinary.

The same thoughtful design which is shown on the exterior has been used in the planning of the interior.

In the first place it may be noted that the garage is shown beyond the house and its driveway is past the porch giving a carriage entrance to the porch.

Casement windows reaching nearly to the floor open from the living room and also from the bedroom or den, to the terrace. The interior finish is all in white. A fireplace with windows on either side fill one end of the living room. Beyond, glass doors open to the dining room, the outer wall of which is filled with windows. The dining room serves as a focal center in reaching the rest of the house. Through the hall leading to the attic it connects with the middle bedroom. On either side of the built-in buffet are doors; on one side leading to the rear communicating hall and on the other side directly to the kitchen.

The kitchen is worthy of special study. The parts of the equipment are so placed that the cabinet and cupboards may be reached from either the range or from the sink with only a few steps. The range
is well lighted,—a thing which is not always given the consideration it merits.

In the entry are placed the refrigerator and a broom closet. There is also room in the entry for a work table and chair or for an ironing board.

The rear central hall gives excellent communication. The bedrooms and bath room fill one side of the house. Two of them connect with this hall as does the bath room, the kitchen, the dining room and the basement stairs. The linen closet and an extra closet also opens from this hall. The bedroom closets are of good size, the largest being 4 by 6 feet 9 inches, and the others each 2 feet 6 inches by a little over 6 feet. The ceilings are 9 feet. The attic is 8 feet 6 inches in the center.

There is a basement under the rear part of the house, back of the line of the living room.

The house is well supplied with windows on every side. The planting is particularly successful.

Two Bungalows

![Two Bungalows](J. W. Lindstrom, Architect)

Unusual in the grouping of the porch posts

The small bungalow, inexpensive to build and easy to keep is the type of house which is now in demand. It must be so convenient in its arrangement that it can compete with the two- and three-room apartments as an easy place to live. This competition can be met by the house that is built all on one floor, or with only the less used rooms finished under the roof, as second story rooms.

Here are two bungalows which fill these conditions, as do many that are shown in this special small house or bungalow number.

The first bungalow has a porch covering the entrance, though only part of it is screened. Both entrance and porch
open to the living room. A wide opening connects living room and dining room. In fact wide openings are used to throw the whole floor much together. These might be fitted with glass doors if desired, without losing the sense of openness. Stairs to the second floor lead from the dining room, closed by a door.

The kitchen is very compactly planned and well arranged. The refrigerator stands in the entry and there is a convenient porch beside the entry.
On the other side of the house are two chambers, each opening to the small connecting hall through which the bath room is reached as well as the dining room. On the second floor are two chambers.

The exterior is of stucco with white woodwork and trim. The porch finish is unusual in the grouping of white posts.

The second bungalow is built of brick for the wall height, with shingles in the gables. The two plans are similar in many respects, but proportioned differently. The general arrangement of the main living rooms is the same. The dining room has a high window over the serving table.

The use of brick in building the small house seems a logical building material.

An Up-to-date Bungalow

ERE is a very convenient design for a bungalow, or it might better, perhaps, be called a cottage, as it has rooms on the second floor. It is 25 feet in width and 41 feet in depth, exclusive of porches, and so may be built on a narrow lot; a thing which must be kept in mind since so many real estate developments are, unfortunately, platted with extremely narrow lots, even though with a fair amount of ground area.

The entrance is from the side of the porch, leaving an unbroken lawn across
A vestibule with closets on either side protects the living room in extreme weather. The living room extends across the full width of the house. Opposite the entrance is the stairway, leading from the living room. The fireplace is on the center of the long wall. Wide openings connect with the sun room in front and with the dining room beyond, making a long vista.

The kitchen is well fitted with cupboards. The sink and range are well placed. The refrigerator is in the entry.

On the second floor are two good sized bedrooms and the sleeping porch. The finish on this floor is pine painted and eamedi white. The floors are of birch. The first story is finished in Washington fir and stained a Mission brown.

The exterior is finished with cement stucco up to the line of the first story window sills. From the sills to the roof, the walls are covered with shingles in alternate courses of wide and narrow shingles. The shingles of the walls are stained a silver gray. The roof shingles are stained a moss green. The stucco is cream color and all the trimmings, casings, cornices, etcetera, are painted white.

A gray and white bungalow

Chas. S. Sedgwick, Architect

**New Stucco Bungalows**

ET high on a grassy knoll this bungalow with many windows, has a generous supply of light and air. The entrance is through the porch, which is screened. It is 10 by 13 feet, making a good outdoor sitting room. The living room is entered from the porch; a room of good size which, since it opens to the dining room with a wide opening, makes both seem larger.

The kitchen is of good size and well arranged as to its equipment. The cupboards and sink are conveniently placed with reference to each other.
The other side of the house is given to the sleeping rooms and bath room, all of which opens from a square hall.

In the second design the sleeping rooms are on the second floor. The living room occupies the whole front of the house with grouped windows. The sun-room opens from the end of the living room, and is fully enclosed.

Stairs to the second story lead from the middle of the living room wall. The kitchen is on the other side of the stairs, connecting with the dining room by a passage way. Acknowledgment of the housewife's multiplied duties is recognized by the door between the kitchen and living room; an opening which was never permitted when there was sup-
posed to be a maid in the kitchen, on whom a large part of the housework should fall. When the mistress is her own cook, it becomes necessary to get quickly from the living room to the kitchen many times a day. An electric range may be installed to prevent the heat from being noticable in the living room. Note the breakfast alcove.

On the second floor are four bedrooms and bath room. The closets are finished under the roof. Dormers provide windows at the front and rear.

The house is 28 feet square and built on simple lines. The hooded entrance and flower boxes add to the effectiveness. Both bungalows are finished in stucco on the exterior. The shrubbery and planting are effective against the stucco and add the touch of hominess.
ARCHITECTURALLY, bungalows are improving every year, but furniture for the interior still holds closely to cut and dried ideas. Straight lines we all applaud, but not designs out of all scale with the background or those too massive in bulk. The value of mission furniture is not denied. With its advent much jig-saw carving and stamped ornaments went out of existence. Moreover, the sincerity of the best mission furniture work came when the structural note in furniture was at a low ebb. Poverty of design as well as faulty construction marked the output of the pre-mission period. Good reproductions we have never lacked, but "original" patterns, so-called, offered little, except fair prices, to the public.

With all our respect for Colonial furniture the beautiful pieces of Chippendale, Hepplewhite and Sheraton did not quite accord with the sturdy background of the bungalow. They were too slender of build, too ruddy in tone, too refined in finish for rough plaster and frank oak,—not that they lacked sincerity; they were merely out of tune and out of scale. When Arts and Crafts pieces made their appearance a new era in furniture making began. Based on designs found in the old Spanish missions of California, simplicity and comfort were united, together with a structural beauty as convincing as that shown in the handiwork of the Middle Ages. Here was furniture to win our
unstinted admiration—something to live with in a bungalow.

All honor to the Arts and Crafts movement both here and abroad. It brought home the lesson preached years before by William Morris, impressing anew the fact that art belongs to everyday objects quite as much as to huge canvases and heroic statuary. It gave fresh impetus to pottery making, weaving, metal work and allied crafts.

When the machine replaced the hand, or in part supplemented it, many people predicted that the charm of Arts and Crafts furniture would depart. In some cases it undoubtedly did. The vitality, the spirit of the designs seemed lost in clumsy proportions and awkward constructions. If the beauty of the early work could have been maintained with the entire mission output there would no no need of sounding a word of warning today.

Oak and kindred woods were often discarded in favor of mahogany and birch. Mission shapes are not interesting in mahogany or any smooth, fine-grained wood. must be related to the design—not polished mahogany, not oak if overlaid with varnish. Yet, on the other hand, not striving after the extremely rude, which, when it is artificial is far indeed from the mark. Furniture glued together with an effect of mortises and tenon is very remote from the real Craft idea.

Many bungalows now depart from Craft ideas. Possibly the walls are painted, or carry some other treatment less direct than rough plaster. The simple note is still dominant but greater latitude in furnishing is permissible. Here the earlier and plainest of Colonial patterns are in excellent taste; shaped back chairs with rush or splint seats, windsors of simple type, and painted pieces. Modern painted furniture also has its place, and so has wicker, reed, raffia and severe bamboo. The plainest of Seventeenth Century cane and oak would also be fitting, but not mixed with other styles.

Several furniture makers specialize in bungalow and cottage furniture. Pieces from their workrooms may be obtained
in natural finish, in stained, or painted surfaces. In many of these schemes the home crafter may exercise her own talents.

The interior of one seaside bungalow is furnished almost exclusively with furniture of the second class. The pieces are on straight lines of semi-mission style stained a driftwood gray. The trim is one tone deeper and floors darker still. A very light gray paint appears on the walls. Shades of gaily colored chintz form the only window decoration, except in the bedrooms where draw curtains of light weight linen in dark green can, when needed, shut out the early sunlight. A roller chintz shade has many advantages. It has all the virtues of the regulation shade with the additional advantage of color. If hung within the frame of the window it will not conceal any of the trim, thus winning the architect’s undying regard. At night it has the character of a decorative panel. If the walls are plain an agreeable balance of solid and figured surfaces is secured. Moreover, a window thus treated needs no other adornment—is better without it, unless the dimensions are sufficiently large for a simple curtain in a plain transparent material to be an agreeable addition. Glazed chintz must be used. Cretonnes, printed linens, etc., are too heavy in weave, and not transparent enough.
A dining room in a bungalow used the year around has furniture of the same general type, but is painted instead of stained. Apple green is the color. On the walls is an ivory paint a shade deeper than the trim. A linoleum in large blocks in ivory and apple green covers the floor. At the windows are curtains in which green, rose, ivory and black make a decorative combination.

The living room has the same general color scheme only the furniture is painted black with several big wicker chairs in apple green. The floor is black liberally covered with a rug, woven near Philadelphia, in apple green border lines and an ivory center. Corner designs in green and old rose help in the harmony. Curtains and trim are the same as in the dining room. Both rooms are free from small unrelated articles.

Painted wicker is wonderfully effective and warrants more attention than it has received. Yellow, mandarin orange, blue, even lavender under some conditions, are good body colors. One tone should dominate. Glossy black is sometimes interesting where the rest of the furniture is painted a solid color. Rush, raffia, bamboo and reed are more attractive in their natural tones.

Found in the Shops

HAND-WOVEN rugs made from new materials are popular, and the beautiful designs and colors in which they may be bought make them attractive for country houses, cottages and bungalows. If a matting is laid all over the floor, touches of color may be introduced by adding these rugs, while on hardwood or stained floors there is nothing more suitable.

A variety called the Martha Washington has intricate border designs showing crows’ feet, herring-bone, and Indian designs, which are suitable for porches, sitting rooms, halls, bedrooms, and bath rooms. A Martha Washington 3x6 costs $5.50, a 9x12 may be bought for $21.75.

Another variety of hand-woven rugs is called the Priscilla, and is much cheaper than the Martha Washington, 3x6 being $2.25, while a 9x12 can be had for $15.00. They are made in eight staple shades, and as the materials are bought in remnant lots, they cost less than the new materials in pieces from which the Martha Washington rugs are made. Being, also, made of good material, they are just as good and will wear as well as the Martha Washington rugs, but, of course, there is not nearly so much variety from which to choose. Being washable, people buy
INSIDE THE HOUSE

"The Bird and Rhododendron"

them in preference to others for bath rooms and porches.

The Mourzouk rugs are popular for porches, and are made in many sizes. They are made of fiber, and a 6x4 costs $5.25, while a 9x12 is $26.50. In coloring, the Mourzouks are particularly desirable for bungalows, showing wood browns, soft greens, yellow, and other harmonious combinations.

The patterns in the Priscillas have charming names—"Primrose," "Daffodil," "Sweet Pea." In these are reproduced flowers and leaves delightfully reminiscent of old gardens.

The cloth used in rag carpets made on the looms at Cornish, New Hampshire, and shown in another shop, is a soft "domett," bought in lots of 500 to 1,000 yards,—all white. It is then torn into pieces about five and one-half yards in length, which is as long as can be handled successfully in dyeing. It is then given to the dyer. After being dyed it is done up in bundles, each of which will make enough balls of prepared material for one rug. These bundles are taken to the sewer, who returns them, when sewed to the manager. When a rug is ordered, the manager selects the colors required, and carries the material to the weaver with the design of the rug. It then goes to the finisher who looks the rug over on both sides, fastens any loose threads, sews down the ends of the strips which are woven in to make the design, knots the fringe, and sews on the trade-mark. It is then returned to the manager for shipment. The trade-mark was designed by a well-known artist of the Cornish colony, and this is stamped on each piece of work.

Most of the coloring is done by two workers, one doing the indigo dyeing, and the other all the other colors. Vegetable dyes are used, the fabrics being boiled for hours in the dye, then thoroughly washed and dried in the sun, sometimes being left out of doors several days, and this process has generally proved so efficacious that the colors are as fast as it is possible to secure on cotton fabrics.

In contrast to these Cornish rugs are a number of Kurdish patterns shown in a Turkish shop.

"Rugs made from wool, carefully washed, will never shrink nor become crooked after they are woven," says the rug expert of this large Oriental firm. "This is on the same principle as the tailor sponges his cloth before cutting. Most of the Kurdish rugs which become crooked show the lack of this careful, initial step, for the Kurds, being a nomadic people, are not always in the vicinity of suitable water nor dry conveniences.

"The next step is to collect the clean, dry wool and, after laying aside a suffi-
cient quantity for family use, market the remainder. Now comes the picking or carding, two methods being employed to accomplish this, preparatory to the spinning. In some of the weaving districts, men pickers—Hadladjelar—travel about after the shearing, carrying with them a bow from five to seven feet in length and strung with stout gut. This is hung by its middle from the ceiling so that the cord just reaches the heap of snowy wool. Now, the picker, armed with a heavy, wooden club—tokmak—pounds upon the bowstring, whipping the wool loose and throwing it aside strand by strand. Far more popular, however, especially in the interior and mountainous districts, where the women do the carding, is the use of the implement called Yun-Tiraghe. This is a triangular, solid block into the edge of which are set stiff iron or steel teeth, which protrude upward, placed upon the floor, where, held firmly between the knees, and the wool is drawn back and forth until combed smooth and ready for the weaving. From time immemorial, this combing process has served as the excuse for a peculiarly oriental social function, when the women, flocking together, sit Turkish fashion in circles on the ground combing and spinning while, at the same time, they discuss the matrimonial affairs of their neighbors, or arrange for betrothals between their own sons and daughters.

"If the weather is warm, this animated symposium is carried on out of doors, the soft, green grass for a carpet. If damp or chilly, under cover. So they comb and spin, chat and laugh, and all to the soft whirl of the hand spinning-wheel. After the spinning the yarn is wound up in great skeins for the dyers.

"In dyeing, as in washing, the quality of the water used must be taken into account. The reputation of certain streams has endured for centuries and their banks are lined with the homes of the dyers. Each family holds its own formula for dyes inviolate, handing them down from generation to generation. One may be renowned for its rich, pure reds, another for its blues or greens. All colorings were originally vegetable dyes, made from roots, herbs, flowers, and berries, and as lasting and indestructible as the fabric itself."
A Room in Brown.

R. E. D.—As a subscriber to Keith's, I would like to avail myself of your advice with regard to redecorating our home.

The woodwork downstairs is oak, medium brown, and oak floors. Upstairs the woodwork is white with mahoganized doors in the two front rooms, and brown stained pine in rear rooms. The upstairs hall, also, has the white woodwork.

Our mistake in the present treatment of downstairs, I think, was in having walls and draperies too dark; and the color scheme being entirely in brown, the effect was rather sombre and monotonous.

In redecorating we should like to get as far as possible from the present treatment, bearing in mind the idea of having the rooms as light as possible.

I shall use the rugs I have, but expect to get new curtains and draperies.

The dining room has a plate rail and I have been wondering whether it would be advisable to have the part which extends removed, leaving merely the oak strip.

Ans.—Your plan shows a well arranged though rather conventional interior, and we would like, in our suggestions for redecorating, to get a little more individual feeling into the lower rooms. The wide openings into dining room and hall necessitate harmony of wall treatment, though not monotony; and as you say, the rooms need lightening up. The brown oak, oak and brown reed furniture and tan rug decide the tone of the wall, which must be on the tan rather than gray shades. But it can be a very soft, light tan, with a glint of gold in it, with a deep ivory tint between the ceiling beams. The same ceiling should be carried through in the dining room. If you do over the hall ceiling, we would make that the same, though it is not imperative.

We would use leaf green for the complementary color in living room draperies and furniture. On the little casement windows over book-cases, we would have short, straight hangings of light apple green, thin silk or gauze, pushed well to one side. We would use a valance across the triple window and down each outer side of leaf green Sunfast, with the same shade in velour or velvet on living room side of door hangings. A couple of the reed chairs should be upholstered in the same velvet. A reed fern stand in the triple window filled with ferns, would complete a very beautiful room.

We should not try to make a flat molding of the dining room plate rail. Either take it off entirely or leave it as it is, making the wall the same both above and below.

For the front room upstairs, with white woodwork and mahogany furniture, we have in mind a charming English chintz paper, the leaves and flat blossoms all an indescribable blend of gray and rose and blue on an oyster white ground. Also a chintz to go with it, for a valance and side draperies to the triple window and for upholstering pale green wicker chairs.
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O. D. H.—I am enclosing a partial plan of the first floor of our home, including additions and alterations.

The fireplace of mottled brick, and the built-in bookcases and casement windows above them in the parlor are new. There are sliding doors between this room and the living room which are seldom used, but we do not wish them removed.

The side walls and ceilings are papered but the ceilings are in a bad condition. What treatment would you suggest to put these walls in condition?

The woodwork in these rooms is oak, finished shiny. Would you advise darkening and dulling it? What treatment would be necessary? Would a flat varnish be satisfactory and all that is required for a dull finish?

These rooms face the west and the southwest corner of windows is shaded by a wide porch. We have Royal Bengal rugs of old rose and dull blue colorings, and I had delft blue Sunfast silk draperies between the rooms. Shall I use the draperies again and match them for over draperies for the windows? How would you treat the casement windows and the French doors? Can a shade be used at the doors? I have another pair of draperies which were between the living room and dining room (opening now closed) which I could use if needed. There is only one pole for draperies and this is on the living room side of the sliding doors. The dining room is to finished in chestnut with a beamed ceiling.

Answer.—Unless the ceilings are very badly broken up by the alterations, we should prefer patching up the plaster, then covering it with canvas or cloth that is used for this purpose by decorators, and tinting that.

In regard to woodwork, you have undoubtedly used oak in the new woodwork of fireplace and bookcases, and you certainly would not wish to finish that "shiny." We do not think any "flat varnish" would do much good without first taking off the old varnish with a varnish remover. Or, you could have it sand-papered off and then use the flat varnish. We would like this best. We hope you will finish the lovely chestnut of the dining room without stain or varnish. Just well rubbed, and a light brushing of oil to preserve it. It will be a soft grayish color but the oak furniture will not be out of harmony. For the wall, we suggest a choice between the silk-finished tapestry, and the gray foliage design. Either will be very charming with the gray chestnut, the dark oak furniture, rose draperies at windows, and a warm gray rug with an all-over small self-toned design and a narrow black border. We suggest that you take the pole which has been in living room doorway, and put it in between hall and dining room doorway with crimson velour hangings. Use rose Sunfast for the casement windows—just half a width on each casement, pushed back on small brass rod, and on French door, drawn together in the center of door, so that it covers about half the sash—on small rods top and bottom of door. You can place an ordinary roller shade on the top of the French doors, but it is never done, and I think you will find the Sunfast sufficient, as you can draw it across if necessary. Your room will be unusual and very charming.

A Festive Breakfast Room.

K. H. J.—We are remodeling our home and I wish some advice as to some finishing in bath room, kitchen, breakfast alcove and later in a sun parlor.

Our dining room as it is now finished is in hard pine. We were wondering if that could be changed to white enamel. There is a colonnade opening between living room and dining room that could be left as it is. We are building in a china closet and didn’t want that finished in the pine. What sort of paper should we use with white enamel.

The kitchen is in the north and east of house and the breakfast alcove is off of it. We were planning on using ivory enamel for woodwork of kitchen. What would you suggest for wall? The built-in ice box and other equipment covers almost entire wall space so I was
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Complete Working Drawings (on sheet 24 x 36 inches) including full specifications—enough for any good carpenter to build from. Perhaps you enjoy such work yourself. If so, you can’t go wrong.

It might even be possible to remodel your present garage on these lines. If you do so, of course you will know what kind of lumber to buy. “If you build of Cypress you build but once.” You know “the Wood Eternal” is the champion pergola lumber—does not tend to shrink, swell or warp like so many woods—takes paint and stain beautifully, but does not need either, except for looks—lasts and lasts and lasts and lasts without them. (See U. S. Govt. Rept., reprinted in full in Vol. 1, Cypress Pocket Library. Just mention that you’d like this book, also.)

This Pergola-Garage is an ADDED SUPPLEMENT to the 9th big reprint of VOLUME 28 of that home-lovers’ guide, counselor and impartial friend, the famous Cypress Pocket Library. It’s FREE. Will you write?

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wondering if it would be expensive to tile part way up.
Would the breakfast alcove be finished the same as kitchen? Could one have built-in table and benches made?
Will you give finish for walls and woodwork in bath room—something neat and pretty. If you use any color I would prefer blue as there is blue in the linoleum.
Ans.—In regard to the finish of your interior, the pine woodwork of the dining room can easily be changed to ivory enamel. If the woodwork is now varnished, the surface can be roughened with sandpaper, so as to make the paint catch and hold. With the ivory woodwork, we would use a design in grays with tints of rose. Tint the remaining walls a soft gray. A tile wainscot in the kitchen would be excellent if you don't mind the expense, or you could have dado of Keene Cement, marked off in tile designs.
Yes the breakfast alcove should have the same woodwork and walls as the kitchen. You could give it a little festive look—a gayly painted little table and chairs, bright deep blue with yellow stripes for instance and curtains at the window of blue and yellow Chinese crepe. We should think your carpenter could very well make the simple table and you can order unfinished kitchen chairs, then have your painter paint them.

Bachelor Apartments.
C. R.—I enclose a plan of my bachelor apartment, built only two years ago. I want to finish the walls with a nonfading stain on a hard finish substance that can be washed and look bright and lasting. Also please give a suggestion as to colors in rooms. I am not looking for something cheap.
Ans.—You speak of using “a nonfading stain that can be washed” on walls. No stains of any kind would bear washing. You perhaps have paint in mind. There are several good inside paints on the market. A good oil paint is the only one that will bear washing, and several coats must be used on hard, smooth plaster which is first sized. You will not find it “cheap.”
As to colors—it is difficult to advise with no knowledge of your wood trim or furnishings. The wall colors should be in harmony with rugs, draperies, upholstery. But in general, we would paint living and desk room walls the same—a warm, pale brown; the bedrooms a lighter, softer tone of grayish tan, relieved by some chintz at the windows, etc., in deep, dull rose and green on grayish ground. The bathroom walls, deep ivory. The kitchen, cigar brown for four feet up from floor, then a flat two-inch molding and above that pale tan, and pale tan ceiling. The light tan ceiling in living and desk rooms also.

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Vegetables---Their Place in the Diet

Elsie M. Fjelstad

The importance of vegetables in the diet cannot be overestimated. They supply several things that are vitally essential to the body.

One of these things is water. Water acts as a solvent, emulsifier, carrier and cleanser and it is very important that the body should have plenty of it. Another is cellulose or "ruffage." It has been said that much of the prevalent teeth trouble is due to the fact that teeth are not given a chance to function and thus they decay. This is in accordance with the theory that an unused organ loses its ability to function. Vegetables have this cellulose which is "bulk" and which gives, not only the teeth but also the digestive organs, something to work on.

Vegetables are rich in mineral matter, which is an important tissue builder for the body. Iron, supplied largely by spinach and greens, is absolutely necessary for the body. Calcium, supplied by milk, mainly, but also by the vegetables, carrots, onions, tomatoes, is very necessary for bone and teeth.

Vegetables supply the little known but important element called vitamins. Fat Soluble A and Water Soluble B, recently discovered substances which have been proven to act as repairing agents and stimulators of growth.

No other single food supplies as many essential body foods as does the vegetable. Hence—its importance.

Vegetables may be readily classified: those most rich in protein, the element of foodstuff which makes meat an important food, are: peas, beans and lentiles. These, then, may be substituted on the menu for meats. Those vegetables rich in starch and sugar, the foodstuff which is found mostly in rice, potato and sugar, are: potatoes, carrots, turnips, sweet potatoes, onion, corn, beets. Vegetables most rich in mineral include: celery, cabbage, lettuce, asparagus, cauliflower, spinach, peppers, and cucumbers.

There are two methods of cooking vegetables. One is to add just enough water so that it is all used up in cooking. Exceptions to this method are made in this case for vegetables with disagreeable taste or odor as cabbage and onions. The other way calls for long slow cooking at a low temperature and with a large quantity of water. As a general rule vegetables should be started in hot water. Hot water closes the pores of the food, so to speak, and thus causes the retention of mineral and other valuable foodstuffs.

Dried vegetables have had their water and other moisture withdrawn. Therefore they should be cooked in a large amount of water and soaked in cold water before they are cooked. The dry beans used for baked beans are a good example of dried vegetable. They should be soaked the night before and boiled until tender the next morning. One-half pound
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BUILDING PRODUCTS

It is of a beautiful soft tone of green, and this green is absolutely permanent. The green will last as long as the shingle itself, and the life of Ambler Asbestos Century Shingles is well known—they are truly "last forever" shingles.

Ambler Shingles are made from a scientifically accurate mixture of the best Portland cement obtainable and strong asbestos fibre. It is this combination of indestructible materials that gives to Ambler Asbestos Shingles their remarkable durability and fire-resisting qualities.

So now at last we are able to offer the famous Ambler Asbestos Shingle (already in use on hundreds of thousands of homes) not only in the Newport gray, natural slate and red, but in this permanent, everlasting, beautiful shade of green.

Send for samples showing color and construction.

Asbestos Shingle, Slate & Sheathing Co.

Ambler, Penna.


BRANCH OFFICES:
Atlanta, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Minneapolis, New York, Philadelphia, Pittsburgh and Washington
of fat salt pork should be used for every three cups of dried vegetable. The pork should be placed near the bottom of the jar, the beans put in and a dressing made of one cup boiling water, salt, mustard and two tablespoons molasses poured over them. Bake six to eight hours.

Certain starchy vegetables combine well with succulent ones. The following table may be helpful in knowing what vegetables may be used together:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>Squash</td>
<td>Squash</td>
<td>Squash</td>
</tr>
<tr>
<td>Boiled Potatoes</td>
<td>Parsnips</td>
<td>Roasted Potatoes</td>
<td>Cauliflower</td>
</tr>
<tr>
<td>Boiled Potatoes</td>
<td>Scalloped Tomatoes</td>
<td>Rice</td>
<td>Cold Slaw</td>
</tr>
<tr>
<td>Potato cooked with meat</td>
<td>Carrots</td>
<td>Buttered Potatoes</td>
<td>Tomato Jelly, Stuffed Peppers</td>
</tr>
<tr>
<td>Spaghetti</td>
<td>Dressed Lettuce</td>
<td>Boiled Potatoes, Radishes, Scalloped Onions</td>
<td>Roast Potatoes</td>
</tr>
<tr>
<td>Savre Rice</td>
<td>Lima Beans</td>
<td>Mashed Potatoes</td>
<td>Brussels Sprouts</td>
</tr>
<tr>
<td>Rice</td>
<td>Celery and Green Pepper Salad</td>
<td>Creamed Macaroni</td>
<td>String Beans</td>
</tr>
<tr>
<td>Baked Potatoes</td>
<td>Squash</td>
<td>Turkish Pilaf</td>
<td>Onions</td>
</tr>
<tr>
<td>Mashed Potatoes and Turnips, Fried Parsnips</td>
<td>Duchess Potatoes</td>
<td>Chopped Celery Salad</td>
<td>Boiled Potatoes</td>
</tr>
<tr>
<td>Duchess Potatoes</td>
<td>Lettuce and Watercress Salad</td>
<td>Rice Pilaf</td>
<td>Creamed Cabbage</td>
</tr>
<tr>
<td>Duchess Potatoes</td>
<td>Peas</td>
<td>Boiled, Buttered Potatoes</td>
<td>Buttered, Butterfly Peas</td>
</tr>
<tr>
<td>Boiled, Buttered Potatoes</td>
<td>Fried Green Peppers, Asparagus</td>
<td>Carrots and Potato Casserole</td>
<td>Lettuce Salad</td>
</tr>
<tr>
<td>Boiled Mashed Potatoes</td>
<td>Lettuce and Pickled Beets</td>
<td>Potato Croquettes</td>
<td>Cale, Spinach</td>
</tr>
<tr>
<td>Rice</td>
<td>String Beans</td>
<td>Mashed Potato, Cheese Browned</td>
<td>Cucumber</td>
</tr>
<tr>
<td>Baked Potato</td>
<td>Peas and Carrots</td>
<td>Baked Potato, Cheese Browned</td>
<td>Cucumber</td>
</tr>
</tbody>
</table>

Besides the well-known ways of preparing vegetables for ordinary use, there are some ways that they may be used besides as a vegetable dish. Try these recipes.

**Asparagus Salad.**

Mix with one can of asparagus, cut up, six chopped pickles, one pimento and three hard cooked eggs, chopped. Add salad dressing and serve cold on lettuce leaves.

**Stuffed Celery.**

Mix together three tablespoons cream cheese, one chopped pimento, one tablespoon milk and seasoning. Stuff in the groove of a celery stalk and serve cold as a relish.

**Scalloped Eggs and Peas.**

One cup milk, two tablespoons butter, one tablespoon flour, four hard cooked eggs, one can peas, seasoning. Make a cream sauce of the milk, flour, and butter. Place the peas and sliced egg in a buttered baking dish in layers. Pour the cream sauce over them and bake until brown.

**Bean Cutlets.**

Mash cold baked beans. Form into cutlets, roll in egg and bread crumbs and fry in hot fat. This dish should not be found on the same menu with meat.

**Asparagus Shortcake.**

Three cups whole wheat meal, salt, four tablespoons baking powder, four tablespoons butter, one and one-half cups milk, one bunch asparagus, three cups milk, three tablespoons flour, three tablespoons butter, three hard boiled eggs. Mix the meal, baking powder and salt and moisten with milk. Cook the asparagus and put in a white sauce made of the milk, flour, butter and salt. Put asparagus, creamed between the layers and on top and garnish with grated egg. Bake the crusts separate.

**Carrot Pie.**

Two medium sized carrots, ginger, cinnamon, salt, one-half cup sugar, two eggs, one and one-half cups milk. Make pastry using four tablespoons fat and cutting into one cup flour. Moisten with cold water. Cook the carrots and make the pie the same as pumpkin pie.

**Carrot Relish Salad.**

Equal parts of celery and cabbage, and one-half amount of grated carrot. Add carrots last because of wateriness. Nuts may be added. Serve with mayonnaise on lettuce leaves.

**Potato Fondant.**

Cook one large potato until very mushy. Mash and stir in powdered sugar until stiff enough to mold. Mold into interesting shapes, using different colors and flavors.
Which House Would You Buy?

To intending purchasers the coal chute is an indication of value. Judge from these photographs.

A Kewanee "Armor Plate" Coal Chute on your house makes it look its value.

And it is more serviceable than any coal chute we know of. Ask your building material or hardware dealer. Or—write us direct.

KEWANEE MANUFACTURING CO.
414 N. Tremont St., Kewanee, Illinois

**Guaranteed**

For five years against breakage—will last a lifetime. No cast iron, no glass. Thousands in use—not one complaint.

Fool-proof—simple and convenient for the coal man to operate.

Burglar-proof—positive automatic lock which can be released from any room in the house.

Wide hopper: No littering the yard.

For new buildings or old!

---

**KEWANEE**

**ALL STEEL - GUARANTEED**

**COAL CHUTE**

---

**Whitney Windows**

work easily and smoothly—open outward out of the way—slide easily to either side of opening permitting wide, unobstructed view and perfect control of ventilation. Can't stick, leak, rattle or slam. Furnished complete, ready to set into the openings.

Write for our booklet "Progress in Windows". It contains valuable suggestions and ideas for your home.

WHITNEY WINDOW CORPORATION
138 E. Lake St., Minneapolis, Minn.

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**"Creo-Dipt" Stained Shingles**

For Unusual Effects

Round ridges and eaves—one of many treatments of special appeal to discriminating builders and architects—are a possibility with these beautiful, economical shingles that come already bent and stained.

Thirty soft-toned, fast shades—red, brown, green, gray. Exclusive creosote staining process. Economical material for side walls and roofs.

For delightful suggestions, send today for Portfolio of 25 Laney Photography of Victor Whitney, Homes and Studios, "Dreaming Windows", "Creo-Dipt". Atchison, "Dixie Homes", "Victorian Homes" and 34 inch Shingles.

CREO-DIPT COMPANY, INC.
1022 Oliver Street
North Tonawanda, N. Y.
Home of Fred & Pethier, Bridgeport, Conn.

---
Home Cooking

Good gracious, Caroline is learning to cook! Not at cooking school either—she's learning at home.

No, her mother isn't teaching her. Mother doesn't know a thing about cooking, how should she? She went to boarding school at 14, graduated at 17, married at 18 and took the old family cook along with her.

Since then Mother has had a succession of cooks. But she doesn't know a saucepan from a fryingpan, and she couldn't make an omelet or stir up a pan of biscuits to save her life. She couldn't, really!

And now there is no cook for Mother to get.

Everything costs so much and Father's business isn't what it was and cooks want three times what they used to want and you can't get one at that.

When Caroline came home from the Motor Corps, she found Father a dyspeptic, Mother a nervous wreck, and little Sister Susie's complexion fairly ruined.

The family had acquired the paper bag habit. Saratoga chips and delicatessen cottage cheese and the sort of sausages that are wrapped up in tinfoil, and bakery pie—that's what they'd been living on.

And Caroline being a practical young woman wouldn't stand it.

So she went down town and bought an old-fashioned cook book and started.

I had luncheon at the house the other day and there was a baked potato completely done, not either burned, nor raw; there was a little chop and there were some homemade biscuits as light as a feather.

Mother and Sister Susie cleared the table, we all helped wash the dishes and Caroline shook the tablecloth and swept up the crumbs, and we had a perfectly good, human time of it. Furthermore, Father is remembering how to laugh, Mother is forgetting her nerves, and Sister Susie is beginning to bloom like a rose again.

All because Caroline has learned to cook, and is making a business of it just as she made a business of driving a motor in France.—Reprinted.

* * *

Here's just a practical suggestion for you: If you think you detest housework, and if at the same time there is no convenient way for you to give it up and do something else very much better and more happily than the housework, then just roll up your sleeves and go to it—go to it with the determination that you are going to be the best little housekeeper and housewife in town—and the chances are that you will end by really liking it.

Preserving Eggs in Water Glass.

Water glass is the best known method of preserving eggs. These general rules, if followed, will keep eggs for at least one year. People have kept eggs for five years, but of course they are not like fresh eggs at the end of that time.
Your Coal Window is Like One of These

WHICH?

What do you see when you look at your coal-bin window? Broken glass, ill-fitting sash, battered siding as in the upper picture? (An actual photograph, not retouched.)

Or do you see an attractive Majestic Coal Chute—walls and foundation undamaged?

If your house hasn't a Majestic Coal Chute you can easily have one installed or, if you are building, don't neglect this essential feature. It will save its cost. You can see why. And it will increase the value of your property, not depreciate it.

Protect against further damage or repairs. Get a Majestic Coal Chute—styles and sizes for every home or building. Details and specifications on request. Working drawings gladly supplied.

Ask also about our Underground Garbage Receiver and our Milk and Package Receiver.

THE MAJESTIC COMPANY
804 Erie Street
Huntington, Indiana

Majestic COAL CHUTE

1. Protects Against Damage
2. Enhances Property Value
3. Lessens Depreciation
4. Saves Money

Warm and Ventilate your house at minimum expense and with maximum satisfaction, with the Majestic STEEL FURNACE

Simply built, stays in order, is easily cleaned, burns any fuel with best results because of its longer fire travel. Send us your plans. No charge for laying out a Heating System.

HAYNES-LANGENBERG MFG. CO.
4062 Forest Park Blvd., St. Louis, Mo.

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Plan Future Homes Now with ECONOMY PLANS of CALIFORNIA STYLES—noted for comfort, beauty and adaptability to any climate.

"Representative Cal. Homes" 50 Plans, $1750 to $12,000—$1
"The New Colonials" 55 Plans, $1000 to $20,000—$1
"West Coast Bungalows" 60 Plans, $1800 to $4500—$1

SPECIAL OFFER. Send $2.50 for all 3 above books and get book of 75 Special Plans, also Garage folder FREE.

EXTRA—"Little Bungalows" 40 Plans, $750 to $1000—50c

Money back if not satisfied

P. W. STILLWELL & CO., Architects, 411 Calif. Bldg., Los Angeles

Running Water for Every Home

The Kewanee Water Supply System ends lifting and filling of heavy water buckets in the kitchen and laundry, in the barn, milk house and garage. Simple in construction, requires little attention and works steadily day after day without getting out of order.

There is also a Kewanee Lighting Plant, and a Combination System supplying both running water and electric light, and a Sewage Disposal System.

Send for free booklet describing over 100 plants for farms, country houses, clubs, etc.

KEWANEE PRIVATE UTILITIES CO.
403 S. Franklin Street
Kewanee, Illinois

Water Supply Electric Light Sewage Disposal
Dilute commercial water glass ten times with water.

Pack clean eggs only (eggs should not be washed) in a clean jar or crock. They may be lowered into the crock daily as they are gathered, if desired.

The water glass solution should cover them by at least two inches.

Be sure that the water glass is not too alkaline as the eggs are apt to take on a bitter flavor.

Eggs will keep better if covered and not moved from a cool, dark place.

Four gallons of water glass will pack 50 dozen eggs.

The Potato in Its Jacket.

Examination of this table will show:
(1) that more of the potato is conserved when the jacket is kept on in cooking;
(2) that baked potatoes lose less water when they are pricked after baking.

Some persons find it hard to peel potatoes after they have been boiled with their skins on, but if a fork is used to hold them it is a simple process and one that takes much less time than to peel them before they are cooked. The skins come off much more readily.

<table>
<thead>
<tr>
<th>Wt.</th>
<th>Wt.</th>
<th>Wt.</th>
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<tbody>
<tr>
<td>before</td>
<td>after</td>
<td>after</td>
</tr>
<tr>
<td>peel-</td>
<td>peel-</td>
<td>cooking</td>
</tr>
<tr>
<td>Boiled in jacket</td>
<td>102</td>
<td>...</td>
</tr>
<tr>
<td>Without jacket, in salt water</td>
<td>171</td>
<td>158</td>
</tr>
<tr>
<td>Without jacket, salt added later</td>
<td>141</td>
<td>128</td>
</tr>
<tr>
<td>Water and salt added when half done</td>
<td>122</td>
<td>106</td>
</tr>
<tr>
<td>Cut in small pieces</td>
<td>125</td>
<td>115</td>
</tr>
<tr>
<td>Baked, pricked before</td>
<td>151</td>
<td>...</td>
</tr>
<tr>
<td>Baked, pricked after</td>
<td>172</td>
<td>...</td>
</tr>
</tbody>
</table>

**Potato Candy.**

One large potato.
Powdered sugar.
Flavoring, coloring, nuts.

Boil the potato until it falls to pieces. Mash and stir in powdered sugar until it is stiff enough to form with the hands. Color and flavor to taste and form into small, tempting shapes. Nuts, raisins, dates and cocoanut may be used for variation.

**Painting a Bathtub.**

If it is an old metal tub which has never been painted, the first step is to clean it thoroughly. Wash it out with soap and water or soda to get rid of the grease. Rinse out with clean hot water, wiping dry with cloths.

Then roughen up the surface by going over it with medium coarse sand paper, clean out the dust and dirt with a dry cloth. The tub is then ready to paint.

For the first coat use red lead in oil, thinned with turpentine. Use a flat bristle brush to put this on with, and be careful not to get too thick a coat. Allow this to dry for at least 24 hours. Then put on a coat of white lead in oil, thinned also with turpentine, and let this dry for 24 hours or until thoroughly dry.

The tub is now ready for a coat of enamel, unless you think it will be better to use a second coat of white lead. Use an enamel made for this purpose and stir it well before applying. One coat is enough, and it should be allowed to dry for four or five days. Then when the tub is first used, hot water should not be allowed to run into it first as it might soften the enamel.

If the tub has been painted before it may be necessary to scrape some of the old paint off before sandpapering.
From Your Viewpoint

Do you remember the first catalog you ever saw, with those grotesque wood cut prints and ridiculously exaggerated descriptions—everything presented from the manufacturer's standpoint? In those days service had not entered the mind of the manufacturer. He made his goods his way, and sold them for his own benefit.

What a contrast in impressions and frank presentation obtains in the Richards-Wilcox new catalog on

Distinctive Garage Door Hardware

Beginning with the front cover, handsomely displayed in full color, this catalog is built to accommodate the convenience of the person interested in garage door hardware.

Here are displayed hundreds of sets of distinctive fixtures for doors which operate inside and outside of the doorway—suitable for every conceivable condition—and all so lucidly and completely compiled, so simply illustrated and so plainly detailed that the reader may select unerringly the exact set suited for his garage, his taste and his purse.

A copy of this beautiful book will be mailed to anyone interested in garage door hardware, on request.

Ask for Catalog ZA-22.

The Sorlien Ceiling Bed

A disappearing bed that merits investigation.

It uses neither Closet nor Wall space.

It really disappears.

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Edwards Metal Spanish Tile Roofing

Its scores of vital, practical advantages cost nothing more than common roofing, yet mean tremendous economy—needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

Home-builders—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new book on beautifying the modern American home by use of Metal Spanish Tile is yours for the asking. A postal will bring it.

The Edward Manufacturing Co.
The World's Largest Makers of Metal Ceilings, Metal Shingles, Metal Roofing, Siding, Rolling Doors, Metal Lockers, etc.
521-541 Culvert Street, Cincinnati, Ohio.
Research Work Relative to Furnace Heating

The work which is being carried on at the University of Illinois for the investigation of furnace heating and the heating plant is a matter of unusual interest to home builders, some account of which was given in this department last month. A warm air furnace has been set up and installed under conditions quite identical with those under which the ordinary furnace must operate, in order to study the conditions in a scientific way.

Objects of the Investigation.

The principal objects of the investigation are briefly stated as follows:

To determine the efficiency and capacity of commercial warm-air furnaces under conditions similar to those existing in actual installations with leaders, stacks and registers to form a complete system.

To determine satisfactory and simple methods for rating furnaces so that the proper size and type of furnace can be definitely selected for the service required.

To determine methods of increasing the efficiency and capacity of furnace heating equipment and the advantages or desirability of certain types of design.

To determine the heat losses in furnace heating systems and the value of insulating materials as affecting the economy of the furnace or the leaders and stacks, and finally of the system as a whole.

To determine the proper sizes and proportions of leaders, stacks, and registers supplying air to first, second and third floors.

To determine the friction losses in the cold air or recirculating ducts and registers and their proper size, proportions and arrangement or location.

Eventually, to make a study and comparison of outside and inside air circulation as affecting the economy and operation of furnace systems.

In this investigation there are not only many new problems to be observed and studied. Delicate measurements of the air currents must be made in order to locate the currents and establish the actual movement of the air currents. Exact temperatures must also be established. So great is the mass of work necessary that it will probably require two years to carry through the program. The National Warm-Air Heating and Ventilating Association is co-operating with the University in this research work.

Special Problems.

There are two vital problems, which have made and will continue to make the testing of a gravity warm-air furnace heating system a most difficult and elusive undertaking. These two problems have already involved a great deal of research work and up to the present have represented the principal work of this investigation.

The Problem of Temperature Measurement.

The first problem deals with the measurement of the temperature of air flowing through the ducts, casing, leaders and stacks of a furnace system.

Covering for Pipes.

While much of the work is technical and does not carry its full significance to the lay mind, some of the results seem very plain and are significant. One of the most surprising discoveries relates to the covering of furnace pipes. It seems to have been taken for granted that any pipe covering was better than none, and that any kind of asbestos covering was suitable.
For Every Kind of Building

In homes, clubs, office buildings—in fact where ever people live or work—greater protection from the weather is assured through the use of Chamberlin Metal Weather Strips. They are considered essential in modern building construction.

Home owners realize that Chamberlin equipment effectively prevents dangerous draughts, shuts out soot and dirt and also conserves fuel by keeping the heat in.

Those who are responsible for larger buildings find that greater economy, cleanliness and satisfaction are secured when Chamberlin Metal Weather Strips are on the windows and doors.

Over a period of 26 years Chamberlin equipment has proven its value. Every year more and more Chamberlin strips are installed. We guarantee them for all time, install them ourselves through branch service offices located in the larger cities. You are assured of complete satisfaction.

Send for Chamberlin Booklet

Plan to put Chamberlin Metal Weather Strips in your home now. Write us for our booklet "26 years of weather stripping." It contains interesting information for home builders and home owners.

Chamberlin Metal Weather Strip Company
112 Dinan Building, Detroit, Mich.
The data on heat loss was regarded as important enough to justify the setting up of additional special apparatus for the testing of furnace insulating materials. This very interesting apparatus has made possible the determination of the absolute, as well as the relative, heat insulating properties of asbestos preparations, paints, metals, and air spaces.

The results of the tests tend to show that three-ply air-cell asbestos paper cuts in half the coefficient which represents heat loss, while a single layer of asbestos paper apparently increases the heat loss over that of the uncovered bright tin leader. Quoting directly from the report:

"This appears to be due to the higher coefficient of radiation of asbestos paper as compared with a polished metal surface, and also to the increased surface area of the asbestos covering. This at once brings up the special problem of relative values of insulation methods in this particular field where thin bright tin pipes are used. In order to secure some corroborative data along this line, a special heat transmission plant supplied with low-pressure steam has been set up by V. S. Day, research engineer, and a few of the more interesting results are given in the table below. In each case, a number of duplicate runs of at least 10 hours' duration have been made."

The relative heat losses from thin sheet metal pipes when covered and uncovered, are shown in the table, bright tin uncovered with a coefficient of 1.40, while the heat loss with 3-ply air-cell asbestos paper is shown as .70, et cetera.

<table>
<thead>
<tr>
<th>Description of Drum</th>
<th>Ht Steam Condensed in 10 Hrs</th>
<th>Coeff of Condensation of Asbestos</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bright IC Tin, 1 Leader Section</td>
<td>11.63</td>
<td>1.40</td>
</tr>
<tr>
<td>2 Same as NY but covered with one sheet 10 lb Asbestos Paper</td>
<td>17.60</td>
<td>2.30</td>
</tr>
<tr>
<td>3 Same as NY but Painted with Gray Enamel</td>
<td>18.14</td>
<td>2.32</td>
</tr>
<tr>
<td>4 Same as NY but Painted with Gray Enamel, as in NY case</td>
<td>18.88</td>
<td>2.40</td>
</tr>
<tr>
<td>5 Black Iron N° 28 US Gage</td>
<td>18.29</td>
<td>2.25</td>
</tr>
<tr>
<td>6 Galvanized Iron N° 28 Gage</td>
<td>17.72</td>
<td>1.55</td>
</tr>
<tr>
<td>7 Same as NY but Covered with 3 Ply Air-cell Asbestos Paper</td>
<td>5.86</td>
<td>70</td>
</tr>
<tr>
<td>8 Same as NY, with 8 Air Space Made by double Wall of Tin</td>
<td>6.32</td>
<td>78</td>
</tr>
</tbody>
</table>

*Coeff based on temp difference Steam to Air

In these tests an auxiliary furnace with a single leader pipe was used. Temperatures were taken at various points within the pipe by means of an electrical device using thermocouples, and the heat flowing from the pipe was measured and compared with that supplied at the furnace.

Further experiments have been conducted by the same investigator to determine the value of pipes made of two layers of tin, nickel-plated tin, galvanized and black iron and pipes covered with paint and with several types of commercial asbestos paper.

Result of Coal-Burning Tests.

"Tests on the present plant show that only about 55 or 60 per cent of the coal burned is transmitted to the air as it passes through the furnace before it enters the basement pipes. Of this heat, about one-fourth is lost from the horizontal and vertical pipes running to the registers."

"Of the other 40 to 45 per cent of the heat value of the coal, about 15 to 20 per cent is carried away in the flue gasses and is necessary to maintain the chimney draft and burn the coal. There still remains about 20 to 30 per cent of the heat which is unaccounted for. Our investigators are making a special study of this loss with a view to reducing it."

---

**If you are planning to build a home or have some remodeling in mind, give comfort and convenience a first consideration. Make the new house a real home complete with the service secured by the installation of the "Minneapolis Heat Regulator".**

It operates automatically, maintaining exactly the temperature desired at all hours of the day and night. Works perfectly with any style of heating plant, burning coal or gas. Affords a considerable saving in fuel and lasts a lifetime—many devices installed 35 years ago still giving good service. Sold by dealers everywhere and guaranteed satisfactory.

Write us for booklets

**Minneapolis Heat Regulator Co.**
2725 Fourth Avenue So., Minneapolis, Minn.
That Robber Pipe

puts the Hess Welded Steel Pipeless Furnace in a class by itself. This arrangement (patented) provides an extra compartment in the pipeless furnace, which we connect with a separate or "robber" pipe, to your bathroom or kitchen, when they are shut off from the other rooms in the house. Other pipeless furnaces cannot supply this efficiently and the lack of it is one of the serious limitations of the pipeless method. The arrangement is easily operated and the heat can be divided or thrown into the one large register, as you want it.

Hess Pipeless Furnaces are wonderfully successful and frequently surprise our customers and ourselves with their efficiency. Send for our latest booklet describing this and also our pipe furnace; also our sixty-three page list of customers, some of them your neighbors, who use Hess Furnaces, and who will tell you of their complete satisfaction.

Here is a suggestion: The supply of steel is very limited and early purchasers will secure the lowest prices of the season and will be sure of deliveries, which will be doubtful later on, even at advanced prices. The best time is right now.

Hess Warming & Ventilating Co.
1217 D. Tacoma Building
Chicago

Special Rates to Contractors

Artistic Interiors

How to produce them is explained in our illustrated book for the home builder.

There is a free copy for you if you will write for it.

Berry Brothers
World's Largest Makers
Furnishes and Paint Specialties
Established 1858
Detroit, Mich. Walkerville, Ont.

Lindstrom's Artistic Homes

This series of beautiful house designs are published in three books containing a total of 240 plans of Bungalows, Cottages and Two-Story Homes.

The designs have been carefully worked out and are extremely practical as well as economical to build. They contain all the new and up-to-date features of home-building. Price of books, $1.00 each.

SPECIAL OFFER—All three of these one-dollar Plan Books for $2.00. Send in your order today.

J. W. Lindstrom
Architect
627 Andrus Bldg. : Minneapolis, Minn.
Conservation in Building Material

The time is past, and probably never will return again in this country, when building materials may be wasted with impunity. There are materials and supplies for all our legitimate needs, but none for our old-time American wastage. Far seeing builders are looking over the local field to discover possible local materials, which can be obtained in the community or in the vicinity.

Local Materials.
With the difficulties of transportation, local materials should be sought as much as possible. The use of stone and sand which is found in the locality, especially when they are good materials and good in color, tends to give an architectural unity. When well used this is an asset to the community and should, in reason, be an economy, also.

Where a building material is manufactured has not been taken largely into consideration because, before the war under normal conditions, the industries were so organized that practically any manufactured material could be bought for much the same price in one part of the country as another, and conversely, a material was no cheaper in the city or community where it was made than in the great city a thousand miles away. Transportation costs were put into the general costs in many places, and then forgotten as a possible place for cutting expense. Few inducements were offered which should tend to bring about the use of local materials and products, though there might be positive advantages in such use in addition to the economic ones.

Following the years of world wide destruction of our material resources the necessity of conservation in all kinds of materials brings a realization of the limitations in the output of the factories. With the need for building materials constantly increasing, the response to the pressure may carry us into wider fields than those bounded by the old traditions and bring us a wholesome enlargement of our possibilities in the way of new ways of using the materials which are about us.

New forms of construction and new methods are being brought to the attention of the builder as a general thing, each in response to a need, or as the solution of a problem.

Developments.
Fire resisting paints and solutions, which have stood well under the tests of the Federal experiment stations have been put on the market in response to the need for greater fire protection for the small builder. Asbestos shingles and asbestos products are in this class for fire protection, adding the advantage of good color.

Metal lath and cement stucco are developing new forms, and in some ways revolutionizing their old types of construction; developing simple systems of metal reinforcement for thin slabs of concrete,—a matter which may be adapted and developed further in many ways, and almost without limit.
Engineering skill has also devised light weight, double strength wooden trusses which will carry a large open span without posts.

The coal shortage has brought to general attention the need for insulation against wind and storm, so that it is possible to maintain an equable temperature, in our buildings, and given special importance to the materials and methods which will make it possible to economically heat our buildings during the severe seasons. This is true also in the milder climates, though to a lesser degree, as no greater discomfort can be found than that experienced in a mild climate on a raw disagreeable day. Insulating quilts, so prepared as to be applied with the minimum of labor, weather strips, and calking around joints all offer their help.

Research Work in Heating.

Fuel conservation in house heating has been taken up from the other angle, and for more than a year a series of tests have been carried on under the direction of engineering experiment station of the University of Illinois in co-operation with National Warm-Air Heating and Ventilating Association, reports from which are given under our Heating Notes. This research work is notable for the spirit in which it is undertaken; that so important a matter as the heating of our houses should be put on a practical scientific basis, instead of being calculated on more or less "rule of thumb" methods. Sensitive instruments have been devised in order to measure delicate air currents and establish and verify the actual facts in a heating installation which it has not hitherto been possible to know. Reports of these tests cover many interesting points.

Hot Water Heating.

Ways of heating water electrically as well as by means of gas have been devised. By either method, the simple turning of the faucet will give hot water heated instantly with the turning of the faucet, with the closing of the faucet the heating process is shut off. The many satisfactory types of gas water heaters are fairly well known for they are installed all over the country. A new electric water heating faucet has lately been developed where the heating unit is confined to the faucet itself. These, we are assured are giving excellent satisfaction and have been in continuous service for the last few years.
Standardization.

In every field of business, standardization has been an aim, and in a large degree an accomplishment during the war period. In modern building practice it is particularly desirable. Standardization, in sizes, in materials, and in processes, which will reduce the number of patterns manufactured, or which gives larger range for quantity production is conservation measure which is being largely advocated and which it is conceded will not only reduce costs in building practice but will at the same time tend to help in bringing system into this great industry, which because it is so involved and complicated as a line of business has always been more or less of a mystery to the uninitiated,—the man about to build.

The present trend toward conservation in building materials is no new thing, however, if one takes into account the massive building which was considered necessary in colonial building or even in the first tall buildings. With steel and reinforced concrete engineers have performed miracles in a constructural way.

In smaller building only has there been so little change. New methods and materials come slowly into use on account of the general conservatism of the home builder. New things are tried out slowly to be sure they are satisfactory; but in no place have we greater need of all the help that progressive modern thinkers can give us than in the building of the home.

Value of Painting.

If the only use of paint was to make people feel more cheerful and give them a little more pride and self respect, it would be worth all it costs. But with lumber and labor costing as it does today, painting really pays two profits,—one in beauty and good looks, and another in saving lumber and dollars.

Years ago when the South was full of timber and we found trees in our way, and burned them to get land cleared, a man could let his buildings go without paint and not lose much money by it, however much he lost of good cheer and beauty. But that day is past, paint now pays its way in saving, besides giving better looks. In fact, the man who is liberal with the paint on his buildings gets the good looks and general satisfaction free of cost, for it actually is cheaper to paint than to neglect it. John Upton.

The Painted Wall.

In the Spring the house wife's fancy always turns to thoughts of paint.

The modern home, with its sanitary requirements and the many solutions to labor saving problems which it requires, owes a considerable indebtedness to the modern painter, with his satin smooth enamel surfaces. The spot-light of feminine attention at the present time is turned on the kitchen. It must be one of the most beautiful rooms in the house, where mere "prettiness" can not be tolerated. The painted wall has made this possible, and the enameled wall competes even with the many beautiful varieties of tile as a sanitary wall, with advantages in its favor aside from that of cost, as there are no joints. When the kitchen has been planned after the newest manner and the fixtures set in relation to the place they have in the "routing of the work," and all the labor saving devices been installed, then comes the final matter of the surface, both for wall and woodwork; a surface which can be wiped off with a cloth. The enamel surface answers this need.

In the white kitchen the refrigerator as well as the cabinets may all be enameled, even the gas range may come in enamel, making the kitchen a thing of beauty.

In the bath room the painted wall is, if possible, even more of a necessity, and an enameled finish allows the room to be kept spotless as well as making the wall waterproof. The blue and white bathroom, or the yellow and white—depending on whether it is a sunny or a north room—are perhaps favorite color schemes when the room is not entirely white.

The vogue of the Colonial house carries with it white wood work for the interior of the rooms. Perhaps there is no type more generally admired, or used, than the paneled Colonial dining rooms with the walls all enameled white, or the creamy tone time has given the white interior of Colonial times.

Nor is the light interior in any sense restricted to the Colonial type of building; it seems to meet the general feeling for a light, cheerful color scheme in the home. With the lovely soft tones which are obtainable and the flat surface which may be given, any color scheme may be admirably carried out.
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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 White Interior

OME one has called this the Period of White Enamel. An appreciation of our own great building period, due to an increasing knowledge of the beauties of the fine old Colonial houses, has indeed largely influenced the builder of modern homes. But the influence of Colonial building, strong that may be, is only in part responsible for the vogue of the White Interior at the present time. In part it may be the last stages of the reaction from the excessively dark finish given to wood work some years ago,—as part of the so-called Mission finish given to bungalow finish and furniture. In part it may be the effort to use less expensive woods for the interior finish while preserving the beauty of the interior. Be that as it may the white or light painted interior is to be found in every type of a house, and in every variety of conditions.

Perhaps more than anything else the use of light paint for the interior woodwork shows the need people are feeling for brightness and cheer in the home, and the greater freedom with which color is being used in the home.

When it has been decided that the woodwork in the new home is to be painted or enameled, that fact should be taken into account when the kind of wood to be used is specified, and such wood be selected as will give the most satisfactory results when painted. This is a vital point. Failure to take into account the individuality of the wood has many times brought trouble and disappointment, and often unexpected expense, during the progress of the work or in the results.

When the interior woodwork is to be enameled woods should be selected which are neutral in grain and color. Among the woods which are most suitable for finishing in enamel are birch, gumwood, bass, whitewood, maple and the soft non-resinous pines. Especially for the better class of house many good architects, through long and intimate acquaintance with certain hardwoods, tend to specify such woods as the only base for all white treatment. Many of the fine pieces of beautiful enameled and painted furniture are made of the most costly woods. The first cost of the wood, in such cases, is so small a part of the total cost, with its exquisite workmanship that there is not sufficient economic reason for using less expensive woods. The same thing may be true in an expensive house, but in much of our home building the small savings are of importance.

In the first reaction from the darker finishes people sometimes talked of the
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M. L. KEITH
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white and enameled finishes as "showing the dirt." It was soon realized, however, that if dirt was present it is much better to see it. It was also asked if it was a costly process and a lasting one. It is true there have been cheap, unsatisfactory enamels on the market, and these are costly at any price. If high grade enamels, made by a reliable manufacturer, are properly applied, there is no element of frailty in the finish. The enamel surface is washable, and so is easily cared for and kept in fine condition. It need cost no more than any other good job of wood finishing, and indeed may cost less. It costs so much for the labor in applying any kind of finish, especially in a big job of work, that the difference in price per gallon between a cheap and a fine enamel is comparatively insignificant as compared with the possibility of the work having to be renewed if unsatisfactory. "Cheap finishes by the gallon are expensive by the job."

Enamel paint is a varnish paint. As enamel partakes of the nature of both paint and varnish, its permanent whiteness depends very materially on the grade of the varnish as well as the paint ingredients. Wood that is very light in color requires less covering capacity in the paint. A resinous quality in the wood tends to stain the paint, and knots must be given a thin coat of pure white shellac before finishing. Especial care should be exercised in white enamel work. The first coat of enamel, as with paint, is always of especial importance because its penetration and smoothness give the basis for the following coats. In enamel finishing, the first coat consists of pure white lead mixed with equal part linseed oil and turpentine, plus a small amount of dryer. This is followed by two or more coats of white paint and then by one or two coats of enamel, depending on the quality of the job desired. If a hard, dull finish is to be secured, rub the last coat with pumice and water. Experience is needed to accomplish the best results in rubbing. The greater the number of coats the harder and more beautiful will be the finish. It is possible, however, to get a dull or semi-gloss finish or a flat finish, without rubbing, by the use of a last coat prepared for that purpose by the big, reliable manufacturers.

In enameled wood work it is not the aim to preserve either the grain or color of the wood work, but instead to give a dominant effect to the color or tone which is essential in the color scheme adopted for the interior. The decision as to the color is not an independent thing to be decided upon for itself. It is only one of many threads which must be woven together in the successful interior. White wood work, or old ivory fit so well into many color schemes that one or the other is very generally adopted as the basis of the color for the rooms, without danger of jeopardizing the whole.

Forest Wastage.

The tremendous destruction through forest fires in the last few years surely should rouse the nation into taking more precaution for the protection of the national heritage.

Investigation as to causes, the holding to personal accountability and education of the people—from the boy scout to the man on a hunting trip—into taking greater precautions would also result in fewer forest fires. The U. S. Forest Service is issuing these pithy statements which are especially pertinent as the outdoor season approaches:

"Forest destruction is quick—forest growth is slow."

"Burned timber pays no wages—keep the forest productive."

"A tree will make a million matches—a match may waste a million trees."

"Take no chances with lighted matches, burning cigarettes, or pipe ashes, brush fires or camp fires."

"Are you practicing fire prevention and forest protection?"

Smaller Spools for Wood Conservation.

One would hardly think that a reduction in the size of spools upon which ordinary sewing thread is wound would make any material difference in the shipping space of railway cars; nor in the amount of wood used. How closely the government agents figured to save every possible cubic foot of storage space is shown in the order reducing the size of spools.

The government authorities estimate that it will relieve the burden on the railways by cutting down to the extent of at least six hundred cars a year in the number required to transport the material used in the spool cotton industry.
KEITH'S MAGAZINE
ON HOME BUILDING

CONTENTS FOR MAY, 1920

Just a Word ........................................ 252
The Building Problem in Seattle—Louise N. Johnson .... 255
The Bay of Windows—Katherine Keene .................. 259
Keeping the Automobile in the House—Charles Alma Byers .... 262
Retaining Walls—Their Effects and Construction—M. Robert Conover .... 265
Why not have the Wrens Nest in Your Yard this Season—Adeline Thayer Thomson .... 268
Colonial Homes ...................................... 270
A Carefully Planned Bungalow .......................... 272
A Substantial Home ................................... 274
The Porch in the Plan ................................ 275

DEPARTMENTS

Inside the House
Decoration and Furnishing—Virginia Robie, Editor
Spring Household Notes ................................ 279
Found in the Shops .................................... 282
Answers to Questions .................................. 284
Table and Food Values
Fish as Food .......................................... 290
Suggested Menus Using Fish ............................ 292
Household Economics
Planning the Kitchen for Efficiency .................... 294
Rolls of Wall Paper Required .......................... 296
Painting the Screens ................................... 298
Heating Notes
Recirculation of Air in the House ....................... 298
Evaporative Tests ..................................... 300
Building Material
Cement Asbestos Shingles ............................... 302
Woods and How to Use Them
Care of Woodwork ..................................... 366
Answers to Questions .................................. 368
Splinters and Shavings
Apartment for Children—Comparative Figures—Book Review ... 310

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The Building Problem in Seattle
Louise N. Johnson

OME building in Seattle has been, and will continue in future years, to be a great boon to her civic life. Pride in a home one owns oneself implants in the lives of the generation growing to manhood the seeds that help them to develop into home-loving and helpful citizens, men and women who will be a credit to their country.

The class of homes which is finding the most popular favor today is the five to seven room bungalow. This does not mean that home building activities are confined to this type, but in its varied adaptations it is certainly coming into great favor. It is not the difference in cost alone that is giving it its place in the sun. These fit peculiarly well in the picturesque Western scenery; then, too, they are easier to take care of; many steps are saved by the elimination of a second story, and they are particularly a valuable asset to a housewife who is caring for her house without the assistance of a maid.

When the shipbuilding boom in Seattle reached its apex in the summer of 1918, the unprecedented increase in population caused by the enormity of Government war orders brought the city face to face with a crisis paralleled by few cities in the country. Every nook and corner of the city was packed; old houses were remodelled, and even those that were not, answered the purpose of temporary living quarters.

It was then that the city realized its condition—war orders piling up, laborers swarming into the city to accept positions, hotels and apartments filled to capacity, and no shelter to give the men on their arrival. So Seattle came to the front and put on a campaign, a big movement as strongly backed as Liberty Loan and Red Cross drives, with "Own Your Own Home" as an objective. It was inaugurated by the Chamber of Commerce through the More Homes Bureau, and aided by the shipbuilding plants, real estate men and contractors generally. Briefly the plan was this: To give every working man desiring a home of his own
a fair opportunity to procure it at a reasonable cost, and an opportunity also to pay for it in installments. Through the co-operation of the architects, plans were submitted for the most economical modern small homes. These plans were then passed on by a committee and certain ones standardized; the various contractors each put in figures at which they would erect these homes. In most cases the figures were such as to encourage the average renter to build a home of his own.

The spirit with which the workers generally adopted the home building plan was gratifying, and the restrictions placed on building during the war were lifted for the purpose of this emergency. Shortly after the close of the war the More Homes Bureau dissolved, but home building has kept up at a rapid pace. According to the United States Geographical Survey, Seattle ranked first in building in 1918.

Its general prosperity, however, was not limited to the working classes. Business of all kinds was unusually active during this period, consequently there was a demand, also for a somewhat better type of home for those who had come to take a permanent part in the city's business life. To meet this demand a class of homes was built ranging in price from about $3,000 to $7,000. The great number of these homes built during 1918, and from that time until now (the demand in 1920 still exceeding the supply) has inevitably determined the type of home which will be most
familiar in Seattle for years to come, and the city is to be congratulated that during this period, when home building had become such a necessity, so many of the smaller homes were built with so much intelligent forethought.

One group of homes particularly typical of Seattle’s home building is that of Gardner J. Gwinn, architect and builder, who has built during the last two years over one hundred six bungalows of the type illustrated. These are in the north end of the city within walking distance of the University of Washington. The success of his building achievements and the demand for all the available homes is a tribute to his genius as a home builder; one who not only builds a home attractive to the eye, both the interior and exterior, but who builds it substantially, embodies all conveniences, and then sells it at a price within reach of the average purse.

When starting his venture, Mr. Gwinn purchased a small tract of land and erected a row of sightly bungalows. Long before they were completed they were sold. He then purchased an adjoining tract, where his bungalows were in equal demand.

Local fir lumber is the essential material used in their construction, which has been adapted to varied purposes. Both the half-shingled bungalows and those of siding are represented.

All of the bungalows have hardwood floors throughout; while the mantels vary in style in each home, the fireplaces are all of tile and pressed brick. The individual owner has sometimes selected the finish of the interior trim, but a strong preference has been shown for soft old ivory, while driftwood gray has also had a number of advocates. Oak stain has been used in a few of the bungalows.

A bungalow is never so dainty as when it possesses French doors and casement windows, and all of the Gwinn homes have these attractive features. In a great many also the windows and doors are of plate glass. The housewife with a desire to make her work as light as possible welcomes the dainty little breakfast nooks which are in all of the homes. Then all of the houses have full cement basements and furnaces, and quite a number have garages in the basement.

There are also other conveniences not found in many homes sold at much higher prices. Maybe one of the most important of these is the recessed bath tubs. While it was more expensive to equip the homes with these tubs, their advantages were so evident that the expense was amply justified. The dirt that ordinarily finds its way both under and between the tub and wall, with the aggravating corners, becomes no part of the cleaning problem. They are built into the wall, and no part but the open surface has to
be dealt with. Each is fitted with an overhead shower, a contrivance not to be advantageously used with the tub standing out in the room. The wash bowls are likewise built in. The bathroom floors are of tile.

The cost of the bungalows shown in the illustrations has been very moderate. Their architecture is especially adapted to the climate of the Northwest, where the rainy seasons are long and the sun-interiors of these bungalows, as to their arrangement and decoration. They have attractive fireplaces, and window arrangement, and there is a pervading sense of good cheer and brightness in the rooms.

When the fact is also taken into consideration that these prices include not only the cost of the bungalows themselves, with their many attractive and delightful features, but the cost of all street improvements, pavements, sewer, gas,

mbers never extremely hot. Hence the entrance of sunshine has nowhere been barred. When roses or other flowering vines have been twined over the lattice work and found their way over the open porches, these little bungalows are going to be not only picturesque and homey, but distinctive. A little imagination as to the possibilities of the homes when the grounds are developed, shrubbery planted and the owner's individuality stamped on each, will bring up a very pretty picture of this group as it will be within the next few years.

Much thought has been given to the electric lights and water, in fact every modern convenience, the figures become doubly attractive. These homes are really less expensive than a great many far less attractive homes which have not been given the same community interest, and where there has been less thought of standardization.

There is no doubt that home-owning advances not only the prosperity of a country, but directly reflects on the lives of the individuals. One heartily agrees with Mr. Charles M. Schwab's statement on home building: "It is not only patriotic, but good business."

With open porches except as roses and vines will cover them
The Bay of Windows
Katherine Keene

The modern house must have light and air in full measure, so we have the whole wall of a room filled with windows, converting the room into a "sun room" when two of the exposed walls are so filled. But even these sun rooms do not entirely take the place of the bay filled with windows; a retired corner or nook, perhaps with cushioned seats under the windows, and many pillows; with a book case, a writing table or a little sewing table conveniently near.

In some places the built-in seat fills the space too much and the comfortable chair, the sewing chair, or the chaise-lounge, gives an equal sense of comfort and a greater freedom in the placing of the furniture.

When seats are built in they may be left open underneath, with only the simple frame work necessary for carrying them, or they may be enclosed and the space underneath used either as a box seat, or with drawers, fitted in size to any especial need which may be desired. Drawers have this advantage, that they may be opened and used without interfering with the top of the seat. Drawers may be built just the right size to take sheet music. It can be classified so that any piece may be easily found when wanted and the music is kept in good condition. Such
drawers also make a good place for magazines and various loose books and publications. To the housekeeper who wishes to keep her rooms always in a neat condition, and yet be able to find the many things which so often litter a living room, drawers under a seat often come as a boon.

A seat is often placed over radiators, with the double advantage of enclosing the radiators out of sight, and at the same time giving an attractive seat. Such a seat must be so built as not to hamper the heat installation, with sufficient openings and properly placed.

The box seat is, however, the more usual way of utilizing the space under a seat. The top is hinged some three inches from the wall, so that the cushion may stand upright against the wall when the top is open. It may be nicely finished inside, as tight and close as a cedar chest if so desired. In fact, it may be lined with cedar and made moth proof, in so far as that is possible. The great difficulty with

a moth proof chest lies in the fact that moths, once brought into a chest, cannot get out, any more than they can get in from the outside.

In any case the seat should project beyond the box or drawers far enough to give "heel room." A seat is always uncomfortable when the feet must be pushed out in front. One finds a constant tendency to draw them back, and a seat which does not allow this is never comfortable.

The shape and size of the sash of the windows in a bay is of importance in giving character to the whole feature in its relation both to the interior of which it forms a part and also on the exterior of the house. Square paned glass is always effective and is very generally used. The windows shown in the photographs all have the glass in square panes, though in different sizes, giving a different scale to the whole.

Curtains and draperies must always be an individual matter in the bay of windows. It is not often that they can be given the same treatment as the regular windows in the room, and there is always the possibility of giving a different treatment if one wishes in some way to accentuate the bay as a thing of itself.

In the bay of many windows Holland shades, so almost universally found in the usual house, may be omitted. A drapery dark in color may be drawn across the window when one wishes to shut out the light, or a chintz or cretonne curtain is often used, similar to that used for the cushion on wicker chairs or slip covers for the upholstering of the furniture. These also serve the place of shades, being so arranged as to be easily drawn over the sash.

Possibly one reason for the popularity of the bay of windows is the opportunity which they afford for bringing more color
An interesting window treatment

into the interior without attempting anything which might prove to be a disappointment. The touch of bright color in a bay, with a dash of strong color on the dominant tones in the pillows has been so thoroughly tried that the home maker with a good color sense does not fear it.

Bungalow interiors are often dark owing to porches which cut off light, or to gloomy wall treatments. The first fault is difficult to set aside; the second is easily remedied. Light may be suggested by yellow, buff, amber, ivory cream and similar tones. Bright notes may be introduced in rugs, draperies, and upholstery. Painted furniture as turned out by many firms is also a wonderful help in producing cheerfulness, with its touch of color and pleasing form.

If a rather sombre living room is preferred, let brighter schemes prevail in the dining rooms and by all means in the bedrooms.

When the same treatment of window draperies is carried out for those of the bay as that used for the other windows it preserves the unity of the room as a whole, rather than giving the individual touch which is so often desired in making a special feature to the bay. If the windows are not too small this may be done; the glass curtains covering all of the windows and the over draperies being placed only at part of the mullions, allowing two or more of the windows to carry as one window. The valance is carried over all the windows, keeping them together as a group. This has been done in the last of the photographs shown. The choice in material has been happy in the way the pattern has been turned to advantage in the valance.
WHY not keep your automobile in the house? Why not, in other words, combine the garage with the house? The proposition presented in these questions may, of course, be argued pro and con. The decision reached, whether in the affirmative or the negative, will naturally depend very largely upon local conditions, especially with respect to local building restrictions, insurance rates, and so forth. Anyway, many persons do make the garage a direct adjunct of the house, and, doing so, apparently find the plan entirely satisfactory. Hence, the idea unquestionably deserves thoughtful consideration.

By way of briefly outlining the pro and con arguments, it may be said that the garage of this kind, by comprising an immediate part of the residence, affords the maximum of convenience, is frequently to be built at an appreciable saving in cost, and, finally, helps to protect the car against theft. On the other hand, it may, in some localities, result in placing a slightly higher insurance rate on the house, because of the gasoline feature, and, further, such an arrangement may, in some cities, be practically or entirely prohibited by building department rules. However, the increase in the insurance rate is never very great, nor do city ordinances in many places prohibit the building of the house-attached garage. Nevertheless, it is necessary that these features of the proposition be borne in mind and looked into before undertaking to make use of the idea.

The garage-and-house combinations shown in the accompanying illustrations
are from Los Angeles, California, and Kansas City, Missouri, in each of which cities the plan of combining the garage with the house has become quite popular. And, incidentally, in studying them, it will be seen that the results obtained from the employment of the idea are very pleasing from the standpoint of architecture; and are, at the same time, very practical.

It will also be observed from the illustrations that the garages are joined to the houses in two distinctly different ways. One method, for instance, is to attach it to one side somewhat after the fashion of an ordinary room or a special addition. This, of course, is the usual way where the building lot is level, or approximately so, and where the lot is of sufficient width to permit. The other method is to let the garage constitute a part of the basement, a plan that is made especially feasible where the building site is more or less sloping. This, in fact, is often a quite ideal arrangement, for the extra cost of including good housing space for the car is, in such cases, almost nothing. Then, too, this method is particularly adaptable to the extremely narrow lot, which, perhaps, will not allow for a driveway to pass along either side of the house. As a matter of fact, sometimes a basement garage, for want of room, is the only kind possible; and to possess even one of this type it may be necessary, because the site is a level one, to create it entirely by excavating—as has been done for at least one of the garages here illustrated.

Whatever else may be said either for or against it, the attached garage is unquestionably the most convenient kind, or at least will be found to be if it is
planned as it should be. By this it is meant that there should be inside connections between the house and the garage — merely a doorway somewhere if both are on the same floor level, and a stairway if the latter is located in the basement. Then, of course, one may leave or reach home in his car without having to pass from the protection of a roof, an advantage that will prove especially appreciable in rainy weather. In short, the garage will be quite as convenient to reach as any other part of the house.

So located the garage will doubtless be afforded other desirable conveniences, which, were it of the ordinary detached kind, it might be denied. For one thing, it will surely be provided with electric lights, for it then will be quite as easy to so equip it as if it were but an extra room of the house. Also, no doubt, it will be connected up with the water system, by which arrangement there will be provided running water both for radiator purposes and for washing soiled hands, as well as for washing the car itself whenever desirable. On account of its close proximity to the house's lighting and water systems, the comparative cost of extending these to the garage will be very slight.

In regard to construction cost, the garage of this kind will generally enable a quite material saving. However, its location demands that it be made neat and attractive in design and construction; that it, in other words, be so handled as to make it a worthily appearing adjunct of the house. Yet, even where it comprises but a sort of addition on one side, in which case at least one wall will be done away with or made to serve a double purpose, it should be possible to realize a considerable saving in the combined cost. In the basement garage, however, especially where a slope or other irregularity of the ground eliminates the necessity of a great deal of excavating, this combination idea is especially economical.

The final argument, perhaps, in behalf
of the attached garage is that the automobile, being thus practically kept in the house, is less apt to be stolen. And if its proximity to the owner or the family is not considered ample protection at night, it will be a very simple matter to put in an electrically operated bell signal.

Therefore, briefly summarized, the advantages of the attached garage are these: It is most conveniently located; because of its location it can be the more conveniently equipped; it, if of the basement kind, is especially practical for the lot that is so narrow or otherwise cramped as to render the ordinary garage impossible; it is at least some and often considerably cheaper to build; and, lastly, it places the car in a safer location.

Retaining Walls---Their Effects and Construction

M. Roberts Conover

The retaining wall is at the same time a physical necessity and an architectural opportunity. The physical necessity must be met, in one way or another, but to make the expensive work that it required and allow it to be a mere barren, lifeless utility, is a lost opportunity.

A wall of any kind presents wonderful possibilities in decorative value. No wall is too small, and certainly none is too large, to deny the craftsman an expression of his art. Many of the most picturesque spots of the old world owe their interest to an effective bit of wall. "The wall should literally breathe strength, solidity, power"—as someone has said, "the very word suggests this; but it can be made to do more,—it can repel, overawe, or seem cold; it can attract, gently shelter, and seem warm. Built of stone, of brick, even of wood; vine-clad or bare; standing forth in brazen conspicuousness, or revealed only in glimpses through the clefts of enveloping foliage—in all these
forms the wall presents endless architectural opportunities."

The tendency of soil to slip when it is wet makes necessary some binding power when a piece of ground slopes sharply to a lower level. With a rolling grade and ordinary soil the roots of grasses is all that is necessary, and a smooth bit of sod with no bare or open spaces will hold the earth in place and make a fine lawn.

The tendency of any soil to slip out of its place is much greater when it is filled with water. A soil which when dry will stand in a perpendicular bank almost without assistance may, when wet, run like water itself. Other soils when wet are very little affected. Some soils allow water to escape through them very slowly, developing hydrostatic pressure. All these things must be taken into account in developing the type of retaining wall. But in any case give it possibilities of beauty. If it is necessary to build a cheap or an ugly wall, give nature a chance. Select vines or shrubbery fitted to the location and soil, which will grow over that type of wall, giving it as much beauty as possible, and plant them to cover the unsightliness.

Sometimes sod, hedge, and a retaining wall, are combined as retaining agents upon an embankment as in the photograph shown. The hedge roots are an important factor. Note also the breadth of coping which fends the encroachment of earth upon the wall beneath, also the perpendicular course of brickwork at the base which strengthens the wall at this point, operating against the stress from above.

Note the width of the bond in the first photograph shown. Also notice that the brick in both walls are laid up in
Another illustration shows an interesting wall at Atlantic Highlands. It has a mortared coping and a ventilated surface, in that the cement is not carried out to the margin of the stones.

Flemish bond, with alternating header and stretcher, bonding well into the wall. The next photograph shows the same wall in the course of construction. Note the retaining foundation of concrete with bricks inset at intervals. This foundation was then coated with a waterproofing substance of a preparation of tar, thereby rendering the wall moisture proof from the earth, and thus protecting the bond of the finished wall from action of frost.

The two other photographs show a dry wall, no cement being used. These dry walls are scientifically laid up by an
experienced builder and withstand weather, being exempt from the heaviest frost. The more elaborate retaining wall of brick surmounted by a balustrade of tapestry brick surrounds a New Jersey country home with brick and cement steps.

The effect of the gentle slope of sod is always pleasing, however, when it is sufficient. In the photograph a low stone reinforcement, at the base, conforming to the angle of the bank, shows a satisfactory treatment for banks of this slant.

Why Not Have the Wrens Nest in Your Yard This Season?

Adeline Thayer Thomson

The easiest birds by far to coax into nesting boxes about the home yard are the tiny brown wrens. At the same time, there are no better songsters among our native birds, or none that are really more friendly or that give more genuine pleasure under observation than these birds.

The wrens are among the first to arrive in the spring, appearing the latter part of April or early May, and are among the last of the feathered tribe to leave in the fall.

It is a very uncommon thing in Bird-dom, that both male and female sing. The wrens, however, both sing—and such a song! It is poured forth in a perfect abandon of fascinating trills, turns, and roundelay that is fairly intoxicating in melody and in its never-failing message of friendliness and good cheer.

Wrens begin their nest making in mid-May. Boxes, however, should be in place for them before their arrival, if possible, for as soon as they come in the spring they begin to seek the desirable houses for rent and decide on their particular choice some time before moving in.

The tiny brown wrens are far more particular regarding the selection of a home than their size would warrant. It is not the style or attractiveness of houses "to let" wherein they are so particular, but rather in the size of the front door! No matter how attractive nesting boxes placed for these birds may be, unless the entrance hole is small enough to suit Mr. and Mrs. Wren, after looking the place over they will fly away, unfailingly, to find a home which suits them better.

The entrance to a wren house should be round, and not more than an inch in diameter. A twenty-five cent piece is just the right size, and I always use one in marking the hole to be made in my wren houses. Ridiculously small this
sized aperture seems, perhaps, yet the birds themselves are such diminutive little things that they easily fly in and out of such an entrance and its size safeguards them against their great enemies, the sparrows. I have seen sparrows try by the hour to gain an entrance into a wren house, the tiny male wren perched on a branch of a bush nearby, singing away nonchalantly, apparently knowing that the saucy sparrow could not possibly gain admittance into the box.

A wooden box—a cigar box will answer the purpose if no other is available—measuring from four to six inches in length, and from three to four inches in width. There are many artistic, attractive, wren houses on the market which are inexpensive, and, of course, many that are elaborate in design and price. If the box is a home-made affair, as suggested in the dimensions given above, the entrance hole should be made well down in one corner with a small perch directly underneath. The wrens fairly dote on this perch, the male bird often taking his stand there while he pours forth his love song to his mate nesting within, and both birds using it to perch on while feeding their tiny fledglings.

Unless one has spacious grounds it is useless to try to entice more than one pair of wrens to nest, as these birds will not allow another pair to nest in close proximity. Indeed, if they can help it, as I found out last summer, they will not permit another pair to nest in an adjoining yard! Last year, in moving to a new home, I put out my wren house, hoping to entice a friendly pair to nest near me as usual. I was overjoyed to find a Mr. Wren and his wife had discovered my box swinging from the center of a garden arch, and were rapidly carrying in material for nest making. To my dismay, however, I soon realized that only one bird seemed to be about the place, and that the entrance to the wren house was bulging with protruding material that completely stopped up the entrance. The mystery was soon solved. The pair of wrens had a nest in a box next door, and they had filled my box full of sharp wires and hairpins (I discovered upon opening it), hoping to keep another pair of wrens from nesting near them! But I was persistent; I emptied the box each day, taking from fifty to sixty pieces of sharp wires that the male bird untiringly carried in, until after a week he gave up the fight and contented himself in looking after his own affairs. In July a pair rewarded my efforts by moving in, where they reared their second brood.

As the wrens raise two broods each season, one is almost sure of getting a pair, even if one loses out early in the season. These birds are very friendly and will nest in boxes placed close to the house. Boxes placed against porch pillars, some twelve feet from the ground, against the side of the house, suspended from garden gates or branches of trees are all good locations.
HE simple dignity of the Colonial type of building is very satisfying for the home, be it large or small. The advantage of using an established type, in any line of procedure, does not lie in the careful copying of something that is good, so much as the avoidance of that which is objectionable. Keeping to an established type means doing much the same thing over and over again, and in this way selecting the most desirable points and eliminating those which are objectionable. It was by this process that the ancient Greeks developed their wonderful architecture and sculpture. Not only were the forms improved but from generation to generation the trained hand and eye became more sensitive. We are still a new country,—our great periods are ahead of us, it is to be hoped. Good homes lie at the heart of American institutions, influencing life, health, and character itself.

The larger of these homes has the rather typical plan with the central entrance hall, which is made very roomy by pushing the stairs back, and at the same time making the stairs as easily accessible from the kitchen as from the front part of the house. Portieres may shut the stairs off from view at the entrance.

On one side of the entrance is the dining room, with the living room on the other side, each separated from the hall by double glass doors. The living room...
fills the end of the house, with windows on three sides and glass doors to the sun porch. The living room is slightly more than 15 feet by 25 feet, with a fireplace on the outside wall, and ample provision for large pieces of furniture, in the matter of wall space.

Beyond the dining room is the kitchen, with its well arranged equipment. Beyond that is an enclosed entry with a broom closet built in and space for the refrigerator. This entry connects with the front hall. From it opens a toilet room. Three steps lead down to the landing on the basement stairs and to the grade entrance.

On the second floor are three good bedrooms and a sleeping porch. The two front bed rooms are 16 feet by 12, with a dressing room between them, and each with a closet 4 by 4 feet. A broom closet as well as a linen closet opens from the hall.

The second home is one of the so-called Colonial bungalows, with Colonial details. The narrow siding sets a small scale for the smaller building. The porch railing of iron, painted black, gives a touch of distinction to the entrance.
The first house is 42 by 26 feet, outside dimensions. The bungalow is 38 feet by 46, with the frontage on the narrow width or on both.

The living room is 24 feet 9 inches by 14 feet. A den or bed room opens from one end of the living room with glass doors. This room is equipped with one of the convenient disappearing beds.

A side entrance gives access to the dining room through glass doors, to the living room, and to the rear of the house through the breakfast room. Both breakfast room and dining room are fitted with a buffet or china cupboard.

Beyond the dining room and kitchen is a small hallway through which two bed rooms and the bath room are reached. Two cases are built into the bath room under the windows, with a seat between and a medicine cabinet.

The kitchen is well planned and equipped. The entry is enclosed and has space for refrigerator and a broom closet. The basement stairs lead from the grade entrance.

Both of these homes are very attractive. The bungalow is new and the planting is only starting. The larger home is well established in the midst of its growing things and the vines are reaching up on the trellis. The wide siding is quite as distinctive a note here as is the narrow siding on the smaller house.

A Carefully Planned Bungalow

ALTHOUGH planned on plain and simple lines, this bungalow is pleasing in appearance, and this is due in large part to the fact that it is simple and plain.

The living room and dining room are combined and are reached through pergola covered terrace, with a seat on one side, flower box across the front, the step at the side giving access to the street. This arrangement of living and dining room is becoming more popular since the housewife must, so often, also be the cook, as it relieves her of considerable work. This arrangement is all the more acceptable on account of the attractive breakfast alcove from the kitchen where not only breakfast, but any meal can be served with satisfaction to her family and more ease to herself. This alcove has windows on three sides, one overlooking the flower box on the pergola terrace. On a sunny morning what more could one ask than an appetizing breakfast in such a nook? The alcove is particularly well placed, easily reached from either kitchen or living room. The sink and range are both convenient to the alcove. You will notice that this housekeeper's work shop, for such it really is, has been well provided with light, and with the conveniences which do so much to make a pleasure of the work of the kitchen. There is a grade entrance to the basement stairs.
Note the compact plan of this dainty bungalow
C. B. McLean, Architect

On the other side of the house are located the two chambers and the bathroom. These chambers are well provided with closet space and each has casement windows on two sides of the room, giving good cross ventilation. The placing of the furniture is indicated on the plan as are also the lighting fixtures. In the living room wall sockets are also shown for the piano lamp and vacuum cleaner.

A small central hall connects these rooms with each other and with the living room. There is a linen closet opening from it, and also a scuttle giving access to the attic, though this space is intended only for ventilation. Louvres are placed in both gables with connections to open and close them when the weather requires.

The living room, however, is the most interesting room in the house, with its group of casement windows, and big fireplace at the end of the room. There are book cases on either side of the fireplace and small casement windows above them. The outside walls of the room are lined with in-swinging casements, overlooking flower boxes at the front. If you are gifted with imagination, furnish this room in the way you would want it to be furnished for your own living. How would you design a room to rival it? For the recessed cupboard by the kitchen, the doors are filled with leaded glass, so that it may be used for dishes without seeming to intrude on the living room.

The exterior, while small is dainty and attractive. It is shown with wide rough siding for the outside walls, though stucco could be used with pleasing effect.
A Substantial Home

In the design here shown we have a residence planned on strictly modern lines, with all the conveniences of the up-to-date house. The breadth is about 38 feet and depth 36 feet. The construction is frame with a veneer of Oriental brick up to the sill course of the first story windows. Above this is stucco, or wide “Colonial” siding may be used. The first story is 9 feet high, with 8 feet 6 inches for the second story.

The roof is low pitched, with wide projecting eaves, giving a good shade over the second story windows. The windows are grouped and casement sash are used in many of the windows. The details throughout are very plain.

Heavy brick piers carry the roof over the entrance porch. At one side of this is a wide terrace with tile floor, or terrazzo may be used. The steps and buttresses are of brick. The corner piers are of native field boulders.

The entrance is through a vestibule to a square central hall. There is a coat closet conveniently placed beside the vestibule. This square hall connects the dining room on the one side and the living room on the other, giving a sense of great openness to the whole interior. If it is desired to close off the dining room, folding screens may be set across the opening. Opposite the entrance glazed French doors open to the stairs and rear hall.

Both living room and dining room are well proportioned, giving a pleasing appearance to the interior upon entering. Opposite the hall is the living room fireplace, in the center of the long outside wall of the room. Beyond the living
room is a den, opening to the rear porch, giving it an outside entrance and making it a satisfactory sanctum for the man of the house.

Beyond the dining room is the kitchen, fully equipped and well arranged, and beyond that a porch large enough to be a pleasure as well as a necessity. There is a full basement under the house, with stairs under the main stairs and leading from the same small hall.

On the second floor are three chambers with good closet space. Two of the chambers are of especially good size, from one of which a sleeping porch opens. There is an open balcony reached from the hall beside the stairs. In the bathroom is shown a shower, in addition to the other fixtures. The second story is finished in white enamel with doors stained a mahogany tone.

The inside finish for the first story is in oak, given a “Mission” finish, with oak floors. The finish is good but perfectly plain. There is no paneled wood work. The stairs are of oak with oak railing and balusters.

The Porch in the Plan

HERE are two types of porch in the modern plan, the wide porch, which is screened, but not otherwise enclosed, and gives a certain amount of outdoor living during the warm season, and the sun room, which is really a part of the house, but may be opened more fully with its many windows, and which is flooded with sunshine at any season.

In this group, the first house shown has a wide porch across the whole width of the house. This is entirely open and is made attractive with flower boxes and potted plants. The second house shown has two stories and is much larger. It has an outdoor living room, or porch, and a second story sleeping porch.

With the coming of the warm season the necessity for porches becomes increasingly apparent. Even for the smaller homes, built under the most stringent economy, the owners find that they can not afford to omit the porches, and something else is cut out.

Contrast of light stucco walls with
brown stained exterior woodwork and shingle roof, which is stained very dark brown, almost black, makes this semi-bungalow very pleasing in appearance. The red brick of chimney breaks up the wall surface and adds interest to the exterior. The stucco, which is applied over metal lath, is made of white Portland cement and finished with a rough texture. The window sills are also of brick.

The interior, while not unusual in any way, is yet very attractive and homelike. Compactness is the keynote. Five good sized, livable rooms, serving pantry and bath are contained in a floor area of but 960 square feet. The basement extends under entire house and provides space for heating plant, a fruit cellar and a workshop for the owner.

On the second floor is a bedroom, 12x18 feet in size, with an unusually long closet and an extra closet from the hall.

A floor of red quarry tile is provided for the large front porch.

The second home is unusually attractive. It makes an especial appeal to those who wish their home to be quite "out of the ordinary"; and to such this design will offer many suggestions. This
is a stucco house, and has none of the severity of outline sometimes found. The broken roof line, lifting over each window or opening, is a very charming idea and suggests the thatched roofing of old country houses. The blinds, too, add to this effect, while the flower boxes and gay awnings proclaim it the home of a family of decidedly modern tastes.

The porches are both open, but could readily be enclosed if desired.

Large rooms are a feature of the plan. By cutting a door between the dining room and porch, this could be used as a dining porch. Awnings protect the porch openings.

On the second floor are four good chambers and a big sleeping porch over the open porch of the first floor.

The upstairs porch may be reached from either of the two right-hand chambers.

The flower boxes are attractive.
American papers of picturesque treatment in shades of warm grays, soft green and fawn
Decoration and Furnishing

VIRGINIA ROBIE, Editor

Spring Household Notes

ANY people who instinctively detect good form from bad find difficulty in using color to advantage, says Una Nixon Hopkins. This is attributable, in most cases, to the fact that people do not look for color. To study it everywhere about us in Nature is well worth while, since its contemplation affords pleasure, and a knowledge of its combinations is of practical value in the home. It is necessary to study the proportion of one color to another, and of varying shades of the same color, in applying them to house decoration. The artist tells us to furnish a room in shades of nasturtium, including leaves and blossoms, but fails to remind us that the darkest shade of green in the leaves prevails; that the stems, a lighter, yellower green, bring together, as it were, the leaves and blossoms; that the gorgeous reddish-yellow of the petal is separated from the light yellow tint showing in the heart of the flower by a beautiful soft brown. This velvety brown modifies the coloring of the flower and illustrates a law in Nature that ought always to be followed in art. Colors in nature are never allowed to infringe upon each other.

Unless this is understood, the using of several shades of the same color in the room is apt to prove disastrous. The strongest color will look garish, and the lighter shades faded; but separate these varying tints by some color that unites them and harmony prevails. The Orientals have known this law to perfection. A rug having the general effect of red or blue or some other color combines several colors and many shades of each color; yet one color is so separated from another, and the proportion of one color to another so carefully studied, as to make the ensemble perfect.

Among English color schemes found in drawing rooms and morning rooms are the following taken from London houses: ivory woodwork, walls in which pale green and mauve predominate, and furniture in mahogany in a rich tone inclining to a violet; walls, woodwork, and furniture of pale gray, the moldings and enrichments being picked out in white; metal work of a dull silver finish, and carpets and hangings of old rose; a white trim, a figured filling in blue, silver, and pale green, a plain green rug, and furniture painted silver gray. Old blue, green, ivory, and plum are used in another room, while green and mauve, green and lavender, green and violet are used over and over, softened by ivory paint, silver gray, or mahogany—the latter seldom showing the ruddy coloring of American mahogany furniture.

An English decorator has defined morning rooms as “drawing rooms in ordinary.” They are a common feature of English houses, but less known here, where in the free-and-easy fashion of
Americans we make one room do duty for many. The American morning room is of two types, the small room of the city house which is located on the second floor and entirely a family room, and the larger apartment of the country house which is on the ground floor and sometimes takes the place of a living room. In expensive houses where there are many rooms the morning room is often decorated in the style of the Adam brothers, or in one of the French periods. Its usual treatment is simple and we recall one delightful morning room in a country house where the furniture of plainest design was painted ivory, the wall gray, and where no decoration was seen besides a few bay trees and curtains of a Walter Crane cotton in blue and green peacocks. In season, yellow and orange flowers were used.

Antique vases, Tanagra figurines, classic masks, are enviable ornaments for a library. They are not only decorative in themselves, but they strike a note of scholarly dignity—more than a note, a chord—breathing of Hellenic days, of Roman grandeur, and of the golden Italian revival of learning, says Isabel McDougell, writing in *The House Beautiful*. They can be had in exact reproduction of the originals, time-worn, weather-stained, mellowed and rubbed down, with faint suggestions of color. Against the rough orange walls of a certain painter's vestibule there hangs an admirably effective grotesque mask, with traces of yellow-brown, like rust-streaks, lingering in its depressions, that brings it into harmony with its background. Another small mask is as successfully placed against the side of a bookcase; the bookcase is painted olive, and the mask is a lightish bronze with green patina. This last, by the way, is in an architect's beautiful library, where over part of the wall space not covered by bookcases, fine photographs of towers, domes, and archways are hung. They are all in a sense classic, accepted and beloved; the high-water mark man's art has placed, but they are not hackneyed.

Restfulness is an element in pictures of architecture that makes them especially suited to a library. St. Peter's or the arch of Titus is unchanging. It stands forever, a monument of beauty and order, yet freighted with human significance. In some moods the calm of architecture has precisely this advantage over the calm of the landscape—that it is plus the human intention. Piranesi's noble Roman etchings are perfect for a library, having a beauty which grows with study, having the quality of stability combined with imagination.

A framed family portrait or family tree looks well in a library.
So does any old certificate, such as a seventeenth-century commission in some trainband, signed by a long-dead governor of "His Majesty's Colony of—" Virginia or the Carolinas. Any man who is a collector can give a stamp of individuality to his library by taking his collection for a keynote, be it coins or autographs, butterflies or firearms.

I have seen a collection of book plates, simply mounted and passe-partouted, ranged all along the wall just above the shelves; not too high to appreciate the delicate points of the tiny designs.

I have seen a collection of book covers spread out like some new kind of giant butterflies, with wings of buff, brown, or crimson cloth. A New York connoisseur of Japanese art has many ornamented Oriental metal sword hilts set in his chimney piece.

A Western man who is especially interested in the French Revolution has all the space above his bookcases crowded with souvenirs of those stormy times. Portraits of Mirabeau, of Danton, Bervic's famous engraving of Louis XVI—the one that was doubled up, thrown into the Seine and recovered, to be the joy of collectors—photographs from Mme. Le Brun's or Nattier's paintings of Marie Antoinette and her ill-fated boy, Flaman's etching of "The Death of Robespierre," are mixed with colored cartoons and prints of the period. This library is in the Louis XVI style, giving a proper setting to everything relating to the epoch.

One of the best small libraries is in a country house built some forty years ago, when pseudo-Gothic was on the top wave of favor. The windows are pointed arches, with diamond panes, and the walnut bookcases, which run fully six feet high, have glass doors of the same style, with trefoils filling in the corners. The wall and ceiling above are of a warm gray in rough plaster, and the cove rounds up into the ceiling. Just over the bookcases a line of shields in bold heraldic reds and blues runs around the room. They are ordinary enameled tin shields, bearing the arms of the different colleges of Oxford University which are, in most cases, those of their royal or priestly founders. These shields cost four shillings in the ancient English city. The quarterings look well on the gray walls over the Gothic bookcases.

An interesting device for a kitchen is described by an expert.

The cupboards are of white painted wood; their peculiarity is that, instead of doors, they are protected by heavy white linen shades, sliding up and down precisely like the shades of a car window, and stopping at any height. Thus the upper shelves may be kept covered, while from the lower ones the cook takes out...
her sifted flour, raisins, sugar, spice, and mixes her cake on the counter directly underneath. The glazed linen shades may be wiped off with a damp cloth, or repainted when soiled. They were used as an economy, both of wood for doors, and of the space taken up by open doors in a small kitchen. They have proved themselves an excellent invention in many ways. One end of the kitchen is filled by the door into the dining-room, with two fairly deep closets on either side; in each the depth is divided by partitions, so that half of it makes a china closet on the dining room side and the other half makes a kitchen cupboard. In one of them is the slide or hatch for passing dishes into the dining room.

It will be seen that much of the available wall space in this kitchen carries shelves above for dry groceries, and compartments below where the pots and pans may be kept. By actual measurement, there is more drawer and shelf space in this kitchen thus lined with cupboards, and in the dining-room china closets, than in the neighboring house, which has the conventional butler's pantry and kitchen pantry. Other points about this kitchen are, that the slide into the dining room is a double-decker, so to speak; it has two shelves. Outside the north window is a home-made cold storage box, supported on brackets in the outer wall and screened by oilcloth curtains. Articles of food may be kept here without ice for the greater part of the year, and during the hot months it is removed.

**Found in the Shops**

BEAUTIFUL old silver is seen in some of the shops together with interesting reproductions. A pair of candlesticks made in the city of Sheffield in 1775 is valued at a high figure. Pleasing table candlesticks, six in number, are of new silver in Ionic columns. In glass there are many interesting things well suited to country dining rooms.

A table arranged to show the use of glass candlesticks was set with one of the new cottage tea services in Wedgwood. Shades for the candles were in pale yellow gauze, the tone of the colored bands on the china. Black candlesticks and black flower holders were on another tea table. Here the service was in apple green of solid tone, the candle shades matching. An attractive flower decoration of violets, yellow primroses and maiden hair ferns blended perfectly with the scheme.

Sweet peas were seen on another table
in the "Spencer" salmon-pink variety. Candlesticks of ivory china with a tea set to match completed the decorations together with ivory flower holders.

The same shop displayed a quantity of enamel cloth centerpieces and doilies ornamented in many ways. A clever young woman takes orders for these, and chooses the color scheme to harmonize with the china, the painted furniture and the wall paper. For summer use these washable attractive articles are highly recommended. One of her specialties is making sets for children, and blue birds and quaintly dressed small people are quite delightful as depicted by her versatile brush.

For a country dining room in a very simple little house she has recently made a luncheon set in ivory enamel cloth, undecorated except for an inch border in pale orange. The table china is Sedji in sage green and the furniture is painted black with a lacquered surface. On the walls is a paper now turned to a sage green, but beginning life five years ago as deep blue-green; a trellis design copied from an old block printed wall hanging. In the first place the floor was painted orange but when the paper faded something had to be done with the floor. Inasmuch as it refused to fade, it was repainted a yellow of the same intensity as the green of the walls. The result is a charming cold harmony heightened by the black furniture. Very gay flowers are used in this room; all the yellow and orange tones, blue, purple and flame, but never crimson—or in fact any of the reds unless of the orange cast.

Interest in old brasses, which had fallen off during the war, has returned, and many good pieces are found in the shops. If of Russian origin they are not of late importation, but rather gathered in this country from collections recently sold.

So many old pieces have changed hands since 1914 that finer things are now on the market than ever, but they are not so reasonable as in earlier days. Beautiful Russian and Dutch brasses are located in a Chicago studio, together with interesting East Indian coppers and Japanese pottery.

Nursery furniture is coming into its own when such pieces as we illustrate may be placed in the child's room. Of charming color, decoration and design is this Danersk furniture which will be more and more appreciated by the owners as time goes on. A pleasing feature is the rush seating of the chairs and settee.
Red Gum Woodwork.

F. M. B.—I am an interested reader of your magazine and would appreciate your help in planning the interior decoration of my bungalow, which is nearing completion. I have hard wood floors. I had thought of using red gum, natural finish for trim for these rooms but I have a piano and Victrola in mahogany which I would like to use and don’t know how they would look with the red gum. I prefer to use something other than mahogany in a room as much used as a living room, if I could get something else that would be good with my two pieces of mahogany.

I have some panels of wood that are very pretty especially the “silver-gray” finish. How would that look for my woodwork with beams, buttress and buffet, using gray wicker furniture in living room and maybe a dull finish or brown mahogany in dining room? What would you suggest for walls. The fireplace in living room is cobblestones same as on the outside of the house.

I’m planning to have my bath room and kitchen white. What would you suggest for hall and stairway?

Ans.—You seem to have very good ideas of your own as to your interior finish, and we will merely confirm most of them.

The red gum will be good in living and dining room, but we should suggest using the gray stain you admire. Your piano and Victrola will not conflict, and wicker or rattan furniture in dark gray, and upholstered just as if it were mahogany will be very good indeed. We would tint the walls a pale soft gray and introduce color in the curtain draperies and upholstery, possibly also the rug, though we would like very much the taupe gray rugs that are relieved only by narrow black borders.

We should finish dining room woodwork the same on account of the wide opening; walnut furniture or brown mahogany will be perfectly appropriate with the woodwork. We would tint the walls deep ivory and use a rich blue rug, one of the Chinese blue and gold rugs now so much in vogue, with blue draperies at windows.

The breakfast room may have paper on the walls, gay birds and blossoms, and painted table and chairs. Paint the pine woodwork gray enamel.

Use white in kitchen and bath and also in the chambers.

A Combination Living and Dining Room.

H. A. W.—I have a small bungalow in which I propose to make some alterations. I have combination dining and living room 22x15, long side of room looks to the east, with two 40-inch windows and a further window, ordinary size, to the south. The room has been in black as long as I can stand it. I propose to take off all finishing lumber, put in oak floor, with walls paneled in fir veneer to a plate rail. I would like to have this stained light oak. Dining room furniture
is cathedral oak. I dislike making the paneling as dark as that. Above the plate rail I would like a decorative frieze with ceiling paper white or light cream; overcurtains and cushions for wicker chairs to match the frieze. Please criticize and advise. I propose to have wicker chairs upholstered in cretonne of same design as curtains. What colors should I use? If necessary, I will dispose of dining room furniture and obtain new.

Ans.—With your oak floors use either Old English oak trim or old ivory enamel. Omit the plate-rail. A plate-rail, if used for china, is unsanitary. Architecturally, most plate-rails are wrongly placed, so that they cut the wall at the wrong height for good proportion. Moreover, a plate-rail lowers the height of the ceiling. The tendency in building now is to do away with them. Console tables of brown mahogany with drawer space below will furnish china space and be in keeping with the combination living room-dining room.

Omit the frieze, because it, too, lowers the height of the ceiling. Besides your choice of hangings and upholstery, together with a frieze, would be using too much design and would result in the room appearing smaller and would be tiring. Ivory may seem too light to you after black; therefore, I have suggested the middle tone of Old English. However, ivory would be a happy background for wicker furniture. Furniture dealers are now finishing oak a soft Old English stain. With the ivory trim, use a soft yellow-tan plain paper. With the oak, use solid English paneling. For both use a cream ceiling of the same hue as wall, but lighter in value.

For a combination living room-dining room, wicker is a very good choice. I should dispose of the cathedral oak set and buy console tables and either a refectory table, a gate-leg or a round wicker table of the breakfast room type to serve as a dining table and yet be in keeping with the living room. With the latter get the little chairs that are meant to push under the table but which you can use as side chairs. With the other tables brown cottage chairs can be used.
The Kitchen Wall.

F. W. B.—What can I use for my kitchen wall which may easily be kept clean. I do not want a dado, but prefer something which can be used for the entire wall; and which does not require washing, but may be wiped down with a dry or a damp cloth. Would you suggest gray painted wall with gray woodwork, or should I use tan for the wall with oil finish for the woodwork?

Answer.—For your kitchen walls, it is quite common to just paint the hard, smooth plaster, though it chips more easily than Keene’s cement. I do not like gray for kitchens, nor yet an oiled finish. Light gray woodwork requires as much care as white, and dark gray is too dismal. Have the woodwork a deep cream; paint the wall 3 or 4 feet up from floor a soft cigar brown; then the wall above a pale tan. You will have a pretty kitchen and quite serviceable.

To Refinish Doors.

H. L. L.—Being a subscriber to Keith’s Magazine, I see that you offer to give suggestions on interior decorations, upon request. As I have a problem with our dining room and living room, I am asking that you give me all the help you can.

We bought a house already built. When we took possession, we found the dining and living room papered with wall paper, a sample of which I am sending you, that you may see just its color. The woodwork was painted, or rather stained, a light oak, and has begun to look faded and “rusty.” The paper is still good, and I cannot afford to replace it. What I want is a suggestion as to the color to use on the woodwork, to harmonize with the walls and the mahogany furniture which I have.

The living room and dining room are connected by sliding doors, as are the entrance hall and living room. The hall is papered in the same color as the living room and dining room. The living room has three windows, opening on a porch on its southwestern exposure, and a French window opening into a sun parlor on its southeastern exposure. The entire southeastern wall of the dining room is composed of four windows, so there is plenty of light in this room. But because all the openings from the living room are upon covered rooms or porches, it is not quite as light as it should be.

We have mahogany furniture and would ordinarily like to finish the woodwork to match, if it would go with the paper and not make the room too dark. Had thought of white or ivory enamel, with mahogany doors and windows, but was afraid they would neither harmonize with the paper or draperies.

The draperies are net with valance and overdrapes of printed marquisette in flowered pattern in wine and brown. The rugs are two-tone wine, or maybe a shade lighter—really are rather bright.

Living room is about twenty by fifteen and the dining room about eighteen by fourteen.

Ans.—Replying to your letter, we advise painting wood trim of room you mention a deep ivory.

You cannot use a mahogany stain on the varnished trim without great trouble and expense, and the result would not be satisfactory anyway. You can, however, take the door off the hinges, remove all the varnish and perhaps get a fairly good mahogany finish on them. We would not advise this for the French doors, but finish them in the deep ivory.

Your wall paper, while a cheap paper, has a good color tone that will blend in excellently with deep ivory, but the ivory must be deep. Your mahogany furniture will be good in this setting and the wine colored rugs are good—they will give character to the rooms. But the window drapery is very unfortunate and spoils the whole thing. Discard the valance and side draperies of printed marquisette and have merely side hangings of wine or deep rose, in a plain color, though a heavy sun fast in a brocaded pattern could be used if all the same color.
INTERIORS BEAUTIFUL
200 VIEWS

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A Complete Decorative Scheme.

P. A. W.—I am asking your service for detailed information for decoration of my new home. Below is enumerated the various rooms and the finish of woodwork I propose, unless you have a better idea, or one that will be more individual, in which event I wish you would give me your best opinion.

Downstairs—Entrance hall, old ivory; living room, old ivory; dining room, old English; butler's pantry, white enamel; kitchen (tile), white enamel; breakfast nook (tile), white enamel; lavatory (tile), white enamel. Staircase, mahogany and white enamel; hall, old ivory; three bedrooms, old ivory; sleeping porch, old ivory; bath room (tile), white enamel. All doors birch with mahogany finish; style of doors, slab.

In addition to these rooms I have a large basement den with rough plastered side walls 5 feet high and 2 feet of rough dark brick above. There are fireplaces in den and living room.

My idea of the walls and ceiling is to canvas all of them and paint them instead of using wall paper, with the exception of the dining room, which I have planned to have rough sand plastered.

Ans.—Would thoroughly endorse your ideas for woodwork for downstairs, with one or two changes suggested, viz.: Old ivory for hall and living room; Early or Old English for dining room; white enamel for pantry, kitchen and lavatory. Breakfast room could be done in soft French gray instead of white with very pretty effect. Stairway treads, rail and post, mahogany; balance old ivory instead of white.

Upper hall and bedrooms, light ivory instead of old ivory. Sleeping porch, French gray or ivory, as desired. On account of having so much ivory elsewhere, the French gray would be preferable. All doors, antique brown mahogany finish. Basement den, walls painted light tan and blended to tone in with brick. Ceiling, light tan, several shades lighter.

Canvas on all walls where there is smooth plaster would be fine, and make a very permanent job. Use lead and oil paint, then stipple and glaze. Colors should be a neutral shade, making a good background for pictures and hangings. Would suggest a warm gray or putty shade. Ceilings on same tones as walls, but lighter, either plain or with some hand decorations.

Dining room can be done in some soft verdure tones, blended, or if there is a wainscoting, the upper part done in a hand decorated design, with plain ceiling.

If living room and entrance hall are connected with large opening, they would better be treated alike, so far as woodwork, walls and ceiling are concerned.

Living Room and Dining Room.

The house faces the south with living room windows on southwest and north. What tone of wall paper would you suggest. Have rugs of tan, rose and blue.

Dining room has windows only on east. What color would be best for walls and draperies? I have a green, tan and black grayish tan paper with all-over almost invisible design in a little darker gray.

Ans.—Have your draperies the rose of the rug in a plain fabric. For the east dining room we should use one of the gay, bird and flower patterns on an ivory ground, with ivory ceiling. This will make a cheerful dining room, in which you can use the green and tan rug. Have curtains of ivory casement cloth.

WHERE detailed plans for HOUSE DECORATION are desired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of $2.00 per room or $7.50 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.
Two Rooms, Facing East and West.

L. G.—I should like a decorating scheme for a room facing west in which will be used bird’s-eye maple furniture, also a room facing east to be occupied by a boy of high school age. This room will have mahogany furniture and opens into a sleeping porch.

Should like the west room something soft and pretty, but it cannot be anything elaborate or expensive.

I enjoy reading the magazine and find it such an interesting paper.

Ans.—Replying to your letter asking suggestions for bedrooms, either a soft old blue for wall, or a pale apple green, will be agreeable for the west room, and will bring out the tone of the bird’s-eye maple furniture to advantage. In either case the ceiling and woodwork should be ivory.

For the boy’s room, with mahogany furniture, we would use a grass cloth weave in paper for the wall, in grayish tones, with curtains of striped gray and yellow cretonne, having a touch of black; on the floor a gray Scotch rug with black and touches of yellow in border. White ceiling, white woodwork, with mahogany doors.

S. M. T.—In the March number of Keith’s Magazine you advise J. R. N. to have brass tubing made into the extra long curtain rods. I have found a type of double flat rods with extension pieces to fit any number of windows, and consider them ideal, and I doubt if the tubing could be cut and made into a rod that would be as neat as this.

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Fish as a Food
Elsie M. Fjelstad

Fish is an important food which lends itself to the summer menu. Meats seem so heavy on a warm day. Fish seems lighter and yet it supplies the same material which makes meat an essential food for the body. It does not give as much of this material, protein, but that matters little in view of the fact that the average person eats more protein than the body requires.

Fish is also less expensive. Fresh varieties can be purchased for a few to quite a few cents less per pound. Dried and salt varieties are still less.

In selecting fish it is well to be sure that the flesh is firm and the eyes bright. The latter is not always a possible test. Some housewives can tell by the fresh odor.

With the exception of salmon, fish contains less fat than meat. Thus fat should always be added, either in sauce or as butter or bacon.

Fish is prepared in all the ordinary ways of preparing meat. To boil, it is lowered in water enough to cover and simmered ten minutes to the pound, or until a fork inserted between the bone and flesh at the thickest portion comes out easily. To steam, it is placed in a steamer ten minutes to the pound.

In baking, the fish is dredged with flour, basted regularly with butter and placed in a moderate oven twelve minutes to the pound. It is prepared the same for broiling except that the flour is omitted.

Frying is probably the most desirable as well as the most common method of preparation. The fish should be rolled in bread crumbs or cornmeal flour and fried in hot fat.

These dishes can all be made more attractive by garnishing with lemon points, toast, parsley, egg (sliced or grated), watercress, and by using lemon, Worcestershire sauce, chow-chow, or Hollandaise sauce as a relish.

Hollandaise Sauce
Hollandaise sauce is made of equal parts of unbeaten egg, boiling water and butter, with one-eighth as much vinegar or lemon juice and a small amount of seasoning. The butter and egg should be creamed, mixed with other ingredients, and cooked over boiling water until it begins to thicken.

Planked Fish
A pleasing variation of baked fish is planked fish. The fish is boned, washed, dried, and narrow incisions are cut in a number of places. Through these incisions, strips of bacon or salt pork, one inch thick, are drawn. The inside may be stuffed, baconed, salted or floured. The fish is then placed on a greased plank and baked 30 to 45 minutes.
To Can Fish

Soak fresh fish in salt water over night. The next morning, drain and add, to each gallon fish, one cup vinegar, one-half cup butter, and seasoning. Cover with hot water. Add more water as it begins to get dry. Put in a moderate oven and bake all day, or until bones begin to get soft. Pack in jars and seal. This will keep all year and is really a practical way of combating the high cost of living. This canning may be done at the time when the fish have the finest flavor, during the summer at a lake or after fishing trips.

Fish Dressing
Two cups cornbread crumbs.
Two tablespoons fat chopped salt pork.
Grated yellow rind of one lemon.
One-half teaspoon salt.
One-eighth teaspoon nutmeg.

Fish Stuffing
Two cups cold boiled rice.
Two cups dry bread crumbs.
Three tablespoons butter or fat chopped salt pork.
Salt, pepper, sage.

Most housewives are afraid of new cooking methods. The following are really easy ways to prepare appetizing fish dishes. They require very little time if forethought is given the meal some time before its preparation.

Salmon Souffle
One small can salmon. Three eggs.
Two tablespoons butter. Two tblsp. flour.
One cup milk. Salt and pepper.

Make a cream gravy of the milk, flour, fat and seasoning. Add the salmon and egg yolks. Cook until very thick. Fold into the stiffly beaten egg whites and turn into a buttered baking dish. Bake in a moderate oven 45 to 60 minutes, or until an inserted knife comes out clean.

Baked Haddock—Oyster Stuffing
Remove skin, head and bones from a fresh haddock. Rub with salt and lemon juice and let stand one-half hour. Place half of the fish on a buttered baking dish and cover with oysters dipped in unmelted butter and cracker crumbs. Lay the other half over the oysters. Brush with beaten egg. Sprinkle with buttered cracker crumbs and bake about 45 minutes. Serve with Hollandaise sauce.

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Salmon Cutlets
One small can salmon.
One and one-half cups mashed potato.
One egg.
Salt and pepper.
Mix all together, form into cutlets, or any small, attractive shapes, roll in egg and bread crumbs and fry in hot, deep fat.

Drawn Butter Sauce for Fish
One-third cup butter.
Three tablespoons flour.
One tablespoon lemon juice.
One and one-half cups water.
One-half teaspoon salt.
One-eighth teaspoon pepper.
Melt butter and add flour with seasonings. Pour hot water on gradually. Boil, then add lemon juice.

Salmon Loaf
One cup salmon.
One-half cup bread crumbs.
One teaspoon butter.
Mix all together as for veal loaf and bake 60 to 80 minutes in a moderate oven. This is nice sliced cold for picnics.

Shrimp Salad
One can shrimp.
One cup shredded cabbage.
Mayonnaise dressing.
Pimento.
Celery.
Nuts.
Have all ingredients shredded except the shrimp. Mix all together and serve with mayonnaise dressing on lettuce leaves. Grated egg over the top improves attractiveness. Mayonnaise dressing is made by beating oil into egg yolk, slowly and carefully. After one-half cup has been added it may be put in a teaspoonful at a time, beating with a Dover beater all the while. It should be thinned with vinegar or lemon juice and highly flavored. One egg yolk will take one and one-half cups of oil. A starch and water paste added to the dressing improves keeping qualities. Salmon, whitefish, crab meat, lobster, tuna fish, all may be made into salad this same way.

Suggested Menus Using Fish as Meat
Salmon Cutlets with Creamed Peas
Carrot-Banana Salad
Egg B-P Biscuits
Maple Nut Mold, Custard Sauce

Carrot-banana salad is made of two small raw carrots, grated; one-fourth cup salted peanuts, grated, and three chopped bananas, with mayonnaise or boiled dressing and lettuce garnish.

Egg baking powder biscuits call for one cup milk, three cups flour, four and one-half tablespoons fat, six teaspoons baking powder, one egg and salt. The dry ingredients are sifted, fat is cut in and the milk and beaten eggs added. They are rolled out, cut and baked as biscuits.

Maple nut mold is made of one and one-half cups of hot water, one-half cup brown sugar, three tablespoons corn starch, one egg white, and one-fourth cup nuts. The sugar and water is thickened with the starch and then folded into the beaten egg white. The nuts are added last and it is turned into individual molds to cool. Custard is made by scalding two cups of milk, adding three egg yolks, one-fourth cup sugar, salt and vanilla, and cooking until it coats the spoon.

Planked Fish
Baked Potato
Stuffed Celery
Chocolate Eclair

Stuffed celery is made by filling the groove with a mixture made of three tablespoons cream cheese, one pimento and one tablespoon milk.

Peach frappe calls for six peaches, two egg whites, one cup sugar and one cup water. Pack it in ice and serve cold.

To make chocolate eclairs, bring one-half cup milk and two tablespoons butter to a boil. Sift in eight tablespoons flour and cook to a stiff paste. Beat one egg and one yolk into the mixture gradually; cool before adding the egg. Put in muffin
tins, spreading each tablespoonful out. Start in a hot oven. When crisp and brown on the outside, take out, open and scrape out dough. Fill with whipped cream and ice with a chocolate frosting.

Creamed Smoked Fish
Dill Pickles
Baked Potato Buttered Turnips
Bread and Butter Tea
Canned Berries Cookies

Salmon Souffle
Creamed Potatoes
Beet and Cabbage Salad
Corn Bread Tea or Coffee
Apple Dumpling

Beet and cabbage salad is made from raw, chopped beets and cabbage, with mayonnaise dressing or boiled dressing and a lettuce garnish.

Shrimp Salad Rolls and Butter
Potato Croquettes with Cheese Sauce
Apple Fritters Tea or Coffee

Potato Croquettes—Five boiled potatoes, mashed; one-fourth cup milk, one tablespoon butter, one egg, and bread crumbs. Mix potatoes into croquettes, dip in egg and bread crumbs and fry in hot fat. Serve with a cheese sauce made of one cup milk, one tablespoon flour and four tablespoons cheese. Scald the milk, thicken with flour, add cheese and allow it to melt.

Apple Fritters—Make a batter of one and one-third cups flour, one-fourth teaspoon salt, two teaspoons baking powder, one egg and two-thirds cup milk. Dip an apple quarter into this dough and drop into deep, hot fat and fry like a doughnut. Sprinkle with powdered sugar and serve plain or with maple syrup.

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Planning the Kitchen for Efficiency

EW housekeepers realize that the fatigue they now take for granted could be eliminated to an astonishing degree if the kitchen equipment were properly placed. Most kitchens are arranged in a haphazard fashion, with the various pieces of equipment placed in relation to the wall spaces instead of in relation to one another.

A small kitchen is supposed to be easier to work in than a large one, but even the largest kitchens may be made efficient by a good arrangement of the working centers.

The stove is a fixed piece and, while it may be moved, it is usually more convenient to allow it to remain where it is and to arrange other pieces in relation to it.

The cabinet and the ice box could be neighbors, at least, and the stove could have the fireless cooker placed near it; while the table might stand near the dining room.

The sink is an independent factor and should have shelves near it for the clean dishes. When these are carried into the pantry, a tray wagon should be used or a large lacquered tray.

The ice box and the cabinet are the starting points of all food journeys, so they ought to be placed near together. The next journey is to the stove or to the fireless cooker (which should stand on a low bench beside the stove so that the heated discs may be lifted from the one into the other without unnecessary steps).

Food cannot be carried from the stove directly to the dining room table. It must be transferred into serving dishes; so the kitchen table is the next step, and from there into the dining room.

If every housekeeper would make several plans of her kitchen, with the equipment indicated, and would trace on these plans the journeys she makes in doing certain household tasks, she would be surprised to see how much unnecessary ground she covers.

She goes to the ice box for perishable foods and the rest is kept in the kitchen cabinet in the small containers that are replenished from the larger stores in the pantry. The actual preparation of food is done on the work table or the cabinet and all preparing tools should be kept in its drawers. It is a good idea to have extra shelves made to hold mixing bowls and other crockery on one side of the cabinet, and biscuit pans, et cetera, on the other.

The "place for everything" should be the place where it is easiest to put it. Things will easily be kept in their places only when their proper places are the easiest places into which they can be dropped.

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Builders of homes, hotels, sanitariums, hospitals, schools, libraries, clubs, apartments and flats, use this style of window hardware extensively.

Illustrated booklet ZC-2 will be sent without obligation to anyone interested.

Why Waste Coal?

Cast iron—breaks
Kewanee—all steel

Warm air escapes through a loose or broken coal chute! Have the Kewanee. It’s ALL STEEL, not cast iron. Won’t jar loose from the foundation. Fool-proof! Burglar-proof! Keeps up appearance, and value of your house.

GUARANTEED for five years against breakage. Will last a lifetime.

If your hardware or building material man hasn’t the Kewanee, write to us direct.

KEWANEE MANUFACTURING CO.
414 N. Tremont St. Kewanee, Illinois

Cabot’s Creosote Stains

The cheapest, most artistic and most durable colorings for

Siding and Shingles

1. They cost less than half as much as paint.
2. Can be applied in half the time and by any intelligent laborer, halving the labor cost.
3. The Creosote preserves the wood and repels insects and vermin.
4. The colors are rich, harmonious and transparent, bringing out the beauty of the grain of the wood.
5. They wear as well as the best paint.
6. They are especially suited for small houses, of siding, shingles or boarding.

You can get Cabot’s Stains all over the country. Send for stained wood samples and name of nearest agent.

525 Market St., San Francisco 24 W. Kinzie St., Chicago
Rolls of Wall Paper Required.

This table gives the amount of wall paper, in double rolls, and the yards of border needed for different size rooms. You may deduct one roll of side wall for every four openings. Notice that the rooms are grouped according to the distance around them. This is correct for the sides and the border, and for the ceiling is nearly enough correct, as some must always be allowed for waste and matching and possible accidents.

<table>
<thead>
<tr>
<th>Size of Room</th>
<th>Double Rolls of Side Wall Needed for Height of Room</th>
<th>Yards of Border</th>
<th>Rolls of Ceiling</th>
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<tbody>
<tr>
<td>8 x 8</td>
<td>4 4 4 5 5 6 12</td>
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</tr>
<tr>
<td>16 x 16</td>
<td>8 9 10 11 12 25</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Where a room has a corner or jog taken out or added on this must be figured by itself. To get the ceiling, take the number of square feet and divide by 72. This gives the number of rolls needed if there were no matching or waste, but as there is and some will extend down on the side walls, always add one roll. Notice in the above table that this is done.—John Upton.

Painting the Screens.

Early in the spring the screens should be put into good condition if they are to give a full measure of service. As a general thing the wire cloth which protects our porches and window and door openings through the summer season does not break from wear as much as from neglect. More screens are allowed to rust out, after several seasons of use and misuse, when the protective coating has suffered from storm and sunshine, with no aid from the outside, than are worn out even by hard usage.

Only after a vacation spent so close to nature that screening of some kind has not been included in the preparations for living, does one appreciate to what a degree civilization is indebted to screen cloth for summer comfort. People are only beginning to realize how far the health of the family is dependent on the exclusion of such pests as the fly and the mosquito. It has been suggested that there would be less need of the "fly swatter" in the later summer if the screens were protected by an application, every spring, of good screen paint; neither would it be necessary to buy new screening so often.

A paint prepared especially for screen cloth should be used, however. Ordinary house paint, even if made so thin as to do little good, stops up the openings, and gums up the screen, and at the same time gives a bad impression from the outside, of the home and its occupants. There is a special screen paint which makes the job look like new, and while not adding materially to the expense of the work adds to the self respect of the owners.

The Wash Boiler.

After you empty the wash boiler rinse it with clear hot water and while still warm rub the inside with soap. This prevents it from rusting and next wash day it will be there to serve as suds.
BUILDING the HOUSE

A Handbook Every Home-Builder Should Have

A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

See that your home is built right. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

Revised Edition
Price, $1.25; postage, 4c.

Published by
M. L. KEITH
204-5 Abbey Bldg., Minneapolis, Minn.
SCIENTIFIC tests have demonstrated that the air in an ordinary dwelling is changing all the time, through cracks around windows and doors, and even through the walls," says Charles Whiting Baker, in a paper presented before the American Society of Heating and Ventilating Engineers. "The rate of change of air increases rapidly with lowering temperature and especially with increase in wind velocity.

With most heating installations in dwellings, bad air from the upper part of the rooms, together with gases and odors, are vented, largely by means of the natural movement of air currents, fresh air being forced in from the outside in order to equalize the pressure. It is only for the warm air installation that any attempt is made to bring into the house the fresh air from the outside. "By taking cold air from inside the house for recirculation in severe weather," this paper continues, "not only would a large saving in fuel be effected, but the house would be much more comfortable in such weather. A furnace can adequately heat a building when taking in air at 50 to 60 degrees Fahrenheit, which it could not possibly heat when taking in air at zero or below. By taking the cold air from inside the house, also, the layer of cold air that accumulates on the floors as a result of the natural ventilation at windows and doors is constantly being drawn off and reheated.

"It is, in fact, a material advantage of the auxiliary cold-air inlet from inside the house that it enables a furnace to be installed which will deliver warm air instead of hot air—a large volume of warm air instead of a small volume of intensely heated air. Not only is this conducive to health and comfort, but the risk of fire from overheated flues is avoided."

In the spring, when the experiences of the winter are still fresh in mind, is a good time to study and, possibly, correct the heating installation for the next winter. In the interest of coal conservation, it has been suggested by many authorities that persons who have hot air heating plants should install auxiliary cold air inlets inside the house, keeping the air in circulation, and recirculating it during the intensely cold and windy season, even if it is brought from the outside during mild weather. Experiments are tending to show that "freshness" in the air often comes from the movement of the air or its ozone content, rather than because it comes from the outside.

This matter of recirculation of the air in the house is being studied in the research department of the University of Illinois, where the warm air furnace is under special investigation. Professor Ward E. Pratt, of the research department, says: "I am in favor of taking cold air from the floors inside the house without an auxiliary cold air intake from the outside." He was one of the heating and ventilating engineers who advised the chief of the United States Housing Commission to employ this system.

Humidity.

Concerning humidifying apparatus in the warm air furnace, Professor Pratt says: "I most emphatically recommend a humidifying apparatus that will evaporate much more water than the average water pan set anywhere in the warm air heater casing. The average water pan does very little good."
This House Not Abandoned

This house with the battered siding and broken coal-bin window is not abandoned. It just looks that way. It is in a good neighborhood and merely shows how the glass was broken, and the siding battered when coal was delivered.

In this emergency the opening was boarded up. But the house was disfigured, cold air rushed under the floors—and there was no light in the coal bin.

Contrast with this the attractive Majestic Coal Chute—which thoroughly protects your home against damage. The wire glass window admits plenty of light. A Majestic chute would have saved its cost in necessary repairs.

Specify Majestic Coal Chute when you build. Install one in your present home. Write for details. Working drawings gladly supplied. Our Milk and Package Receiver and Underground Garbage Receiver are wonderful home helps. Ask about them.

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1004 Erie Street
Huntington, Ind.

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1. Protects Against Damage
2. Enhances Property Value
3. Lessens Depreciation
4. Saves Money

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A glass bottle never leaks. Its seams are melted together so that it becomes one piece of glass.

For exactly the same reason, the HESS WELDED STEEL FURNACES cannot leak gas, smoke, nor dust. The steel plates of the radiator are riveted together and then they are welded together where they join, with a process of welding and melting which makes of them a continuous seamless body of steel.

The fire-box, ash-pit, etc., are all inside of this steel radiator and are fully enclosed, just as they are in the bottle. There are no cup nor sanded seams to open nor leak; no cemented joints in the entire radiator. No amount of expansion and contraction can ever make a leak in this furnace; It is everlastingly tight. This is only one of numerous features in the HESS WELDED STEEL FURNACE, that make it different and better than ordinary furnaces.

Our 48-page booklet will give you an idea of furnace construction of the best type, and this book we will send you free on request, and we will send you also a small sample of steel showing the manner in which the plates are made seamless by welding. Ask for them.

We are making both PIPE and PIPELESS furnaces. Our free planning service is at your disposal, without any obligation whatever on your part.

HESS WARMING & VENTILATING CO.
1217E Tacoma Building
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Special Rates to Contractors
The evaporative capacity of water pans as used in furnace installation has been made the subject of special study by Professor Pratt. The results apply to the three common types of pans, all of which were run successively in the furnace, when operating as a complete system.

"It will be noted from the data obtained in these tests, that the dome pan is by far the most effective per square inch of surface, and that its total evaporation is greater than the crescent shaped pan around the fire pot, up to the maximum temperatures used. The limited evaporation which takes place from the regular type of pan is too little to produce any appreciable effect, as is very well known to anyone who has ever attempted to determine the effect of such pans on the humidity of a heated house."

Tight Building and Window Leakage.

The statement is made that "a space of one-eighth of an inch or more will be found around almost every window and door frame in the average residence and flat building." This may not seem much, until it is figured out that an eighth of an inch all around, say thirty windows, which is not an unusual number for the modern house, would equal the space of an opening 3 feet wide and 2 feet high. Then imagine trying to heat a house in very cold or windy weather with a space of this size open, in the hall, or where it will affect all of the house. This gives some idea of the amount of outside air which is constantly entering the house.

"Window and door frames leaking air around the casings or into the walls behind the plaster is not necessarily the fault of their construction or of the materials used—as all wood will warp and shrink, contract and expand; mortar will fall down, and such a condition is often harshly judged as poor or shoddy work."

"As the warping of the wood of the window frame and the settling of the stone, brick or concrete of a building occur, there is bound to be that variation between them which will allow the in-leakage of cold air, dust, soot and water and the out-leakage of warm air. These changes are not definite and they never cease. Temperature, moisture and indeterminate causes make for expansion, contraction and settling. Oakum or similar material must be tightly driven in around the frames and under the sills. Double windows in winter or some form of metal weather strips are effective measures for obtaining tight windows."

Study the Heating System.

Special emphasis has been laid recently on the opportunities awaiting the heating contractor in the examination of existing heating plants, with doubtless first among the usual defects in a heating system, those of the chimney or flue.

Let us consider the next thing, which is the smoke pipe. Too long a horizontal smoke pipe between the boiler and chimney will affect the chimney draft, though this is not a disadvantage where the draft is by far sufficient.

On the other hand, if the draft is less than desired, and the long smoke pipe cannot be otherwise remedied, it should be covered in a thorough manner. A long uncovered smoke pipe, say 40 feet, without considering the frictional resistance, may have the effect of lowering the stack about 15 feet.—Heating and Ventilating Magazine.

Warm and Ventilate

your house at minimum expense and with maximum satisfaction, with the

FRONT RANK Steel Furnace

Simply built, stays in order, is easily cleaned, burns any fuel with best results because of its longer fire travel. Send us your plans. No charge for laying out a Heating System.

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and its EQUIPMENT should be carefully PLANNED.

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The Kewanee Sewage Disposal System is a complete sanitary system of protection, enabling you to use all up-to-date plumbing appliances. The System is simple in construction, easy to install and has nothing to get out of order. It brings to your home the comforts and conveniences of a city dwelling.

There are also Kewanee Lighting Plants, and Kewanee Water Supply Systems. The Combination System, supplying both running water and electricity, in one compact machine, costs less than the ordinary lighting plant alone. Send today for free booklet describing over 100 Kewanee plants for farms, country houses, clubs, etc.

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KEWANEE
Water Supply Electric Light Sewage Disposal

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Porches equipped with Aerolux Ventilating Porch Shades become pleasant living rooms and healthful sleeping rooms with all the privacy and comfort of interior rooms.

Aerolux Shades shut out the sun's intense heat and glare, yet they admit a restful diffused light and allow a free circulation of air. Made of narrow, linwood splines finely finished and stained in attractive lasting colors. For Porches, Sun Parlors and Sleeping Porches. Aerolux Porch Shades have the features, durability, beauty and finish that make them a superior shading equipment for every type of porch.

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NO-WHIP
VENTILATING
PORCH SHADES

The Home Complete

If you are planning to build a home or have some remodeling in mind, give comfort and convenience a first consideration. Make the new house a real home complete with the service secured by the installation of

The "MINNEAPOLIS" HEAT REGULATOR

It operates automatically, maintaining exactly the temperature desired at all hours of the day and night. Works perfectly with any style of heating plant, burning coal or gas. Affords a considerable saving in fuel and lasts a lifetime—many devices installed 35 years ago still giving good service. Sold by dealers everywhere and guaranteed satisfactory.

Write us for booklet

MINNEAPOLIS HEAT REGULATOR CO.
2725 Fourth Avenue S., Minneapolis, Minn.
HEN roofing materials are under consideration, asbestos shingles, or, as they are more properly called, cement asbestos shingles, are among the types of materials which are giving satisfactory service, and which are at the same time an attractive adjunct to the house, as they are made in a variety of excellent colors.

At the National Conference on Concrete Housing, which was held at Chicago in February of this year, one of the reports presented to that conference gave an interesting account of the way asbestos shingles are made. We quote from this report:

"Cement asbestos shingles are composed essentially of Portland cement and asbestos fibre, about 75 per cent of the content being Portland cement. They are of Austrian invention, and large amounts of capital and effort have been expended in perfecting their commercial production. We believe full credit is due Dr. Richard V. Mattison for his efforts in this field."

Method of Manufacture.

"After exceptionally thorough mixing, which is accomplished in machines somewhat resembling a pulp beater commonly used in paper mills, the pulp mixture of cement and asbestos is dropped on a wide moving felt conveyor whence it is conveyed between heavy rollers to a pressure roll where successive layers are laid upon this roll from the felt. The material is thus built up in piles. When the desired thickness is reached, the sheets, still wet, are cut off and run through a cutter, where the shingles are cut from the sheet into uniform sizes. A number of other operations are performed, the shingles being pressed to remove the bulk of the moisture and produce a smooth surface. They are then seasoned, trimmed and drilled."

Size and Weight.

"Cement asbestos shingles are approximately 3⁄16" thick. They average in weight about 435 lbs. per square (100 square feet) for the American type, and about 275 lbs. per square for the French or diagonal type. They are made in a variety of shades and are commonly furnished in standard colors of gray, red, brown, dark slate and green. They are available in various shapes—commonly furnished in rectangular and diamond-shaped shingle forms. The application of these shingles is so simple that any carpenter skilled in applying wooden shingles, or any roofer, can apply them in minimum time, as all nail holes are punched in asbestos shingles during the course of manufacture."

Cement asbestos shingles are composed of Portland cement and asbestos fibre, 75 to 85 per cent of the content being Portland cement. They are of Austrian invention, the Austrian patents having been brought to the country some time ago, where they were purchased.
No Danger of Fire in This Beautiful Home

All the walls and ceilings are plastered over KNO-BURN Expanded Metal Lath. The steel and non-combustible plaster makes every wall a fire-stop.

Kno-Burn Metal Lath
also prevents interior or exterior plastering from cracking or falling and from streaking. Use it in your home to make it more safe—more beautiful. Ask your Architect about KNO-BURN or send for FREE BUILDER'S BOOK and samples.

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M. L. Keith
EDITOR AND PROPRIETOR OF KEITH'S MAGAZINE
PRESIDENT AND TREASURER OF KEITH CORPORATION
some 15 or 20 years ago, improved and developed, and brought to general knowledge.

Most of the asbestos used in this country is mined in Canada, where there are large deposits. In normal times Russia produced a considerable amount of asbestos. When the embargo was placed on shipments from Canada in 1916, our domestic sources were investigated, and an encouraging outlook reported in Arizona. Also it seemed possible that production might be resumed in Vermont with perhaps an increased production of asbestos in Georgia.

Nevertheless it is to Canada that we look for our chief supplies, where it is mined from great pits, though underground tunneling has now been developed.

The serpentine rock is blasted out of these limestone quarries in order to get the little layer of asbestos between the veins. The asbestos is found in the form of rock and is usually from one-half to three inches in thickness. Great masses of limestone must be blasted away in order to obtain these small veins of asbestos.

As it is mined asbestos has the form and appearance of rock, but when it is crushed, instead of crumbling to a powder it crushes into a fibrous mass not unlike wool.

The crude asbestos shows clearly its fibrous nature. It has much the appearance of spun glass, with the fibres transverse of the vein, and therefore the length of the fibre limited to the thickness of the vein. The fibres show a face polished almost like a surface of mica, but the cleavage is with the fibre, which is really so soft that it easily rubs off into a soft feathery consistency. After being crushed, cleaned, and carded, ready to be manufactured into cloth or any of its products, it has the appearance of a great mass of wool. Touch a match to it, and the likeness disappears, as it refuses to burn. Generally only about 15 per cent of asbestos is used in the preparation of the shingles, together with 85 per cent of Portland cement. Manufacturers tell us that they would more properly be called cement shingles since so large a proportion is cement. Nevertheless the name asbestos or cement asbestos seems properly to belong to them.

Building Material for France.

William G. Sharp, of Elyria, American ambassador to France during the greater part of the war, declared before the Cleveland Chamber of Industry last week that not nine-tenths of the building material the casual reader thinks will go from America to rebuild the devastated regions of France will be required or purchased because it would not pay to ship it and France does not want it.

"We are not going to supply—nor is any other nation going to supply—the material for rebuilding those ruined towns because they have the raw materials they use, lath and plaster, literally, in their back yards," said the ex-ambassador. "They won't have outside material."

This statement by the ex-ambassador will probably come as a surprise to many who had anticipated a large foreign demand for all kinds of building materials and, in view of the tremendous activity expected in the building trades in this country, the real condition in France, as stated by Mr. Sharp, may be a blessing in disguise.

Avoid Waste.

A successful carpenter-contractor explained, a short time ago, how he managed to make several hundred dollars more on each job than his competitors:

"I figure in advance exactly what dimensions will work to best advantage in the structure that I am erecting. This does not apply very much in the matter of joists, studding and other heavy timbers. In sheathing, first and second flooring, siding, and the like, however, I find that it is possible to save a good many feet of lumber. In estimating the quantities of these latter parts of a house architects do not commonly give dimensions, but merely give lump quantities. In buying all lengths it invariably happens that a good many short pieces will remain after boards have been cut to fit particular runs. For example, 14-foot siding never exactly laps center to center on studding spaced 16 inches center to center. The waste of 8 inches per board does not seem very great, but in the long run it amounts to many feet.

This calls for more study as to the relations between standard dimensions for plans, and the standard sizes and lengths of lumber as it is manufactured.
The Shingles You Can Put on and Forget

Ambler Asbestos Shingles are worry-proof. You can put them on the roof and forget about them—dismissing roofing troubles from your mind. Weather and fire-resisting and beautiful in appearance, they’ll live as long as the building itself. One of the

**AMBLER ASBESTOS BUILDING PRODUCTS**

**Ambler Asbestos Shingles.** Made in three styles, four permanent colors: Newport grey, natural slate, red and green. Lie snug to the roof, forming water-tight and fire-tight covering.
Also 1-4 inch mixed color shingles in seven shades of reds, browns and greys.

**Ambler Asbestos Building Lumber.** For siding, partitions, fire doors and wherever fire resistance is essential.

**Ambler Asbestos Corrugated Roofing and Siding.** For industrial, railroad and farm buildings.

**Ambler Linabestos Wallboard.** Wherever a superior flame-proof, fire-resisting wallboard is wanted.

*Send for Samples and Literature showing reproductions of installations.*

**Asbestos Shingle, Slate & Sheathing Co.**

Ambler, Penna.


**BRANCH OFFICES:**
Atlanta, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Minneapolis, New York, Philadelphia, Pittsburgh and Washington
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.

Care of Woodwork

The progressive housewife appreciates the value of her personal care and attention if she wishes her woodwork to keep its pristine beauty, as it should. As a matter of fact it may grow more beautiful, rather than less, with the continued rubbing as the time passes. With care and attention, it is beautiful and lustrous; with neglect, it is dull and marred.

The first essential care is the "dusting." Never, never use just any old piece of cloth, from a discarded garment, because it is handy and you think you are economizing; perhaps it is not economy.

A Duster

For a few cents you can secure a woolen duster or cheesecloth. Wash the cheesecloth until every particle of starch or stiffening is removed. When dusting furniture do not bear down on the duster, or cloth, as though you were scrubbing instead of dusting, but rub lightly; it is so easy to start out dusting lightly, but, before you are aware of the fact, you are more than rubbing. Try to remember.

The small particles of dust that you collect on your duster, with pressure, makes it become like sandpaper—even though very fine. This will gradually remove the lustre and wear off the finish.

Removing the finish, or lustre, from varnish is the same thing as wearing the enamel off the teeth. Everyone knows the result. The protecting coating becomes dulled and discolored and useless as a protection. So does any finish.

Avoid Water.

Use water as sparingly as possible on any lustrous surface unless it is enamelled. When you do use it, simply dampen a cloth and go very lightly and quickly over the surface. After a few minutes take a dry cheesecloth, with a few drops of furniture oil, and go over the surface again, to prevent the water, be it ever so little, from getting through the finish. Any scratch or mar gives it a chance to creep in. Water is, to varnish, what oil is to rubber, or acid is to skin; unless quickly removed it leaves a blemish.

Moldings and grooved woodwork require a soft-haired brush to remove the dust. Always dust with the grain of the wood, as the finish is applied in that manner and naturally there is less friction or wear.

Scratches

Should the woodwork become scratched, attend to it as soon as possible—the sooner the better. Always keep on hand hardwood filler, the same color as your woodwork. It can be
has no equal for porch construction. It seems to be pretty fully demonstrated that for all porch construction, porch floors, porch columns, steps and rails, the rot-resistant quality of "The Wood Eternal" gives it unequaled investment value for this class of work. CYPRESS is famous for "staying put."

SPECIAL NOTICE: Among the 43 Volumes of the INTERNATIONALLY STANDARD CYPRESS POCKET LIBRARY, the following volumes contain matter bearing on the above subject, viz.: Volume 16 and Volume 12. Volume 1 contains full U.S. Government Report on Cypress and a complete list of all volumes. Any or all of these will come free promptly on your request.

Let our "ALL-ROUND HELPS DEPARTMENT" help YOU. Our entire resources are at your service with Reliable Counsel. We invite correspondence with a serious purpose in it.

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SPECIFY AND INSIST ON "TIDEWATER" CYPRESS IDENTIFIED BY THE CYPRESS ASSN.'S REGISTERED TRADE-MARK.
IF IN ANY DOUBT, PLEASE WRITE US IMMEDIATELY.

THIS REGISTERED TRADE-MARK IS INDELIBLY STAMPED IN THE END OF EVERY BOARD OF TRUE "TIDEWATER" CYPRESS. TAKE NO OTHER.
bought in 1-pound to 100-pound lots, so you can buy any amount, at from 26c to 36c a pound. Rub the filler into the scratches, let it dry—it takes about ten minutes. Then rub off the surface smoothly and apply a little varnish with the grain, never against it. Do the same thing in case the wood becomes overheated and blisters, but first remove the blisters and rub smooth with fine sandpaper, 00 or steel wool 00. Should your woodwork be soft wood, grained to represent hardwood, get a stain of the same color and apply to marred surface. When dry, varnish, and your woodwork looks like new again.

When the general finish of the house begins to lose its lustre, get the best interior varnish obtainable—it is the cheapest in the long run, both as to durability and covering capacity—costing about $6.00 per gallon. Any housewife, with a little care, can apply it with satisfactory results, but it is often better to have a good painter apply it, as every housewife has a plenty to do without this, and a good painter can cover much more surface with a gallon than an amateur or beginner. After the varnish has been applied, do not allow any dust or smoke to come in contact with it until perfectly dry. Good varnish sets dustproof in about eight to twelve hours. Better give it a few hours more to allow for dampness, etc.

By carefully following these simple precautions and attentions, your woodwork will retain its lustre for years and add beauty and newness to your whole home.

*Curtis Schlefke.*

**Refinishing Woodwork.**

C. J. M.—We have an old house which we want to redecorate and change the woodwork. Am enclosing floor plan. The woodwork is all just varnished—soft pine. Now would it be possible to make this Ivory Enamel and Mahogany combined? Does the varnish have to be taken off or can the paint and stain be applied over the varnish?

The floors are also pine, varnished, and I do not like them for they mar so easily. Is there not some other finish for such floors that would be suitable?

Answer.—In regard to your woodwork, it is not necessary to remove the varnish in order to paint the trim, though it is best to roughen it a little with sandpaper, so the paint will catch and hold well. If you wish to stain the doors mahogany, you must remove the varnish with a varnish remover, before you can apply the stain. But that is not a difficult matter, for you can take the doors off, while this is being done.

In regard to the floors; you can wax them right over the varnish, if they are in good condition. If not, we advise you to clean them off, perhaps with steel shavings, then shellac them, putting some brown stain in the shellac, then wax and polish, which will make nice looking floors if the pine is hard. Otherwise, could you not have three-eighths inch hardwood floors laid over the pine floors and finish as above?

**Refinishing a Fine Waxed Floor.**

J. E. R.—In refinishing a fine quartersawed oak floor, which is better—to wax over the filler only, or use two thin coats of best varnish, then the wax? The latter is much more expensive, of course. As the floors are to be re-scraped with the electric sandpaper machine and so entirely renewed, I would like your advice. The present finish—two rubbed-down coats of good varnish—has been discolored on thresholds so as to need refinishing. The old floors had no stain under varnish.

Ans.—You ask as to the most satisfactory method of refinishing a waxed floor. Reasoning along the line that “a chain is no stronger than its weakest link,” just so will a wax finish wear no longer than its foundation.

Very frequently in the filling of an oak floor the filler is not thoroughly worked into the pores, thus leaving slight indentations into which the shellac coat would sink and leave very little material on the surface for a foundation.

The application of one or two coats of varnish over a coat of filler serves to seal the filled surface and to lengthen the life of the wax. Should the wax be applied directly to the filler, the solvents in the wax would tend to drive the wax into the surface, and the wear would then come on the filler and not on the wax.
Making Plans to Build?

Include in those plans the

BUILDING AGE,

the monthly publication which contains—every month—full page colored perspective drawings with plans, constructive details, and condensed specifications, also photographs of recently completed unique and unusual houses accompanied by full working drawings.

You will also find many valuable suggestions for residences of moderate-cost type and ideas which will add to the convenience and comfort of your new home.

Consult the advertising pages before buying—you will find them a veritable market place for material.

Special Offer

To enable you to judge for yourself the value of the contents of BUILDING AGE, we are glad to make readers of Keith's this special offer:

The price of 12 issues (1 year) is $2.
We will mail you the next 6 important numbers ($1) and copies of 2 current issues—8 numbers in all for only $1, if you will write mentioning this offer and enclosing $1. (Canadian postage 25c or foreign postage 50c additional.)

When writing just say, "I accept Special Offer in Keith's." Or tear out this coupon and mail with your name and remittance. Do it today!

BUILDING AGE
243 West 39th St. NEW YORK CITY
Apartments for Children.

Apartments planned especially for families where there are children come as a new development in one of the larger mid-western cities. These apartments promise to be a "mother's paradise," as not only are children "allowed," but special provisions are made, not only for comfortable living with her own children, but with the neighbors' children also. Especial provision is made for the deadening of the walls and floors so that the noise of children at play or in their little difficulties will not be communicated from one apartment to another. Children will not be allowed to play in the halls and corridors. There will be a large play room in the basement, and also an outdoor playground, with the usual playground equipment. More than that, there will be attendants with special supervision over the children; a "child expert" and an instructor or play director, with a nurse for the younger children.

This is intended to give the mother a certain amount of freedom from anxiety in leaving her children for an afternoon or evening, as she could leave them in the hands of a trained specialist instead of with an inattentive or ignorant maid.

Most of the apartments are of five rooms with two bed rooms, though a few are four-room apartments, with special provision for closet space, such as is always necessary with a family of children. The owner says that he is taking this way for putting a "premium on better Americanism," in making provision for the coming generation of citizens.

Book Review.

Progressive Steps in Architectural Drawing, by George W. Seaman, Architect, Instructor in Architecture, School of Industrial Arts, Trenton, New Jersey, has just been published by The Manual Arts Press, Peoria, Illinois, price, $1.25, and is a valuable little book not only to students of architecture and architectural drawing, but also to those people who would like to be able to "read plans" and understand what they say to the builder. It is "A step-by-step method for student draughtsmen, together with details of construction and design."

The system of laying out a set of plans is given, drawing accurately and quickly the general lines of the elevation and showing heights. Sizes which are more or less standard, and the ranges through which they are generally used for such details as doors, stairs, flues for chimneys, et cetera, are given, as are also the way these and other details are ordinarily shown on plans and other drawings. While these are intended to teach the student in the drawing of the plans, to quite a large class of people who are building or about to build homes for themselves, these will be of equal value as showing just what is meant by these details on the plans they are studying.

Plates show the usual types of window box construction, gutters and cornices. The similarity of plans and the types into which they fall are shown.

A series of plates show the "Orders of Architecture," Doric, Ionic, etc., as derived from the old classic architecture and so much used in Colonial details, noting that more delicate proportions must be used as applied to wood. Excellent lettering is shown all through the plates.

Comparative Building Figures.

For the past 11 years, the annual building figures for 120 identical cities, according to Babson's Statistics, are as follows:

<table>
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</tr>
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</table>
## CONTENTS FOR JUNE, 1920

<table>
<thead>
<tr>
<th>Article</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just a Word</td>
<td>316</td>
</tr>
<tr>
<td>How Do Your Gardens Grow?—Louise N. Johnson</td>
<td>319</td>
</tr>
<tr>
<td>Home Atmosphere—Mrs. Minnie Olcott Williams</td>
<td>322</td>
</tr>
<tr>
<td>The Electric Range—Warfield Webb</td>
<td>326</td>
</tr>
<tr>
<td>Garage on Terrace Property—R. D. Count</td>
<td>329</td>
</tr>
<tr>
<td>By Your Lawns—Florence E. Andrews</td>
<td>331</td>
</tr>
<tr>
<td>Two Attractive Homes</td>
<td>333</td>
</tr>
<tr>
<td>A Southern Home</td>
<td>335</td>
</tr>
<tr>
<td>A Real Home</td>
<td>337</td>
</tr>
<tr>
<td>A Pleading Small Home</td>
<td>338</td>
</tr>
<tr>
<td>Shingles For the Exterior</td>
<td>339</td>
</tr>
</tbody>
</table>

### DEPARTMENTS

**Inside the House**
- Decoration and Furnishing—Virginia Robie, Editor
- Charm in Our Houses
- Batik as a Fine Art

**Answers to Questions**
- Table and Food Values
- About Salads—Elsie M. Fjelstad

**Household Economics**
- The Ubiquitous House Fly
- To Renovate Window Shades

**Water Supply**
- Importance of the Water Supply
- Home Plumbing Notes

**Building Materials**
- Stucco in Construction
- Concrete

**Woods and How to Use Them**
- The Modern Standard For Floors
- To Finish Floors

**Splinters and Shavings**
- To Teach Fire Prevention
- Book Review

**Contents Volume XLIII**
How does your garden grow?
The old nursery rhyme, "Mary, Mary, quite contrary, How does your garden grow?" interested me before the affairs of a garden were comprehended. "Silver bells and cockle shells, And pretty maids all in a row," brought to my mind a jolly garden, just the kind to run and play in. Isn't it a pretty picture even for a grown-up? Though past the age of merry rhyme, and also that when the brightest hued flowers fell the ready victims of my grasping fingers, a beautiful garden still holds me spellbound. Silken petals kissed by the morning dew, ivy clinging in friendly aspect on severe stone walls, delightful wooded paths, all have such a subtle charm that description falls short of their true meaning. Be the flowers ever so gaudy and varied in hue, their bright color contrasting with the green landscape.
brightens the eye and gives a zest to living.

And why does a garden always allure? What is the secret of its enchantment? Have you ever viewed a garden at early morning when the sun's first rays touched the flowers? Studying each closely, it is almost human the way they lift their faces toward the sun. At the end of a tiresome, hot day, did you ever stroll in a garden pungent with the perfumes of roses and honeysuckle without an unexplainable loosening of the chords which bound you to worry and fretfulness? Something in the friendly nodding of the flowers, pleasing and dainty; in the supple strength of the trees, proud and erect in spite of the winds and rains, clears away the cobwebs in our tired minds and replaces them with a kindly, genial glow towards the world in general.

There are, of course, gardens and gardens, and to attempt to help you in the layout of yours, or to explain the kind of garden best suited to each particular plat, is not the purpose of my story. It is only a plea for their existence, for in shutting them out of our everyday lives we lose a gift which I think is the most lavish of all nature's blessings. A true lover of nature can never be wholly unhappy. He has taken a lesson from the flowers, and his soul has gained too much beauty and sweetness from communion with them to be crushed by affairs of man-made business.

The garden in the rear of a Seattle home shows the touch of an artistic hand and the sympathy of a flower lover. In the formal garden flowers so varied in hue as to create a riot of color were planted, and against the creamy white walls of the house, the green lawn and the dull red brick garden walks, they present a picture that would fire the dullest fancy. Their enlivening effect is just as sure as the "silver bells and cockle shells."

At Alki Point, a suburb of Seattle, this exquisite rose garden was found on an old estate. Here also is the site of the rustic bridge spanning the creek which flows through the grounds. "Away dull care," you will exclaim as you wander around
Homes and gardens are closely allied

Ellis F. Lawrence, Architect

these grounds. Flowers everywhere, roses predominating, bordering the paths, twining around the trees and over the porches and trellises.

Homes and gardens are so closely allied that neither can be quite complete without the other. A very beautiful house may seem quite barren in a bleak landscape, while the simplest little home set in a garden may be beautiful, and at the same time add a charming spot in the landscape.

The illustration showing the home of Judge Bronough, of Portland, is typical of Oregon scenery. The house overlooks the Willamette River, and nestling as it does among the evergreen trees and shrubs on the grassy slope, its beauty has been enhanced a hundredfold. Can you realize what it means to an interior when right outside the window sill a profusion of roses are blooming? And when the open porch is closed in by a flowering hedge, isn't it an effective way of combining beauty and utility? The vines that climb over the east side of the house facing the river give an added touch of friendliness to the picture.

It's just a matter of choice which you prefer, the formal or the informal garden. In the latter the shrubbery has been given greater sway, roses, rhododendrons, iris, petunias and asters all being represented as one jolly fraternity of good fellows.

A gentleman who owned a suburban home in California, with grounds covering a few acres of hilly land, was confronted with the problem of either laying out the then unattractive sloping field in the rear...
of his home in a garden; necessitating care which he had not the time to give it, or hiring a gardener. Instead, he planted the entire slope with California poppies, and when the poppies bloomed, their brilliant colors creating a bright patch on the hillside, they were a pleasure for which the owners would not have exchanged the most carefully kept garden. Nor was the pleasure confined to the owners, as the brilliant hillside was a magic spot to the community.

To you walled in by hotel and apartment rooms, where life is too apt to narrow down to the practical, when you find life growing irksome and somewhat monotonous, go out and play among the laughing flowers,—living over again your happier days. The flowers and the open have a message for you; get acquainted, talk to them. In them is hidden the soul of romance, the fountain of laughter; they are the symbols of love and beauty given to this busy old world by a generous Creator.

**Home Atmosphere**

Mrs. Minnie Olcott Williams

S to what makes a house a home people might differ, according to their ideas of what is home-like. Home is where the heart is, as Lord Byron found out long ago. All the fine furniture in the world will not make a home without that indefinable something called atmosphere. Things beautiful in themselves become more beautiful when they contribute to somebody’s need. But there are so many “somebodies” and so many needs that it is easy to furnish the variety which makes the spice of living.

Above all, a home must be a place to live and not a show-case for fine furnish-
ings. A real living-room is one in which the combined tastes of the family are expressed. If some love music, the means of expressing it must be there; if books, they must be in evidence; if pictures, let them be an indication of what you love best and not those recommended by outsiders. If you care for none of these things you can still make home attractive by its cleanliness, its restfulness and its peace; you can contribute a cheerful presence and a welcome smile to the weary home-comers that will spell Home with a capital letter.

Our family Doctor has an ideal Library or Living Room as you like it. The walls are lined with books—well selected, interesting books, with no suggestion of having been ordered by the set to fill up the book-cases. Your favorite will perhaps be found within easy reach among those upon the big, solid, roomy table, where you can sit and read to your heart's content, choosing your light from the real candles such as your forefathers used, or the modernized electric ones in the chandelier above. Presently the good doctor will come bustling in and invite you to sit by the fire in his pleasant dining room; he will delight to point out the old settle, particularly dear to his heart because it was made of the old walnut from a pew in the village church where his mother used to worship, and fashioned after a bench in an old English cathedral. On the other side of the fireplace he will offer you the comfortable looking chair,—the Colonial type of fireside coziness. The poker and tongs and the bellows are there, even the old-fashioned warming pan commonly used by the pioneers to make icy sheets endurable, in the absence of furnace or steam heat so indispensable today. The two candlesticks with their prismatic fringes remind you of your own grandmother's lamp with its dangles of imprisoned light so tempting to little fingers. In the mirror the old Grandfather clock is reflected from another corner of the room.

You will not be in a hurry to leave this homey place nor the society of your favorite "Doctor Lavendar." It has been truly said that the note which permeates the old Colonial and lends it charm is domesticity. Perhaps also the solid durability of their furniture, beautiful in its high polish and the texture of its wood, appeals to our taste for what is genuine and real.

Does not the entrance to a home give a little inkling of the character of those within? As you are welcomed into the beautiful hall of my friend's Colonial home, you are wafted back to the days when "grave Alice and laughing Allegra
In a Colonial hall

and Edith with golden hair,” came down to storm Longfellow in his den, and you look instinctively for the Old Clock on the Stair. But in the meantime, the maid has taken your card and you wonder if she will eventually deposit it in one of the Parian marble receivers on the old console with its scroll legs and marble top. As you wait you can imagine that there is a garden in the distance, so well do the tapestried walls produce that effect.

Another equally hospitable hall is one in which the console has a mirror which reaches to the floor and I happen to know that it came from Bedford City, Virginia, formerly called Liberty, and one of the first towns to be so named after the defeat of Lord Cornwallis, at Yorktown. Near this historic piece is a davenport of the old Empire style which opens its comfortable looking arms in which you may await your hostess, if you like. As you sit there your eye is attracted to a queer box on the console which you are later informed is a knife box much used in those old days in the Colonies.

What makes a home? Is it not that indescribable touch, usually feminine, without which it is merely a place in which to eat and sleep, as many a man knows who has spent his summer wading through the accumulation of newspapers and miscellaneous articles which seem to be as much out of their element as he is himself.

I did see a bachelor home once, in a little country town, that was a marvel of neatness and order. Meeting us at the screen door, with a comprehensive swat at an invisible fly, the host admitted us hurriedly, lest an invasion of the pest be imminent. Proudly he showed us through his nine-roomed house, immaculate from start to finish, through his old-fashioned garden radiant with the
gorgeous hues of midsummer, on past his thrifty vegetable garden where a weed was an unknown quantity—a plebeian forever ostracised—back to his peach trees laden with the finest fruit, which he eagerly gathered for us. As we walked along with admiration, not a speck of dirt nor dust could we have discovered had we been feminine scientists armed with microscopes,—from the parlor with its old-fashioned furniture and hideous pictures, its photograph album hobnobbing with the stereoscope on the marble-topped center table, which family pride would not allow him to disturb, to the bed rooms with their spotless white spreads, and hem-stitched linen, covering dressers upon which were arrayed toilet articles fine enough to arouse the envy of the most fastidious maiden (he was evidently an observing bachelor), to the dining room with its polished table and well-filled china closet, to the kitchen where there was no choice between the floor and the tables for spotless whiteness, to the pantry where we enviously noted his bountiful array of aluminum and enameled ware, back to the woodshed where the wood was stacked with geometrical precision. It was really uncanny in its perfection.

Not being eligible to such a position, I remarked that it was no wonder that he had never married, no woman could keep house to suit him. His reply was a sad smile implying a beautiful memory tucked away in the corner of his memory closet. Reflecting upon this one-man household afterward, I decided that his was the art gallery of the town, a show-place, an exception to the rule that no man can cope with the intricacies and exquisite detail of housekeeping, and that the remarkable efficiency of this man who rose at four in the morning to complete his daily tasks and then at the proper time betake his masculinity to the arduous business of managing one of the large gravel pits on the bluff, was only a bit of the passing show.

In another photograph an open book upon an ottoman in front of the fire suggests an unexpected call. On the handsome old mahogany table fashioned after the style so dear to the hearts of our grandmothers, there are all sorts of magazines, and a well-filled set of bookshelves built in beyond and also near the fireplace. You see at once that the dear little bride has brought some of her own home atmosphere with her to help express her tastes in the new nest. The woodwork is white and the walls in dainty Dresden colors.

Although the criticism has been made that so many small flats with in-a-door beds are placing us on the level of the ancient cave-dweller who only wanted a place in which to eat and sleep, yet flats
continue to be built and rented before finished. The old, old homes nestled back among the trees have been crowded out by business blocks and flats, but nothing daunted their owners have but moved their Lares and Penates further north and there they dwell in Colonial simplicity, in spite of the newspaper plaint that there is a deplorable lack of old-fashioned home-like atmosphere. Must home-atmosphere necessarily be old-fashioned? Must we spin flax and weave our own cloth and make candles and soap, in order to be home-like? Home atmosphere is like any other atmosphere, invisible, we can not see it but we know when it is there.

The Ideal Kitchen, and the Electric Range

Warfield Webb

It may be that the bungalow idea in our homes has been a material help in making the kitchen a more notable factor in our home building. While the kitchenette, with its compactly planned, and often cramped space, is not always to be desired, yet the idea is one that has met with general favor and we find that with some modifications and varying forms, it is present in many modern homes.

In earlier days the gas range, and then the newer electric range has had some-thing to do with the more pronounced development of the kitchen in the plan of the home. Now we can build our kitchens very small and still not be compelled to smother on account of the excessive heat that was always the great detriment when the coal range was, for so long, the only practical method of cooking. The present-day cooking apparatus is so compact, and withal so improved, that it has become a most important factor in all of the innovations that have made the culinary department approach more nearly to the ideal.

Our ideas on this score as applied to the home have undergone some very marked changes in the past generation. The old fashioned and roomy kitchen that some of us used to know in our youthful days, when the matter of obtaining help was much less a problem for the housewife than it is today, has given place to the compact plan where, with a
few steps there can be just as much accomplished, and with a wonderful saving in both time and labor. The modern housewife finds that with the modern kitchen her needs are met and she can easily prepare a meal without the necessity or even the desire to don a kitchen costume.

The kitchen must, above all things, be sanitary. It must be possible to keep it in that condition with a minimum of work. The kitchens in views shown are compact and very conveniently arranged. All the essentials are at hand and the ease with which a meal can be prepared is noted in such kitchens at a glance.

That which the housewife desires is the ideal kitchen. She can take delight in preparing meals where the surroundings are both convenient and pleasant. The spotless whiteness of the sink, china closet and cupboards, as well as the ease with which the floor and walls can be kept scrupulously clean bring the kitchen nearer to ideal conditions.

As yet there has been only a limited amount of consideration given to the electric range. The value that this latest culinary help can be made to the housewife is of moment when it is given a little more consideration. The purchase and installation of an electric range is now being given wider scope, because the matter is being more generally brought to the attention of the public. Of course the cost of operation depends to a great extent upon two very important elements. These are cost of electric power and the care which the individual uses who is cooking on the electric range.

There are in use today many thousands of electric ranges and the cost per kw. unit of power varies according to the location of the owner. Some cities have a cheaper power than others. In installing an electric range, as with electrical installations of any kind, it is necessary to make sure that the power will carry the additional load on the current, but this is a matter usually taken care of by the electric companies. The cost per hour in the use of an electric range is not high, and may be very low, as when provision is made, and an electric car is used and charged, so that advantage may be taken of the special low rates.

In an average of 100 central stations, in which power is supplied to over 1,800 communities, where there are in use 26,180 electric ranges, the cost of operation in the average family of 4.2 persons, was 3¼ cents per kw. hour.

The advantages that are enjoyed by the users of the electric ranges can be summed up as including a saving in time, conserving of heat, and sanitation. The
oven can be heated, according to the baking or roasting that is to be done, and then the heat can be turned off and the electric range will act just as a fireless cooker, continuing the cooking process without any additional heat from the current.

This is made possible by the fact that the oven of the electric range is insulated and air tight, and does not permit any heat to escape, provided the door is kept closed, which can be done by adhering to the rules set forth on the card guide. On the outside of the oven door there is a thermometer, so that the exact heat of the oven can be ascertained at a glance. This makes it possible to bake or roast any kind of food, and the preparation and cooking, wherein the flavors and juices are retained with little or no trouble.

There is also the factor of cleanliness, as no grease, waste or dirt will result from the heat that is produced by the electric current. Then there is possible the exact regulation of the heating apparatus, as the heat switch can be turned to high, low or medium, and in this way there is possible the saving of power when it is not needed. There is very little knowledge required to operate an electric range, the simple operation being easily and quickly explained to the user. These ranges are simply constructed, and do not easily get out of order. Repairs can be obtained without any trouble and the increasing use of this character of cooking device is such as to make its future a material aid in quick and satisfactory food preparation.

The fact that there is no waste heat makes this an ideal cooking device for kitchenettes, and its compactness is another help in this way. Smaller electric ranges are now made to be fastened to the side of a door, and the closing of the door hides the range. Where one desires heat in the kitchen and uses an electric range a combination coal and electric range can be purchased. These ranges have been on the market only a few years, but their popularity is now attested by the fact that thousands of them are in use in various parts of the country.

The kitchen may play a great part in making the home a happy one. Make the kitchen compact. Make it such a place that there shall be no feeling of dread in entering it, no dreary sigh at the first glance within. Equip the kitchen in such a way that the labors which are part of its demands shall not be an unwelcome part of the round of duties. Then there can be a pleasure in the preparation of the food and the tasks which have for so long been looked upon as drudgery. There can be a joy in the home making.
The Garage on Terrace Property

R. D. Count

Modern conveniences and luxuries bring forth modern problems of more or less magnitude and during the last decade every prospective home builder has been required to furnish an answer to the question: "Where shall we build the garage?"

Those whose property has been level have found the solution comparatively simple in most cases, but the owner of a terrace lot or of property on a hill slope is sometimes sorely perplexed to decide upon an efficient and practical location for the auto's domicile.

The garage underground at the corner of the lot, as shown by the photo, is owned by a practicing physician who, probably more than any other professional man, must have his car accessible not only to the house but to the street as well. The outstanding feature of this location is the continuous expanse of lawn around the house, unmarred by a driveway of any sort. Beds of old-fashioned flowers border the house on every side and also along the top of the street wall, leaving a commodious stretch of greensward on which the children may romp with no open entrance to the street to entice them to wander out and away.

This garage will house two cars and is built of reinforced concrete throughout with three feet of earth on top. The only complaint which the owner voiced was that the contractor had made the roof absolutely flat, and that during a severe
rain this flat roof does not shed the water quickly enough to prevent its seeping through in various spots. This roof should have been sloped or crowned.

As will be seen in the second illustration, for the man who is the owner of a corner lot, this built-in garage offers a number of advantages peculiarly its own. First in importance is the ability to reach the car at any and all times without leaving the house; an especial convenience in rainy weather. Another point to be found in favor of this location is its proximity to the street for the doors, as will be noticed, are almost on the building line.

As is quite frequently the case with property of this kind, the yard space is exceedingly limited; in this instance the rear line of the lot is a scant twenty-five feet from the house. Therefore it will be apparent that a separate structure and the driveway thereby entailed would have absorbed an inconvenient amount of space. An addition to the house, then, was the logical solution. This addition was built some time after the house itself; the upper part being fitted up as an elaborate sun parlor and lounging room while the garage underneath, brilliantly lighted by its many windows, is flanked on the other side by what was formerly a semi-basement under the house. This was remodeled and fitted up for the chauffeur and his family.

The third method of entrance is one that is the oldest and most familiar type of any, and is best adapted to a house of the type shown. It is artistic, its lines are pleasing and it further permits of a *porte cochere*—entirely in harmony with the old English style of this residence.

Were this property on a level with the street grade, little if anything, could be said against its use; but where there is a terrace—especially a high one as in this instance—there is a serious factor with which to reckon. This is the grade of the driveway, the one shown having a rise of ten feet in a thirty-foot distance; a 33\% per cent grade.

A grade such as this is not only a source of inconvenience on entering but throws a vast amount of extra work on
the car. In making an exit it must also be remembered that care is required, more especially in wet weather.

However, each owner of the three homes illustrated was asked this question: “If you had this building to do over again would you place and construct your garage as you now have it?” In every instance the answer was in the affirmative, which would seem to indicate that these various entrances and locations all have their advantages.

By Your Lawns They Shall Know You

Florence E. Andrews

HARACTER is what you really are and reputation is what people think you are, and this is not any less true of your lawns.

Your front lawn is where you put your best forward and can be likened appropriately to reputation, but your back yard represents your true character. Back there where nobody but yourself and family, the delivery boys, and an occasional intimate caller, ever go, that is where you
An attractive back yard

demonstrate whether you really love the beautiful or whether that attractive front lawn is merely a camouflage.

An attractive back yard pays more to the home owner than the same amount of energy and money spent upon the front lawn, and if equipped with hammocks and comfortable seats, protected by vine-covered trellises, it is just as valuable an asset as any room inside the house.

The house shown has a west front and, while the awning and the trees that are on the boulevard make the front porch comfortable even on the warmest days, the back yard is where my lady retires to in the afternoons so that she can be away from the dust and disconcerting noises of the street. Here she can spend the hours reading or sewing in peace and with enough seclusion to make the hours yet to be spent there ones of pleasurable anticipation.

The place is shady the entire afternoon and the heat from the pavements does not reach it. The hammock is ideally located and provides many restful moments.

Fifteen months ago this back yard was bare clay of cowardly hue!

Next year, the rose trellis will be heightened so as to form an arbor over to the eaves of the house and a seat will be built underneath. By that time the grapes, five varieties of them ranging from white to coal black and from extra early to extra late, will have entirely covered their framework and the trees will have heightened several feet more, the whole adding to an already almost ideal spot. If it is enticing now, as it is to the owner and her friends, what will it be when this arbor is completed and is entirely overgrown? The comfort of such an outdoor living place can hardly be overestimated.

Don't be a hypocrite about your front and back lawns. If you are, you are really not fooling anybody but you are certainly cheating yourself.

The front lawn
ITH the coming of the warm season to the colder climates, as all the year in the lands of sunshine, special thought is given to the window exposure and to the possibility of living in the open air and sunshine. In the gambrel-roofed house, the living room takes a full end of the house and is one step lower than the other rooms, with ator space and closet, and steps to the basement. These steps lead to the landing at the grade entrance. There is a full basement under the house.

On the second floor are two good bedrooms and a bath room. The front dormers open to the sleeping rooms.

On the exterior, this home is quite unusual and more than usually attractive.

that much additional height of ceiling for the larger room. It is a very pleasant room with a group of windows opposite the door, and on either side of the fireplace. Stairs to the second floor and two closets open from the hall which communicates with the dining room.

Beyond the dining room is the kitchen, well arranged and equipped, and still beyond is the rear entry, with refriger-

Glass doors from the dining room open to the terrace in front. Notwithstanding, the concrete or tile floor of the terrace, provision has been made for the growing vines which have covered the trellises about these glass doors.

Groups of long casement windows opening on the terrace make ample provision for air in the small colonial home shown, and give an attractive exterior.
The roof spans the front of the building including the living room and dining rooms, while the remaining part of the plan is covered by a gable at right angles to the front. The side porch is roofed flat. There is a good attic space for storage but it is not high enough for finished rooms. The basement under the house comes as far to the front as the rear wall of the living room. The ceilings are 8 feet 4 inches in height.

The entrance is into one end of the living room, through a glass door. Glass doors separate the living room from the den and from the dining room. There is a fireplace in the living room opposite the opening to the den. Beyond the living room is the dining room, which opens to a side porch, the whole outside wall of the room being glass. There is a built-in buffet and also a closet opening from the dining room, rather an unusual convenience.

Between the dining room and the kitchen is a breakfast alcove, with a table and seats under a double window. The kitchen has long work tables on either side of the sink; a cupboard beside the sink; one by the range and another nearer the dining room. The refrigerator stands in the entry, with a broom closet beside it. The entry is enclosed with sash and screens.

A hall connects the sleeping rooms with the bathroom and also with the kitchen, stairs to the attic lead from this hall, and the linen cupboard opens from it, also the clothes chute.

The house is well supplied with closets. The middle bedroom and the den communicate through a long closet in which is set a lavatory.

Nature has been munificent in the growth of vine on the trellis and the eaves of the house, giving a certain amount of protection to the window.
A Southern Home

E are illustrating in this issue a recently planned home in the South. It is a plain substantial residence with broad frontage and built on Colonial lines. The size of the main house is 55 feet across the front by 27 feet 6 inches in depth, with a glazed conservatory on one side, 10 by 26 feet.

This is a beautiful, modern, up-to-date home. The exterior walls are of dark Oriental brick, the roof is of green Spanish tile. The exterior is symmetrical in treatment, with a wide brick porch at the entrance. Extending on either side across the front is a wide terrace built with brick walls and tile floor. The floor of the conservatory is tile, as is also the front vestibule. The rear piazza, kitchen and pantry have tile floors. Bath and toilet rooms are in tile, floors and walls.
The interior is symmetrical in treatment. Entering through a spacious vestibule, one passes into a wide hall with columned arch opposite the entrance. The "Colonial" staircase, circling up on either side after the manner of the fine old Colonial mansion is a distinctive feature of the interior.

On the left of the entrance hall is the living room and on the right is the dining room. In the rear of the living room is a library and beyond the dining room is the butler's pantry and kitchen, etc.

These rooms are ample in size. Each of the main living rooms has a wide fireplace. Halls and stairways are paneled.

The second story has five chambers, a large central sleeping porch opens from the landing of the main staircase. Ample closets have been provided. There are two large bath rooms, the owner's bath room being provided with shower. There is a toilet with the maid's chamber.

The windows throughout are casements, swinging outward, with the glass cut into small lights. The floors are all of oak except where tile is used.

An attractive feature of the exterior is the long flower boxes built in the boulder wall of the terrace.

**A Real Home**

His five-room house is not large, being only 24 feet square, with sun room added, but is nevertheless an attractive home. We enter the living room directly from the front porch. To the right is the stairway leading to the second floor. This stairway is in itself a feature of the room. At the opposite end of the living room is the fireplace with book cases on either side, and small casement windows above. To the front of the living room and at the left of the fireplace through French doors we enter the sun room, and a real
sun room it is; the windows on all sides, with their flower boxes present a rival for real outdoor life.

Connected with the living room by a large cased opening we find the dining room. Notice the built-in buffet and window ledge. The kitchen is entered from the dining room and shows the workshop of the housewife with its place for everything she needs, and with plenty of light.

A grade entrance is provided leading to the basement, and a short run of steps to the passage between living room and kitchen. A coat closet opens from the passage. This passage makes a short cut from the kitchen to the front door, often a great convenience to the housekeeper.

On the second floor are located two chambers and a bath room. The closet space allowed is noteworthy. Look at the large drawers opening from the bath room, for linen or for clothes; also the chest of drawers in the front chamber.

The rooms are all finished in pine, with maple floors. The main living rooms are enameled in ivory and the rest of the house in white enamel.

The exterior is in typical gray stucco with exposed timber work painted white.
HEN the cost of building can be approximately estimated in terms of the cubic foot of contents under the roof one may realize what an important element is the size of the building, area and height taken together. Next to size comes the matter of simplicity of construction. Every additional corner or unusual angle in the construction of a building means additional labor for the workman; the cutting of material, especially lumber, which usually means that small pieces of it are wasted; and the general slowing down of the work until the unusual parts are out of the way.

The attractive little stucco house here shown is very compactly and simply planned. The entrance from the stoop is into a vestibule, with a coat closet opening beside it. The stairs are beside the vestibule door opening into the living room, and are easily reached from the kitchen as well.

The living space, which serves as living room and dining room, is 13 by 23 feet and extends across the width of the house, with grouped windows on each of the three exposed sides, and a sun room extending the front wall of the house, adding the dignity of a little greater size than could be given to so small a house otherwise.

The fireplace is on the center of the wall of the living space, so placed that the kitchen flue is in the same chimney with the flues from the fireplace and heating plant in the basement. There is a book case beside the fireplace and good wall spaces on the other side of the room.

The kitchen is well equipped with cupboards and work space. The basement stairs are under the main stairs with an outside entrance at the grade level, in the arrangement which has almost become a standard construction for the small house.

On the second floor are three fair sized bedrooms and a bath room. The closets are built under the roof at the corners of the house.

The exterior is of cream colored stucco.
with a course of red brick at the grade, and the color scheme carried out in the light red asbestos shingles of the roof and the chimney of the same red brick. There is a touch of color also in the shingled hood over the stoop.

Shingles For the Exterior

It is always interesting, and sometimes very helpful, to study plans with reference to each other and see wherein the difference lies. The two plans shown in this group, while not seeming at first glance to be at all alike, yet develop into the same type as to general arrangement of the living space. In one case the end of the living room is set off as a screened veranda. The fire-
place is differently placed and one larger opening to the dining room instead of the two smaller doors. The kitchen has the same relation to dining room and living room in both plans. Some three feet is added to one dimension of each room in the cottage which has the sleeping rooms on the second floor; the house is more roomy throughout. Both are excellent arrangements.

The entrance to the two-story cottage is from a stoop into a vestibule, from which a coat closet opens. This entry is at one end of the living room, and the stairs are beside it, and beyond a door leading to the basement stairs and to the kitchen.

There is a corner fireplace beside the door to the dining room, where it will serve both rooms. The porch is entered from the dining room. One might like it extended so as to get a door from the living room also.

On the second floor are three bedrooms and a bath room. It will be noticed that the bath room is placed over the sink in the kitchen so that the plumbing pipes are as direct as possible. These rooms are built in under the height of the roof so as to have full height of ceiling.

The other home is of the bungalow type, with all the rooms on one floor. The bedrooms and bath room fill one end of the house, connecting with the living rooms by a small hall. It is very compact, and very well arranged. The rooms are, however, all smaller than in the other home.

In the living room the fireplace is centered on the wall opposite the entrance. The entrance is at the grade level with three steps into the living room, and a coat closet opening from the entry. While the kitchen is small it is very well arranged. The sink and cupboards are properly placed to avoid unnecessary handling of the dishes. There is a closet in the kitchen.

On one corner of the house is a sleeping porch, connecting with, and really a part of the bedroom beside it. This is so arranged that the bed may be placed on the porch, and the room furnished and used as a dressing room and sitting room. Such an arrangement is especially appreciated by those who sleep outdoors all the year round, and can step immediately into a warm room. It also avoids the fuel wastage which is necessary when the whole house, and especially the bedrooms, get very cold at night, in order to have fresh outside air for sleeping.
A pleasing combination of shingles and stucco

This little home is shown in a pleasing combination of stucco and shingles for the exterior walls, but as is so often the case in warm climates the roof has very little slope and is covered with a composition roofing. Shingles are used entirely for the exterior of the first home in this group. The soft tone which shingles take when stained, together with the pleasing irregularity of the surface, make a shingle surface effective, either in a background of shrubbery or standing alone.
Charm in houses is difficult to define. Sometimes the cottage expresses it better than the mansion.
Somebody has said that character is greater than personality and it is entirely true, but do not the people for whom you care most possess both, and do not the houses which you like best to visit contain the fine character of stability, coherence and simplicity, with the agreeable personality of harmony and charm?

Houses of the black walnut period undoubtedly possessed stability—too stable by far—but they lacked coherence. In rare cases did they express repose. Personality of a certain kind they undoubtedly had, but seldom harmony and certainly not charm.

Charm is a difficult quality to capture. It cannot be measured in exact terms nor reckoned in round numbers. It is confined to no period, style or age. It has been known to elude mansions and gravitate to cottages, to cling to thatched roofs and rose bushes, and pass over entrance gates and stately doorways. It is no respecter of localities, first families or inherited fortunes. It is perhaps a gift of the gods.

The outer edges of things, particularly in houses, are very significant. You cannot hide ostentation under a bushel any more than you can a candle, and there never was yet a Pandora box that could imprison poor taste.

I remember a little house set within a trim green lawn and enclosed by a white picket fence. On the doorstep I felt its sincerity, lack of pose, friendly straightforwardness. No, it was not in New England, although there must have been a New England grandfather in the family.

On the floor of the small vestibule, cut in gray-green tiling, were the words: "Edith and Allan Haines—their house." Here was something out of the ordinary at the outset, something that expressed personality and that unusual characteristic in American home building—permanency. For who could pull up stakes on a May moving day with that adorable old sampler-legend staring in one's face.

Simplicity united with charm in an old four-post bedstead
I remember the serenity of rooms that seemed large by reason of fine proportions and harmonious furnishing, of restful expanses of quiet color, and small, well placed areas of brilliant tone, of nice balances between plain and figured surfaces, of beautiful old things and well-related new things, of many novel accessories.

I recall an old silver basket on the gate leg dining table, heaped with oranges and purple grapes, when most of the dining rooms of my acquaintance still clung to the plated ferneries of wedding present tradition. I recall the painted furniture of the spotless bedrooms, and the daring use of pure yellow, old blue, rose and mauve,—quite usual today, but uncommon a dozen years ago. I like to think of that little house with its cheerful spic-and-spanness, its refreshing simplicity and unaffected hospitality. It truly had the backbone of character and the saving grace of charm.

During the past five years we have had a great color awakening. At first it went to our heads—we had so long been strictly neutral in color schemes. Some of the first plunges in pure pigment might have been evolved by the Mad Hatter in his maddest moments. The very foundations of interior decoration trembled, and fashion designers apparently lost their minds.

Many reasons combined to precipitate the color riot—the Futurist movement...
and its tremendous influence on art, the complete upheaval of the world, industrial and otherwise, and the prosaic everyday reason of the lack of subtle American dyes.

Just as the most academic of painters responded more or less to the Futurists, so have the most conservative of decorators readjusted their color schemes. And this breaking away from cut-and-dried theories has been wonderfully helpful in every branch of house furnishing. Probably not again—in our generation at least—will the "low in tone" rooms return. Quiet color will always have its place but it will not domintae an entire house.

We have a new attitude toward color and its relation to temperament, health and happiness. We have learned that our living quarters must express the three "C's"—comfort, convenience, and cheerfulness, and the greatest of these is cheerfulness.

Next to actual space and sunshine the colors which suggest these qualities are the main factors in securing cheerfulness. Not that color is more important than proportion, line and scale. In the well furnished house proportion is the preface. It deals with the constructive as color does with the decorative.

The whole subject may be reduced to a consideration of backgrounds, conveniently divided into two subheads: the

The homely charm of an old house with an original use of braided rugs
constructive value of well designed cornices, windows, doors and fireplaces; and the decorative value of well selected rugs, wall hangings, curtains and furniture. Rooms used constantly, such as living rooms and libraries, best serve their purpose when the walls are restful in tone; rooms used less frequently may be gayer in treatment with more daring color schemes. But every room needs its brilliant touches, its joyous high lights.

Inherited possessions often hamper the amateur decorator. Inherited traditions are sometimes a greater handicap. Fortunate is the person whose accumulated belongings date back to the days of really fine designing, and doubly fortunate is he, or she, who can set aside the accumulated prejudices of two generations. Keeping articles long since outgrown—mentally speaking—merely for sentimental reasons has been responsible for many failures in house furnishing. Yet association—plus beauty and utility—is a powerful factor. Every room gains in atmosphere when past and present join hands. Houses may be created out of raw material, but not homes.

It is more than twenty years since the old furniture hobby first took root in this country and in that time we have passed many milestones. We no longer accept an article merely because it has age. It must measure up to other standards. There must be beauty of line, color and texture as well. Without question the collecting mania has produced much incongruity and turned more than one house into a haphazard museum. Yet more and more are collectors seeking consistent backgrounds for their possessions, more and more are they becoming students of design. When the collecting impulse is turned to creating harmonious interiors for everyday living a practical and very human side of the cult is developed. The mere gathering together of teapots, banjo-clocks, early American glass, even fine fiddle-back chairs, can never again quite satisfy. The outlook has broadened sufficiently to encompass an entire dwelling and the collector is both architect and decorator of his own roof tree.

No room is complete without these small after-touches which, rightly selected and placed, contribute so vitally to individuality and charm. The weeding process, however, can never be lost sight of and no word belongs to the amateur’s lexicon of household art more than “eliminate.” It should be written invisibly over every living room and thrice on the threshold of every bedroom.

William Morris and the Greeks were right in uniting the useful and the beautiful. We have erred in separating them although now making tardy amends.

After all walls are merely shells, and the material house is successful or unsuccessful as it adds or detracts from the beauty and usefulness of the life lived within.

Batik as a Fine Art

The batiks by Arthur Crisp, says the art critic of The New York Times, are but one example of the expanding interest on the part of artists in fabrics not for their own sake alone, but for the opportunity they offer to gain new effects. If we take a bit of cloth and tie it up in tight knots and dip into a pot of dye, the knots will protect the tied parts and the rest will take the color, and you have the simplest form of batik. But if you try the Javanese method and make your design on
the cloth, then covering every part of the background with hot wax, leaving the design to take the color, you can produce much more elaborate effects, and if you let the wax get cold before you dip your cloth in dye, it will split into fine cracks like the crackle on porcelain, and the dye will run into these and you will have another element of variety and charm. And you must be not only an artist for the sake of your design, but a thoroughly drilled craftsman experienced in the difficult work of dyeing textiles, if you are to make full use of the resources of the medium, and produce such work as "Diana of the White Horse." This beautiful example of Mr. Crisp's art was destroyed in the disastrous fire which wrecked the famous "Academy" in New York City a few months ago, where the exhibition of the Architectural League suffered a complete loss.

Arthur Crisp makes his batiks without the slightest approach to imitation of the primitive past. He is not too simple because he is speaking for an age that knows nothing of simplicity. He is rather learned in his themes and his treatment of them because he expresses an age that leans heavily on books and the lore of museums. He is not too bold because sophisticated boldness is only an offense. In one sentence, he is a genuine representative of his own time and country with his mingling of past and present, its multitude of contacts and experiences.
Placing Furniture.

F. C.—We have just moved to this town and are living in a rented house for a few months. We sold our furniture and are now in the throes of buying new, with a view to using it in our own home a little later.

My living room has been such a trial and I hope you will assist me. I will enclose a diagram of living room. I hung the windows with marquisette in ecru color and the paper is tan and the woodwork awful varnished yellow stuff. However, as I was buying for a future house I got a lovely plain library table in brown walnut and use a tapestry cover and have a green pottery table lamp—then I got a lovely big wing chair in tapestry, very neutral, and a brown mahogany rocker in taupe velour. I must have at least two more chairs and should like a spinet desk with chair. Do you approve of a desk in living room?

Ans.—We have returned your floor diagram, with furniture advised, laid out in blue pencil. Your selections therefor are admirable, unless it be the taupe velour, as taupe is not very harmonious with tans.

The green pottery lamp is all right, but if you use the green rajah draperies, it almost compels some green in the furniture.

Your wing chair is fine, but should be placed near the fireplace. Get the desk by all means, walnut like the table, but place it near the south window.

A wicker or brown wood and cane fern stand in the window will be a great addition. Besides these you have room for only a davenport or couch, and one arm chair. Get these in either brown wood and cane panels, or rattan.

As you have tapestry on the wing chair, have the seat cushions of the other chair plain, and we prefer the davenport plain, but we would not like green. Perhaps, on the whole, it would best be tapestry, like the wing chair, with the arm chair same as rocker.

Furnishing a House.

L. S.—I have an extra chance at all magazines, and to say that I go back over your issues almost every time I wish to do something a little different or rather smart is putting it mildly, for I even read most of your ads.

I would greatly appreciate some help, having just purchased a home of nine rooms. It is splendidly built and finished, and a fine location. I do not feel able to do much changing of interior at present and have some furniture, but must get more, and with present conditions, I find it hard to match, and plan to economize.

I will have natural willow furniture in sun porch with bluebird shade of blue in cushions, etc. Would it be more attractive in old ivory finish? It seems to look dead. I want mulberry shades in living room, upholstered. All wood trim is dark chestnut. Upstairs is in white. I prefer gray paper in dining room and living room, and window drapes in mulberry, the light or old shade, almost lavender, rather than the dark shades of
mulberry, if it would harmonize with dining room and sun porch sufficiently. I dislike any except the most expensive tapestry. What about damask or velour for three pieces, settee, wing chair and large arm chair? Should portieres in dining room be same shade as upholstery and windows? Have Chinese rug with mixture of shades, much covered. Eventually I wish an oriental rug here. Dining room, for present, must use a rug in brown and black, all over pattern. New Queen Anne dining set, table, buffet and tea wagon in walnut. Antique walnut dining chairs. Yellow tint in lighting fixtures. Shades in dining room must be in brown and blue at present.

Ans.—We think the proposed shade of mauve-mulberry for living room furnishings will be impossible to obtain for some time yet. We do not think it would be in harmony with the “bluebird blue” of the sun parlor. Either change your scheme for living room to deep, rich tones of old blue for upholstery and hangings, or if you stick to the mulberry, do the sun room furniture in soft, deep old pink roses and grayish-brownish leaves. The wood trim in sun parlor should surely be ivory. The dark chestnut trim is very good for the other rooms. Velour and damask upholstery is better suited to a parlor than a living room. Velvet, however, is a substantial covering. The room will be much improved when papered in gray. The portieres should correspond in color with the furniture, though the curtain drapery could be several shades lighter. Some of the new wide-striped Sunfasts in two tones of rose or blue are very beautiful, but they are rather costly, but nothing is inexpensive now.

We know of nothing better for furniture covers than gray momie cloth or the gray and black striped—not flowered—cretonnes. If you use side draperies at the windows, the new way of drawing the lace over the glass plain like a shade, is very good.

In the dining room we would have the woodwork deep old ivory, and use old ivory casement cloth for curtains. These will be all right when you change the paper and probably use the Chinese rug of living room in dining room.
With Blue Dining Room.

L. A. M.—Please send me an idea for the draping of windows in a blue dining room. It will have to remain blue, as it is such good paper and new.

There are five windows in the long wall, three above a recessed window seat and two long ones on sides, you will see by sketch.

There is a six-foot opening between living room and dining room and a four-foot one into the hall. The living room and hall are papered in golden brown plain paper, and the dining room is also plain.

The rug in dining room is blue and brown with olive green. The one in the living room is olive green and brown. The ceilings are ten feet high and ivory tint.

There is a mantel in one end of the dining room with blue and brown tile. The wood trim all over is natural cypress and floor is very good, stained to match.

I have a pair of velour curtains of a lovely olive shade, also some corn color brocaded silk ones that could be dyed.

Ans.—We have returned samples of curtain materials, with pencil sketch outlining style of draping.

With such a heavy blue wall, we should dispense with overdrapes at this style of window, using one set of curtains only. Ivory lace nets would be good, or the scrims, carrying blue in the border. One width is sufficient for each side window. The olive velour portieres would be good in dining room opening, and the brocade could be dyed olive to match for the hall.

The light brown natural cypress is not an inharmonious trim for the darker furniature. It could be darkened a little with a coat of varnish, to which brown stain has been added, and then rubbed.

A Quartered Oak Hall.

F. B. J.—Please give suggestions for refinishing my living room, dining room and hall. I would like to have the rooms enamelled in white. The woodwork in living and dining rooms is painted and varnished and can easily be repainted, I suppose, but the hall is finished in quartered oak, paneled, and I hardly like to cover it with paint.

Ans.—To cover that handsome oak paneling in hall with four or five coats of white paint seems a desecration, especially as quartered oak now costs too near its weight in gold, so to speak. You must make your scheme conform to the oak hall. Nor would we like white enamel in both living and dining room, and the oak hall like a fly in a pan of milk between them. It will be perfectly proper to enamel the dining room ivory rather than white or even cream, and we would open it into the hall and living room with French doors. But the living room woodwork, whether it is birch or mahogany, we would stain a brown mahogany, and deepen the oak of

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the hall to a rich English brown. Thus there is unity of treatment, and you preserve the beauty of the wood for the most part. The present finish will have to be removed, either sandpapered off, an expensive process, or taken off with a varnish remover. But to paint over the dining room work you need only sandpaper, then varnish enough to roughen it and make the paint hold. It will take five or six coats of paint for a good finish.

Two Small Rooms in One.

J. T. R.—Can you tell me what to do with the double doorways between sun parlor, living room and dining room? Sun parlor, gray and blue, “grass cloth” paper, ivory woodwork, mahogany mantel, gray flax rug, floor painted “ground color” and waxed; reed furniture painted ivory. We have lots of flowers at the south windows, reaching the floor.

Living room, same paper, ivory woodwork, brick mantel, rug with a red center, gold colored silk curtains over white net at windows. The couch in between windows on west side. Have a mahogany desk and several chairs. Could I recover some of them to harmonize with couch cover and draperies? It must not be too expensive.

Dining room, old blue tapestry paper above the plate rail, blue below, gold silk curtains, tan and blue rug, ivory woodwork.

The question of portieres is one I cannot solve. The rooms are small, about 14x14x9 feet ceiling. The large doors are cold looking when closed. We usually keep the pair between living room and sun parlor open in order to get more sunlight.

Ans.—We should take out the little ends of a partition now between living room and sun parlor and make one good room of it in place of the two square boxes of rooms. This is practicable since woodwork and paper in both rooms are the same.

Between the living room and dining room have portieres of old blue velour. Have shades made of pongee silk—natural—for the sun room and living room windows; these shades are drawn in festoons and finished with putty colored narrow fringe, and cover the windows half way. Take out the white net and gold silk curtains in living room. They are unfortunate with that paper, the brick mantle and the red rug. The pongee is neutral, and will not fight.

You do not say what the couch cover is, but we would recover the two big chairs in old blue material like portieres and repaint the reed chairs smoke gray, upholstering them in striped blue and grayish brown cretonne. We have seen just the thing. Then mix them with the other furniture through the big room. Confining the gold curtains to the dining room. You will then have some harmony between your walls and your furnishings.

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M. L. KEITH
314-5 Abbey Bldg., Minneapolis, Minn.
UNE is the month for salads. And very naturally so, too, because it marks the beginning of warm weather, the one-hot-dish menu and thus,—the salad.

Salads offer a palatable and attractive way of disposing of small quantities of choice left-over vegetables, fruits or meats, and of introducing fruits and vegetables into daily meals. This is especially a good way of introducing green leaf vegetables which are known to be excellent sources of iron,—that necessary body food. Salads lend a desirable color note to the table. They add a pleasantly acid flavor to the menu itself.

In my mind there are two kinds of salads: the heavy type such as potato, fish or meat salad which may furnish the main dish of the meal, and the lighter, more succulent, relish-type of salad which serves rather as an accompaniment of meat or a dinner. Examples of this type are: vegetable and fruit salads.

**Garnishes**

Many salad herbs are desirable to use with the salad if it is known just how to use them. Caper berries may be used as a garnish for meat or fish salads, mixed with the salad itself or chopped and added with other chopped seasonings to the mayonnaise dressing. Chervil may be chopped like parsley and sprinkled over fish or endive salads. Chives may be chopped and sprinkled over potato or meat salads, or added to dressing. Garlic may be used to rub the bottom of the salad bowl. A little is desirable but much should be avoided. Nasturtium flowers may be used to garnish. The leaves and young buds, chopped, give flavor. Onion is best when rubbed over the side of the salad bowl. Or a piece may be left in the salad for a while and removed before serving. Sage, chopped, is used in meat salads. Parsley, chopped and sprinkled over the top, improves meat salads. Lamb or mutton salad is improved by being sprinkled with chopped spearmint.

**Salad Dressings**

Salad dressings fall into three main types: French, boiled and mayonnaise. To make French dressing use: six tablespoons of oil, two tablespoons vinegar or lemon juice, one teaspoon salt and one-fourth teaspoon paprika or more. Many people use enough paprika to color the dressing. Stir or whip the oil with salt and paprika and add vinegar or lemon to a creamy consistency. For boiled dressing, cook in a double boiler: three-fourths cup milk, two teaspoons butter, one-half cup vinegar, one-half teaspoon salt, one-fourth teaspoon mustard and one egg. For mayonnaise dressing, beat two egg yolks with a Dover beater, adding oil.
drop by drop until one cup has been added. Thin at intervals with lemon juice or vinegar. Season with salt or mustard.

French dressing is used to marinate a vegetable or fruit salad,—dinner salad. Mayonnaise dressing is used with a fish, meat or hearty salad,— luncheon or supper salad. Cooked dressing is used in place of either French or mayonnaise dressing.

**Banana Salad**

Four bananas
One tablespoon lemon juice
Eight lettuce leaves
One-half cup chopped peanuts
One-fourth cup boiled dressing
Mix bananas, peanuts and dressing together. Pour lemon juice over bananas to prevent them from darkening. Serve cold on the lettuce.

**Chicken Salad**

One cup cooked chicken
One cup celery
Eight lettuce leaves
Four tablespoons French dressing
Four tablespoons mayonnaise dressing
Mix celery and chicken. Add dressing. Serve cold on lettuce leaves.

**Egg Salad**

Two eggs
Four lettuce leaves
Mayonnaise
Slice eggs after they have been hard boiled. Serve on lettuce with mayonnaise on top.

**Sardine Salad**

Five sardines
One egg white
Two egg yolks
Two lettuce leaves
Mayonnaise
Cover the sardines with the grated hard boiled egg. Serve on lettuce, using the mayonnaise on top.

**Salmon Salad**

One cup salmon, minced
Two stalks celery
One dill pickle
Four lettuce leaves
Nuts if desired
Mayonnaise
Mix the salmon, chopped celery and pickle and nuts with the mayonnaise. Serve cold on the lettuce.

**Cheese and Pineapple Salad**

One-half head lettuce
Six slices canned pineapple
One cream cheese
French dressing
Place a slice of pineapple on the lettuce leaf. Sprinkle with the cheese, grated. Put dressing on top. Pears and peaches may be served the same way.
Cold Slaw
Two cups shredded cabbage
One-fourth cup thick cream
One tablespoon vinegar
Seasonings
Season the cabbage. Pour on the vinegar and then the cream. Serve cold.

Tomato-Cucumber Salad
Six slices cucumber
Three slices tomato
Three leaves lettuce
Mayonnaise
Place tomato on the lettuce. Put cucumbers on top and then the mayonnaise. Tomatoes may be served alone with lettuce, of course.

Carrot-Raisin Salad
One-half cup raisins Lettuce
Two carrots, raw Dressing
Put raisins and carrots through a meat grinder. Mix with the dressing and serve cold on lettuce.

Carrot-Banana Salad
Two small carrots Three bananas
One-fourth cup Lettuce
peanuts Dressing

Perfection Salad
Gelatin
One-fourth cup cabbage
One-fourth cup celery
One-fourth pimento
Lettuce
Mayonnaise
Hydrate your gelatin in cold water, one-fourth cup. Use one tablespoon gelatin, one-fourth cup cold water and one cup hot water. When gelatin begins to harden add the chopped cabbage, celery and pimento. Place in molds and allow to harden. Turn molds out on lettuce leaves and serve with the mayonnaise dressing.

Asparagus Salad
Three hard cooked Asparagus eggs
Six sweet pickles Lettuce
Dressing
Put several pieces of asparagus on a lettuce. Sprinkle with grated egg, chopped pickle and chopped pimento. Put dressing on top.

Waldorf Salad
Two apples, chopped Walnuts
One-fourth cup cut Lettuce
celery Mayonnaise
Mix apples, walnuts and celery with mayonnaise. Serve cold on lettuce leaves.

Carrot-Relish Salad
One cup cabbage One-half cup carrot
One cup celery Lettuce
Mayonnaise
Chop cabbage and celery. Put carrot through meat grinder. Mix three together with dressing and serve cold on lettuce leaves.

Fruit Salad
Three-fourths pound white grapes
Three small oranges
One small banana
Walnuts
Lettuce
One cup mayonnaise
Halve and seed the grapes. Chop or slice the oranges and banana. Chop nuts. Mix all together, mix with mayonnaise and serve cold on lettuce. Most any fruits, in varying quantities, may be mixed together to form a very edible salad.

General Rules
All salads are better served cold.
All salads need a lettuce or parsley or some other garnish.
Dressings may be used almost interchangeably.
Herbs mentioned above improve most salads.

To Pack Ice Cream.
When you make ice cream pack newspaper tightly over the top of the freezer. It will keep the ice from melting too rapidly before the cream is served.
If the ice man leaves an extra piece of ice for making ice cream later in the day, wrap the ice in many layers of newspapers and put where neither wind nor sunshine will strike it. This gives an insulation of thin layers of paper and air alternating, an excellent insulation.

Mosquitoes.
It is said that mosquitoes will flee from the odor of kerosene. Wet a cloth with the oil and hang it where the insects gather and you will not be molested by them.
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The Ubiquitous House Fly, Can It Be Annihilated?

HILE the fact has been established beyond the question of a doubt that the house fly is one of the most dangerous of the insects affecting mankind, especially children, still intelligent people have not, as yet, taken more than the first steps to rid themselves of this pest. "Born and reared in filth, attracted to human excrement and to decaying and putrescent matter of all kinds; it passes from these to our food and drink, carrying the germs of disease and of death," says William A. Riley, Division of Entomology and Economic Zoology of the University of Minnesota, in Agricultural Extension Bulletin Number 48. "And yet we tolerate this filthy insect in our homes, our dairies, our stores and public eating places, even in our sick rooms."

Two Methods of Attack.

There are two methods of combating the house fly. The first and most important one lies in the direction looking toward the extermination of the pest, primarily through prevention of breeding; and the other lies in protection against the fly, through methods of which scrupulous cleanliness, and screen protection, are perhaps the most effective. The second is the method which has been given most consideration hitherto, but has proved to be rather hopeless.

The Generations of the Fly.

The life history of the fly is given in this bulletin. "The house fly passes the winter as a full grown fly, or as a pupa from which the adult emerges in the early spring. When the first warm days lure it from its hiding place, it seeks out horse manure or other suitable food for its young and deposits eggs, a hundred or more. From a single overwintering fly, myriads of these pests may arise, seven generations or more during a season." It is obvious that killing them as soon as they appear in the spring is a strong preventative measure. The entire development from egg to adult and to egg again, may be a cycle completed in from 11 to 14 days; a period which is considerably prolonged in cooler weather.

Screens, Both for Houses and Garbage.

Screens have proved the most effectual defense against the housefly, but not only should people be protected by screens in the houses, but garbage cans and piles of refuse of any kind in the back yard should also be covered to prevent their forming a breeding place for flies. This is a thing which may be required in a neighborhood. One cannot require absolute cleanliness of a neighbor, but the public sentiment of a community can require that refuse must be covered or screened. Where there are no breeding places the fly cannot flourish and will soon cease to
exist. In so far as horse manure has always been a favored breeding place, the popular acceptance of the automobile as replacing the horse, helps in the prevention of the fly, since the manure pile at every barn door is a thing of the past.

**Burning Sulphur Kills Flies Wholesale.**

Great numbers of flies may get into the house before the screens are on in the spring, or in the fall, or in some special emergency. In such instances, Bulletin 48 gives fumigation with burning sulphur as the most satisfactory method of getting rid of them.

"The room which is to be fumigated should be made as tight as possible, and readily tarnished metals removed. The powdered sulphur, at the rate of two pounds to a thousand cubic feet of space, should then be distributed in several old pie-pan, or tin covers, placed in different parts of the room. The tins should be put on bricks in larger pans with a little water in the bottom to avoid all danger of fire if the burning sulphur should sputter over. Then make a little well in the pile of sulphur and pour in a teaspoonful of alcohol or kerosene to insure the burning. Light it and then keep the room tightly closed over night; or for several hours, if the first is not convenient."

**Stained Fingers.**

In working with fruit the finger ends and nails always become badly discolored, and the discoloration sometimes remains for days to the chagrin of the good lady concerned. A housekeeper has given us a tip which we pass on, as the time for blackberries and fresh fruit comes again. Get out your paraffin can and melt a little of it. Just as soon as the paraffin cools a little so as not to burn, dip the finger tips into it, covering the depth of the nails with this protecting coating which forms closely about them, excluding the discoloring juices until the paraffin wears off.

**A "Frame Up."**

The following very practicable and efficient way of removing fruit stains from linen was the contribution of a Connecticut housewife: "For years I had known that fruit stains on linen were most easily removed by pouring boiling water
through the linen when stretched over a bowl, but this evening, when preparing to take out some strawberry stains from one of my very best table napkins, I happened to notice the silver frame for my pudding dish on the table. Immediately I put the napkin over the pudding dish and slipped the silver rim in place; thus I had the linen stretched and held as tightly as though it were in an embroidery frame. And with both hands free to hold the kettle high, I could obtain force from the stream of water sufficient to remove the stains both quickly and easily.”—Good Housekeeping.

**A Revolving Chair.**

If you want such a chair, one that can be turned around and is also adjustable as to height, and go and buy it, you will need to pay quite a price. But if you have or can get an old piano or organ stool, with the legs and screw part still good and have a chair with a broken leg, you can get a desk chair for a song. Remove the top of the stool and the legs of the chair. Of course, you can take a good chair if you wish. Then fasten the seat of the chair on the stool with screws as the top was fastened. Do not turn these way down as it is better to have a little play to the seat.—John Upton.

**What Salt Will Do.**

Salt scattered on the carpet before sweeping is very good, but be sure and sweep it all up as the dampness might make it run.

Dip a piece of flannel in salt and whit- ing to clean knife handles, stained teacups and glasses.

By adding a tiny pinch of salt to milk when fresh it will keep a much longer time.

Make a little salt bag and rub the griddle with it instead of grease. Pancakes will not stick and there will be no smoke or odor.

To remove perspiration stains from clothes, soak the garments in strong salt water before laundering.

To clean willow furniture use salt and water. Scrub well with a stiff brush and dry thoroughly.

To clean matting, wash it with salt water. Simply wiping matting with a cloth dampened in salt water makes it seem fresh and clean.

**To Renovate Window Shades.**

New window shades are quite an expensive item when there is so much that must be done about the house in the spring. Oftentimes there is still service in window shades after they have become so faded or discolored that they seem out of keeping with the freshened room. If they are taken off the roller and turned so as to put the little used part of the shade cloth at the bottom with a fresh hem, the length of life of the shade is almost doubled, as both ends will then receive the full wear in turn. Here is a suggestion given by one of our exchanges which may help when shades have become stained or faded:

“Window shades that have become cracked and faded can be made to look almost as good as new at small cost, and with very little trouble. Buy a can of ordinary flat wall paint. Reduce it by adding 25 per cent of turpentine. Remove the curtains from the rollers; tack them down smoothly on a bare floor or table and apply one coat of the paint. To eliminate brush marks go over it immediately with a dry stiff bristled brush. Any color of flat paint may be used and it is possible to have the outside of the shade one color and the inside another.”

**Stair Carpet.**

Here is another suggestion: When buying stair carpet always buy one-half yard more than is needed and turn it under at the lowest step. When the carpet begins to show signs of wear, draw it up until the worn places come between the steps instead of on them.

**Meal for the Hands.**

There is nothing better for keeping the hands soft and white, says a good house- keeper, than to rub them with a little corn meal after washing and wiping them. The meal should be rubbed on the hands until it is entirely dry and falls off.
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Importance of the Water Supply

ONLY in so far as it has already been solved do we fail to realize the importance of the matter of the water supply. When one has only to turn a faucet in order to have a copious flow of water in any part of the house or grounds, and seemingly without effort, then one is apt to accept water, like air, as a matter of course.

From the days of the Patriarchs of Bible times down to the pioneers on the western plains the settlement or the camp gathered round a spring or well. An ample supply of water is the first requisite of human habitation. The water must be good, it must be pleasant to the taste, and sight, and it must be free from impurities which might cause disease, or from an undue amount of minerals which would unpleasantly affect the body. The source of the water, or the water supply, must be such that it will continue to give pure water, and is not liable to pollution from outside sources.

The source of the water supply is either underground, such as wells, dug, bored, drilled or driven, or springs, where the water is brought near the surface, presumably by underground streams; or it is surface water, gathered in cisterns, surface reservoirs, lakes and ponds, or rivers and streams.

Danger of Pollution.

As found in nature, sources of the second group, the surface water, are more likely to be polluted and are more difficult to keep safe without artificial treatment. Wells and springs are usually found pure and are not so difficult to keep pure. Underground sources get water from the surface, as a general thing, only after it has passed through the soil which lies between the water-bearing stratum and the surface. In this movement of water through the soil natural purification takes place. The idea that pollution may seep through the soil for a long distance does not seem to be so likely as that the pollution has found a more direct way of getting into a well through some unnoticed surface communication.

Careless management is the cause of contamination in many cases where this has occurred. The casing of the well may become leaky, or the pumping apparatus may get out of repair. Any portion of the construction may become faulty and thus open avenues through which pollution may gain entrance to the supply. "Priming" the well with water which is not pure may contaminate the whole supply.

Under proper conditions either surface or underground water may be safely used. So important is this matter, however, that the water supply should never be selected without a chemical or bacteriological examination.

Carrying the Water.

When the source of the water supply has once been determined, the next problem is the power by which it will be put at the disposal of the user. The primitive method was carrying it from the nearest spring or community well. Later, when a spring was not near a well was dug, and the water pumped by hand from its depth, or a cistern was built in which surface water was gathered and this also was generally pumped with a hand pump and carried to the house or to the barn; though the farmer learned to pipe the water to the barn for the use of his cattle and horses, long before he thought of attempting to pipe it into the house for family use.

When the water source is high enough that gravity will carry it into the building,
with sufficient force to carry it as high as it is needed, nature furnishes the power. But it is only in rare instances that the problem is so simple. The most primitive application of power is the hydraulic ram, which requires an abundant supply, in order to deliver a small percentage where it is required.

**Water Supply System.**

Under ordinary conditions the choice of the water supply system lies between some kind of a power pump and a windmill, where the wind supplies the motive power; or both. Those who have windmills installed, but find themselves hampered and inconvenienced on windless days, often arrange to belt the pump to a gasoline engine on calm days, using whichever source of power seems better at the time.

In order to get the necessary force to carry the water wherever it is needed, it is pumped into a tank sufficiently elevated to force the water as high as necessary, or else it is pumped into a pressure tank, where the air compressed in the top of the tank by the inflowing water has sufficient pressure to force the water out again, and to the desired height. The pressure tank has the advantage that it may be placed out of sight. It may be buried in the ground under the pump house, or it may be placed in the basement.

The system by which the water is supplied for household and general use where city water is not available, whether it is a suburban home or a farm, is a very important matter. Especially is this true as the power plant which supplies the water must generally be used for manifold other uses, both in the house and in the land development. Often the lighting plant must be supplied as well as power for a vacuum cleaner, and for laundry and kitchen equipment in the house alone, and all of these matters must be taken into account at the same time.

**The Septic Tank.**

Not only must the water be brought into the house, but provision must be made for its disposal in a satisfactory manner, wherein the septic tank gives the simple solution, since it utilizes the processes and agencies of nature. The cesspool should no longer be tolerated. Instead, a sewage disposal system should be adopted which shall be sanitary, con-

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venient for use, easy to maintain, and simple of construction. After the bacterial process in the first compartment of the septic tank, followed by the aeration and nitrification, the final disposal may be either surface or sub-irrigation.

**Water Requirements.**

The amount of water which is likely to be required must form a basis in the selection of the water system. It has been estimated by those who have the necessary data from general usage that under modern sanitary conditions something like 50 gallons of water is required for each adult, per day of 24 hours. Information taken from the best authorities is given for a basis of estimate as follows:

- For filling lavatory, 1½ gallons.
- For filling standard bath tub, 30 gallons.
- For flushing closets 4 to 7½ gallons, according to adjustment of ball cock.
- Standard shower bath will discharge 6 to 8 gallons of water per minute.
- Spray lawn sprinkler at 30 pounds pressure will discharge 2 to 3 gallons of water per minute.
- Standard garden hose, nozzle full open, at 30 pounds pressure, will discharge 5 to 8 gallons of water per minute.
- Water required to sprinkle 100 square feet of lawn varies with nature and condition of soil, but will average 8 to 16 gallons.
- The water required for kitchen use, dishwashing, and for the laundry is not given in these estimates, but it must be included. It is averaged in the per diem requirements for the individual as given above.
- The following is given as a good average for stock and poultry:
  - Horses ............. 10 gallons
  - Cows ................ 12 gallons
  - Hogs ................ 2 gallons
  - Sheep ............... 1 gallon
  - Chickens .......... 4 gallons per 100 head

**Motorizing the Farm or the Country Home.**

"In the days of slavery, a powerful slave often brought $1,500.00 on the auction block. After being bought he must be fed, clothed, housed, made to work and instructed in his work. Today a power stand with a ¼ horse power motor costing $50.00 will outwork and outeat any man alive and require practically no outlay for upkeep. It will run eight hours at a cost but slightly over one cent an hour. Could you feed, clothe, and house a man for eight cents a day? It will pump, it will churn, run a milking machine, a sewing machine, a cream separator, the horse clippers. It will run a small saw, a fanning mill, a corn sheller or a food chopper. A man can do efficient work for eight hours a day. A motor for twenty-four hours. A man tires—a motor never tires. Make a motor your willing slave."

In a rural community some kind of a power plant is usually necessary in order to bring water within easy reach of the place where it is to be used.

The "modern" farm must have not only a water supply system but also a lighting plant. With his own light and power plant the householder or the farmer finds many ways in which he can cut out labor and save time, bringing increased efficiency in the work and greater comfort in the living conditions.

**Home Plumbing Notes.**

Most pipe in the house now is or should be of iron instead of lead. While one reason is that it may cost less, yet there are other reasons also. As there is no soldering to be done most anyone can put iron pipe in place, and in case of stoppage or freezing one can take the pipe apart and clean it out or thaw the ice out.

When the waste pipe is put in for running water from the sink, it is well to put in a tee instead of an elbow where it turns; then when the pipe becomes stopped you can remove the iron plug by unscrewing it and a piece of wire will fish out the obstruction.

In pipe for supplying water you should have a tee put in at any point where you expect that later you will want to put another pipe for drawing out water.

You will need a pipe wrench for taking pipe apart, but you should have one anyway, for it is one of the handiest tools that you can have in the house, or that a man can get for the shop. It can be used for many things, and in places nothing else will do as well. It can be used for removing the screw cover from cans (glass or tin), for turning any round iron, like a broken bolt, and dozens of other things that one will find out from day to day.

*F. S. Upton.*
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Stucco in Construction

IMENT plaster, when used to finish the exterior wall of a structure, sometimes when used for interior decoration, is usually referred to as stucco. Stucco work has the advantage of being done without the use of forms and when carefully done gives an attractive appearance to the building so treated.

Stucco has come in for an increasing share of use within recent years, not only for exterior finish for new buildings but for renovating old frame structures on which siding or weather boarding has become so dilapidated as to need replacement. When built new from the ground up, the stucco house consists of a timber frame covered with cement plaster. Stucco work as here referred to should not be confused with ordinary plastering done with lime-sand mortar. In the modern acceptance of the term, stucco is a cement-sand mortar in which there may be a small quantity of hydrated lime, added to increase plasticity or ease of working the mortar when applying.

Application.

For best results, cement plaster for stucco finish should be applied to metal lath or woven mesh fabric which has previously been fastened to the building studs or sheathing. Another method consists of plastering over wood studs or to furring strips nailed over the sheathing or perhaps over the (old) siding, although it would in all cases be better to remove the siding before furring and lathing the surface to be stuccoed. Several firms now specialize in manufacturing so-called metal lath and woven wire mesh fabric intended solely for use as a ground work for stucco.

Framing and Furring.

Framing of studding should be carefully done so that the structure to be stuccoed will be stiff enough to form a rigid support for the lath and plaster. Otherwise, if there should be settlement or movement of the structure, cracks will eventually follow in the plaster. Dwellings should be covered with sheathing boards to which some type of waterproof paper should be applied, before attaching furring strips. In covering old frame buildings the furring strips may be nailed directly upon the weatherboards when the surface is regular, but removing the weatherboarding first is by far the better way of preparing the surface for stucco. Wood furring strips may be used, and should be not less than $\frac{1}{2}$ inch thick and about 1 inch wide. Sometimes $\frac{1}{4}$ inch round rods are used with metal lath as furring strips to hold the lath out from the sheathing boards, thus creating a space back of the lath for the plaster to “key,” the lath being wired to the rods, which are in turn stapled to the sheathing.

Metal lath is made both with and without stiffeners, these being in the nature of ribs formed in the material at the time...
it is punched or cut in manufacturing, and with metal lath, metal furring should be used as wood strips are necessarily more bulky, thus interfering with the clinch or bond of the plaster and preventing a thorough coating of the lath at that particular point.

Furring strips and studding should be spaced not more than 16 inches apart in order to give sufficient stiffness to the lath. Each furring strip, whether of wood or metal, should be securely attached to the studding sheathing, or weatherboarding, at distances not greater than 1 foot apart.

**Metal Lath.**

One kind of metal lath made from slotted metal is formed into a variety of shapes with different sized openings and can be obtained in various weights; that is, stamped out of steel of varying thickness. The lath is usually coated to temporarily protect the metal from rusting. This type of lath provides a good support for the first plaster coat because of the rough or uneven surfaces, which catch and hold the plaster, but the cut edges of the metal must be thoroughly covered with plaster on both sides to protect tendency to rust with dampness and atmospheric changes.

Wire lath is made from strong wire of different sizes woven to form a network of fabric having meshes about one-third of an inch square. Such lath comes both japanned and galvanized. Generally speaking, the galvanized type is preferable, if it has been galvanized after the fabric has been woven, as the coating thus assists to form a tie or bond where the wires of the fabric cross or intersect. Sixteen-inch spacing of furring and studding accommodates 36-inch wide lath, allowing it to lap 2 inches in the side. For straight walls, lath made from No. 18 wire is recommended; but for shaping cornices, it is better to use a lighter wire (such as No. 21), as this can more easily be bent to the desired form. Care should be taken to stretch the wire lath well over the framework, otherwise when applying the first coat of plaster, the lath will bend back in places under pressure of the trowel, thus interfering with the clinch of the plaster upon the mesh and giving the wall an uneven surface.

Metal lath should be lapped at least 1 inch wherever joined and fastened to the
furring strips or studding in such a manner as to avoid sagging or bulging. When fastening metal lath to metal furring or to overlapping sections of lath, it should be wired to them; for this purpose No. 18 soft iron galvanized wire is recommended.

Wood Lath.

Wood lath is often used for exterior stucco work as well as for interior plastering, but considerable care must be taken to select good lath and to see that they are well wet down before applying the plaster. If the lath are not wet enough, they will absorb moisture from the plaster, while if too wet they will shrink later and separate from the plaster in places, thus weakening the key. * * *

When wood lath are used, they should be so placed that the spaces between them are about ½ inch wide and they should be nailed securely at each point of intersection with stud or furring strip. At corners, wood lath should be covered with a strip of wire netting or fabric to prevent cracks in the wall at these points.

Cement for Concrete Construction.

Proper Backgrounds for Stucco.

In mixing for scratch coat mortars, proportions are sometimes as high as one part cement to four or five parts sand and even up to an additional 30 per cent of hydrated lime. Then, with the idea of giving greater strength, the finish coat is sometimes made much richer, but here the contractor is deceived.

The vibration of the building makes it possible for the scratch coat mortar to break off at the keys, owing to its poor proportions and the finish coat being so much heavier and richer in material aids in breaking away from the background.

Where mortar has been applied to a thickness of approximately one inch it is less liable to break and insures longer life to stucco work.

Suitable backgrounds, a right mix and a proper application of the different coats will do much to prevent vibration cracks in stucco work.

Recently a section of stucco was observed that had been removed from a bungalow where Portland Cement exterior stucco had been used. The background was ordinary wood lath spaced about half an inch apart and the outer surface covered with two-inch mesh poultry netting, well stapled.

Although the work was over three years old, the netting imbedded in the scratch coat mortar was still bright as the day it was nailed over the lath. This seemed to the observer an excellent background method, for the netting had taken up the stress of the mortar and eliminated all possibility of contraction.

Medusa Review.

Concrete.

The man who starts to use concrete will want to know about the amount of material needed and the right proportions for mixing concrete.

For low foundation walls, grouting for floors, and other work not requiring great strength, use 1 part cement, 3 parts sand and 6 parts of gravel or broken stone.

By sand we mean any grains that will pass through a quarter-inch screen, coarser than this is called gravel. You may wish to use the gravel and sand as it comes from the pit, for this, use 1 part cement and 6 parts mixed sand and gravel, for it is supposed that the sand will simply fill up the spaces in the gravel and not add to its bulk.

A fair medium mix for cellar walls, barn foundations, retaining walls, walks and single course floors, is called 1..2½..5. or 1 to 5.

For engine foundations, tanks, cisterns and water-tight work, a richer mix is needed, use 1..2.. 4 or 1 to 4.

For all work that must withstand strains as fence posts, columns, top coat of floors and reinforced work, mix 1..1½.. 3. or 1 to 3.

The following will help to find the amount of material needed.

Barrels in a cubic yard of concrete:

<table>
<thead>
<tr>
<th>Cement</th>
<th>Sand</th>
<th>Gravel or Stone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>1.5</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>1.25</td>
<td>3.25</td>
<td>6.5</td>
</tr>
<tr>
<td>1.10</td>
<td>3.30</td>
<td>6.60</td>
</tr>
</tbody>
</table>

A barrel or four sacks of cement is 3.8 cu. ft., and a barrel of sand means the same amount in bulk. A bottomless box 10 inches high, 2 feet 3 inches by 4 feet will hold two barrels. Such a frame may be used for measuring on the mixing platform and lifted away when filled, leaving the sand or gravel ready for the cement.

John Upton.
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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.

The Modern Standard For Floors

The floor must contribute its part to the beauty of the house. Together with the walls, the floors help to make the background for the furnishings and bear a great responsibility in the satisfying home interior. The passing of the carpet as a floor covering brought a new phase in the building and finishing of floors. The floor, however, can not be changed and renewed every time the house is redecorated as can the wall paper, or even as the old-time carpet. This puts a greater responsibility on the home builder to have such a floor as will be satisfactory for years of use. Not only that, but it must be so finished that it will have complete protection from the wear of constant use. This is the office of the “floor finish,” whether varnish, wax, or paint is used, and the surface of the wood should always be covered. It should not be allowed to wear off in spots,—as in much used passageways, or at doors, as in that case the wear comes onto the wood and its surface soon becomes destroyed. In that case, nothing can be done for the worn places to make them look like the rest of the floor, but by taking off the old finish and scraping the floor to give it a new surface.

It is much easier to keep a floor in good condition by regular care than it is to bring it back again to good condition, after periods of neglect. Keeping the floor in condition is a point, the importance of which must be kept in mind in deciding how the floor shall be finished in the first place.

In a good house the floor which is to be left uncovered except for rugs should be hard enough to withstand the wear which is put upon it. But as a general thing one can have beautiful floors with any kind of wood.

Flooring.

The almost universal replacement of carpets by rugs in the homes of this country makes a beautiful and durable floor an important part of a house and the production of high-grade flooring is one of the notable development of modern lumber manufacturing, according to the Architectural and Building Code Service of the National Lumber Manufacturers Association.

Flooring of high quality is made from maple, birch, beech, oak, yellow pine, Douglas fir, and other woods; it is manufactured to exact standard sizes, of selected thoroughly seasoned stock and is carefully handled as is all interior finish.

Every detail has been considered which is needed to make a perfect floor, even to the recommendation of steel cut nails,
driven at an angle of 45°, with no nails placed within six inches of the ends of the flooring pieces.

The grain of woods is carefully studied. Maple, beech and birch are close grain woods which give equally good appearance and service for floors, whether slashed or quarter-sawed, and red and white oak floorings are always popular.

Strictly speaking, yellow pine and Douglas fir are softwoods, but edge grain flooring made of them gives such good service that it is widely used.

Finishing Hardwood Floors.

For hardwood floors, not to be painted there are three finishes that may be used. These are not entirely different and will vary some as there is a difference in woods used for floors. They are, oiling, varnishing and waxing. The way the floor is to be used should have something to do with the way it is finished. For real hard wear oil may be the best; for moderate wear, varnish will give good results, and for the finer class of work where a floor will get good care wax may be used.

The filler to be used depends on the wood used and not on the finish. Open grained woods, as oak, birch, ash, walnut, should have a paste filler. Beware of cheap paste fillers; some are adulterated with cornstarch, others with whitening, talc, plaster of paris, and will not last. When dry they come loose from the wood. Some are made of the cheaper round grained silex, and these do not get a good hold on the wood. Good paste fillers may be bought ready for use or may be made by mixing the best needle-like silex crystals with equal parts of pure linseed oil, turpentine and japan drier, to form a medium paste.

Thin this with turpentine and apply with a stiff stubby brush that will work it into the wood. Brush across the grain. After 30 or 40 minutes rub across the grain with a piece of burlap, carpet or excelsior. Do not let the filler get too hard or you will need sandpaper. One coat will do but two will be better.

Close grained woods like maple do not need a filler, but a coat of shellac may be used and will act as filler and under coat. This will need sandpapering to remove the gloss before the next coat is put on.
As shellac is likely to show laps, some will prefer to use a coat of varnish instead, but an ordinary varnish will darken a floor some if used for the first coat. Sometimes this may not be objectionable, however.

Yellow pine, because of the pitch in it, should have a coat of shellac.

Oiling is the most durable finish for a floor, though it needs an occasional renewing. Varnish is the cleanest and may be the most satisfactory if well done, as long as it does not get marred. Waxing will give a fine finish, if scratched is easily refigured, and will not darken the floor as much as other finishes.

For floor oil use three parts linseed oil to one part turpentine. This is for boiled oil. For raw oil use four parts to one of turpentine and one of drier. Stir when using. Apply with a stiff brush and rub well. Clean off all surplus, and later wipe frequently with an oiled cloth.

When a floor is to be varnished, do not use a cheap varnish. After the wood has been filled and sandpapered smooth, apply two or three coats of varnish. Allow ample time for each one to dry. Do not be afraid to use an extra coat, for if the film is too thin, it will wear through too soon.

Floor wax may be softened with a little linseed oil and reduced to a paste with turpentine. Apply an even coat with a soft cloth and let it dry, then polish with a regular brush or a piece of carpet tacked on a block of wood. Several coats may be applied, and the more work you put on this polishing the better the results will be. Such a floor needs frequent rubbing with a soft cloth and a thin coat of wax at times.

A waxed floor may be slippery but it is a fine finish, though needing some care to keep it in good order. But it can be kept so that it is always in good condition.

John Upton.

To Apply Wax.

The best way to apply wax is to place a quantity between two or more thicknesses of cheesecloth, forming a sort of bag. Then allow the wax to work through the meshes of the cloth as it is passed over the floor, thus insuring a thin, even coat. Do not use too much. A little produces a beautiful finish—too much will not give satisfaction. Allow this to dry ten minutes, rub with a clean, soft cloth, polish with a weighted floor brush made for the purpose, or with a brick or some heavy article with a cloth wrapped around it. Polish first across the grain of wood, then with it. If a brush is used, a piece of woolen felt or carpet placed under it will give the finishing gloss. In an hour or two a second coat of wax should be applied the same as the first.

To Finish Wax Floors.

A. B. W.—What is the most satisfactory finish for my new oak floors?

Ans.—In finishing any hardwood floor, the color is first considered, then the material which takes the wear. Oil, water or acid stains may be used to get the desired color. The floor should be scraped and sand-papered perfectly smooth and clean. Then apply a good paste wood filler and allow it to dry.

Good shellac or floor varnish, two coats, makes a good wearing surface. Unless the floor is a thin floor nailed through the surface, an acid stain gives excellent results as the color penetrates the wood and does not wear off easily if the shellac or varnish becomes worn through before being renewed. It is well to experiment with both the stain and the shellac or varnish on pieces of waste flooring before applying to the finished floor. A little time spent in this way is not only interesting but it will show you what you are getting and will perhaps save great disappointment in the finished work. Wax may be applied over the last coat of shellac or varnish, thoroughly rubbed down with a weighted floor brush.

A highly polished waxed floor is apt to be slippery but it makes a beautiful floor and can always be kept in fine condition. If the shellac or varnish is too shiny it can be dulled by rubbing with either pumice and oil or pumice and water to the desired dullness. Water used with pumice gives a slight grayness to the floor which may or may not be desired. Experiments as suggested above are advisable.

Acid or water stain should not be used on thin floors nailed through the surface, as this stain will not color the putty in the nail holes, giving an objectionable spotted effect. Use oil stain on any thin floor, surface nailed. Floors over ¼" thick are usually tongued and grooved and blind nailed.
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M. L. KEITH
EDITOR AND PROPRIETOR OF KEITH'S MAGAZINE
PRESIDENT AND TREASURER OF KEITH CORPORATION
To Teach Fire Prevention in the Public Schools.

T HAS been proposed that the subject of fire prevention should in some way be included in the instruction of the public schools, combined with some of the common subjects taught, so that it shall not become an added tax on the child's time.

A campaign of education seems to be the only solution of the fire wastage problem since, according to the report of the fire marshal for Minnesota; "Carelessness in the home and of the individual is the contributing agent of practically every fire recorded. Defective flues contributed to no less than 125 fires, with a consequent loss of property valued at $174,045. Sparks from soot-filled chimneys were responsible for a loss of nearly $100,000 in property, and carelessness with matches was responsible for a property loss of more than $70,000. In nearly every instance the use of ordinary common sense would have made such a fire impossible."

"The fire marshal, in his report, recommends the enactment of a law that would be designed to assess upon individuals, firms and corporations the cost of extinguishing or attempting to extinguish all fires on their premises wherever the fires are the result of failure to comply with any law, ordinance, regulation or requirement of the state. Such a law would be founded on the theory that a man is responsible to the community for preventable fire loss."

The Public Interest in Industry.

It is commonly assumed that all income inures wholly to the benefit of the recipient and that all property is devoted wholly to the benefit of the owner. The radical doctrines of the day are based upon this assumption, although common observation shows it to be false. The industries are all privately owned, but they are engaged in producing for common consumption, and all development and improvement in them inures to the benefit of the great body of consumers.

To whatever extent the profits of an industry are turned back into the industry to enlarge and cheapen production, the public enjoys the benefits. It is only to the extent that the owners withdraw profits for expenditure upon themselves that they receive benefits.

All wealth employed in production for the public market is socially employed, and may be regarded as a social fund, in the same sense as though the title to it was actually in the State. The real distribution of wealth, therefore, is not to be measured by ownership but by consumption.

The grievance of society against large private incomes is confined to that portion of such incomes as may be dissipated in undue and wasteful private consumption.

When this view is accepted it will be seen that so far as practicable taxation should be levied upon that part of a rich man's income which is devoted to private consumption rather than upon that part which is returned to industry and devoted to public purposes.

—National City Bank Letter.

Book Review.

How to Use Cement for Concrete Construction for Town and Farm, by H. Colin Campbell, C.E., published by Stanton and Van Vliet, Chicago. While the author is an engineer by profession, he mentions the fact that in addition to his special knowledge of the many and varied uses of concrete, he was also raised on a farm, and operates one at the present time, so has had many opportunities to prove the economy of concrete. The book is profusely illustrated with drawings and diagrams, giving specific instructions which should enable the reader to construct farm and town equipment. He takes up the little things about the house, whether in town or country, which will add a little touch of cheer and utility; flower boxes, lawn seats, concrete posts for arbors or pergola.
In addition to the more usual uses for concrete he gives directions for laying out and building a concrete tennis court; some very attractive designs for a concrete garage. From stucco bird houses to tree surgery, the processes and directions are given in a lucid manner. Methods of treating concrete surfaces and the variety of finish are given in some detail; also concrete steps, entrances and approaches. It is a very practicable book, with many tables and formulas. In "Building Materials" we have quoted from the chapter on Stucco.

Summer.

Wouldn’t it be stupid if there were no summer? One of the very best things that you can say of summer is that it gives you a chance to begin all over again —after your house in its winter dress is getting a bit stale—and re-curtain, re-rug, re-decorate and returnish to your heart’s content, either in the summer cottage or the all-year house.

Statement of the Ownership, Management, Circulation, Etc., Required by the Act of Congress of August 24, 1912,

Of Keith’s Magazine on Home Building, published monthly at Minneapolis, Minn., for April 1, 1920.

State of Minnesota, County of Hennepin—ss.

Before me, a Notary Public in and for the state and county aforesaid, personally appeared M. L. Keith, who, having been duly sworn according to law, deposes and says that he is the owner of the Keith’s Magazine, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August, 24, 1912, embodied in section 443, Postal Laws and Regulations, to-wit:

1. That the names and address of the publisher, managing editor, and business managers are:

Publisher—M. L. Keith, Minneapolis, Minn.
Editor—M. L. Keith, Minneapolis, Minn.
Managing Editor—E. Bartholomew.
Business Manager—Ezra N. Oberg, Minneapolis, Minn.

2. That the owner is:

M. L. Keith, Minneapolis, Minn.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are:

None.

M. L. KEITH.
Sworn to and subscribed before me this 1st day of April, 1920.

W. M. KOON.

(Seal)
My commission expires August 23, 1922.
Contents
Keith's Magazine—Volume XLIII

Answers to Questions... 38-96-158-222-284-348
Apartment for Children .... 310
Batik as a Fine Art .... 346
The Bay of Windows—Katherine Keene . 259
Book Reviews—
  Flora—A Book of Drawings ..... 118
  Practical Book Interior Decoration ..... 54
  Progressive Steps in Arch'l Drawing ..... 310
Breakfast Room—Marion Brownfield. ..... 194
Breakfast Rooms—Charles Alma Byers. ..... 191
Building Material Supply ..... 60
Building a Basement Later. ..... 110
Building Problem in Seattle—L. N. Johnson. ..... 255
Can Washing Be Made Easy? ... 102
Cement Asbestos Shingles. ..... 302
Charm in Our Houses. ..... 343
Conservation in Building Materials. ..... 240
Cottage-Bungalow—Anthony Woodruff. ..... 191
Covers Under Glass—Helen Newman. ..... 130
Decoration and Furnishing—Virginia Robie—
  Batik as a Fine Art. ..... 346
  Charm in Our Houses. ..... 343
Decorative Possibilities of Casts. ..... 151
  Found in the Shops. ..... 36-219-282
Furniture for the Bungalow. ..... 216
Lighting Notes ..... 94
Spring Household Notes. ..... 279
Three Rooms—Studies in Color. ..... 33
The Treatment of Doorways. ..... 91
Decorative Possibilities of Casts. ..... 151
Doorways of Old New York—A. Curtiss . 70
Treatment of Doorways. ..... 94
Electric Range and the Kitchen. ..... 326
Enclosed Porch—Anthony Woodruff. ..... 123
Evaporative Tests. ..... 300
  Find Waste Shortage. ..... 188
Flower Box—Marion Brownfield. ..... 127
Floors—The Modern Standard. ..... 370
Furniture for the Bungalow. ..... 216
Good Building. ..... 2
Garage on a Terrace—R. D. Count. ..... 41
Heating Notes—
  Evaporative Tests. ..... 300
  Increased Efficiency for the Furnace ..... 170
Recirculation of Air in the House. ..... 298
Research Work in Furnace Heating. ..... 236
Home Atmosphere—M. O. Williams. ..... 322
Home Cooking. ..... 232
The Hooked Rug—C. B. MacLean. ..... 15
A House an Architect Built for Himself—
  Charles Alma Byers. ..... 197
House That Grew—Van de Vort Walsh. ..... 9
How Would You Change Your Home? ..... 80
How Do Your Gardens Grow?—Louise N.
  Johnson. ..... 319
The Ideal Kitchen—Nancy D. Dunlea. ..... 201
Interior Decorator, Being One's Own—
  Alice Phoebe Eldridge. ..... 18
Ironing as "Fancy Work". ..... 166
Is the American Home Roomy?.... 125
Keeping the Automobile—C. A. Byers. ..... 262
Labor-Saving Bungalow—E. P. Jinkins. ..... 204
Laundry, For the ..... 168
Lawns, By Your—Florence E. Andrews. ..... 331
Lighting Notes ..... 94
Modern Home vs. Dump Sites—W. Webb 131
Suburban Home—Franklin Boyd. ..... 131
“ My Own Home”—E. M. Watson. ..... 77
Overmantel and Fireplace—J. H. Martin. ..... 68
Our Home—Ella S. Witherill. ..... 140
Painting the Screens. ..... 296
The Painted Wall. ..... 242
Planning the Kitchen for Efficiency. ..... 294
Planning the Home—
  Attractive Little Stucco Home. ..... 25
  Attractive Homes. ..... 207
  Bungalow Planned Like an Apartment. ..... 21
  Brick and Stucco in Combination. ..... 149
  Bungalow for a Larger Family. ..... 84
  Carefully Planned Bungalow. ..... 272
  Colonial Homes. ..... 270
  Comfortable Home. ..... 144
  Cottage Bungalow. ..... 86
  Economy Bungalow. ..... 23
  Five-Room House. ..... 145
  New Stucco Bungalows. ..... 213
  Pleasing Small Home. ..... 338
  The Porch in the Plan. ..... 275
  Real Home. ..... 337
  Shingles for the Exterior. ..... 339
  Small Colonial House. ..... 82
  Southern Home. ..... 335
  Substantial Home. ..... 274
  Square Eight-Room House. ..... 27
  Two Attractive Homes. ..... 333
  Two Bungalows. ..... 210
  Two Stucco Homes. ..... 87
  Up-to-Date Bungalow. ..... 212
  Well Designed Cottage. ..... 127
  Well Planned Homes. ..... 29
Planting for the Small Flower Plot—Adeline Thayer Thomson . 137
Preserving Eggs in Water Glass. ..... 232
Recirculation of Air in the House. ..... 298
Refinishing Old Furniture—Julia A. Wolf. ..... 134
Research Work in Furnace Heating. ..... 236
Retaining Walls—M. Robert Conover. ..... 265
Rolls of Wall Paper Required. ..... 296
Roof Talk—John Upton. ..... 174
Spring Household Notes. ..... 279
The Story of a House—Harriet Keith. ..... 63
Table and Food Values—
  Cereals as a Food. ..... Elsie M. Fjelstad 162
  Fish as a Food. ..... “ 290
  Menus Using Fish. ..... “ 292
  Food Program. ..... “ 42
  Salads. ..... “ 352
  Soups and Soup Making. ..... “ 106
  Vegetables. ..... “ 228
Three Rooms—Studies in Color. ..... 33
The Ubiquitous House Fly. ..... 356
Water Supply. ..... 362
What We Can Learn from the Report of the
  Housing Corporation. ..... 182
Woods and How to Use Them—
  Answers to Questions. ..... 114-308
Care of Wood. ..... 306
  Floors. ..... 370
  Forest Wastage. ..... 246
  Gray Toned Woodwork. ..... 50
  White Interior. ..... 244
  Relation of Woodwork to Furniture. ..... 178
  What to Avoid in Wood Finishing. ..... 180
Working to Dimension. ..... 176
Wren's Nest in Your Yard—Adeline
  Thayer Thomson. ..... 268
Wren's in Your Yard—A. T. Thomson. ..... 268

Volume XLIII

KEITH'S MAGAZINE
KEITH'S MAGAZINE
ON HOME BUILDING

CONTENTS FOR JULY, 1920

Just a Word—Tax on Idle Land ........................................... 2
Discovering the Doorway—Esther Matson ................................ 5
The Patio Bungalow—R. D. Count ........................................ 9
Are Log Houses Practical? .................................................. 13
Homes For Warm Weather .................................................. 16
A Six-Room Stucco House .................................................. 18
A Practical Little Bungalow .................................................. 20
The Livable Quality in the Home ......................................... 21

DEPARTMENTS

Inside the House
Decoration and Furnishing—Virginia Robie, Editor
Summer Wall Papers ....................................................... 25
French Schemes ............................................................... 26
Do's and Don'ts in Framing Pictures .................................... 28
Answers to Questions ........................................................ 30

Table and Food Values
Feeding the Folks in Hot Weather—Elsie M. Fjelstad .............. 34

Household Economics
The Community Kitchen ..................................................... 38
Food From the Back Yard Garden ........................................... 40

Building Materials
The Safety Engineer and His Work ....................................... 42
A New Hollow Brick .......................................................... 44
Light and Safety .................................................................. 44

Splinters and Shavings
The Nation's Income, Per Capita ......................................... 46

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A cottage door, daintily hooded and with semi-circular steps.
SOMEONE once said of books that some are to be tasted, others are to be skimmed lightly, and some few are to be read. We might say that doorways likewise are—some of them to shunned, others to be scanned from a distance, and some few to be loved.

Now comparisons can be odious, but to make them between different doorways—to ask ourselves why one door displeases and another delights us—this is no odious pastime, but rather a worth-while pursuit. It may lead us on one of the most fascinating of quests possible—a quest of doors. Such an objective will enhance immensely the interest of any journeying we may make, while if tours in reality are not feasible we may still enjoy discovering doorways in pictures.

Recently a woman living on the Pacific coast spent a summer in New England and came home bearing a portfolio full of photographs she had collected (sometimes buying, sometimes herself taking snapshots). Doorways of old Salem, old Portsmouth, old Portland, and old Deerfield doorways made bulky the portfolio. These photographs have been not only happy souvenirs of her summer, but they are now being turned to practical account in the planning of her western home. She and her architect have pored over them and picked out certain features that are adaptable to her new house, which besides expressing her personal preferences will thus be endowed, so to speak, with association. The doorway that results is going to be not merely her own doorway, but it will be at the same time reminiscent of certain other doors that have been "owned" and loved by people of "far away and long ago."

In the Bible the door is spoken of as the mouthpiece of the house. And how much the word suggests. For of all the house features this most positively expresses a man's personality. If we look about us with a curious eye we will be astonished to see how here one door expresses unmistakably its owner's fondness for the trim and precise—how there another shows its possessor's deeply ingrained love of tradition—how still another shows a man's bold-
England evolved a peculiarly rare and delicate art of doorways from the humble material—the wood—which they found at hand in abundance.

As a matter of fact, so compelling is the charm of certain examples of their art still to be discovered on Long Island, in Connecticut and in Massachusetts—indeed, up and down the Eastern coast—that the temptation is great to merely make choice of one and copy it. Sometimes the result is happy enough. But we need to remember that the old work was done in a different spirit from that of today, to remind ourselves that these genuinely old products showed the true craftsman’s pride and fervor. This, perhaps, is one of the reasons why our reproductions do not always satisfy their anticipation. Besides this, we are now growing so cosmopolitan that we can rightly take our inspirations from every nook and corner of the universe. We have good reason to take
suggestions from certain mediaeval doorways of French towns. We may be interested to turn back to Italy for certain stately but none-the-less adaptable examples, and if we chance to live in the far west we may be pleased to study the fashions of the men who came from Spain and settled there.

But whatever the type we may choose for our inspiration we will do well to take to heart one little matter which a modern novelist brought out not so long since. We may well take care that our door shall seem hospitable. In "The Harbor" Ernest Poole puts this sentence into the mouth of one of his characters: "I always like the front door of a house to be wide and low, with only a step or two leading up. I like it to look hospitable as though always waiting for friends to come in." So do we all.

But unluckily that is about as far as many of us go in analyzing our doorways. What we need to do is to consider the reasons why they please or displease, why they have charm or lack it, why they do or do not look hospitable.

With old Colonial doorways we find that in addition to the delightful columns which so often guard the door itself and the lovely leaded side-lights and fans, there were often welcoming seats each side of it. In certain Dutch relics we may find that besides the cozy benches where mein herr used to smoke his evening pipe and his frau would gossip over her knitting with her neighbor, there was another peculiarly inviting feature—that known as the Dutch door—a door cut into halves in such wise that the upper part could be wide open while the closed lower half kept out draughts (and possibly at the same time any wandering cats, dogs, even hogs, which we are told all roamed freely about in the old-time village streets!).

If we study the Mediterranean architecture we may find that hints may be had even from doorways elaborate enough to count as portals. We will come to realize that in countries of intense sunshine there is good reason for the recessed entrance. Similarly for climatic reasons we will see that a special study must be made of color and of lights and shades. The reason then becomes apparent for certain of the characteristics of Spanish buildings—for their expanse of bare wall surface, for one instance—and for the extreme elaboration of

*Set in a framework of brick and flanked by stucco columns*

Myron Hunt, Architect

The doorway, the richness of which often actually startles one so vivid and forceful is its contrast with the plain surfaces.

The further we look into the matter the more surely we will come to realize that the door ought moreover to be considered from the inside effect as well as from the exterior. In a house to be used only in summer time, for example, how appropriate is the wish to make the transition between
The placing of shrubs, vines, and tub-plants is a veritable art in itself.

indoors and outdoors as slight as possible. In such case the French window-doors came in aptly and these combined with ample windows on each side may help the room itself to seem almost an integral part of the great porch or terrace which in its turn links the house to the garden.

Contrariwise in the winter home such a device would be highly inept. In cold weather to enter the house and shut the door ought to allow one literally and figuratively to shut out the weather and the worrisome world—to feel oneself, even in the stormiest of days, to be as the poet phrased it, "enclosed in a tumultuous privacy."

And so we come to Emerson's idea. "Why need we copy the Doric or the Gothic model? Beauty, convenience, grandeur of thought, and quaint expression are as near to us as to any, and if the American artist will study with hope and love the precise thing to be done by him, considering the climate, the soil, the length of day, the wants of the people, the habit and form of government, he will create a home in which all these will find themselves fitted, and taste and sentiment will be satisfied also."

"Considering the climate, the soil, the length of day, the wants of the people." Precisely those are the things to underscore and to write in red this very day. Taking these into consideration, we come to the conclusion that what delights us in a doorway is not, after all, so much its period or its style as it is the spirit which it reveals. We find charm, now in some example of foreign inspiration and most elaborate design and workmanship, again in one of extreme and indigenous simplicity.

We may be captivated now by one door framed in brickwork and flanked by the plainest of stucco columns and graced by overhanging vines, again by one recessed behind an arch of masonry and adorned with a bit of carving. We may be arrested by a slight cottage door daintily hooded with wood and made particularly inviting by the daintiest of semi-circular porches, or by an entrance stately with columns.

We might insert a little code of rules in our portfolio, making it elastic enough to admit of much variation. To start with here are four principles that are eminently practical.
First: Take care that your house door is of frank and honest construction.
Secondly: See that it is pleasant in its proportions—especially if it be a paneled door see that the panels are agreeable in shape and in their relation to each other. Remember that vertical lines tend to be ambitious, may be restless, while the horizontal lines make for stability and quiet. Make sure, besides that the door itself is “in scale” as the architects says—that it prove neither too large and obtrusive nor too small and insignificant for your house-face.
Thirdly: Watch, lest in the effort to make your door “rich but not gaudy” you let it grow too solid and sombre. No longer has it any excuse to be as stern as the pattern of a mediaeval keep. Rather is our need today that of grace and cheeriness.
Fourthly: Have a care for the dignity of your door—yes—but take more thought to make it inviting. See that it swings inward and both literally and figuratively lures you within the magic precincts.

The choosing of the hardware, perhaps the addition of some quaint souvenir in the shape of a brass knocker or some ancient iron Spanish bell-pull, as well as the placing of the vines or shrubs, or the possible tub-plants, which is a veritable art in itself, will serve as finishing touches. And then we may take a pardonable pride in the tale which the doorway—this “mouthpiece” of our house—shall bespeak.

The Patio Bungalow
R. D. Count

Among the many and widely diversified types of architecture which have been applied to the genus bungalow probably none have been so seldom used as the style of the “patio” bungalow, illustrated here-with.

The dictionary says that a “patio” is the inner open court of Spanish or Spanish-American dwellings, but does not give any details regarding their evolution or use. Briefly then, this patio design, or inner court, comes to us originally from old Spain and the country of the Moors who, while jealously guarding their women from public gaze, sought to give
them pleasant gardens perfumed with flowers, shaded with palms and cooled with fountains and pools. To meet those requirements it was necessary in those troublous times to build the house in the form of a hollow square; that is, surrounding the patio on all four sides. In more modern times, and especially in the Spanish-Americas, this was modified to a building having three sides only, the garden frequently extending beyond the boundary lines of the house and being protected from the outside world by a high wall.

In the early days of California the Spanish dons who first settled the country used this latter style in a majority of instances as the basic idea in the building of their ranch houses. Those who have read the story of "Ramona" by Helen Hunt Jackson will have in mind a vivid word picture of a Spanish patio in daily use.

It seems exceedingly strange that this style of building, so typical of the old California traditions, has not been more frequently used in bungalow design on the western coast. Instead builders have run the gamut of almost all the known architectural styles and during the last few years have focused on the colonial to a degree which has reduced that historic type to a place among things mediocre.

In those sections of the country having a reasonably mild climate throughout the year the "patio" bungalow offers so many unusual advantages that a trip in imagination through this one will be found unique and entertaining.

The house occupies a corner lot facing west, and with side street exposure to the south. The street grade slopes up toward the rear, having a rise of six feet in the hundred foot distance.

We mount the short flight of brick steps and passing through the French doors are surprised to find ourselves in a vestibule 5 x 4 feet, paneled with quarter sawed oak and equipped with hat stand and other outer garment accessories. Other glass doors, twins of and in line with the outer ones, open and admit us to the reception or living room occupying the center section of the house; but the eye is carried immediately on entering to the farther side where another pair of glass doors permit a charming vista of the cool and inviting patio. Broad and spacious, with trim of quarter sawed oak and a beam ceiling, this room covers a
space approximately 19 x 33 feet and contains in one corner a big, honest-to-goodness fireplace. Not one of the dinky little imitations so often seen in modern homes, but one like those used in the days of our grandmothers beside which lovers of an evening were wont to whisper sweet nothings or in silence sit hand in hand watching the wavering flames.

Just to the right from the vestibule entrance a portiere-covered doorway gives access to the den—13 x 10 feet—with wide-stretching windows looking to the west and south. Equipped with wicker furniture and commodious divans it serves as a lounging and smoking room during the evening hours or, in the daytime when the air is chilly, as a sun parlor and reading room. Returning again to the reception room we pass through another door to the right at its farther end which opens into a small hall only eight feet long by four wide. Toward the front of the house a door in this hall opens into the guest room, 14 x 13 feet, finished in white painted woodwork and with wallpaper carrying a bright, cheerful pattern. A complete bath room and large clothes closet are adjacent.

At the other end of the little hallway is another bedroom 12 x 13 feet with casement windows facing to the south, while directly opposite them a pair of French doors open onto the patio. This gives an ideal ventilation in warm weather—almost a sense of sleeping out of doors. Next is another short hall, identical with the former except that a door in the center opens into a bath room equipped with both tub and shower paraphernalia. Beyond is a third bedroom, also with casement windows and doors opening directly into the patio. All of these sleeping rooms, halls and baths have white painted woodwork and walls are
covered with paper of bright and vivifying motif.

With a lingering look of admiration in the last bedroom we step through the open doors into the patio and pause speechless before the dainty beauty of this entrancing garden, while we grope futilely for expressive adjectives.

Its area is not great—36 x 29 feet approximately—but it is so cool and restful; the twitter of birds, the rustle of the breeze among the palm leaves overhead induce a feeling of seclusion and peaceful quietude which makes one wish that they might linger long. Standing in this place one can appreciate the Spaniard's distaste for our American hurry and turmoil, and sympathize with his desire to put off till "manana" those things that clamor to be done today.

A narrow cement walk borders the wall under the overhanging eaves while in the center is an expanse of velvety lawn with a tiny central fountain. Against the brick wall of the pergola at the end of the patio are seen the snowy blooms of lilies and the gorgeous colors of pansies, while just around the corner the north side of the street wall shelters a rock garden and bank of ferns. The pergola with its white columns and beams partly hidden by the cluster blossoms of the blue wistaria makes a fitting close to the vista. However, it is made to serve a utilitarian purpose as well; it is the automobile entrance and driveway with a garage 15 x 15 feet at its end.

But our guide has turned again to the house, so with a reluctant sigh we follow. Stepping from the patio into the reception room once more we pass to the front and enter the dining room on the northwest side of the house. This room is finished in quarter sawed oak and is 14 x 17 feet with two big bay windows—one facing west and the other north.
Both have broad cushioned window seats with ample storage space beneath. Next come the pantry and linen closets and then the kitchen.

On the north side of the kitchen is a screen porch giving access to a delivery entrance which borders the north side of the building from the front. Deliveries and refuse therefore do not pass through any part of the house, the patio or even the auto entrance. A doorway on the other side of the kitchen opening into the patio permits the serving of breakfast, afternoon tea or evening refreshments therein—the latter an especially frequent function when, with a brilliant moon overhead, the garden and pergola illuminated with their electric lanterns present irresistible attractions.

Next to the kitchen is the housekeeper's room with its own bath and separate entrance on the north side. Beyond that and last are two distinct but commodious store rooms for trunks, garden tools and other miscellany as must find a place.

We thought we had seen all—a diminutive, winsome garden with a surprisingly roomy house on an ordinary size city lot—but as we step outside a casual glance toward the top of the garage rivets our attention. Think of it! Even a sleeping porch, on top of the garage, 15 x 15 feet, screened and curtained all around and equipped with twin beds, wash bowl and running water, chiffonier and electric light. What more could one ask?

As we walk down the street with the host's cheery invitation to "come again, any time," ringing in our ears we peep into our note book to see what data has been jotted down. Um-m-m. Built about seven years ago, by day labor under supervision of the owner and cost $11,-500; lot, 65 x 100 feet, cost $6,000. Total, $17,500.

Well, it's worth it, and when my ship comes in that is what I shall build for my home—a "patio" bungalow.

**Are Log Houses Practical?**

Whether or not a log house is practical depends largely on what is meant by being practical. If you expect all the refinements of a framed and plastered house, don't build of logs. If you like to use the real thing and by "practical" you include the sense of satisfaction in using and living with a material you like, and if you can overlook the obvious difficulties of log construction, applied to everyday living conditions, nothing could be finer than a log house. Cut the logs as near of a size as possible. Take off
all the bark, which can be most easily done in the spring. Logs cut in the winter will be found to peel fairly easily the following spring. Cut and fit with skill. Employ an expert axeman if possible.

Oakum makes a very satisfactory caulking material. It is best to let the whole structure shrink and set a year if possible before caulking. Caulking should be done from the outside and set home tight with a caulking chisel. Hew the logs a little top and bottom to make a bed caulking the crack. Pin each log to the one below with hardwood pins. Pin thoroughly each side of the doors and windows. Cut out doors and windows after the walls are up. Hew the inside surface of the walls as the logs go up if you desire a fairly even wall inside.

A real log construction, using hewn logs, requires experienced log workers, and these are not so numerous now as they were in the days that were nearer to pioneer times. Where slabs are available, as is often the case where there is a local saw mill and these slabs are left after the logs have been sawn into lumber, their use is very practical. Slabs, either with or without the bark, may be used in the place of sheathing in such a way that they add much to the attractiveness of the simplest type of a sheathed frame.
house, and at the same time make it more staunch.

The cottages in the Wisconsin woods which are shown, are built of sawed lumber from the locality, with the frame sheathed. Outside of this, slabs are set vertically, from the eaves to the ground. The sheathing back of the slabs makes a tight construction. While these are not really “log cabins” at all, they are a very practical construction, making use of the materials at hand in the best and most modern way. The workman of the present day does not know how to handle an ax in such a way to build with logs according to the best of the old time construction. The old-time woodsman and the men who have worked in lumber camps know how to handle an ax, and are able to get results which would tax the resources of other men and even of other good workmen with a whole chest of tools.

The photographs of the interiors show something of the possibilities of home construction in the finishing and the furnishing of the summer home in the birch woods. White birch lends itself to this kind of use particularly well because of the beautiful silk-like surface of the bark and its soft tone and silvery finish. The outside of the bark seems quite as good a surface for furnishings as the inside of the wood in its cut surface. The seat ends constructed of white birch in the bark are quite in character, and the table and desk are nicely designed. The table uses the base of a tree trunk, with the spread at the roots, as a pedestal on which rests the circular slab which forms the table top. The desk is built up of small pieces of white birch in a usual form.

Most ingenious, however, is the four-post bed built of white birch poles and curtained and draped after the manner of the beds of our grandmothers. Grill work of the birch at the top gives the tester effect of the old fashioned bed but the curtains set below it.

Anyone who is accustomed to handling tools and knows something of working with wood can work marvels in the way of rustic furniture for the summer lodge; furnishings which seem to belong in the surroundings, with a refreshing sense of the unusual, yet at the same time a rational construction. The boy who has liked manual training work, which is giv-
Homes For the Warm Weather

The sleeping porch with windows on all four sides seems to be the ideal solution for the problem of sleeping during the warm season. This has been the motif back of the so-called Airplane bungalows so much in favor in the great Southwest.

Two homes are shown in this group in which the first floor arrangement is not unlike, though the exterior is vastly different owing to the second story sleeping porch.

The first photograph shows a little bungalow designed with the simplicity of the Colonial building. It is terraced across the front, pergola covered on either side of the entrance, where the vines will soon give protection from the sun during the warm season, without covering it from the sun when the sunshine is desired. It can be roofed over the pergola rafters if desired.

The plan is a simple arrangement of five rooms. The big living room itself conforms to the exterior feeling of comfort. One has every opportunity to develop a wonderfully attractive interior in such a living room and it is well adapted to the needs of those who have a fondness for music and dancing.
The house is of standard frame construction with a basement under the entire rear part back of the living room.

Beyond the living room in both designs is the dining room and a bedroom. Glass doors separate the dining room from the living room, while there is a single door to the bedroom. Opposite the French doors is a built-in buffet, with a door on either side, one leading to the kitchen and the other to the hall. This small square hall connects the two bedrooms and the bath room with the kitchen and dining room. Two closets open from the hall. Good closets open from both bedrooms.

The kitchen is well arranged and compactly planned. The range stands beside the chimney, with good light from the double window. The sink is well lighted also and has good work tables on either side, with cupboards at either end. Beyond the kitchen is the enclosed entry.

The second photograph shows the Airplane Bungalow, which is nothing more than a five-room house with just enough of the attic raised to make a nice large sleeping porch with a closet.

The second story room is 13 feet 6 inches by 12 feet with a 7-foot ceiling.

The living room is a wonderful room. With the sunny alcove in front there is exceptional opportunity for the expres-
sion of one's individuality in interior treatment.

It is a very good thing to have a family entrance off the front porch at the side.

The location of the bathroom permits of the real convenience of access from the back entry.

The porch masonry is cement stone and the floor is cemented. There is a good basement back of the living room under the full width of the house, and it has heating accommodations, etc. It is a shingled house, but susceptible of any kind of wall treatment.

**A Six-Room Stucco House**

The living room across the full front of the house has become very popular and is generally found quite satisfactory. In this arrangement no space is cut off for a hall, but rather it is used to increase the main living room. The main stairs are at the extreme end and lead up directly from the living room. There is a fireplace on the long inside wall and a projecting bay at one end of the room.

The entrance is through a piazza, which is completely enclosed with glass. A coat closet is shown beside the front vestibule.

Beyond the living room is the dining room with a wide opening between. The windows are so arranged that a serving table can stand under the group of windows and a buffet between the two windows opposite the living room.

In the kitchen there are cupboards on either side of the door to the dining room. Stairs from the kitchen lead to the landing of the main stairs, with the basement stairs under. The refrigerator is on the enclosed rear porch.
On the second floor are three good-sized chambers and bath room. The chamber over the dining room has many windows; a veritable sleeping porch.

The interior is finished in hardwood, oak being used for floors and trim on the first floor and birch on the second floor. If the woodwork is to be enameled, birch is a good wood for this purpose.

There is a full basement under the house, complete with laundry, vegetable cellar, fruit room, heating room, et cetera. There is good attic space for storage, but it is not intended to be finished. The eaves come low over the windows. The roof is low pitched with asbestos or stained wood shingles.

The exterior is stuccoed from finished
grade to the eaves. The stucco is applied over metal lath. From the second-story window sills to the eaves the stucco is finished with half-timber work as a trim. This is given a dark brown creosote stain, and this same treatment is given to all outside window casings, cornices and timber work.

The size of this six-room house is 26 feet in width and 28 feet in depth, exclusive of porches. It is planned for a south or west frontage.

A Practical Little Bungalow

Very practical little bungalow home is shown in this design. It is shingled on the outside, with brick chimney and porch piers. The entrance is at the side of the porch so that it does not cut the sitting space.

The house is 40 feet across the front, including the porch. The living room has windows on three sides. The fireplace is interestingly placed in its composition with the exterior lines of the house as well as on the interior.

The living room and dining room have only an indication of division between them, so wide is the opening. With the dining alcove beyond, these rooms might well be made into one big room, one end of which could still be used for dining, but the heavy set of “dining room furniture” might easily be eliminated. These rooms have a coved ceiling.

The kitchen is conveniently arranged and quite complete. The refrigerator stands in the entry, from which the basement stairs are reached.

The chamber on the first floor is reached from the little stair hall.

This chamber with cross ventilation, sleeping porch, closet and a private bath, makes an especial appeal to the small family. There are two chambers and bath in the attic.
The interior is finished either in hardwood stained to the tone of the furniture which is to be used or it is painted or enameled old ivory or possibly some of the light tones of flat paint.

The foundations are stuccoed to the shingles. There is a full basement under the house with boiler and fuel room and also a laundry.

The shingles and brick work of the exterior makes an effective background for the planting.

The Livable Quality in the Home

More and more are people realizing the necessity for a greater openness in the planning of the home. This is true even more in the small home, if possible, than in the larger buildings. The feeling of space and airiness gives a restfulness and adds to the livable qualities of the home.

This attractive little bungalow is designed and built on simple lines. The
floor plan is very conveniently arranged. The dining room and living room open together. Beyond the dining room is the kitchen and from the living room opens the hall which connects the other rooms. There is an unusually large linen cupboard opening from the hall. Two chambers and the bath room open from this hall to kitchen and living room.

Beyond the kitchen is a room which may be used as a maid's room, or it may be used as a nursery or sewing room. If desired it could be used as a breakfast room in the California way, where the "dining room" is only used as such on state occasions, on the supposition that this arrangement makes it easier to keep the front part of the house in order.

There is a basement under the rear portion in which the furnace is located. The finish and floors are of pine or cypress for paint, stain or enamel. The attic space affords ventilation only.

The cottage is 27 feet by 37 feet long, exclusive of porch, and the story is 9 feet.

The exterior is covered with shingles and stained.

The other photograph shows a home which is attractive, beyond the usual, in its green and white paint and its gambrel roof, with its broad windows, emphasized by shutters, and its latticed porch.

The entrance from the porch is into a central hall, lighted from the side lights on either side of the door. A wide cased opening communicates with the living room which extends across the entire width of the house, and the sun porch beyond. Two pairs of French doors open to the porch. A wide fireplace fills the center wall of the living room. A door connects the living room directly with the kitchen.

On the other side of the hall is the dining room with its wide window in front and group of three windows on the side. Beyond, but without direct connection with the dining room, is the pantry, opening from the kitchen. Here are shelves and cupboard and also the ice box, convenient to both kitchen and dining room and iced from the entry.

On the second floor are three bedrooms and a bath, with closets under the angles of
A Colonial home, attractive beyond the usual

the roof which give excellent hanging space.

The full second story height is cleverly carried up in the dormer, while the gambrel ends and projecting eaves carry the feeling of the one-story house. The lower as well as the upper sash of the windows are divided into small panes in the New England way. The treatment of the porch and of the lattice bound posts at the entrance with its latticed enclosure promises a clambering rose or some beautiful vine for its covering.

There is a full basement under the house with the usual arrangements for heating plant, laundry, storage, etc. The furnace flue, fireplace and range flues are all accommodated in one chimney near the center of the house.

To an unusual degree does this home show that livable quality which seems to be so difficult to capture, and materialize in wood and plaster. The broad lines of the low hanging eaves and broad windows give a sense of restfulness, while the latticed entrance and long side porch promises a charming interior, in keeping with the outside.
Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Summer Wall Papers

The wall papers shown in the shops this season are so decorative that they will completely efface the furnishings unless the latter are kept quite subordinate. It is a mistake to use the charming bird and flower patterns, unless one is quite willing to tuck away, out of sight, most of the bric-a-brac and small belongings of the average room. Under the right circumstances the boldly figured wall hangings are very satisfactory. Moreover, they contribute a dash of refreshing novelty, well worth cultivating during the summer months.

The decorators who predicted a few seasons ago that the Japanese and Chinese designs would be short-lived were evidently not prophetic. The most attractive and most salable of the papers of 1920 are decidedly Oriental. To be sure it is a blended Oriental and Occidental, sometimes working for good, sometimes otherwise.

The patterns presented herewith show a few selected from a quantity of new papers. The first is quite Japanese, having a delicate, subtle color scheme, which is rather lost in the reproduction. From the branches of a flowering tree hang lanterns in colors harmonious with the blossoms and leaves. As with most designs of a Japanese character, the background plays an important part. There are plain spaces of a creamy white which balance the design and give to it a certain quietness. Such a paper would be interesting in a bedroom where the soft gray-green of the leaves is repeated in the rugs, and the old pink of the flowers in the curtains. Wicker furniture painted gray-green would fit into this scheme.

Quite English in execution, Chinese in suggestion, is the border showing the bird in the tree—a tree of wonderful flowers and more remarkable leaves. This particular pattern may be purchased in several combinations of color. In the fragment shown the cockatoo is in natural colors, the deep blue-greens and green-blues being repeated in the foliage. An attractive deep pink is conspicuous, modi-
fied by the general working out of the design. This pattern would be attractive in a room where the colors of the paper are repeated in the furnishings—a rather neutral tone for large spaces and the more lively hues for small areas.

Another illustration shows an old-fashioned bouquet of flowers against a cool gray-green stripe, more gray than green, perhaps. The nosegay, while brilliant, is very harmonious. Tulips, roses, blue bells and clove pinks are skillfully combined. Very old fashioned in feeling is the lace and festoon border showing roses of deep pink against ivory and soft blue.

French Schemes.

The Louis XVI period in wall decorations, furniture and lesser house appointments makes much the same appeal that colonial furnishings do, and, under many circumstances, is equally livable. Of all French schemes save the simplest Renaissance and the simplest Gothic, which most people are afraid of, for sundry reasons, it is the pleasantest to live with and by far the easiest to find in good reproductions. Moreover, it fits into the average house without proclaiming itself unduly as "period"; also, and this is important, it has the merit of adapting itself to other styles, if taste and discrimination have a hand in the mixing. Particularly are the plainer English styles of the eighteenth century on friendly terms, but the kinship is in this case quite close, Adam and Sheraton things especially having many of the same details. But the colonial sofa of local make or the imported Empire table will not clash at the Louis XVI armchair or cabinet, when placed in close proximity. This statement cannot be made of either Louis XV or Louis XIV things. They need their own setting and are aliens without it.

It is possible with care, time, and a love of the work to evolve a Louis XV room and have it entirely livable, but it must begin with the wall decoration and end with the smallest detail. In the same way, with more time and a greater outlay of money it is possible to have a consistent Louis XIV room, but it would not invite companionship in quite the same way, although if the plainer side of the style were copied, as, for instance, the wall treatment and furnishings of Madame de Maintenon’s apartment in Fontainebleau, it would not be overpoweringly gorgeous; it would, in fact, be a place of great dignity and of undeniable beauty. The plainer side of things decorative, however, has, until recently, failed to win either the enthusiasm of the owners of great houses or the co-operation of decorators.
The American millionaire of thirty years ago went in for elaborate furniture. Louis XV designs appealed to him strongly as a costly venture. The dollar-mark was entirely in evidence. Valuable, indeed, were these pieces, if genuine, and horribly expensive anyway. This furniture was usually the most ornate of its kind—belonging to that high rococo division of the Louis XV style, known as the Regency—the output of that brief period between the death of Louis XIV and the coming of age of Louis XV. For eight years the Duke of Orleans was regent, but it might have been eight times eight for the importance given it in this country during the nineteenth century. The Regency is an important period when viewed from the historic side of interior decoration. It is quite in a class by itself, forming an important link between the Louis XIV style and the real Louis XV, which later in the century became once again extremely rococo. It is, however, an unfortunate phase to win the fancy of the newly rich. No scheme could be less fitted to an American drawing room.

Some of the rooms “done” at this period, really “undone,” are still to be seen. Home-like they never were and now, with that worn look that most things in America take on after a quarter of a century, they are hopelessly tawdry. The painted walls are paneled and ornamented with gilded moldings—a great deal of gilt, a little paint. The furniture has gilded frames of pronounced Regency pattern, flowing in line and florid as to ornament. Padded, rather than upholstered, are the pieces, with highly colored tapestry woven in the Beauvais manner, not any too correct as to pattern, all a little faded but still garish. Glitter seems to have been measured by the yard and reckoned in American dollars, by the square inch.

Some of the details in these rooms are
A type of paper popular for summer use combined with plain draperies

really beautiful. The mantel garniture, for instance, which could not be purchased in imitation, is very fine of its kind—there are old sconces of fire gilt, real works of art, and the carpet, also imported, probably of Aubusson weave, is still quite wonderful in its way. But these items do not alter the impression of the room as a whole nor redeem its bad features.

A great deal of prejudice against the Louis XV style was due to just such rooms. They in no way interpreted the real thing; they merely represented money and the crude ideas of decorators who had not mastered their craft and who, without travel and with a limited amount of study, tried to reproduce Versailles and the Grand Trianon in a brown stone front. That they succeeded as well as they did is perhaps remarkable.

Another decade brought great changes in period furnishing. As patrons traveled and decorators gained a surer grasp of their subject, the royal palaces of Europe were no longer taken for models. Simpler places were hunted out and copied to the minutest detail; in some cases the paneling of rooms was bodily removed and transported to this country, and the accessories correctly assembled.

Do’s and Don’t’s in Framing Pictures

The framing of pictures has become an art second only to the making of the pictures. All the strength and grandeur, or all the delicacy and beauty of a picture, may be entirely lost by an inharmonious frame, or by such a place upon the wall as will render it entirely out of keeping with its surroundings.

A short time ago we would have paid little heed to these things, but as we become better acquainted with the various refining phases of art, we naturally pay more attention to harmony and the eternal fitness of things.

We have also learned that delicacy and beauty are essential in the decorations of our sleeping apartments. It would be
interesting to know the whereabouts of the pictorial nightmares that did yeoman service on bedroom walls a few years since as sleep-destroyers and nerve-rackers. There were the "Last Hours of John Bunyan," "The Early Christian Martyr," "The Assassination of President Lincoln," and another funereal horror in black and white that was designated "A Memorial," and in which crêpe costumes, a heavily bordered handkerchief, weeping-willows, and tombstones made up the essential parts.

In hanging pictures, a study of surroundings is of most importance. Colors in harmony with the pictures should predominate in the furnishings, and should be in such subdued tones as will, like good children, not insist on being seen or heard until called upon. Above all, care should be taken as to wall coverings. Avoid large-patterned papers, and papers with any pattern at all, if possible.

The walls of a room should never be crowded, and as nearly as possible, all pictures should be placed on a level with the eye, or, as artists know it, "on the line." This will emphasize the purpose of pictures, viz., instruction and pleasure.

Don't hang inharmonious pictures together. See that the pink-and-white summer girl is kept away from the vicinity of the saintly Cecilia. The latter is belittled by the former, and the summer girl, dainty and excellently painted though she may be, loses all of her sprightliness in the company of such purity and spiritual beauty. Though each may be a gem in its individual way, they clash when brought together, and both are losers thereby. In the same way avoid the mixing up of paintings, drawings, etchings, and miscellaneous bric-a-brac. The quiet, refined lines of an etching have no chance whatever in the company of a brilliant, many-colored painting, and a pencil or ink drawing, no matter how pure and clear its lines, would pass wholly unnoticed in the brilliant but overwhelming society of a Benares plaque of beaten brass.

Do not hang highly glazed pictures or pictures under glass opposite a window, for there is, under such conditions, an unavoidable glare upon them that renders them meaningless and purposeless.

The framing of pictures is so much a matter of individual taste that it is well-nigh impossible to make a set of laws that will apply in all instances. The following general suggestions, however, are of sufficient breadth to cover most cases.

Oil-paintings, highly colored prints, and bright or very dark water-colors are, as a rule, framed in rich frames. Prints, etchings, engravings, photographs, and black-and-whites are framed in black, white, or natural wood; pastels, light water-colors, colored prints, etc., in white, silver, gold, or some delicate combination of these tones.

Some Epigrams from Ross Crane.

Good sense is the basis of good taste. It isn't the furniture that counts, it's the harmony and the unity.

There is just as much joy in learning the good points of a chair as in selecting the good points of a beautiful painting.

There must be a central feature in every room—a painting, a rug, a davenport of good lines—but a central feature.

A living room is not a showing-off place. It is a spot of restfulness, a place where pieces of furniture are grouped together for the comfort of the family.
To Give Unity to the Rooms.

W. T. H.—I am enclosing a rough sketch of the floor plan of a house we have just purchased, and would like suggestions as to interior finish for walls, also hangings and rugs.

The trim in the living room is natural oak, low landing and open stairway. The fireplace is finished in oak mantel with bluish-gray granite stone. My furniture, tables, chairs, davenport, mahogany. Two wicker chairs, nut brown finish, soft rose and tan upholstered, and a walnut stained piano. Whatever can I do with such a combination? I must purchase new rugs, also window net and overdrapes for living room.

The dining room opens into living room with sliding doors. The trim at present is painted a medium brown. The rug I must use is a mosque design, in sage green, brown and soft tan, an overcast look of grayish green. Doesn’t sound attractive but really is. My plan is to have the woodwork in the dining room changed to a dull ivory, if you think it would look well, opening off the oak trimmed living room. However, cannot change it at present, but would like to plan walls and hangings for present and future harmony. Cannot afford proper tinting which I feel requires real artistic touch, so will use paper on walls.

Your magazine is a real delight to us.

Ans.—The dining room trim can be repainted deep ivory. It will require several coats. It would be an expensive proposition to change the natural oak finish of the very large living room. We advise leaving it as it is.

There is a soft pale ecru with tapestry design in a darker shade that would be a good wall paper for the living room, and the same soft ecru picked out in gold, for the dining room. This will help unify the room. In the dining room you could have draperies in a plain fabric, the sage green of the prevailing tone of the rug.

In the living room, repeat the rose in your chair coverings in plain rose draperies with plain rose upholstery somewhere.

Considering the mixed furniture and the woodwork, we think rugs in leaf brown shades would be the best choice. We would advise two large rugs rather than several small ones.

An Old House.

E. H. B.—I was a prospective builder and as such subscribed to your magazine. Now I have bought a home instead of building one and will have to call on you for suggestions. I am a business woman and hopelessly inartistic.

Across the front there is a living room and hall (with good looking staircase), folding doors between; dining room back of living room, folding doors between. Nothing has ever been done to walls. They are plastered and I am not able to change them at this time. The woodwork is natural finish, hard oiled (golden brown). The floors need doing over badly, some have been dark brown, some dark oak. What should I do with them?

I have a brown rug for the dining
room that I will use, small figures, tans and brown, a suggestion of rose. I purchased for the hall and living room rugs in old blue with golden brown figures. Was this a mistake? I tried to get away from browns as color scheme, expecting to replace later the dining room rug with old blue. There are five windows in living room, one in hall, two in dining room. What drapes shall I use? The dining room is not as sunny as I should wish.

I have mission furniture for hall that I would like to paint. I have to purchase something in the way of furniture for living room, but it can't be elaborate or numerous. The room is 15x15.

Dining room furniture is oak, Jacobean finish. I want drapes to brighten the rooms, but do not care for the flowered. Am afraid to mix figured rugs and figured drapes. What would you do with these three rooms? Reception hall has French doors opening into room beyond it.

Ans.—We think the first thing is to do something to the walls. Furniture and drapes will not overcome soiled or dingy plaster. Get some inexpensive paper in a soft tan and freshen up the walls. We should get along with present furnishings for living room, and put the money on the walls. A room 15x15 will not take a great deal of furniture, and recovering a couple of pieces to go with your rugs will do a great deal.

Unless the living room has a north facing, the old blue and brown will be all right, with soft tan walls. We would not use overdrapes at those windows at all, just soft cream figured lace net, or else plain cream casement cloth, or ivory pongee, best of all.

We should not paint the Mission furniture for hall. Painted furniture is used in bedrooms, in breakfast rooms and in some dining rooms rather than in halls.

If your dining room is rather dark, old gold sun fast curtains will be good with the dark furniture and brown rugs.

Have your floors thoroughly cleaned, then given a coat of shellac with brown stain in it for the worn spots, then two coats of floor wax, polishing between each coat.
The Kitchen and Wash Room Wall.

W. H. N.—As we are now owners of a new modern farm home we should like your advice on several points.

We have three rooms with tiled walls, namely kitchen, wash room and bath room. As I understand, such walls are usually given a coat of flat white paint, then two coats of enamel. That seems very well for bath room and perhaps the kitchen, but I fear it will not be satisfactory in the wash room, which is really the entrance for the hired help, with wash sink, place for coats, overshoes, etc., and really must be used hard and will consequently demand much cleaning.

Now what I wish to know is, would some color besides white seem out of place on such walls? The floor is of small white tile with tan border, and woodwork is golden oak stain. Tiled walls reach up only about four feet. Above which, and in all other rooms, are sand finished walls. What is the best finish for such walls?

Where should roller shade hooks be placed? On window casing or set inside of window jambs?

Advice by Mail

in all branches of interior decoration and furnishing. Two dollars per room. Samples and complete color guide.

ANN WENTWORTH
former Decorative Editor of "The House Beautiful"
461 Fourth Ave. New York City

Also, what finish should be put on floors which are not to be waxed? I have oak floors downstairs and vertical grain pine upstairs. Have a floor scraper with which we should endeavor to obtain a good smooth surface for the finish that we decide to apply. Now please bear in mind that this is a country home and will have to be used by children and hired help to some extent, so wearing qualities must be sought for, although we do not intend to sacrifice the artistic side as we have a well planned house of twelve rooms with full basement.

I have just recently become a subscriber to your very helpful magazine and read with great interest the "Answers to Questions" department.

Ans.—We are in receipt of your letter regarding the finish on tile walls. You do not state what kind of tiling you have used. The regulation tile comes with a finished surface, either glazed or unglazed, but we take it your wall is Keene's cement, a very hard plaster finish, that has been marked off into tile, and is intended to be finished with paint. If this is the case, there is no reason whatever why you should not use color on this wainscot in the wash room where the walls are likely to get hard wear, and as you have a brown border in the floor tiling, why not use a tan or brown shade on this side wall also? This is as serviceable color as you could possibly choose and also gives a very good effect. It would seem to us that your wisest choice for the plaster wall above would be to tint it in a lighter tan or buff shade. This could be nicely used in the kitchen also. Paint could be used, of course, if you prefer. These wall tints come ready mixed and are simply used with hot water to dissolve the glue they contain and are
put on with a whitewash brush. You would probably need two coats, unless you have a professional painter who could put the single coat on very evenly.

The roller shade fixtures often are put inside the casing on the window frames, so as not to interfere with draperies.

Regarding the finish of your hardwood floors, after scraping the floors should be filled with a wood filler to which is added a little stain to darken. Then the floors should be shellaced and waxed or varnished. The varnished surface does not show water spots nor wear off quickly. You should have the specially prepared floor varnish, however.

For the pine floors you would better stain them first and then shellac or varnish; painted floors in bedrooms are very satisfactory. They would require at least two coats of paint for a good job and should be in neutral shades so as to harmonize with the decorations of the rooms. Grays and dull greens are very good and combine with almost anything, though if you use the stain, probably brown would be the better choice. If the floors are of good, clear pine, you can get a very nice appearing floor by giving them a good finish of the stain and varnish.

The Built-In Buffet.

J. A. G.—I am a subscriber to Keith’s. I began taking it when we decided to build a home. I get so much pleasure out of the Decorative Service Department, and now I want your help in regard to my problem.

My dining room will be papered in cream or buff, with ceiling a lighter shade, the woodwork flat white. It has a large casement window on the North and a long narrow one opening on an East porch. My color scheme is old blue predominating in the drapery at window, and rug with blue and gray. Now, I’m having a built-in china closet that will fill a space 5 feet long. It has full length leaded glass doors at each side with a mirror 24 by 24 inches in the center, above the shelf and drawers below. Now I want to ask, shall I have this closet painted white like the rest of the woodwork in room or have it finished in the natural wood like the furniture?

Ans.—Paint the built-in china closet like the rest of the dining room trim. Finish all of your doors the same as the woodwork of the respective rooms.
Feeding the Folks in Hot Weather

Elsie M. Fjelstad

In the hot months of summer that the conscientious housewife is bothered most by the question, "What can I make for supper?" And, right then is it most of a problem, for the family has as "finicky" an appetite as the housewife has little incentive to "humor" it.

The following menus are light, easily prepared and such that they can be served with attractive garnishes and the like. It is hoped they may lessen the problem.

Frankfurters with Cream Sauce
Deviled Cheese and Biscuits
Cream Puffs with Maple Filling
Iced Tea

Frankfurters With Cream Sauce: Cover eight frankfurters with boiling water and cook slowly 15 minutes. Cool, remove casings and slice crosswise in thin slices. Prepare a thin white sauce of milk, thickening and fat. Season highly with salt, pepper, cayenne, horseradish root or Worcester sauce. Reheat frankfurter slices in sauce and serve with toast points.

Curry of Macaroni
Baking Powder Biscuits
Red Raspberries
Chilled Cocoa
Buttermilk
Curry of Macaroni: Melt two tablespoons of butter in a saucepan. Add two slices of onion and cook to a nice brown. Add two tablespoons flour sifted with two tablespoons curry powder, ¼ teaspoon salt, pepper and cayenne. Stir until well blended then add one cup hot milk. Stir until smooth and glossy. Have ready one cup macaroni, which has been cooked in salt water. Reheat in the sauce. One-half cup thick tomato puree added to the sauce is an improvement.

Fried Mountain Trout with Bacon
Cucumbers
Small Tea Biscuits
Blackberry Pudding with Cream
Iced Tea
Lemonade

Fried Mountain Trout with Bacon: Clean trout without removing head and tail. Remove fins, sprinkle with salt and pepper and dredge with flour or cornmeal. Have ready a frying pan with bacon fat over the bottom. Put in the fish and saute to a golden brown. Serve on a platter with the bacon.

Broiled Tomatoes on Toast
Cream Sauce
Blueberries with Cream and Sugar
Brown Sugar Cookies
Tea

Broiled Tomatoes on Toast: Prepare the desired number of slices of toast. Make one and one-half cups thin cream sauce of milk, thickening and fat. Peel and cut in halves crosswise three firm tomatoes. Dip each half in melted butter and season with cracker crumbs. Broil in the oven or on top the stove until tomatoes are soft and crumbs are brown. Dip toast in hot cream
sauce and place on a platter. Put a half tomato on each piece of toast, pour on the rest of the sauce and sprinkle with grated cheese.

Lobster Salad
Rolls
White Cake with Strawberry Sauce
Coffee

Lobster Salad: Peel and cut in one-half-inch slices three firm tomatoes. Arrange a slice in a nest of crisp lettuce. Pile on the tomatoes, cucumbers cut in cubes and lobster meat cubes moistened with mayonnaise. Put a stuffed olive on top.

Corn Chowder
Rye Bread
Raspberry or Currant Jam
Buttermilk Doughnuts
Cheese
Tea
Orangeade

Buttermilk Doughnuts: Beat three eggs. Add one and one-half cups sugar gradually. Mix and sift five cups flour, ½ teaspoon salt, one teaspoon nutmeg and 1 ½ teaspoons soda. Add to first mixture alternately with 1 ¼ cups buttermilk. Add three tablespoons butter. Chill dough. Roll out to one-half inch, cut and fry in hot lard.

Chicken Liver Salad
Cheese Ramequins
Rolls
New Blackberry Jam
Fresh Sugared Apricots
Lady Fingers
Coffee

Cheese Ramequins: Put one-half cup butter in a saucepan and add one-half cup boiling water. Heat to boiling. Add, all at once, one-half cup flour, a pinch salt and one of cayenne. Stir constantly, cooking until mixture leaves the side of the pan. Remove from fire and add one-third cup grated cheese. Beat two eggs and add separately. Drop from tip of spoon into gem pans. Wash tops with beaten egg diluted with two tablespoons milk. Set cubes of cheese on top and bake 15 minutes. Serve at once.

Sardine Sandwiches
Egg and Lettuce Salad
Dutch Peach or Apple Cake with Cream
Coffee

Sardine Sandwiches: Pound the flesh of sardines to a paste. Add sifted yolks of two or more hard boiled eggs and continue pounding until smooth. Season with paprika and salt. Press through a sieve and add chopped pimento. Add stiffly whipped cream and spread on the sandwiches.
Bacon with Fried Apples
Bran Muffins  Baked Potato
Iced Tea  Lemonade
Sugar Cookies

Bacon with Fried Apples: Fry to a nice crisp brown three slices of bacon for each person to be served. Arrange in the center of a platter. Peel apples, two for each person to be served. Cut them in eighths and fry them in the hot bacon fat. Arrange them attractively around the central mound of bacon. Garnish with parsley sprigs. This dish is especially delectable in the summer when apples first “come in.”

Apples Fried with Bacon: Put several slices of bacon in the frying pan. When they begin to crisp, turn and cover with apple, sliced thin, without paring. Before the bacon is fairly crisped on both sides keep it on top of the apple, turning so that the apple slices are lightly browned, almost like a confection. Arrange on a hot dish with the bacon as a garnish, and serve immediately. This makes an excellent breakfast dish, also.

Hot Ham Sandwiches
Beets and Beet Green Salad
Rhubarb Marmalade
Jelly Roll

Iced Tea  Buttermilk

Hot Ham Sandwiches: Spread white bread with minced ham seasoned with paprika and prepared mustard. Put together in pairs and soak two minutes in a mixture of beaten egg and milk—two tablespoons of milk to each egg. Sauté sandwiches in butter or lard, serving hot and at once.

Scrambled Eggs with Dried Beef
Cold Slaw
Baking Powder Biscuits
Green Apple Sauce
Cocoa  Iced Tea

Scrambled Eggs with Dried Beef: Cut with scissors one-half pound thinly sliced dried beef into strips, cover with boiling water and drain at once. Beat six eggs with six tablespoons milk until well blended. Melt two tablespoons butter in a saucepan and add beef. Add eggs and continue to scrape and turn until eggs are set. Season. Turn onto a serving platter where garnish with parsley and grated hard boiled egg. Also paprika if desired.

Veal and Cucumber Salad
Rye Bread with Green Chili Cheese
Green Onions  Dill Pickles
Sugar Red and White Currants
Sugar Cookies
Ginger Ale  Rhubarb Punch

Rhubarb Punch: Wash, drain and cut four pounds of rhubarb in one-inch pieces. Add four cups of water and one bay leaf. Cook 20 minutes or until rhubarb is soft. Strain through a double cheese cloth. Add two cups orange juice, one cup lemon juice and one-half cup ginger syrup. Add two and one-half cups sugar and cook five minutes. Strain again. Chill and dilute with cold water.

Green Corn Griddle Cakes
Sliced Peaches with Cream and Sugar
Cake

Tea  Coffee

Score the kernels of 12 ears of corn. With the back of the knife, scrape out the milk and the pulp, leaving the hulls on the cob. To the pulp add four eggs, one cup cream or milk, one cup flour sifted with one teaspoon each of salt and baking powder. Add three tablespoons butter if milk is used. Cook as griddle cakes. Serve with powdered sugar.

Halibut Salad
Lettuce Sandwiches
Sugared California Prunes  Devils Food
Coffee with Ice Cream
Tea

Coffee with Ice Cream: Make plain boiled coffee. There should be seven cups. Add 14 half pieces domino sugar and stir until dissolved. Chill. Turn into tall, thin glasses and dilute with cream. Add two tablespoons of vanilla ice cream to each glass. Serve cold.

Thinly Sliced Cold Ham
Tomatoes Stuffed with Celery and Cabbage
Pimola Sandwiches
Sliced Cucumber Pickles
Watermelon  Peanut Cookies
Tea  Coffee

Pimola Sandwiches: Spread slices of bread with mayonnaise or boiled dressing. Cover with thinly sliced pimentos or pimientos. Also add sliced stuffed olives. Put bread slices on top of these slices and serve immediately.
American Beauties

This old world we're livin' in
Is mighty hard to beat.
There is a thorn on every rose,
But ain't the roses sweet?
—Selected.

Silvsectite. (Pat'd)

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It is illustrated in the June issue of the Building Age with drawings showing three arrangements
of rooms worked out by the architect.

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243 W. 39th St. BUILDING AGE New York City K.J.
The Community Kitchen

Here was a time when not only was all the sewing and baking and canning and cooking done within the four walls of the home, but the spinning of the thread and the weaving of the cloth as well as the raising and preparing of the flax or wool. Soap making and candle making was then a part of the regular yearly routine. In fact the household was a great independent manufacturing plant, isolated largely from the similar plant which was its neighbor. One woman alone was helpless at the head of such a household in the matter of the work to be done. She must have a retinue of helpers, whether they were hired helpers, servants, or members of the family, sisters, cousins, aunts, who were in need of a home, but could not, at that time, consider going outside of the home as salaried workers without losing all social standing, though they might easily be drudges in the home of a relative, living on his "charity."

Industries Taken Out of the Home.

Conditions have moved far since that time—not so long ago. Great factories make the cloth. Soap-making is an independent industry. Candles are almost out of ordinary use. The canning of foods, laundry work, and since the war even baking of bread has largely gone out of the home. Only cooking of the meals has remained a necessary function in the home.

As each industry has been taken out of the home, some of the women of the household have gone with it into the factory, or the store, the office or the distributing businesses which have taken over their former duties and occupation in the home. First the industries went out of the home, requiring or allowing a lessening of the household retinue, until household service, having lost repute, has become practically a negative quantity, and all the remaining household work as far as possible is being forced out into standardized industries.

And Now the Kitchen.

The latest of these newer "home industries" is the Community kitchen, which is coming to take its place in relieving the mistress of the servantless house. As these have come into use in the suburbs of Chicago and of New York, and elsewhere, the meal is cooked by experts in the central kitchen, packed in glass lined metal insulated containers, of such pleasing shape that they may be set, piping hot, directly upon the table. The containers are constructed on the principal of the fireless cooker, so that they may be delivered, like ice cream, an hour or more before they are to be served without losing the desired temperature.

The community kitchen may develop out of a shop for the daily sale of good home cooked food. It is suggested that such a shop might be open only from 11
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o'clock in the morning to 5:30 P. M., catering to the two heavier meals of the day, as distinguished from the delicatessen, which is open all day long. The foods would be fresher and better for the shorter hours, and would be open at the hours when these foods are required. If this can be started in a club or school kitchen as a neighborhood venture, a heavy initial expense will be avoided. Good cooks and good marketing are first essentials. If local gardens are available for fresh vegetables, so much the better. Well cooked meats and properly prepared vegetables, salads, spaghetti, various "made dishes," patties, muffins, pies and cakes may be offered. The variety from which selection is practicable depends on the amount of patronage.

Another suggestion coming from established kitchens proposes that the patrons permit those in charge to make up menus for the month, or for the week, without daily consultation, but with a record of the likes and dislikes of the families as a guide. Surplus food prepared for the dinners could be put on sale the next day in the shop. Where community kitchens are in operation they have been serving meals delivered so they keep hot until served, at something like seventy-five cents to a dollar per person, with the comment that as the patronage increased the price would decrease.

Not only to the housewife, but also to the business and professional woman will the community kitchen come as a great boon. Rebelling at boarding houses and hotels, she is establishing herself in small apartments, where, returning from an arduous day, she enjoys a daintily served meal in her own rooms, which she has neither time nor energy to cook, even if she has the inclination.

Food from the Back Yard Garden.
The accomplishment of one little back yard garden in Minnesota, a careful record of which was kept for three successive years, strikingly illustrates what may be done with the home gardens of the country. Many people are accomplishing somewhat similar results, but only a few keep any record of what they are doing. This plot, about one-nineteenth of an acre, was cultivated entirely by hand; and though naturally poor soil, received only a compost made from the ashes and vegetable refuse of the house and lawn. It was regularly inter-cropped, some portions of it bearing three or four successive crops in one season, such as radishes, peas, early cabbage and tomatoes in the order named.

The list of vegetables for the first year, for example, was: Radishes, onions, spinach, lettuce, peppergrass, English thyme, summer savory, rosemary, parsley, salsify, tomatoes, cucumbers, squashes, pumpkins, citrons, watermelons, muskmelons, beans, peas, potatoes, carrots, beets, parsnips, turnips, cauliflower and cabbage.

Except for potatoes, celery and cabbage, this garden kept the family of six adults in vegetables the year round, and much besides was given or thrown away. It was estimated that one acre similarly cultivated would furnish the year round all the vegetables named for a hundred and fourteen adults.

The owner, by the way, was a college professor, for many years a member of the faculty of the State College of Agriculture. Cultivated after this fashion, less than eighteen thousand acres of Minnesota land would furnish the entire population of that state with a year's supply of twenty-five kinds of vegetables and at that rate half the state's tillable acres would do the same service for three hundred million people.

The Professor's backyard garden confirmed his belief that the hungry age of the earth is yet indefinite centuries away.

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Rub any kind of a stain on a white table cloth with paraffin before sending to the laundry and the stains will come out in boiling.

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A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

See that your home is built right. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

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The Safety Engineer and His Work

IGHT hundred men—the chiefs of the operating departments of the most representative industrial plants in the Pittsburgh district—attended the graduating exercises of the third School for Safety Supervisors of the Western Pennsylvania Division of the National Safety Council at Pittsburgh.

Back of the men who attended this meeting are 250,000 workmen for whose safety and welfare the 800 executives are responsible; back of the quarter million of workmen are 1,000,000 women and children whose daily bread, shelter, and education are assured only so long as the safety of the quarter million workmen is assured.

With the graduation of this class, Pittsburgh can boast of approximately 1,000 men who have received a thorough education in the fundamentals of safety work, for it was at Pittsburgh that the idea for a safety supervisors' school was born and the first such school developed. Practically every man in that audience has done notable safety work in his own plant; some of them have reduced deaths and serious injuries 85 per cent.

Mortality in the Industries.

Accidents, generally speaking, indicate a disorderly, inefficient job.

Statistics tend to show that the normal casualties of the industries are annually greater than the American casualties in the great war; yet people have only begun to do anything about it. With the awakening of the American people to the importance of greater safety in the industries, a great change in this respect must come about. Most accidents have their origin in carelessness of some kind, and a campaign of education is being prescribed for it.

The worker who must guard himself by watchfulness where there is known danger, is at a disadvantage. No man works at his full efficiency if he must constantly guard himself against dangers. The workman on a slippery scaffolding or one that vibrates under every step could double production if relieved of this handicap. Time may be saved by "taking a chance," but life is jeopardized—and insurance rates are high. It is the business of the Safety Engineer to eliminate the "chance" as far as it is humanly possible, and Big Business is demanding his services.

Hazards.

The Wisconsin Industrial Commission has analyzed 2,000 accidents for which compensation was paid last year. More than a quarter of these accidents, and nearly half of all fatal accidents, were falls from scaffolds, ladders, buildings, et cetera. Floor openings, falling material, caving-in of excavations are other causes prolific of accidents, which should be guarded, as are unguarded machinery, derricks and dangers incident to wrecking buildings. The nail hazard, rusty or otherwise, may be somewhat alleviated by first-aid kits. The mechanical equipment
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HOT FACTS

The Power of a Furnace LIES IN

1. The area of the fire, or grate surface.
2. The area of the radiating surface.

The square form of the Hess Furnace contains more square feet of radiating surfaces than a round one of the same diameter.

The Hess locomotive style firebox has great area with efficient grates under the whole surface. It gives perfect combustion even with inferior fuels.

It burns anything—delivers all the heat.

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is only part of the story. Safety in con-
struction work can be secured only by
constant vigilance on the part of the
superintendents and foremen and by edu-
cating the workers to be careful. These
facts give significance to the School for
Safety Supervisors.

A New Hollow Brick

American builders will be interested in
a new brick which has been evolved in
England as one of the ways of meeting
the needs in the building shortage there,
where lack of man power is greater than
the lack of materials. This brick is five
times larger than the ordinary brick, but
much less heavy and is easily handled. It
is made, as a rule, of one part cement
and four of sand, the shaping of the
bricks being such that a joint running
through the wall is avoided. Simple
hand machinery is used in the manufac-
ture, and three men, it is alleged, can in
one working day make enough bricks to
lay up 400 to 500 feet of a wall: A fur-
ther economy is effected by the manner
of laying the walls, inasmuch as the ends
and bottoms of the bricks need only to
be dipped in a thin line mortar mixed
with a small amount of cement. If laid
in the usual way the air channels in
the bricks would become filled.

It may be added that slag, clinker,
sand and brick dust, mixed with cement,
form suitable materials for these bricks.

—American Contractor.

Light and Safety.

Some one has said that light is a tool
which adds to the efficiency of every other
tool. The modern industrial manager
goes a step farther, for he realizes that
adequate lighting, both artificial and nat-
ural, is indispensable not only to efficiency
but also to safety. He knows that the
dark plant is the dangerous plant.

One of the large insurance companies
made a careful study of the reports of
91,000 accidents and discovered that ten
per cent—9,100 accidents—were caused
directly by the absence of proper lighting.
The investigation of the British Gov-
ernment also revealed that during the
four winter months deaths and serious
injuries resulting from falls were 39 1/2
per cent greater than during the four
summer months, thus showing the bear-
ing of light on accidents.

The economic value of good lighting
becomes readily apparent when it is
known that the overhead cost of adequate
lighting is not more than one-half of one
per cent of the pay roll. In other words,
a workman who is being paid four dollars
a day can be made a more efficient and a
more careful workman through the ex-
penditure of approximately two cents a
day for adequate lighting.

Industrial managers are coming to real-
ize that light not only increases output
and decreases accidents, but also plays a
most important part in making the plant
a cheerful and pleasant place in which to
work.

Light has a positive influence in en-
couraging orderliness, cleanliness, and
efficiency. In a plant where the windows
have been washed, the walls whitened,
and effective lighting installed, there has
followed, almost invariably, a houseclean-
ing on the part of both foremen and work-
men—all of which makes for efficiency,
safety and contentment.

—C. W. Price.

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M. L. KEITH
EDITOR AND PROPRIETOR OF KEITH'S MAGAZINE
PRESIDENT AND TREASURER OF KEITH CORPORATION
The Nation's Income, Per Capita.

Some very astonishing figures have been compiled, which were published in Leslie’s Weekly, as to the income of this nation, if put on a per capita basis. These estimates figure out in much the same manner as has been practically demonstrated in Russia. If the people who are receiving an income of $3,000 a year or over, and who have so segregated themselves; people who work with their heads as well as with their hands and who have the forethought to make provision for the future; — if these people should suddenly become merged in the mass of the population, and the total income of the country divided per capita this country, rich and prosperous as it seems, would not only be plunged into the chaos of Russia industrially, but the per capita income would be less than $130 for the year.

The worker who is now getting from $3 to $7 per day, and is talking about the “rober rich,” who are keeping the poor man from the just reward of his labors, would fail to find a rosy glow about the vision of an “equal division of the wealth of the country if his share, and that of every one else in the country would be less, probably much less than $130 a year; especially as this division would take wealth from production, so that in other years the income would be decreasingly less.

According to the figures if all the income in excess of $3,000 per individual had been taken away from its recipient and divided pro rata among all the 110 million inhabitants of the United States, without any regard to any personal difference among them of services rendered to society, each individual would receive $61. This is from the statistics of 1917, a year of great prosperity in war profits, we are told.

If, on the other hand, only those were taken into the account who are already “engaged in a gainful occupation,” according to the last census reports this percentage would be something like 41.5 per cent of the population. (If we could get the percentage of wage earners at the present time it would probably be much larger, thus decreasing the average.) According to these figures if the amount of the total surplus income above and beyond the income of $3,000 received by any individual, whether Wall Street magnate production king, during the year 1917 were equally divided among the wage earners, it would have resulted in an approximate increase to each wage earner of $147 only, certainly not enough advance to bring in the new era in which there should be no poverty anywhere.

These figures are rather appalling in that they show how little wealth per capita there is in this great rich country, if it were allowed to idle. Wealth is the great tool of industry. It is only by keeping this capital very busy that it can produce enough to keep the people in any comfort, and our only salvation is in greatly increasing its productiveness.

The Value of Flax

According to Popular Science Monthly, flax is considered the most valuable plant grown, because of its great usefulness. All linen goods are made of flax fibre; linseed oil, the chief ingredient of good paint, oil cloth and linoleum, is obtained by crushing the flaxseed; and the residue from the crushing process, known as oil cake, is used as a stock food as well as for fertilizer.

In an effort to save as much of the fibre and seed as possible, Europeans remove the flax seeds by hand. In America, however, this work is done by a machine having two rollers, which remove the seeds without damaging the fibre, doing the work in a much shorter time.

Back Numbers of Keith’s.

In order to complete a file the price of current issues, 25 cents each, in cash will be paid for the following numbers of Keith’s Magazine: 1919—January, February, March, April, May, June, July, and
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About 120 years ago, when Louisiana was a French Province, the Water Mains of New Orleans were CYPRESS logs, 18 feet long by 22 inches diameter, with a 5-inch hole bored lengthwise. These were joined by short iron tubes, tapered at both ends. A few years ago these were replaced by the most modern system. Below is a photograph of a section of one of the CYPRESS mains just as it was dug up—as sound as ever after over 100 years’ contact with wet earth.

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HERE IS CYPRESS VS. WEATHER.
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There is an unusually liberal education (and a wonderful INVESTMENT value for you) in this CYPRESS advertising—and in the detailed information and reliable counsel to be had promptly WITHOUT COST, if you will WRITE US YOUR OWN NEEDS (big or little), and ASK YOUR OWN QUESTIONS of the “ALL-ROUND HELPS DEPARTMENT” of the

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## CONTENTS FOR AUGUST, 1920

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just a Word — Side Lights on Cost of Building Materials</td>
<td>50</td>
</tr>
<tr>
<td>Enjoyable Porches For Summer — Charles Alma Byers</td>
<td>53</td>
</tr>
<tr>
<td>Summer Rugs — Faith Burton</td>
<td>57</td>
</tr>
<tr>
<td>Make Place For the Princess</td>
<td>60</td>
</tr>
<tr>
<td>Small House Service Bureau and Its Work</td>
<td>61</td>
</tr>
<tr>
<td>Two Plans For an Attractive Home</td>
<td>62</td>
</tr>
<tr>
<td>Keeping the Automobile in the House</td>
<td>64</td>
</tr>
<tr>
<td>A Modern Country Home</td>
<td>65</td>
</tr>
<tr>
<td>Planning the Room Arrangement</td>
<td>67</td>
</tr>
</tbody>
</table>

## DEPARTMENTS

### Inside the House
- Decoration and Furnishing — Virginia Robit, Editor
  - Midsummer Furniture                                               | 70   |
  - Found in the Shops                                                | 74   |
- Answers to Questions                                                | 76   |
- Table and Food Values                                               |       |
  - Ending the Meal — Summer Desserts — Elsie M. Fjelstad            | 80   |
- Building Material                                                   |       |
  - Houses, Old and New — John Upton                                  | 84   |

Entered as second-class matter January 1st, 1899, at the Post-Office at Minneapolis, Minn., under the Act of March 3, 1879. Copyright, 1920, by M. L. Keith.
An inviting porch overlooking the garden
Enjoyable Porches For Summer
Charles Alma Byers

Gain mid-summer introduces us to the porch—or the porch to us, as you like. The introduction is re-performed each year. During the winter we practically forget the porch’s existence, but always with the coming of summer again we are glad to make its acquaintance. We once more turn to seeking the enjoyment, the comforts, the cool and healthful outdoor breezes which it affords—or at least we have that opportunity.

How to make the porch yield us the most possible in the way of pleasure and benefits naturally deserves to be given our most thoughtful attention. It is also a problem which requires to be more or less re-solved each summer. At least there should be a desire to effect improvement. Hence, what others have done or are doing with their porches is, as affording suggestions, always interesting. This being true, the accompanying illustrations are presented with the belief that they will have something in the way of helpful ideas to offer.

Correctly used, the porch becomes, as perhaps is quite generally recognized, a real outdoor living room. To make it such, however, in the true sense of the term, it is necessary that we both fully realize and utilize its many possibilities; that we bestow upon it practically the same amount of study and attention as
A porch on the front of the house, designed and furnished for use and enjoyment

we do upon the indoor living room. At least it deserves to be made as attractive as possible; it should be inviting; it may be made to afford genuine and wholesome comforts. Therefore, it should receive our careful consideration from several angles—namely, as to location, for instance, especially in respect to the privacy afforded; the command of garden vistas; and the cooling draughts to be caught and enjoyed; also as to its furniture, floral decorations, and so forth.

The porches illustrated here with introduce each of the three locations commonly selected. We have, in other words, the front porch, or veranda, the side porch, and the rear porch. Of the three, the first named is no doubt the most common, yet the porch that is located either on one side or in the rear usually has the most to offer in the way of real enjoyment. Ordinarily, at least, a side or rear location assures a greater degree of privacy, which undoubtedly is to be much desired. Of the two, the rear location is often the superior. Then, too, the rear or side porch can usually be treated less formally in regard to furnishing and decorating, and often made the more comfortable and inviting; also, the porch so located can frequently be made to command the more charming garden view, especially if one's grounds be at all extensive. However, the front porch can be made to afford
Much genuine pleasure and outdoor healthfulness, even though it does require to be somewhat formally treated and is more exposed to the gaze of passersby. If properly handled, it may even be made to give a degree of seclusion—either, for instance, through a studied scheme of garden planting, or through screening at least a portion of it with vines, or with lattice-work or trellises, vine-covered or a curtain-style of awning.

The porch should, of course, provide a cool retreat. This means that its location should be more or less governed accordingly, for it should not be too much exposed to the rays of the sun. For this reason, if it is to be used principally during the afternoon and evening—which it is presumed may be the time it will be used most—it may be quite necessary to place it somewhere on the front of the house. It is well to remember, in this connection, however, that here again, to temper any undue intensity of sun-rays, some method of screening can doubtless be employed to advantage.

Yet, while a cool retreat from the summer's heat is to be striven for, the porch, to satisfactorily serve as an outdoor living room, should not be too draughty, which is sometimes the case, especially in some localities, if it be entirely open on three sides. This can be prevented in various ways. Glass, for instance, may be used to close one end, or lattice-work, a screen of vines, or merely a curtain may be used for the purpose of closing an end against draughtiness. The illustrations show some very charming and practical examples of such protections.

The matter of furnishing the porch which is to constitute a truly enjoyable living room outdoors is especially important. Above all, the furniture should be selected to be comfortable, but, more than this, it should help to make the retreat attractive. Therefore, instead of the old way of handling the matter, which was more or less a haphazard, perhaps using odd pieces discarded from use in the interior of the home on account of their dinginess or partial disability, it is no doubt to be desired that the furniture be especially chosen for the purpose. For the porches here shown this has been done, and the result, in each instance, is certainly to be commended. Yet it is not, of course, absolutely necessary to do this, for many times it is possible to use a few otherwise discarded pieces and fill out with others "borrowed" temporarily from the interior, and still possess a porch quite as attractively and invitingly furnished as any one need wish.

As to kinds of furniture, hickory and so-called wicker are, of course, as is well
known, especially suitable for the porch. The former is naturally the more lasting kind, and also better withstands all kinds of outdoor weather, but wicker—in which class the several reed and grass varieties must be included—also proves very lasting and highly serviceable if given reasonable care. The latter, furthermore, may be obtained in so many different styles that one is sure of being able to produce in the porch an all-round pleasing appearance. In no other type of furniture may such variety be found.

Instead of restricting the pieces of porch furniture merely to a few rockers and ordinary straight chairs, as is often done, it is well to remember that there are various other items that should be added to the list, if most is to be made of the possibilities. A reading table, for instance, which also may be used occasionally for serving afternoon tea, is always a very desirable addition. Then, too, a swinging seat of some kind, perhaps an ordinary settee or two, foot rests, jardiniere stands, and such things can frequently be included with improving results, while rugs for the floor, which preferably should be of grass or of some other kind that will not be damaged by the weather, will naturally help to bring into the porch the desired quality of the living room.

In respect to floral treatment and planting, the porch affords particularly charming possibilities. In addition to any use of vines to provide secluded screens or protection against draughts and intense sun-rays, there, of course, may be hanging baskets, potted plants, flower boxes, and so forth. In fact, if the owner wishes to do so the porch may be made into a veritable bower of flowers and greenery.

The extent to which such decoration
shall be carried is governed more or less by the location of the porch, its size, the vistas which it commands, or possibly the outlook which it is desired to shut from view. Not only must these be taken into consideration, but they are governed by the condition of the pocketbook as well as by the individual taste of the owner. These photographs may give suggestions as to the location of the porch, its screening and protection, and its furnishing and decoration.

Summer Rugs
Faith Burton

During the summer season the natural impulse is to get away from stuffy surroundings, closed doors, heavy curtains and draperies, and even heavy rugs on the floors. One flees from the hum-drum convenience and comfort of a well kept city home to “life on the farm” or in the woods, and for a season one can thoroughly enjoy the primitive conditions.

Following this stage with most people comes the time when the summer home must be no less convenient and comfortable than the all-the-year home, but it must all be done in white paint, with muslin curtains and the simplest of rugs—perhaps the old fashioned braided or crocheted rugs of our grandmother’s time. We are coming back to the time of home-craft work of various kinds, of which rug making is one of the most practicable and popular.

The great value of any bit of creative work is that it sets a standard to the creator. A woman who has once made good rugs for herself will hesitate to buy workmanship inferior to her own; and this will apply to other things than rugs. She will learn to see, and will find many points before unnoticed. It is a good thing for the woman in the home to practice some craft, even occasionally, but to do it well. At the same time women love to turn their so-called fancy work and hand work to account in use in their homes, where it serves the double purpose—of which perhaps the first looms largest—that of displaying the beautiful work unostentatiously and at the same time the usefulness of the object itself. People are turning again to homely, practical things. The braided or crocheted rugs are eminently practical. In the first place they give use to which “rags” may be
put, garments that are worn beyond using, scraps and pieces of all varieties of shape, color and material. Woven rag rugs have found favor and have been used with great satisfaction in many kinds of room. But these require the intervention of the weaver, not always easy to attain, as the hand loom has never formed an essential part of the American home, as it has in many of the old countries. There are several types of rugs which can be entirely made at home. For the braided rug the rags are simply braided into three or four strand plaits. Then they can be easily turned into a round or an oval center and the inner edge of the plait firmly sewed to it, around and around, allowing the outer edge to spread to take the form desired. The same pieces, cut and sewed as for weaving into rag rugs may instead be crocheted, with a big wooden crochet hook, into a rug of any length. Crochet a "chain" in the same way as working with yarn, making it half or a third the length of the finished rug, depending on the desired width, remembering that the length will grow just as much, and no more than the width, as the crocheting goes round and round. Considerable ingenuity may be exercised in the even curve, or the more or less square end of the rug, and also in the way the change is made from strips of one color to that of another color.

Much home craft work is not done as well as the worker knows that she might do it. It is done either under stress of necessity, and without feeling that its importance in the use to which it is to be put warrants more time or effort being put into it; or more often, perhaps, the housewife discounts the material which she is using, on account of its previous use, and so thinks that it is not "worth more time or effort."

Mr. Richard F. Bach, of the Staff of the New York Metropolitan Museum, issues a warning to craft workers, which applies to women doing rag rugs or other craft work for their own home just as much as it does to any form of fine craft workers in the shops. He says: "It is the high duty of crafts men and women in the various arts of ancient lineage and of honorable history to cherish constantly the ideal of absolute perfection of design and reliability of workmanship." Only the standard which is acceptable in the home can eventually be profitably made in the shops. In this country we look to the manufacturers to show us what we may have. When people refuse to accept, buy and pay good money for bad design and shoddy workmanship, such work must cease.

"Deep-rooted in the heart of the human race lies a love and a craving for this quality which we call beauty; everyone feels
it, everyone knows it. It is in the sunset, in the flower garden, in the fields." "The art of a nation rises no higher than the understanding of its people," says Lucy D. Taylor, Director of the New England School of Art. "It is in the homes of the people, in their selections and combinations that we have the index of our present understanding. All great art has always come from the lives of the common people—been an expression of their thoughts and ideas."

"National art in America will never be manufactured by any group of artists in any art school. It will never come about solely as the result of fine productions copied from the relics of other lives and other times, and made available to the public through the enterprise of a few manufacturing concerns. It will only come as a slow process of growth of individuals. Legislation never made a man moral. National academies of art will never make national art. Only as individuals learn to separate the beautiful from the trivial and ugly will great art become a national possibility.

"Any campaign for nationalized art in this country will have to include cooperative effort and systematic training of all the elements in the vast machinery of production, distribution and consumption.

"The manufacturer who knows more about the technical processes, costs and markets than about taste and quality of his production needs education, so does the artist who can make a beautiful design that can not be reproduced to advantage because of his ignorance of reproductive processes and costs.

"The home makers need courses of instruction which will make use of the actual materials that are current in the market, and by comparison of poor with good, better with best, learn to turn to the latter because it satisfies them best in the long run."

"America is a democracy; its national art will be democratic for it will come
out of the heart of the Every Man, not the Selective Man. It will come only through the steady, slow growth in cooperation on the part of all the factors involved; manufacturers, distributors and consumers, working to the end, not of a traditional standard of a bygone time, but the satisfaction and honest expression of the thought and ideals of our own time and our own people.”

Make Place For the Princess

WHERE shall the Baby play? She is so happy in the sand pile; but on a damp, drizzling day she can not go out of doors because it is so damp; and on a hot, sunny day she can not be allowed to play out in the hot sun and burn; besides, the flies and mosquitoes are apt to be bad any time.

Why not bring a sand box on the screened porch, and give over an end or a corner of the porch to the baby and her interests? She loves to sit on the little straw mats, which she often drags after her in her play. If one is conveniently placed by her sand box she will usually choose to sit on it rather than on a cold tile floor—unless indeed it has been too urgently pressed upon her. When the clean white sand gets spilled or thrown over the floor, Mother can remind herself that in ancient days a floor freshly strewn with sand was the special preparation for guests. Sand in the house has precedent from time unremembered. Make place for the Princess; she must be kept healthy and happy.

What happier place for the sand box than on the screened porch
Small House Service Bureau, and Its Work

In order to encourage persons of limited means to build and own their homes, and to assist them in obtaining desirable and attractive house plans at the lowest possible cost, seventeen well known architectural offices of Minneapolis, St. Paul, Duluth and Grand Forks, North Dakota, have organized a Small House Service Bureau. The purpose of this Bureau is to assist home builders to lower building costs and at the same time to secure a better class and character in the small homes built.

The Bureau has been endorsed by the American Institute of Architects at its recent convention in Washington. Frederick M. Mann, Professor of Architecture at the University of Minnesota, is president of the organization, and Maurice I. Flagg, the former director of the Minnesota State Art Commission, who inaugurated for the State government a number of competitions for the small village and farm homes, is acting manager and director of the Bureau.

Small home plans, ranging from three to six rooms in size, have been prepared under the organization of the Bureau, designed to secure a real economy and a safe investment for the home builder.

A series of these attractive designs will appear in Keith's Magazine together with data and advice sent out by the Bureau. The increasing demand for better architectural design in the small home, quite as much as in the larger and more elaborate houses, is being recog-
nized by the profession and is receiving more attention than it has ever had before. The fact that home builders with limited sums of money to spend, deserve the utmost protection and direction for their home building dollars, is the subject to which these pages have been devoted—in fact, it is the "reason for being" of its existence for twenty years past. It is with particular pleasure that we present these designs of the Bureau to our readers. The small home which has always been the poor little brow-beaten Cinderella among the architectural children, is at last coming into her own and is receiving something of what is due to her.

The design which is here presented by the Architects' Small House Service Bureau is both attractive and practical. One story in height, it is designed on good and simple lines, with a partially enclosed porch, latticed for climbing vines.

The dining alcove placed between the living room and the kitchen, yet separated from both, with windows opening on the vine-covered porch, is an excellent solution of the problem of dining space, which shall be economical of room as well as in the matter of furniture, yet sufficient for serving the meals of a small family in as easy a way as possible. It is surprising the number of people that can be served comfortably in this way, as a matter of practice. The table shown is full width. Two chairs may easily be placed at the end, serving six people.

The living room is of good size and well proportioned, with a fireplace, giving a central furnace flue.

The plan has the small hall which separates the sleeping rooms from the living rooms, giving them as complete privacy as the second floor, but saving the housekeeper's steps. The kitchen is carefully planned and well equipped. There is a full basement under the house.

Two Plans For an Attractive Home

While the design of this bungalow borrows features from several architectural styles, yet they are combined most effectively and without any incongruity into a charming home.

The plan for this dainty bungalow is elastic, as may be noted. Either it is a five room bungalow, with the usual two bedrooms, kitchen, living and dining rooms, or eight feet added to the length at the rear gives an additional bedroom.

Just before one makes the final decision as to the plan of the home about to be built there is always an unusual interest in seeing just what changes and adjustments a slight change in arrangement or in size may bring.

The attic—so accessible from the hall—is large but too low, as here shown, for comfortable rooms. A moderate enlargement of the plan which would increase the roof space would provide good ceiling height. The attic is 9 feet 6 inches in
the center. The other ceilings are 8 feet 4 inches.

The smaller plan gives a very satisfactory five roomed house. The living room is prominently featured and offers unusual opportunities for a variety of interior treatment. The hooded entrance beside the chimney is wonderfully effective, with its dark stained wood brackets carrying the overhang of the roof projection. The carriage entrance from the terrace at the side of the house enters the living room through glass doors at the end of the room. Glass doors at the opposite end of the room open to the side porch, as does also the dining room, through similar French doors. Beyond the dining room is the kitchen, well planned and equipped with cupboards and working tables. At the corner, with windows on two sides, is the breakfast alcove. An enclosed entry gives place for the refrigerator and a broom closet. The rear entrance is at the grade level, connecting with the basement stairs. There is a basement under the house, back of the living room.

The enlarged plan gives a little different arrangement of the rooms so that a small additional length to the rear part of the house gives a third bedroom. The hall which connects them is a little longer and the bath room is beyond the kitchen, but connects directly with all the rooms. Note that the closets are all a little larger than the usual closet.

The breakfast alcove in this plan is be-
tween the dining room and kitchen, and quite separated from both. Windows fill one end of the alcove and a cupboard is built into the full width at the other end of the space, making an unusually convenient and practical solution of this breakfast room problem.

The details of the exterior have been nicely worked out, from the chimney pots and the little decoration on the face of the chimney to the cutting in the dark stained blinds, and the tub-plants at the entrance, and also the pergola covered carriage entrance.

Keeping the Automobile in the House

In planning a good sized house it is also necessary to plan for the automobile, and as has already been suggested in this magazine, keeping the automobile in the house has its advantages. Such an arrangement by which the garage is very closely connected with the house is a feature of the home which is here shown. The garage is placed directly against the rear wall of the house, one wall answering for both buildings. It is also easily heated and lighted from the house, using the same heating plant. A fire-wall separates the garage from the rest of the house, but a door through this connects directly with the garage from the rear hall of the house. In the plan a large amusement room is built beside the long wall of the garage.

The house itself is an attractive, two-story building, with a central hall, and screened porches at one end of the house. The living room extends the full width of the house on one side of the hall, with screened and sun porches beyond. Doors on either side of the fireplace open to the large amusement room.

The dining room is on the other side of the hall, with a projecting bay opposite the opening from the hall. Beyond the
dining room is the well-arranged kitchen, which has a cupboard beside the dining room door, with good working space under the windows. The sink and refrigerator are recessed at the farther end of the room.

The stairs are set well back in the hall, so that they are easily accessible from any part of the house.

On the second floor are four chambers and two bath rooms, one of which opens directly from the owner’s room. The screened porch also opens from this room, giving a very livable suite of rooms.

The outside of the house is of stucco above the brick work. Brick is carried up to the sill courses of the first-story windows, and the porches are of brick to the same height. Stucco piers carry the corners of the porches, while wood columns and balustrade are set inside the piers. Both upper and lower porches are screened.

The roof is low pitched with wide extending eaves, casting interesting shadows over windows and porches.

The brick work of the lower walls and porches makes an excellent background for the planting about the house and for the flower boxes placed against it.

A Modern Country Home

ALMOST any house is more effective if set among trees. This is especially true of a gabled or gambrel roofed house, such as the one shown in the accompanying design, which is attractive, and unusual in outline.

The main part of the house is 38 feet wide and 25 feet in depth, exclusive of the one-story extensions at the front and rear. Not only is the sun room enclosed with windows, but the outside walls of both living room and first story bedroom are also filled with windows. These are all one story in height, with a gambrel roof over the two-story part of the house. This arrangement gives spacious rooms on the main floor, only giving the three additional sleeping rooms required on the second floor.

The entrance is into the living room beside the sun room, which opens from the living room with a wide opening, separated with glazed French doors. The dining room also opens to the sun room.

Sliding doors separate the living and
dining rooms, which together fill the whole width of the house. Beyond the dining room is the kitchen, rather larger than is usual in this time of kitchenettes, and tiny rooms. A cabinet fills one end of the kitchen, with a window between the upper cupboards. The maid's room and one bedroom are on the first floor.

The stairs lead from the living room, with a passageway between hall and kitchen in the rear of the stairs. Some housekeepers would prefer the passageway in front of the stairs where these could be reached from the kitchen as well as the living room. This would require cutting into the kitchen for several steps to the basement, and would probably make a closet there under the second run of the stairs.

The house is of frame construction with cement stucco for the exterior finish. The outside trimmings are painted white or cream. The roofs are covered with stained shingles. Slate or tile might be used with some additional cost.

The interior is finished throughout in hardwood with the second story finished in white enamel.
Planning the Room Arrangement

Whether the new home shall have a wide frontage, or if the greatest length shall extend back from the front, whether the living room shall be centrally located, or is placed where it can have more window exposure; whether there shall be two bedrooms or three; these points are usually fixed by determined conditions. By thoughtful planning the best features of the determining conditions can usually be turned to advantage. A wide porch across the full front of the house has always been popular, even though the entrance virtually cuts it into two parts. The broad sweep of a vine covered porch is attractive and the breezes can usually find a way to it when three sides are open to admit it. At the same time the smaller square porch sometimes gives as much openness.

In the first home shown, the massing of flowers about it, is the notable feature which takes the attention at first glance. This home is a popular type, the long roof over the main part of the house, sloping down over the porch to low eaves. The living room, which is not very large, presumably because the porch is general-

A simple home made attractive with planting
ly the real living part of the house, is centrally located with windows on either side of the door,—a broad high window on one side to accommodate a piano or a desk, and two full length windows on the other side. The fireplace is recessed. The dining room is really a part of the living room, with its wide opening.

The second home shown in this group has its frontage across the narrow width. Also it has a smaller square porch which is very airy. The entrance is through one side of the porch, leaving the breezy corner undisturbed.

The living room, dining room and kitchen fill one side of the house. There is a fireplace in the living room with windows on either side, and a wide group of windows across the front of the room. A group of windows fills one end of the dining room. The china cupboard in the dining room opens to the kitchen also.

The kitchen is well arranged and compactly planned. The relation of the sink is very practical. Steps from the kitchen lead to the rear entrance at the grade level and also down to the basement.

Two bedrooms with bath room and hall connecting them fill the other side of the house. Each has a closet and the linen closet opens from the hall.

The exterior of the house is stuccoed from the ground to the heads of the windows and the gables are shingled. The vine covered brick chimney is effective.
Give Your Floor Planning
More Serious Consideration

Too many home builders fail to realize the great importance of their floors and mar an otherwise harmonious home setting by giving insufficient thought to this essential feature.

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The word "August" suggests hot paving stones and suffering humanity, and, by contrast, green fields and cool breezes. To those who can be in the country the problem is not a difficult one. It is when heat is combined with noise and dirt that it becomes unbearable.

There is, of course, a great difference in cities. Some have a pleasant summer reputation; others have not; some are tempered by rivers and lakes or a real coast line; others are almost land-locked. Some are built up solidly, like New York; others contain a good deal of country within their limits, like Chicago.

Whatever the location may be, much may be done to modify discomfort by cool-looking furniture and by restful, harmonious color schemes. Particularly do rooms gain in serenity and spaciousness if the necessities only are allowed to remain. Put away all the small adornments that may have meaning at another time of the year; take down most of the pictures; remove the heavy draperies. Keep everything as simple as you can—two main points in view—to lessen work and to promote order—that quiet order which, in itself, seems to reduce the temperature ten degrees.

Color is also a powerful weapon, never more so than when the mercury is in the high eighties. Avoid such brilliant hues as red, yellow and orange where large spaces are concerned, but do not discard them altogether. As with the dash of cayenne or tabasco in the summer salad...
they will help wonderfully with mental digestion. Too much neutral color is monotonous, and monotony is not good for the soul.

If you have a green outlook—your own or your neighbor's—it will be possible to use bright colors in a more generous way than if brick walls surrounded you on all sides. With a background of the first type painted furniture would be interesting, for the eye unconsciously would travel beyond the gay paint to the cooler color outside, so it would be with chintz at the windows or furniture covered with striking design. Color is a strange thing in regard to this unconscious sweep of the eye. We all enjoy the little girl in the red frock out on the lawn, or on the beach, or in the woods, but when she comes into the city room we like her just as well in something else. If we considered the red dress in relation to the child herself and not as a bit of decoration, we would beg the mother to use a less fatiguing, exciting color, or, at least, to try white or green and note the results. And we might say a good deal more about the effect of solid red worn for more than an hour or two in summer, and this quite aside from the thickness or thinness of the material. But the psychology of color in regard to clothes is so vast a topic that it cannot be tucked into a sentence or two when writ-
ing of midsomer furniture. It needs a volume and a thick one.

With the present high cost of furniture the old casual way of buying a few pieces for temporary usage is out of the question. The purchase of nearly every article today, whether for household use or personal adornment, becomes a matter of importance, requiring thought and time. More than the present need must be taken into consideration with every table or chair, and this on the whole makes for good.

Buy what you need to give your sum-
eroom or rooms the desired quality, but buy for the future also. You will secure in that way the full value of your money giving to the transaction the time and consideration it has always merited. Haphazard dealings in regard to interior furnishings have resulted in many dull, unattractive homes.

In so-called summer furniture there is more variety than ever. We may choose willow, reed, bamboo, raffia, rush, etc., in

Painted, stained or natural surfaces. We may buy for a whole house or a room or a corner of the porch.

In reed, the painted and enameled pieces are comparatively new and among the most attractive of the season's output. In willow there are many beautiful designs, both in the purely American product, and in the furniture made in this country from imported willow. Designs in all lines are excellent; durable, comfortable and of fine simple pattern.

One firm making willow furniture exclusively shows a series of rooms with appropriate pieces placed as for actual use. The bedroom furniture interested me particularly. The Bellewood bedstead and the Arlington dresser of plain lattice design seemed to me practical as well as attractive. How refreshing a city bedroom would be at the end of an imperfect day with these cool, comfortable pieces. Another shop shows a printed linen in a lily pond pattern, which would fit admirably into the scheme.
The chintz and cretonne subject is a vital one this season for both imported and domestic stuffs are relatively high in price, yet nothing contributes so successfully to the decorative quality of a room as an appropriate printed fabric. In this connection I was glad to learn that one big shop had placed on its shelves more than two thousand yards of cretonne in discontinued patterns at the pleasing price of forty-eight cents a yard. The patterns, on investigation, proved of wide variety and of remarkably good value. For porches, sun rooms, bedrooms, breakfast rooms, etc., these charming cretonnes would truly meet a definite need.

The same shop carries "log cabin" rugs in old-fashioned "rag" weaving, the prices ranging from two dollars and upward for small sizes of the rugs to twenty-eight dollars for the nine by twelve sizes.

Reed enameled black and upholstered in copper, jade, black and mauve was seen in the furniture section of this decorator. Returning to willow, the pieces designed for breakfast alcoves are new and very cozy—just the kind of furniture to inspire cheerful rising on an August morning. They would furnish most agreeably the type of breakfast alcove illustrated from time to time in this magazine. There is the long narrow table, firm and stable as though of oak, with two long settees with high backs, all carefully planned for the purpose of comfortable eating. Consequently the seats are not too deep nor too high—"just right," as Alice remarked to the Rabbit on an entirely different topic. In novel small things in willow are mirror frames, square and oval, shades for electric brackets, wall pockets of many kinds, stands for fish bowls and aquariums, and bird cages of many varieties. It would be a very critical bird who would not enjoy housekeeping in one of the following cages: Hadden Lane, Freecourt, Saybrook, Andymore, Mulberry, Zimbell, Nundorf, Stansbury, Alwin or Midland.

Settee of reed enameled in two colors with cushions in harmonious shades
Found in the Shops

A CLEVER woman who has a box shop makes bandboxes which look almost as quaint as those delightful old ones over which collectors wax eloquent. She makes them correctly, too, that is on an oval foundation not on a round or a square base, and she uses modern wall paper in old fashioned designs. Some show old time flower arrangements and some are done in landscapes but all are interesting. Moreover these attractive articles are convenient. They may be purchased singly or in pairs or in nests of half a dozen. There are many uses to which these gay boxes may be put. For the guest room the larger sizes are recommended, particularly where closet space is limited. Like the big cretonne knitting bags they will hold an astonishing amount.

All sorts of lemonade and ice tea sets are on the market—and never were “soft” drinks so much in evidence. Glass tea pots for the iced beverage have been mentioned in these columns—pleasing in color when filled and so cool looking. Tall glasses are shown with the teapots, also glass spoons with long handles which are hollow and may be used as straws.

One hostess places a spray of crystallized mint in each glass; and the process of making, as she describes it, is to “paint” the leaves with white of egg with a final “dusting” of sugar. The sprays are placed in water and kept in the refrigerator until needed. But first you must have a mint bed or know someone who has. The market mint is too old and broken. Nothing grows more rapidly, however, and it will almost thrive between cobble stones.

Sandwich trays and baskets follow closely on the tea outfits. A new device has a wet sponge concealed in an inner compartment, perforated like a flower holder, and warranted to prevent the unpleasant drying which often ruins the delicacy of a sandwich. A damp cloth kept over the sandwiches until the last moment does not find favor with the ultra-particular, for here again the flavor is impaired.

Although named for an English earl, America is the home of active sandwich-makers. Your English hostess prefers toasted muffins, your Irish, crumpets, and your Scotch, scones—or just plain bread and butter, which is best of all. The butter is spread on the loaf, and so sharp is the knife and so skillful the cutting that the bread is almost transparent. Somehow it does not look or taste the same over here. The bread does not seem to cut as well in the first place. Then the English butter, unsalted and packed with layers of clover blossoms—and the air and the scenery and all the other things!

American coffee, first, last and always, but still to the British Isles the glory of the teapot!

Coffee equipments of all kinds are shown, the most effective being in burnished copper. One set is for Turkish coffee, and the small handleless cups are set in standards of silver ornamented with colored enamels. One may be very extravagant, if one desires, with the cup that cheers—or very practical and go in
for white enamel of the plainest type. And plain white enamel with freshly roasted and daily ground coffee—mixed with brains, or, what is better, a knack for coffee making—is more to be desired than silver and enamel and much dazzling copper. And speaking of "the cup that cheers," that oft-quoted expression is parchment leaves, covers of brown leather beautifully tooled in gold and ornamented with copper clasps toned the color of the leather. It is a work of art in every way. The same shop contains interesting things from local potters who are experimenting with dips and slips, much as did the seventeenth century potters.

![For afternoon tea](image)

usually incorrectly given, as witness my own reference. I came across the original in an old guest-book the other day, and Cowper is the author. This is the way it runs, and I fear tea, not coffee, is in the poet's mind:

"Now stir the fire and close the shutters fast,
Let fall the curtains, wheel the sofa round,
And while the bubbling and loud hissing urn
Throws up a steamy column, and the cups
That cheer but not inebriate, wait on each,
So let us welcome peaceful evening in."

This old guest-book, with which I have not yet finished, reminds me of a new one seen recently in a craft shop. It has

Epigrams from Ross Crane

A home should be a spot of exquisite comfort.

Every room should have a table—a place to put books, things—not necessarily tennis racquets, but things.

Unless you show people how art makes itself useful in their lives they are not going to accept it as anything more than luxury.

The surest way to make the world realize the value of art is to show people how their homes are more comfortable when beautiful, how their business is more profitable when producing not only the useful but the beautiful things, how their advertising is more convincing when they put the spirit of art into it.
Two Color Schemes.

G. A. J.—I am enclosing the floor plan of our new home. I should appreciate your opinion of the two color schemes which I am submitting. My furniture and rugs are as follows: Dining room, fumed oak, rug in blue, orange and black with small design, grapes in orange, black and green cretonne; living room, fumed oak, tapestry, floor lamp in black lacquer with blue and rose shade, drapes in dull blue silk, rug in blue Chinese design; sun room in wicker. Woodwork and floors of these three rooms in oak. Which of these two color schemes would you advise:

1. Walls of living and dining rooms, also sun room, in French gray; woodwork in silver gray in living and dining rooms; old ivory enamel in sun room.

2. Walls of these three rooms in golden brown; woodwork in living and dining rooms, fumed oak; in sun room, old ivory enamel.

Should the floors be left natural or stained? If I choose the gray walls and woodwork, should I have the fireplace in gray brick?

Ans.—If you choose the gray woodwork, use the gray trim, also in the sun room which adjoins, or you will have a patch-work effect. An all gray background is excellent taste and gives an elegant interior, but its tendency is to show up ugly lines of furniture, especially when of very greatly contrasting dark oak. A gray background is better suited to the period furniture of lighter design.

If by any chance your furniture is old, or to be replaced in the near future, you might be glad to do it now and use silver gray stain.

The other background is more adapted to the more dignified, sturdy periods. Its use, though good, is more common. Keep to the fumed oak trim in the sun room also, if you choose the second scheme.

Blue in a lamp shade, as a general thing, gives a very poor, cold light. A rose lining might counteract this, but a safer thing to do would be to use simply the rose. You have enough blue, anyway, since blue should be used sparingly.

Since the rest of your living room furniture is brown, I suggest brown reed for the sun room.

Finish the floors a natural dark oak. Stain on floors is likely to wear off in spots and cannot be retouched successfully.

If you correct the above matters and if your furniture permits the use of the gray background, either color scheme would be correct and attractive.

A Bungalow Interior.

W. E. C.—Being a subscriber to your magazine, would ask you for a little help in the finishing of my new bungalow, of which floor plan is enclosed.

The exterior of house is brown with cream tint, front porch built up with brown tapestry brick. The interior throughout will be ivory enamel. I had planned my living room to have putty walls, putty and green figured rugs, green
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138 East Lake Street
Minneapolis, Minn.
hangings, mahogany and ivory wicker furniture. What color should the front door be made, mahogany or ivory? And also, what color tiles to use in living room fireplace. I want my dining room to have old blue hangings. I have now a pretty rug with blue in the figures. It also is to have putty walls. What color would you use in its fireplace? Would you use glass door to separate living room from hall or some pretty velvet portieres? I will appreciate any suggestion that you offer to make my home more beautiful.

Ans.—With the putty color walls and green hangings of living room, we suggest fireplace facings of smooth, dull red Colonial brick, laid up in dark red mortar. The hearth may be either of the same brick or of dark red tile. This will give a touch of color and be in tune with the ivory woodwork.

The dining room fireplace will be pretty in gray brick or tile. We should like glass doors into the hall, as there seems enough green in the rug and hangings and the glass doors are newer. Many people do not veil them at all, but the lace or net of the curtains can be drawn over the glass or a pale green, thin silk. This latter would be extremely pretty.

Certainly the dining room can have blue hangings. The wicker chairs of living room would be pretty cushioned in one of the striped materials so much used, in green and putty color.

We should stain the front door dark brown mahogany.

To Get More Light.

H. L. McC.—I am remodeling my hall and parlor by throwing it all together to make one large living room, 15 1/2 x 20 1/2 feet. The house faces north, and a large porch covers the entire north of house, and also the west end of this room, which makes it dark and gloomy as it is now. The stairway runs up at the east end, and at the west end is a fireplace that I want taken out to give room for more windows. I would like your opinion in regard to a nice roomy window seat, at the west end, where the fireplace now is. We have a very fine looking house and I would not like to spoil the looks of it, but am sure the window seat would improve it from the inside.

Ans.—In regard to remodeling your living room, we do not advise taking out the fireplace in west end. We append a little sketch of the room as we would arrange it. By putting in a single French door each side of the fireplace, and by removing the square window in north front and substituting a group of three or four mullioned windows—that is, windows separated only by a mullion—you would get an abundance of light, retain your fireplace—always an interesting feature in a room—and the whole effect inside and outside would be much better architecturally. You could then place the square window in the east staircase wall, if you wish; open it on a landing.

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in all branches of interior decoration and furnishing, Two dollars per room. Samples and complete color guide.

ANN WENTWORTH
former Decorative Editor of "The House Beautiful"
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Ending the Meal—Summer Desserts
Elsie M. Fjelstad

The dessert is a part of the meal rather than an addition to it. The kind of dessert served, therefore, should be determined by the type of meal preceding it.

A heavy meal should be followed by a light dessert as an ice, gelatine or fruit dessert. When the main course of the meal is light, a heavier dessert has its place for it brings up the food value of the meal.

Desserts may be roughly classified. Milk desserts are those such as corn starch pudding, custards, ice cream and the like, which have as their foundation milk or milk and eggs.

This group of foods is very nutritious and especially valuable for children.

Batter desserts include steamed puddings, baked batters and pies. These desserts are heavy and thus should follow only a light meal.

Fruit desserts include fruits served fresh or cooked, combined with cereal, whipped cream, gelatin or ices. They are really the lightest type of dessert obtainable and thus have their correct place at the end of a heavy meal. They are very valuable in the diet, despite their lightness, because of their content of fruit acids and mineral matter.

Frozen desserts may be either fruit or cream. Most fruit desserts are the better for being chilled.

Cranberry Sherbet.
Cook one quart cranberries in two quarts of water. Strain and add juice of one lemon. Sweeten to taste, cool and freeze.

Peach Frappe.
Six peaches.
Two egg whites.
One cup water.
One cup sugar.
Slice the peaches and let them stand with sugar. Then add beaten egg whites, water, and pack in ice. Serve with wafers after a heavy meal.

Prune Whip.
One pound prunes.
Sugar to taste.
Whites of two eggs.
One tablespoon pulverized sugar.
Wash prunes and soak over night. Cook until tender in water soaked in. Remove stones, sweeten and chop. Beat eggs, add powdered sugar and then the prunes. Beat all several minutes and set on ice to cool. Serve with whipped cream or custard sauce. Other fruits may be combined in this same way.

Jellied Apples.
Six or eight sour apples.
One cup sugar.
One and one-half cups water.
Core apples and pare, leaving a band around the center. Cook in syrup until soft, keeping the shape by turning. Drain, fill centers with whipped cream, garnish with jelly and pour syrup over and around them.
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World's Largest Mantel House.
Gelatin Desserts.

Gelatin Proportions: Three or four tablespoons gelatin, one cup sugar, one cup cold water and two and one-half cups hot water.

Fruited Gelatin.

Allow a layer of gelatin to harden. Put in a layer of fruit. Fill the mold this way in alternate layers of fruit and gelatin.

Sponge Gelatin or Snow Pudding.

Make a plain lemon gelatin. When partly congealed, beat with an egg beater. Then fold into the beaten white of one egg. Make a yellow sauce out of the egg yolk. Let the mixture congeal again. Serve with the yellow sauce. Fruit may be added.

Bavarian Cream.

Add gelatin to whipped cream and allow it to congeal. Fruit may be added.

Sponge Cake.

Use the same amounts of sugar and egg and one-half the amount of flour. Use one-half lemon to one-half pound of sugar. Beat the egg very light. Add the thoroughly sifted flour and sugar slowly, folding it into the eggs very carefully. Add lemon last. Bake as angel food. Sponge cake with whipped cream or any kind of sauce makes an ideal dessert.

Maple Nut Mold.

One and one-half cups hot water.
One-half cup brown sugar.
Three tablespoons cornstarch.
One egg white.
One-third cup chopped walnuts.
Add the cornstarch to the sugar-water syrup. Cook until it begins to thicken. Fold into the stiffly beaten egg white. Add nuts and allow to cool in molds. Serve with cream or a soft custard sauce.

Custard Sauce.

Two cups milk. Two egg yolks.
One-fourth cup sugar. Vanilla.
Heat milk in double boiler. Add beaten egg yolks, let thicken. Add sugar and vanilla to coat the spoon. Serve cold.

Pineapple Delight.

One-half can pineapple.
One-half pound chopped marshmallows.
One-half pint whipped cream.
Soak marshmallow, diced, in pineapple juice until soft. Drain and mix with the pineapple and whipped cream. Chill and serve.

Ice Cream Tarts.

Using any reliable recipe for sponge cake, bake it so as to have three one-half inch layers. Then have one-half inch slices of vanilla ice cream to serve between the layers and on top. The top may be decorated with whipped cream and a variety of candied fruits.

Fruit Ices.

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Water</th>
<th>Sugar</th>
<th>Flavoring</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lemon</td>
<td>4 c.</td>
<td>2 c.</td>
<td>¼ c. lemon</td>
<td>102 c. for 30 minutes</td>
</tr>
<tr>
<td>Orange</td>
<td>4 c.</td>
<td>2 c.</td>
<td>¼ c. lemon</td>
<td>102 c. for 30 minutes</td>
</tr>
<tr>
<td>Strawberry</td>
<td>4 c.</td>
<td>1½ c.</td>
<td>2 c. canned</td>
<td>102 c. for 30 minutes</td>
</tr>
<tr>
<td>Apricot</td>
<td>4 c.</td>
<td>2 c.</td>
<td>2 c. canned</td>
<td>102 c. for 30 minutes</td>
</tr>
</tbody>
</table>

Pastry.

Use four to eight tablespoons of fat to each cup of flour, one teaspoon salt and cold water. Cut in fat with knife. Add just enough water to enable you to roll out. The crust may be baked before filling. After baking filled pie, a meringue of the white of eggs, beaten very stiff and sweetened, may be added and set back into the oven to brown.

Filling for Pies.

<table>
<thead>
<tr>
<th>Cream</th>
<th>Sugar</th>
<th>Flour</th>
<th>Salt</th>
<th>Milk</th>
<th>Eggs</th>
<th>Butter</th>
<th>Flavor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 c.</td>
<td>4 tbs.</td>
<td>¼ ts.</td>
<td>2 c.</td>
<td>3 yolks</td>
<td>1 ts.</td>
<td>1 ts.</td>
<td></td>
</tr>
<tr>
<td>Cocoanut</td>
<td>1 c.</td>
<td>2 tbs.</td>
<td>¼ ts.</td>
<td>1½ c.</td>
<td>2 yolks</td>
<td>1 ts.</td>
<td>1 ts., 1 c. cocoanut</td>
</tr>
<tr>
<td>Chocolate</td>
<td>1 c.</td>
<td>3 tbs.</td>
<td>¼ ts.</td>
<td>2 c.</td>
<td>3 yolks</td>
<td>1 ts.</td>
<td>1 ts., ¼ c. cocoa</td>
</tr>
<tr>
<td>Lemon</td>
<td>1 c.</td>
<td>5 tbs.</td>
<td>¼ ts.</td>
<td>1 c. water</td>
<td>2 yolks</td>
<td>1 tbs.</td>
<td>Rind, juice 1 lemon</td>
</tr>
<tr>
<td>Custard</td>
<td>3 tbs.</td>
<td>¾ ts.</td>
<td>1½ c.</td>
<td>2 whole</td>
<td>2 yolks</td>
<td>¾ c.</td>
<td>1 ts. vanilla</td>
</tr>
<tr>
<td>Butter Scotch</td>
<td>2 c. brown</td>
<td>4 tbs.</td>
<td>½ c. or 1 c. water</td>
<td>2 yolks</td>
<td>¾ c.</td>
<td>1 ts. vanilla</td>
<td></td>
</tr>
</tbody>
</table>

Tbs.—tablespoon. c.—cup. ts.—teaspoon.
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We have all heard and read about the well built houses of the early colonial days, how the workmen were more careful than those of today, and as a result the houses were better built than those built later, but let us look at the matter fairly and make a comparison.

The better class of houses built today for homes, which are built by reliable contractors, under the direction of competent architects are good value for the money expended. For the amount of work or the sacrifice one need make to get them, they are really cheaper than those of the colonial days, especially when one takes into consideration the added comfort given by modern houses. While we may not have any better workmen, nor as good as those early builders, yet we have learned something about building as well as about house planning.

For one thing, the large timbers of former days are not now used, not so much because of the cost or the trouble of getting them but because we can use the timber to better advantage by sawing it smaller. We put about the same amount of timber into the frame as before, but instead of heavy floor beams some six feet apart with small square joists between them, we put the joists closer, and being of the proper shape when set on edge, they make a rigid support. Then these are stiffened by cross bridging, which is well nailed, and the floor itself is better even in the cheapest houses than it was in early days in the more costly ones. In fact the modern hardwood floor of narrow boards leaves little to be desired in that line.

Many of the old houses were set down close to the ground and had a cellar under but part of them. These features made them damp and also caused decay. The foundations were of stones often laid up without mortar and simply pointed on the inside, which made but a poor job, the cellar was low, dark and would freeze in winter.

When mortar was used either for wall or chimney it was only lime, for cement was not common, but the modern wall of concrete not only requires less material than if built of stone but it is better and takes up less room, and so leaves more space in the cellar.

We have improved in building the chimney, too; they are smaller and better in that they are more nearly fireproof, so there is not so much danger of fires from defective ones, though there is still much to be desired in this matter. By using flue linings an owner can be sure of a good flue now.

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# KEITH'S MAGAZINE ON HOME BUILDING

## CONTENTS FOR SEPTEMBER, 1920

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just a Word—Driven to Home Ownership</td>
<td>90</td>
</tr>
<tr>
<td>A New Building Construction—Monroe Woolley</td>
<td>93</td>
</tr>
<tr>
<td>Outdoor Living Rooms—Dorothea De Meritte Dunlea</td>
<td>96</td>
</tr>
<tr>
<td>Value of Details—Anthony Woodruff</td>
<td>98</td>
</tr>
<tr>
<td>An English Cottage</td>
<td>100</td>
</tr>
<tr>
<td>Is It Cheaper to Build Than to Rent?</td>
<td>102</td>
</tr>
<tr>
<td>Brick For the Home</td>
<td>103</td>
</tr>
<tr>
<td>A Seven-Room &quot;Community Cottage&quot;</td>
<td>105</td>
</tr>
<tr>
<td>The Modern Duplex</td>
<td>106</td>
</tr>
</tbody>
</table>

## DEPARTMENTS

**Inside the House**

- **Decoration and Furnishing**—Virginia Robie, Editor
  - The Small Apartment                                               | 108  |
  - Answers to Questions                                              | 112  |
- **Table and Food Values**                                           |      |
  - Filling the Fruit Cellar During a Sugar Shortage—Elsie M. Fjelstad | 116  |
- **Household Economics**                                             |      |
  - The Back Yard Meat Shop—Eunice Marcia Smith                      | 120  |

**Building Material**

- When to Paint                                                        | 122  |
- Concrete Sash Weights                                               | 124  |

**Splinters and Shavings**                                            |      |

- New England Frame House—17th Century                                | 126  |

---

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The charming entrance of a country home

Asmar Embury, Architect
A New Building Construction  
Monroe Woolley

FOR centuries the sole building materials used by the Filipinos in constructing their thatched-hut homes have been dry nipa leaves and bamboo poles. Such material has always been popular because it can be obtained locally anywhere, at very little expense, the average cost of a nipa house, suitable for the peasant class, being around one hundred pesos, or fifty dollars in gold. Following American occupation our officials noted that although the first cost was trifling, the nipa house was not cheap in the end. To begin with it rots quickly, it is unsanitary, and once on fire it burns like paper. Every year entire towns built of nipa are wiped out by conflagration.

In an effort to overcome the sanitary and economic handicap of nipa as a material for house construction, the director of health of the Philippines, and his assistants, recently designed a model house for the natives of the poorer class to be constructed out of a new fire-proof material invented and perfected by the island health service.

This new material which, under certain conditions and in certain types of buildings, might be applicable in this country, is composed of cement, sand, and ipa. Ipa is the Philippine term for the husks obtained from rice in threshing. This mixture is reinforced with bamboo. For what is known as a first-class mixture the ingredients are one part each of cement, sand, and ipa. The material is formed into shingles for the roof and into slabs for siding. The slabs have a thickness of half an inch and weigh about six pounds per square foot.
The windows open out, and are in two panels

The first-class mixture will yield from one barrel of cement from 450 to 500 shingles, and the cost per shingle, not reckoning on labor, which is cheap in the islands, is about 1½ cents. The cost of a 2x6-foot slab is from 35 cents to 40 cents. A house approximately 20 feet wide and 32 feet long requires about 2,400 shingles and a little more than 100 siding slabs for walls and partitions, allowing for some breakage. The country, being tropical, no interior plastering is necessary. Thus, the roofing and siding material for a house of this size costs in the neighborhood of $76.00. This cost is somewhat more than the cost of material for a house of nipa of the same dimensions, but a far superior structure is obtained.

The shingles and slabs are formed in moulds and are afterwards cured in water.

The Philippine government, to improve sanitary living conditions and to lessen fire loss throughout the archipelago, and to encourage the building of better houses, has built a model house of this material for exhibition purposes at Manila, and the natives are evincing much interest in the new type of home. It is something much better than the average peasant has been accustomed to, but as we have taught the native to long and look for better things in dress, in government, and in education he is naturally looking forward to better homes.

The model house built of the new material has five rooms. There is a combined reception and dining room, a sala, (meaning in native parlance a reception room), which is also used as a sleeping room, a bedroom proper, kitchen, porch and bath and closet combined. As may be noted in the photographs, the windows are double panelled for two openings which let in the air in two places. For privacy the lower opening may be closed, leaving the top panel open for ventilation.

The new composition of which this house is built, according to officials of
the Manila fire department, offers better fire-resisting qualities than the houses built of hardwood and roofed with sheet iron. The chief of the fire department places houses of this new type in the same class with houses built of brick with hardwood frames and tile roofs, or hardwood houses roofed with galvanized iron.

It is estimated that the model house will last in a serviceable condition, with few, if any, repairs for 25 years. The life of the average nipa house, or hut, is but ten years, including frequent repairs made necessary by wind and rain storms every year. Fire, as a rule, destroys the nipa hut before the owner can get ten years of use out of it. The Philippine government's model house costs $250.00 which is the same that a nipa house of about the same size will cost, including yearly repairs and leaving out of the accounts its susceptibility to fire.

In addition to its ability to resist fire and to its cheapness, the model house is far more sanitary than a house of nipa. Nipa houses harbor rats and insects; they are ill ventilated as a rule, and rarely have enough room for the isolation of the sick or for proper living conditions. The model house is provided with the main sanitary facilities necessary for a modern house. Since the building of the first model house several others have been built by the government and a lot of publicity has been instituted to have the new form of construction generally adopted.

The consulting architect of this department recommends a change in roofing material to light tile, owing to the torrential downpours of rain so frequent. The Philippine Bureau of Science has been experimenting for some time with certain Philippine clays from which it is claimed a tile of much lighter weight than those imported into the islands can be made. The problem is to manufacture a tile which will not be too heavy for a house framework of bamboo, and which at the same time will be cheap and durable.

The model houses built by the Philippine health bureau are not of bamboo framework so common on the Islands. Instead 6x6-inch posts are used, and the houses are raised about four feet off the ground to avoid dampness within, during the rainy season. The nipa huts, as a rule, are built higher still from the ground. The model house exhibited at the Manila carnival is surrounded with productive vegetable gardens and ornamental tropical shrubbery.

The way in which the Bureau of Public Works has taken up this matter of finding and making available to the natives a building material better than the one which they have used from time immemorial, and at little greater cost, is certainly commendable. One may be proud of American officials who are getting results in reducing the fire hazards in a community. While this Philippine building material might not be applicable to the conditions of this country, the spirit in which they worked out the problems there, might find equally satisfactory results if applied to the problems we have among us in this country.
HEN warm weather is here one wants to get outdoors; more, one wants to live outdoors, for it is so alluring with sunshine, fresh air and mild breezes laden with the thousand delicate perfumes of grass and flowers. And one can really live outdoors a good part of the time, if one plans the house or grounds so an outdoor living room is part of it.

There are countless ways of making an outdoor living room and every one should arrange some place where one can spend some hours in the open air. A place, simple or elaborate, will depend upon the money one can expend, but it is likely that the less money one spends, the more fresh air and sunshine one will have while, if one pays out for glass and screens and roofing, one will shut out more air and sunshine, the things one is seeking.

The busy housekeeper can have outdoor living quarters just to suit her taste if she can spend a small sum for building. See the two white wooden seats built under the big trees out in the yard. What could be more inviting, especially in the early fall, when the summer heat is past.

If the house does not have a wide veranda opening to a pleasant exposure it is really worth while building one. East or south is usually best for all day comfort. With a well laid wooden floor and railing made solid around the outside, it can be screened and glassed up to the sloping roof which may be either shingled or covered with a patent roofing. Here, in this outdoor room, household duties become a pleasure.

Another attractive outdoor living room of this description was built by a woman, on her little bungalow overlooking a hillside. It was built across the back of the house, the south end, and also had east and west exposures. It was directly off the kitchen and here in summer the breakfast was eaten; then this housekeeper came out and prepared her vegetables for lunch and dinner. After the necessary household tasks had been finished within the bungalow—bedmaking and dishwashing, she could live outdoors the rest of the day in her charming south veranda.

Commanding a beautiful view of green
hills and distant blue mountains, the window openings were not marred with draperies but the clear glass gave an uninterrupted view. From early morn till late at night in the summertime, these casement windows were swung open. Being well screened, flies and insects were kept out but plenty of fresh air and invigorating breezes came in, making it delightfully cool and attractive.

At lunchtime, the meal was eaten here again, and at night the family ate supper here with the western view of a golden sun sinking into a sea of reds and purples. The meals were simply delightful for the surroundings were satisfying. After the "tea things" had been cleared away, the family enjoyed sitting out on this veranda, watching the dusk slowly set in until finally the deep blue sky dotted with twinkling stars still beckoned them to stay outside in this great outdoors.

The furnishings of this outdoor living room consisted of an inexpensive wool rug, about nine by twelve in size, a small dining table that had folding leaves, the necessary number of dining chairs, several comfortable wicker rockers, and a box couch covered with plenty of sofa pillows. Steps from the east end of the porch led down into the sloping garden but the porch was so comfortable, one was not easily tempted away from it.

Another very attractive outdoor living room was made by a woman in her side yard. She had a small wooden platform built, a little less than a foot from the ground, and had posts set at intervals along the sides of the wooden floor. Beams were laid trellis fashion overhead, from post to post, and then this framework was entirely covered with the leaves from fan palms. They made a solid roofing, which was rain-proof and their
fringed ends hung down over the edge of the roof. Vines were planted at the posts and hanging baskets of ferns and trailing vines were hung at intervals on the outside beams.

This latter was really an outdoor room, for it was set at a distance from the house, right in the midst of flowers, shrubs and big shade trees. Rockers, a table and small rugs were the comfortable furnishings. This outdoor living room cost only the price of flooring, posts and beams and the rest was donated by Nature, plants, palm leaves, vines and summer sunshine.

An outdoor living room that admits of great privacy is the patio or court, copied from the Spanish and very charming are many of these courts, entirely enclosed on four sides, or partially enclosed with one side open entirely or screened with gates of wrought iron or lattices of wood.

A particularly pretty court recently seen in a new bungalow was one which had one side open to the street, partly screened by a low balustrade with swinging gate, leading to a stretch of green sward outside. Within the court was a large square, open to the sky, with a small fountain placed in the middle of the tiled floor. Around the three walled sides of the court ran a corridor, roofed with red tiling with the ceiling tinted. In the protection of these corridors, chairs and lounges were placed out of range of the sun's rays, and also protected from rain.

One of the great charms of the Spanish court is that almost without exception, plants and vines are grown within the court itself. This gives a wonderful coolness, and a refreshing appearance to this kind of outdoor living room, especially if there is a fountain.

An outdoor living room that has not received much consideration, yet is open to the sky, is the one that may be built on a roof. Whether it is a real roof garden or just a plain roof, of course, depends on what one makes of it. There are certainly many worth while features at one's disposal, if one has the space on a roof high above the city's noise, where clean air and fresh winds are available. Strips of canvas, awnings or porch curtains are all great helps in giving protection on the roof and the addition of green plants, in pots and tubs and baskets, trenches full of them, will make on the roof a fine outdoor living room.

Though one possesses no glassed in sun rooms, Italian pergolas, Spanish courts or Newport verandas, one should not fail to have some kind of an outdoor living place, that is really livable; even if it be necessary to dig out a space under a big jasmine vine or nail platforms in a tree for lack of other space.

Value of Details
Anthony Woodruff

Did you ever notice that the houses which one most admires are attractive on account of the details or surroundings of the house, in four cases out of five, rather than because the house in and of itself is beautiful? Take out the grouped windows, in imagination, replacing them with two or three, placed in the ordinary way, take away the vines and planting, take away the trellises, take away the flower boxes. Imagine the exterior with an ordinary texture, painted or coated a dull color, without any interest in the trimmings; no inter-
estig brick work or brick color; what would you have left? At best a house fine in outline and proportion but absolutely lacking in interest; at worst an awkward, badly designed and illy proportioned building with nothing to relieve or call attention away from its defects.

Granting that much of the charm of an interesting home, which attracts one exceptionally, might or would be lost if the details were taken away leaving the building barren and unattractive; conversely, the opposite line of action is equally true. In fact, it is true to an even greater extent because it is constructively true, and that which tends to build up is always stronger than that which tears down, because it has the forces of nature working with it. For instance a house which is denuded of its details, if left wholly to Mother Nature's kindly ministrations will in a few years' time become distractingly beautiful in its robes of matted vines and growing things; not livable, of course, but beautiful in Nature's own way.

It would seem to follow that any house is capable of being made beautiful if one but goes about it in the right way; and in general there are two ways of going about it. It may be painted, with an interesting touch of color in the trimmings, windows may be added, interestingly placed and grouped; trellises may be added, or new porches built, or any of the thousand and one things which make a home attractive, inside and out. By the second method vines and planting may be used in the same careful and critical way as any other form of decoration, so placed as to enhance the good points of the building or to cover or minimize the details which one might wish were otherwise, or else to call the attention so strongly, for instance, to a charming vine covered stoop with seats on either side of the entrance that one would not notice the awkward windows, or even the door itself, which might be ugly.

The "first aid," perhaps, in making a dull house charming lies in the matter of windows, in many instances. Here again there is wide scope for choice. French doors or windows have been the saving grace in many remodeled houses. Did you ever notice, as a matter of fact, how often the remodeled house is more attractive than the new home? Just herein lies the reason: the main facts of the house are settled without question or controversy, and the whole attention is centered on giving, by means of new details, what the house lacked before the alterations. Nothing else adds so satisfactorily to the attractiveness both of the inside and the outside of the house as may be accomplished by many well placed windows.

The cutting of the glass is another available asset in the matter of windows. The glass size sets the scale for the building, and a small scale is generally more
attractive. Whether square panes or diamond shaped, the effect is usually good; sometimes even both square and diamond panes are used. In order to make one gable of a group more important — more noticeable than any of the others — the glass in this one gable may be cut in a different manner from all the rest, and it will accomplish the end desired, even though at the sacrifice of the conventions.

A pergola covered entrance is always attractive when covered with a good growth of vines whether blossoming or not, and well kept window boxes are an unfailing attraction.

White trellises against brick work may also be counted on in an effort to make a place attractive, especially if used in conjunction with white painted flower boxes. This is illustrated many times over in a drive through the residence part of any city; yet it always meets the eye with a fresh sense of beauty.

Any home is capable of being made beautiful, in some degree at least, — it is worth repeating this fact at least, — it is thought which creates beauty, let it work in any medium which it finds available.

An English Cottage

One of the effects of the war which has already made itself manifest is seen in the English influence appearing in some of our home building, as shown in the cottage here illustrated. The plan, however, is not English, for the English houses are noted, among tourists at least, as being most inconvenient and rambling in arrangement — not easy to live in, unless there is plenty of service available.

Though the exterior shows English influence, the plans are bungalow plans, compact and convenient. In fact two plans are given with this charming exterior, a five-room bungalow plan and a...
six-room plan. In the larger house the rooms are somewhat larger also. Eighteen inches is added to the width and to the length of the living room.

The porch is on the corner of the house in front of the living room, with the entrance through a hooded stoop. The space between the posts of the stoop is filled in with brick, set herring-bone pattern, with an open grill above. In the older days of English building the frame of the building was set using heavy timbers, then the spaces between were filled with brick or were plastered. Half-timber work had some such origin. This brick-timber work gives a touch of color.

The dining room is beyond the living room with glazed doors between. In both plans the dining room opens onto a side porch. In the larger house the breakfast alcove has a window opening onto this porch, connecting with the dining room, the kitchen and with the rear entry. The kitchen is considerably larger in this plan, though both are well arranged and well equipped. The basement stairs lead from the rear entry with an outside entrance at the grade. In both plans the basement extends to the rear of the living room.

The front bed room opens from the
living room. In the smaller plan it also connects with the passageway to the other bed room, the bath room and the dining room. The larger plan has three bed rooms, filling one side of the house. All have good closets.

The exterior is of wide siding over building paper and sheathing. Casement windows are shown in the front bed room. Trellises over these windows carry the vines in a very effective way. Brick steps carry out the color of the brick work.

Is It Cheaper to Build Than Rent?

Perhaps you are trying to decide. It is worth while to take a pencil and paper and do some careful figuring. Here are some figures and facts given by the Architects' Small House Service Bureau. These figures represent average conditions, based on current cost of building. They take a specific example to show the difference between paying rent to a landlord and building a new home.

First, suppose you have a "nest egg" in the bank, sufficient to make the first payment on a new home. If you figure it out you will find that you are losing 2 to 5 per cent each year on your savings, because you are living in another man's house.
Suppose you have cash . . . . . . $2,400.00
This will allow a possible build-
ing loan, 60% of $6,000 . . . . 3,600.00
$6,000.00

Itemized list showing cost for
building—
Carpenter and mason
work . . . . . . . . . . $3,436.00
Plumbing, gas fitting 480.00
Hot air heating . . . 365.00
Painting, finishing . . 250.00
Electric wiring . . . 100.00
Lighting fixtures . . 115.00
Screens . . . . . . . . 80.00
Grading . . . . . . . . 72.00

$4,898.00

Expense of building loan and in-
surance, including plans and
specifications . . . . . . . 252.00
$5,150.00

Cost of lot . . . . . . . . $835.00
Tax search and record-
ing fee . . . . . . . . . . 15.00
$850.00
$6,000.00

The annual carrying charges—
6% on building loan . . . $216.00
Taxes . . . . . . . . . . 140.00
Fire insurance . . . . . . . 12.00
$368.00

Rent based on government esti-
mate at 13% on total invest-
ment . . . . . . . . . . . . 780.00
Balance which may be applied
on the principal . . . . . . . $412.00

There is marked character and dignity
in the modern English type of home which
is shown here. The exterior is well
studied in proportions. The windows are
well placed and the roof lines are distinc-
tive. The small overhanging hood at the
entrance echoes the roof pitch and main-
tains the harmony of line on which the
home is planned.

The floor plan shows an especially
happy arrangement of rooms. The house
can be built equally well on a corner or
inside lot. It will be a cool home in sum-
er if it faces west, getting both the west
and the south breeze. At the same time it
is a plan happily adapted to any front-
age. A 40-foot lot will give this home a
comfortable setting.

The grouping of the living room, din-
ing room and sun porch is inviting. Only
a few interior furnishings will be required
to make this living room attractive be-
cause of the big fireplace on one side and
the open stairway at the end. If one
wishes to avoid the expense of a fire-
place a window can be substituted.

The sun porch is practically a seventh
room. The opening between it and the
dining room may be as wide as desired.

Two windows in the kitchen insure a
cool, pleasant room. Beneath one win-
dow is the work table and the sink is
under the other.

On the second floor are three airy bed
rooms, a bath room and a storage room
for trunks.

Brick For
the Home

AID up in Roman brick, light
cream in color, with white wood-
en cornices and brackets, the
home here shown is both sub-
stantial and attractive.
The entrance is at the side, giving the
unbroken front of the house to the living
room, with its wide bay of windows. The
central hall is reached from the porch
through a wide vestibule. Folding
French doors separate the living room
from the hall, the doors being four in
number and hinged to fold back on each
other, two on either side.
The dining room is a very pleasing room with its Colonial corner cupboards for china. It is planned to add a sun room beyond the dining room at some future date and French doors are placed to open to it. In the meantime they serve as windows, or open to the terraced lawn. The dining room is finished in white enamel, the room being Colonial in detail, as is also the hall. The living room and hall are finished in birch, stained brown to tone with mahogany furniture. The stairs are given the favorite Colonial treatment used for mahogany and white wood work. The hand rail and the treads of the steps are stained and finished while the spindles and the rest of the trim in the hall are all painted white. This is a very attractive as well as a logical treatment as neither the stair treads nor the rail would be so satisfactory if painted white. An unusually roomy coat closet
KEITH'S MAGAZINE

opens from the hall near the stairs. The living room is finished in birch stained. The kitchen communicates directly with the front hall.

On the second floor are four chambers and a bath room. There is a lavatory opening from one of the front chambers, and good closets for each room. One of the rear chambers opens to a balcony, a great convenience on sweeping day. There is a clothes chute from the second floor to the laundry in the basement. Steps lead up to the third floor.

The second floor is finished in white enamel paint. The bath room is tiled, both the floor and a wainscoting.

Seven-Room "Community Cottage"

TYPE of cottage which has been more or less in demand in the last few years has been brought out in some of the community planning, which gives to the kitchen some of the properties which we usually assign to the living room. The American home is planned for the woman who has a certain amount of leisure in her day, or at least the choice of work and where it shall be performed. Only a portion of her day is passed in the kitchen, and the living room is her working center. If on the other hand the kitchen is the working center of the housewife it should be made large enough for the family to be about her while she is at work and should be the most attractive and pleasant room in the house. Also it may be used more as a center of communication for the rest of the house than otherwise. The thing that is essential in home planning is that the house should be planned to fit into the customs and need of the particular family which is to occupy it.

This cottage has a 32 foot frontage and is 24 feet in depth. The entrance is through an enclosed sun porch. The living room is of fair size, 14 by 12 feet, with a fireplace which gives a flue to the kitchen and one for the heating plant.

There are three chambers and a bath room on the second floor.

The inside finish throughout is in Washington fir. The first story is stained
Mission brown. The second story is in the natural color and varnished. The floors of the first story are of oak, and of the second story they are of birch.

The outside is covered with wide siding up to the window sills, and above the walls are covered with cement stucco, "pebble-dash" surface. All outside trimmings are stained brown.

The steps at the entrance are of cement concrete and finished smooth. The sun porch is finished inside the same as the living room. All windows are screened and have storm windows.

The Modern Duplex

The word "Duplex," as a building term, has carried widely differing meanings in different places. "Duplex Apartments" have made wonderfully effective studio apartments with the big studio or living room, high of ceiling and spacious in size, with a mezzanine floor and balcony across one side at least, with tiny kitchenette and serving room with sleeping rooms over them, all in the height of the studio.

In the Midwest, however, the term stands for the two-flat house, one apartment on the first and one on the second floor, with separate entrances for the better type and for those more lately built.

The bungalow has demonstrated the convenience of living on one floor. The duplex puts two bungalow plans under the same roof, one duplicating and placed directly over the other. People have found this a very convenient way of living, especially where the business of the "man of the house" obliges him to be out of the city or away from home much of the time, as many women do not like to stay in a house alone.

The accompanying design shows a duplex lately built, excellent in type. The
plan given is that of the first floor. The
two entrances are side by side; one open-
ing to an alcove off the living room, and
the other opening to a landing at the
foot of the stairs to the second floor. In
the first floor apartment there is a coat
closet under the last run of the stairs.
Grouped windows across the front and
side of the living rooms give them the
advantages of sun rooms, but as a part of
the living rooms themselves. A wide
opening connects the living room and the
dining room, which also has a group of
windows.
Opening from the dining room is a
the hanging space. Various types of ex-
tension carriers and garment hangers
double and treble the hanging space when
so equipped.
The two plans differ only in some of
the stair details, made necessary by being
on different floors. There is a rear en-
trance also, from the upper duplex, which
does not intrude upon the lower apart-
ment.
Laundry, and storage for both apart-
ments is prepared in the basement. Usually separate furnaces or heating
plants are installed so that each apart-
ment is entirely independent of the other,
small square hall opening to two cham-
ers and bath room. This hall opens to
the kitchen as well as to the dining room.
Wardrobes are built into the chambers
in place of closets. Some people maintain
that properly built and equipped ward-
robes may give more convenience in hang-
ing space and in keeping clothing than
the larger and seemingly roomier closets.
Wardrobes usually give hanging space
just the height needed, with shelf room
above for hats and drawer space below
and each householder can manage his
own heating plant, keeping it at the tem-
perature he desires.
This duplex is of brick or hollow tile
construction, with brick work carried to
the heads of the first story windows at
the front of the house. Above the brick-
work the walls are stuccoed on the out-
side. Flower boxes under the group of
front windows give each apartment a
chance to have flowers and growing things.
ROADLY speaking, the same rules holding good in a house, hold good in an apartment. There are no special decorative schemes for the latter. Good taste is just as necessary, perhaps more so. Ugly decoration spread over an entire house is bad enough, but it becomes even more distasteful when "condensed." One cannot get away so successfully from a garish living room, a gloomy dining room. There are few doors to close; few real avenues of escape.

In selecting a neutral and quiet scheme for several rooms, one very important matter must first be taken into consideration. Will the proposed color selection darken or lighten? The apartments which are too sunny are very rare. If they ever existed, they are almost extinct now. To lighten and brighten, yet to keep things quiet and restful is not so simple as it sounds. To succeed means more than appears on the surface. Lucky is she who has ivory paint to start with in fall furnishing, be it cottage, mansion or apartment. If a darkish apartment, the greatest difficulty is surmounted—that of attaining a good trim.

The beauty of a natural trim is not decried, nor the value of stains; they imposed more conditions than the simple ivory paint. The first of these conditions is a uniformity of style. With the warm white paint there is great latitude. In the rather darkish living room place on the walls, either a deep ivory paper, a very pale yellow, a very light tan, or a gray which suggests warmth. A cool clear, true gray will not do this. The difference in grays will not be appreciated until one has visited the wallpaper shops and compared endless samples. Under some circumstances real gray is delightful. In a well-lighted room with white paint and mahogany furniture, how attractive is gray-gray when all details are well chosen.

A gray room in an apartment is recalled where the walls are calcimined. A cretonne of American manufacture in a bold pattern of hollyhocks is used at
the windows and as slip covers for the chairs. The rug is an American Wilton of hollyhock red. The furniture of inexpensive make is painted the gray of the walls. On the ceiling is a cream white calcimine—the tone of the paint. The simple white mantel carries a long mirror in a dull gold frame, a pair of old brass candle-sticks and a rectangular mahogany clock made by Eli Terry. There are one or two old prints in flat old frames and a cherry table with a drop-leaf. The few old things are excellent and the modern, inexpensive things are chosen with excellent taste. Best of all, there is a flood of sunlight. Had the room been poorly lighted the gray would have been too cold and no amount of hollyhock red would have been able to make it cheerful.

A room similar in dimensions, but having light from one window only, was made interesting by a yellow paper in a narrow stripe. In spite of the fact that
the room was high the stripe was effective, lighting up the upper portion of the room in a better way than a flat yellow. Here the paint was deep cream. A clear white would have made too sharp a contrast. At the doors hung yellow portieres of silk and linen tapestry in a small conventionalized pattern. The one window had a "dust curtain" of sheerest cream colored net hung on rods at top and bottom of the window. There was also an over-curtain of transparent yellow silk, drawn back at the sides. There was no shade. All the light that was possible came into the room, and there was the feeling of additional light by reason of the clever treatment. The dust curtain was merely a useful device for keeping out dust without interfering with light or air. In a copper pot hung high against the window was an English ivy, its long tendrils growing downward. In summer the small fireplace was filled with green branches. In winter a small grate fire enlivened the room. At all times there was a good deal of glow and cheer from burnished brasses and coppers.

The value of one color used in several rooms was well set forth. The small dining room and the long hall were equally yellow. One bedroom was papered in ivory, another with a small figured green paper. The light, convenient kitchen was painted apple-green. The furniture was mahogany with a few good pieces in willow, painted green. There was nothing remarkable about the rooms, yet by reason of effective color and well chosen furnishings they produced a charming effect.

Another living room was walled in gray-tan or tan-gray, with a pleasing combination of blue and green in curtains, rugs and upholstery. Scotch madras in a Morris pattern in blue and green made the sole curtains for the windows. A large Hammersmith rug covered the floor, and a delightful touch was given to the room by a generous use of black cretonne, having by way of decoration blue and green
and old pink. The pattern was one of those bold flower and bird schemes which are so attractive in color and drawing. The whole effect with the tan walls was very good and in its way quite as successful as the ivory and yellow room. The furniture needs a word. It was Jacobean cane of James II period in a warm golden brown, harmonizing with walls, woodwork and furnishings.

In advising simplicity for the small house and for the apartment, no plea for monotony is made. On the contrary, the more individuality a room can express the better—but it must be a sane individuality. Here is where the good taste, talent and decorative tact come in; to be able to furnish a room in such a way that its first impression is one of serenity; yet to reveal on more intimate acquaintance many novel and individual touches. Surely when this is accomplished, a good grasp of the situation is shown.

A color scheme might be suggested from autumnal tones, says a city decorator. Greens touched with brown and orange, and a little yellow against a gray wall. To put this hint on a practical basis, let us take a living room, with gray walls, hoping that the woodwork is one shade deeper, and cover the floor with a small green rug. It may be necessary to use an old one, and possibly that old rug happens to be one of moquette—tan, with a border of pink roses. So much the better, have it colored; give the dyer a sample of the shades, and it will come out in a tone as rich as velvet.

Then there are the windows to curtain. Presuming they are casements, here is the great opportunity for making the room attractive. Purchase something in cotton. A green will do here; green with perhaps autumn orange or red in which orange predominates, brown, or yellow. If the windows are casements, shades may be omitted, and these curtains, hanging from a brass rod, combine the decorative and essential features. Use plenty of plants. Green palms will look well against gray walls, and an old-fashioned begonia will combine your autumn tints.

In using such a scheme as suggested by this well-known decorator, care must be taken to avoid a heavy massing of tone. Keep in mind that autumn coloring is seen in sunshine, and that a tone which seems full of life and brilliancy outdoors may look dull and unattractive in the house. Also remember that artificial lighting must be taken into consideration with every combination of color.
An Attractive Home in Mississippi.

S. H. H.—Under separate cover I am sending you floor plan of our new house, which is now under construction.

The house will be in the country in a beautiful grove of oak trees, facing the public road north. Should it be painted white, and if so, what color for trim?

I have a suite of nut brown mahogany living room furniture with blue upholstery. The dining room furniture is dark, dull oak. My bedroom is furnished with golden oak, and brass bed. I shall have to buy the furnishings for the guest room.

Please suggest woodwork and curtains for the dining room and the others. I want artistic curtains, but nothing too expensive.

The walls will be plastered and should they be plain or sand finished, and also tinted, and what colors? The living room will have a large brick mantel, the other rooms, wood and tile.

Ans.—White paint is good, especially for a small house. A trim is not necessary, but, if preferred, use a blue-green.

For the living and dining rooms have dark oak floors and velvet or clear flax plain rugs in a serviceable dark taupe color. Tinted walls are attractive for a country home, in which case the walls must be rough plastered. Use a soft flat tan-yellow and cream ceiling, because you need sunshine effects in these practically sunless, northern exposed rooms. Ivory trim will add to this effect also, as will gold sun-fast taffeta hangings. Curtain the French doors with the same material. The curtains for the dining room should be the same, since the windows of both rooms are seen across the front of the house. Pongee could be used in the same way. It is difficult to get anything cheap unless you want a cream voile, net, or scrim. These would be good, however, to give atmosphere to the room. Another expedient would be to use a cretonne of a sketchy Japanese design with big attractive birds on a light buff or yellow ground and with apple-green tones and a bit of rose and mauve as overhangings with no glass curtains. In the country you really need no glass curtains for privacy in the living rooms. Have one pair of overhangings for each group of windows and connect them with a valance. Your big group of windows in the dining room especially needs this connecting line. However, the width of this group may be too great for this treatment. Your ceilings are probably high enough so that a valance will not affect the seeming ceiling heights, i.e., lower it too much. With this Japanese cretonne I should have one or more upholstered chairs. There is such a thing as over-doing the use of cretonne, but hangings and chairs upholstered in the same material give the room unity. Simply using chintz roller shades would serve a double purpose, but the effect is more bare. If you use the Japanese cretonne accent its colors in your choice of color for your ornaments and flowers. For the mantel a pair of early wrought iron candlesticks would be
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newer than brass. Use mauve colored candles. Between them place an orange bowl. A jade-green lamp base would give a color contrast. With it use an ivory shade of a double faced silk having deep, crushed rose on the under side. Of this material make a triple box plaited ruffle for finishing. Use other green notes in palms, Boston and wild ferns and ivy. A few pieces of wicker would add contrast to the mahogany and add to the informality of the room. A tea-table, perhaps, or a deep chair are suggestions. Use a buff brick for the living room fireplace. The brown mahogany will look well against the above background, but I fear you will not care for the blue upholstery in this north room, since blue is a cold color. However, your climate in Mississippi may counteract this effect.

In the dining room hanging baskets of ferns or trailing Wandering Jew and flowers would be pleasing in the unusually big group of windows, with one in the other group, or ferneries of wicker would fill in the space. A bench is another suggestion, if you haven't a pair of arm dining room chairs to place there. A dull orange silk shade, made inverted, with a black tassel, and blue-green printed linen upholstering on the chairs would give you the correct color notes with your dark oak furniture and exposure and background previously suggested.

The breakfast room could be less conservative in its treatment. Pale blue-green trim and walls with oak floors would give a harmonizing vista from the dining room. A rush rug or matting, wicker or white painted furniture of cottage type designed with carefully and sparsely placed vari-colored nasturtiums would be pleasing. You could buy a stencil at some art store and do this yourself. If you haven't used cretonne in the other rooms you could use a chintz here or a linen with luscious fruit in warm colors. Hand-dyed muslin in blue would be good or natural colored unbleached muslin stencilled with nasturtiums.

In the kitchen use varnished and waxed linoleum on the floors in brown tile shapes, or better yet have cork flooring. Be sure that your sink is placed at the level most convenient for the one who is to use it (usually 30 to 36 inches from floor), and so placed that one does not stand in one's own light. Under the window would be a good place. Have the drain on the left side and table space on the other, with cabinet space above to right and left of the window. Use the same blue-green walls as breakfast room, above a tile dado and white muslin curtains.

The hall could be used for family portraits: Mirrors would, if placed to reflect light, brighten the hall in day time.

Use the same color of rug in the guest room as in hall, a clear flax or velvet. Have walls pistache green with the same trim or else ivory trim with cream ceiling. Buy a pale pistache green painted set of furniture lined with mulberry—a daybed, by all means for a small guest room, a dressing table, or a vanity bureau with the long mirror, or if this is too costly, have a mirror in the door. Buy also a convenient writing table and a chaise lounge of gray wicker of the chair and stool type upholstered in a Japanese cretonne in subdued tones but with the green background. Use ivory wicker with the ivory. Use the same cretonne for windows and daybed covering, provided the room is not too small. Use glass curtains of cream voile.

By all means paint your brass bed and golden oak furniture a gray, not too light in value. A ground of white paint might be necessary. The bed could be hidden by a slip cover. The walls could be light gray with gray trim and the hangings yellow or rose poplin with voile glass curtains. To the gray and yellow scheme could be added touches of rose in lampshade, pincushion or bureau candlesticks, or to the gray and rose touches of mauve or yellow, or both. Use a gray clear flax rug.

The covers of couches on sleeping porches could be of the same gray.
Advice by Mail
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ation and furnishing. Two dollars per room. Samples and
complete color guide.

ANN WENTWORTH
former Decorative Editor of
"The House Beautiful"
461 Fourth Ave. New York City

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4062 Forest Park Blvd., St. Louis, Mo.
Filling the Fruit Cellar During a Sugar Shortage

Elsie M. Fjelstad

This year the canning questions are not "How shall I get the fruit that I want to put up?" or "Where will I get time to can all this fruit?" but "How can I fill my fruit larder when sugar is so hard to get?"

And this is a real problem. Somehow or other the housewife manages to "get along" with the minimum of sugar every day but to have preserving time come with sugar either unavailable or out of reach in price is a serious problem.

The following suggested ways of saving sugar may be helpful. They have been worked out at the Farm School of the University of Minnesota.

Canning proportions for syrups used:

For every cup of sugar substitute one cup of honey or one and two-thirds cups of corn syrup.

<table>
<thead>
<tr>
<th>Thick</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 c. corn syrup, white</td>
<td>⅛ c. sugar</td>
</tr>
<tr>
<td>½ c. sugar</td>
<td>⅛ c. corn syrup, white</td>
</tr>
<tr>
<td>1½ c. cold water</td>
<td>¼ c. water</td>
</tr>
</tbody>
</table>

Thin

¼ c. sugar
1 c. corn syrup, white
3 c. water

Sugarless Jelly

If the strained juice is thin, it should be boiled down until it is the consistency of cream. For each cup of juice, measure out three-fourths cup of honey or syrup, or combination of both,—the best results are obtained from half syrup and half honey. Boil the syrup alone as long as is possible without scorching, to evaporate the water present. If the sweetening and juice are boiled long together, a syrupy jelly is apt to be produced. When at the proper consistency have the fruit juice boiling, pour it over the syrup and cook until the usual tests for jelly are obtained.

Orange Marmalade

Two large oranges Two lemons
Nine cups water Eight cups white Karo syrup

Grind the fruit through the food chopper, add water and let stand for about 24 hours. Boil 25 minutes and let stand 12 hours. Add Karo, boil to 220 degrees for about three hours.

Apricot Marmalade

Two pounds apricots
Two pounds syrup—equal weight of Karo and sugar
One-fourth teaspoon cinnamon

Soak fruit and cook until soft in the syrup to which the spice has been added.

Preserves

For acid fruits—
Use,—for every pound of fruit:
One scant cup syrup
Three-eighths cup sugar
One-half to one-fourth cup water

Use,—for every five pounds of fruit:
Four and three-fourths cups syrup
Two cups or one pound of sugar
One to two cups water
This Plaster Will Never Crack or Fall

The plain plastered walls which add so much to the charm of this room will never be marred by cracks or disfiguring streaks. This is because all the plastering was applied over a base of Kno-Burn Metal Lath.

The use of Kno-Burn Metal Lath not only contributes to the interior beauty of a home, but it makes it FIRE SAFE. You should know more about Kno-Burn. Send for a copy of "Fireproof Construction," free.

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Wore Better Than Paint

Biloxi, Miss., Feb. 25, 1916.

"My residence, completed two years ago, stained brown with green roof with your stain, in as perfect condition as the day stained. Even the salt spray from the fearful storm of Sept. 29th did not injure one place. The white columns had to be repainted, as numerous houses, painted on the beach, were."

J. D. ODENEAL.

Cabot's Creosote Stains

wear as well as the best paints in all climates and better than paint in the south because they cannot crack and peel off as paint does there. The colors are soft and rich, much handsomer than paint, and the Creosote penetrates and preserves the wood. You can afford to use Cabot's Stains.

Cost Half as Much as Paint

You can get Cabot's Stains all over the country. Send for stained wood samples and name of nearest agent.


KEITH'S MAGAZINE 117
For medium sweet fruits—
For every pound of fruit:
Two-thirds cup syrup
One-fourth cup sugar
One-fourth to one-half cup water
For every five pounds of fruit:
Three cups syrup
One and one-fourth cups sugar
One to two cups water
For sweet fruits—
For every pound of prepared fruit:
One-half cup sugar
One and one-third cups syrup

The following rules for sugarless sweets may also come in handy:
One cup of sugar equals one cup of maple syrup
One cup of sugar equals one cup of sorghum
One cup of sugar equals one cup of honey
One cup of sugar equals four-fifths of a cup of Karo syrup
The liquid called for in the recipe must be reduced one-fourth for every cup of honey or syrup substituted. Honey is acid. Use one-sixth teaspoon of soda to each cup of honey.

In recipes in which baking powder is used, reduce the baking powder ¾ teaspoon for each one-sixth teaspoon of soda

Cake without Sugar
1/4 c. fat
2 c. corn syrup
2 eggs
3 c. flour
Cream fat and add the syrup and eggs. Mix well. Add the milk. Sift the baking powder and flour together. Add slowly to the mixture and beat. Bake in a moderate oven as a loaf or layer cake or small drop cakes. One-fourth cup of raisins added to the batter gives more flavor and sweetness.

Icing
3/4 c. corn syrup
1 egg white, beaten stiff
Put materials together in double boiler and cook for seven minutes, beating all the time. It should be thick and white as marshmallow filling.

Yellow Cake
5 lb. fat
1 c. syrup
3/4 c. sugar
1 egg
2/4 c. sour milk
2 1/2 c. flour
1 1/2 tsp. baking powder
34 tsp. soda
1 tsp. vanilla

Cream the fat and add the syrup and the sugar. Add the beaten egg, milk, sifted dry ingredients and the vanilla. Bake the cake in a loaf or in two layers. May be put together with a fruit filling.

Dried Fruits
Add syrup when fruits are about done. The amount depends upon the taste, ordinarily about 1/2 c. syrup to each quart of cooked fruit.

Cranberries may be sweetened with 1 1/2 to 2 c. for each quart of cranberries.

Pineapple Sherbet
1 c. syrup
2 c. boiling water
White of 1 egg

Combine ingredients with exception of egg white. Cool the mixture and freeze it. Add the beaten egg white just before the mixture freezes.

The following table may help you to know how to store your vegetables so you may have the use of them throughout the winter.

Potatoes, carrots and beets—Decay if atmosphere is moist; shrivel if atmosphere is dry. Pack in bins or boxes and cover with a little sand.

Parsnips—May be left in soil all winter or dug up and buried in soil or sand for winter use.

Onions—Require a well-ventilated rather dry room. Should be kept as near freezing as possible.

Cabbage—Hang up by roots or cut roots off, wrap heads in paper and lay on shelves. Watch carefully and remove on first signs of decay.

Squash and Pumpkins—Place in a well-ventilated, airy storage place. See that they have a stem stub left on them.

Parsley—Set parsley in boxes, pots or tin cans and place near the light in a room that never freezes.

Rhubarb—Allow good sized roots to freeze in some out-of-the-way place such as the north side of a building. About Christmas time, place in a box of soil with just enough to cover the roots. Water thoroughly and place in a warm dark cellar. Stalks will grow from these stalks and will furnish rhubarb throughout the winter.

Fruits—Apples can be stored well. Do not put them in a vegetable cellar as they readily take up odors. Store in boxes or barrels in a cool part of the cellar or basement as possible. Wrapping in paper helps as the paper absorbs any moisture from decayed fruit.
Does Cypress "The Wood Eternal" Last?!
Study These Photographs of an "Ingrowing Fence"

Below is a glimpse down a country highway ("de big road," as Uncle Remus called it) near Monroe, Louisiana. That fence has no posts. It was built by forcing split Cypress boards between saplings. This occurred so many years ago that nobody knows when it was, nor who was the labor-saving genius who did it. Then the trees grew, and grew, and grew.

NOW, PLEASE, study the larger photograph and see in detail how the fence looks today. Note the size of the tree, and how deeply are embedded the ends of those old Cypress rails—no one can tell how deep they extend in. Note also, how weathered they are, yet they ring as true and sound under a hammer as though just hewn. Were those old Cypress boards somebody's money's worth? Why should not YOU do as well with your lumber money—whether you are building a beautiful home or just patching up the old place? (USE CYPRESS.)

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The Back Yard Meat Shop
Eunice Marcia Smith

Are you worrying about your meat bill? Well, how about a nice broiled saddle of rabbit for dinner this evening—or perhaps a savory dish of baked rabbit en casserole? Yes? Well, go out and dress that fat young buck you'll find hanging by the kitchen door, and then try and be patient until dinner time.

Doesn't that sound good to you, Mr. Hungry Business Man, and to you, Mrs. Housewife? Especially when you consider that the very bunny that is presently going to give off most tantalizing odors from the gas-oven was fattened wholly upon waste from the garden and grass cuttings. And in these days, when even a moderately conscientious butcher has to blush when he admits the price of pork chops and when every cut of beef seems to come from the original cow that did the high jump over the moon, cheap meat production means something.

The rabbits especially adapted for home production are the Belgian, the New Zealand Red and the Flemish Giant. The rapidity of production of these animals, the cheapness of raising and the fine quality of the meat makes these breeds very profitable for table production. The meat is as delicate as chicken, and the hind quarter of the rabbit is nearly as white as the breast of poultry.

Oh no, you don't have to live in the country to raise your own meat supply. No, indeed. One or two does and a buck will supply your family with plenty of inexpensive and nourishing meat, and will leave some over to dispose of to the corner meat shop. A hutch 2 by 2 by 6 feet will hold adequately an adult rabbit and litter. As these hutch can be placed in tiers of three, very little space is required.

The hutch are simply made. Your small son, with a dry goods box and a few nails and hinges, can make a very satisfactory hutch. One-third of the hutch should be partitioned off as a nest box. The front of this should be provided with a wooden door. A round hole seven inches in diameter should be cut in the partition between the nest box and the rest of the hutch, which should have a wire meshed door to keep out rats.

In purchasing your breeders, be sure your stock is healthy. A Belgian or New Zealand doe wanted for breeding costs from $3.50 to $10. These does should be at least seven months old. The Flemish doe should be ten months old before being bred. Never breed stock over two years old. Bucks cost from $2 to $8.

A good doe may safely produce four or five litters a year. About 45 pounds of meat in six months can be produced from one doe.

During the summer months, the cost
of feeding is negligible. Beet and carrot tops, cornstalks, grass, weeds and old lettuce make good food. A bit of dry hay once a day is desirable. In winter and early spring, the animals should be given oats, hay or roots. Dry bread and waste from vegetables is good also. Three ounces of oats in the morning and two ounces of hay in the evening makes up a winter feed for an adult. A bran mash with apple peelings makes an occasional change of diet.

The best time for killing rabbits for the table is at the age of four or five months. Flemish rabbits weigh about five pounds at that age. New Zealand and Belgian rabbits will weigh four pounds, live weight. About one-fifth per cent of weight will be lost in dressing.

In cooking rabbits, any method which will tend to dry out the meat should be avoided. Rabbit may be cooked almost any way that chicken is prepared.

To Peel Oranges.
Pour boiling water on oranges and let them stand five minutes. This will cause the white lining to come away clean with the skin, so that a large quantity can be quickly sliced for sauce or puddings.

Nicked Dishes.
Most housewives would rather have a dish broken than one chipped and nicked. When washing dishes, if a towel or piece of cloth is put in the dish drainer it will prevent the dishes from striking against each other and may prevent their becoming nicked. Little rubber mats for this purpose may be purchased.

Seasoning.
When you boil chicken or fowl try adding a dash of sugar, also celery salt. Some housewives add a little sugar to most vegetables after taking from the tin can in order to make them taste more like fresh vegetables.

Browned Potatoes.
If a little flour is sprinkled on potatoes before frying they will be a delicious golden brown when done.

To Shell Nuts.
It has been suggested that pecans and walnuts may be shelled more easily by pouring hot salt water over them and letting them stand awhile.

Fall painting
Its importance

When you think of putting off Fall painting, you should think of Winter's wearing wrestle. It pinches—it penetrates—it loosens and breaks down. It is the season of destroying.

Fall painting means protection against Winter. A building on which one coat would do this Fall is likely to need two coats next Spring. Fall painting saves your paint that's on. Saves your buildings. Saves the extra coat of paint.

Some paint is better for Fall painting than others. Why better is told in our "Happy Happening Book." Send 10c. in stamps for it.

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Minneapolis Toronto

Paints
When to Paint

PROBABLY in no other way can the value of property be enhanced so materially and at the same time so easily as with a coat of good paint. A few years ago an inquiry made in the Middle West as to the value of paint upon farm buildings developed the information that bankers would lend from 5 to 50 per cent more on land where farm buildings were well painted and kept in good condition than on land where they were not kept painted, according to Henry A. Gardener, of the Educational Bureau of Paint Manufacturers' Association. It was maintained that the painted buildings were an indication of thrift, and that a thrifty man was a good client and a safe risk.

When to Paint.

Spring time brings the feeling that everything must be made fresh and clean, so there is usually much painting done in the spring. This has its advantages as it gives a freshness before the trying days of the summer come on. At the same time April showers are not good for a painting time. The dry period during the fall months is said to be the best time for painting, as the house is given protection from the severe weather of the ensuing winter. As a matter of fact, however, the time to paint is just before the surface begins to require repainting, regardless of season, providing the weather is clear. Paint applied during rainy weather does not give the service to be expected when it is applied during dry weather.

Wearing Qualities.

The serviceability of any paint should be judged, not only by the durability of the painting job, but also by the surface which it leaves for repainting after a period of from four to five years. Inferior and cheap paints will crack, check, and scale to a rough surface. Such defects show through the next coat of repainting, seriously affecting their strength and detracting from the beauty of the job. High-grade paints weather gradually without showing marked defects, and when repainted present a uniform surface which will absorb and amalgamate with the freshly applied paint.

Tests made in all parts of the country tend to show that high-grade paint will give satisfactory results under all conditions of climate, whether in the coastal regions, in the mountains, or on the plains.

General Rules for Exterior Work.

Some general rules on painting the exterior of dwellings are given here:

No paint or other finishing material should be applied in damp weather.

The interior plaster work of a new structure should be allowed to dry thoroughly before applying paint to the exterior of a building, as the water drawn out through the wood might cause blistering.

The surface of the wood must be free from moisture.

Weathering of some types of wood previous to the application of the second and
"VARNISH WISELY OR YOU’LL VARNISH TWICE."

I’ve known people to use cheap or unsuitable finishes that went shabby in a few months, so that an entire home interior had to be done over. I always use Berry Brothers' Varnishes, Enamels and Stains, because they look well until it is about time to rebuild.”

The use of “Berry” Finishes is the direct road to artistic interiors that last.

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BERRY BROTHERS INC.
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Detroit, Michigan
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Edwards' Metal Shingles

Will Outlast Your Building

Rot-Proof—Fire-Proof—Lightning-Proof

Edwards' Metal Shingles
in Ten Popular Patterns

Edwards' Metal Shingles are attractive, durable, water, wind and fire-proof. There's a design to suit every taste. They are easily laid; the only tools needed being hammer and nails. And the patent Interlocking Device provides automatically for expansion and contraction.

Descriptive literature and samples on request

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The World's Largest Manufacturers of Metal Roofing, Metal Shingles, Metal Spanish Tile, Metal Ceilings, Metal Garages, Portable Buildings, Rolling Steel Doors, Partitions, Etc.

Include Plenty of Porch Space in Your New Home

Many families, whether living in the city, country or at the lake side literally move out of doors during the pleasant seasons of the year—they live, eat and sleep there—making their porches their summer homes. Properly furnished, the porch becomes one of the most worth while features of the attractive home.

For protection against the sun and weather AEROLUX Ventilating Shades are an ideal equipment and are suitable for cottage, bungalow or mansion.

The Aerolux Booklet, picturing porch possibilities will interest lovers of comfortable homes. Send for it.

THE AEROSHADE COMPANY
259 Oakland Ave. Waukesha, Wis.

AEROLUX
No-Whip Ventilating Porch-Shades

third coats of paint is sometimes advisable in order to allow thorough seasoning and drying out.

If the wood has been previously painted, all old, loose paint that may sometimes be observed should be removed with a wire brush.

Concrete Sash Weights.

A new type of sash weights for double hung windows has been put on the market. These weights are made of concrete, only one weight in each weight box, and that connected to both sash. Through a pulley in the top of the weight, around which the sash cord passes, one cord only is used, one end of which is attached to each sash. This prevents the possibility of weights rattling together, or of the cord jumping the pulleys when the weight of a sash is suddenly removed. The single weight instead of two cuts out handling of a larger number of pieces and makes only half as many knots to tie in the installation, as well as relieving, even in so small a matter, the metal needed elsewhere.

One important feature is the wedge shaped tongue and groove which enters easily, drives up snug and insures a perfect face at all times without after smoothing, an advantage that is not obtained by any other manufacture.

Our method of air-seasoning and kiln drying has stood the test for thirty years.


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Kees Metal Corners

Make a mitered finished corner that's superior to the slow, expensive way of fitting and mitering. Made of heavy gauge galvanized iron. Accurately shaped to fit over the ends of the siding and are pierced to take nail easily. Chemically treated surface holds paint or stain as readily as wood.

Closes the Way to Decay
Kees metal lap siding corners are absolutely weatherproof. Lower edges overlap and make a tight, joint. Once applied, can't possibly spread or open. Safely yourself—write your hardware or lumber dealer for them or write Dept. 100.

F.D. Kees Mfg Co. Beatrice, Nebr.
Built for Modern Home Needs
The Kewanee Lighting Plant, simple in construction, easy to install and operate, provides electricity for the electric iron, vacuum cleaner, washing machine, electric churn, grindstone and separator. There is also a Kewanee Water Supply System, or a Combination System supplying running water and electric light in one plant, and a Kewanee Sewage Disposal System.

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New England Frame House—
17th Century.

One of the best preserved houses of the earlier Colonial Period in New England is the "Parson Capen House" in Topsfield, Mass., built in 1683 by the Rev. Joseph Capen and described in the latest bulletin of the Society for the Preservation of New England Antiquities. The house is now owned by the local historical society and was carefully restored in 1913 by its secretary. This house was well built, even for its day, and is unusual, even among other existing dwellings of that period. The second story widely overhangs the first in front, the attic floors project at either end and all are supported by ornamental wooden brackets. The overhang is a form of timber construction common in old English work and seems to have been done solely for its architectural effect. Beside the front door and under the gables are brackets that help to support the overhang.

The framework of these houses was usually of oak, though sometimes of pine, and made of heavy timbers mortised and tenoned together and held in place by wooden pins. Their joints were hewn with much skill by men who worked as their medieval forefathers had done. The foundation timbers rested on an underpinning of field stones, laid without mortar.

The timbers of the framing in the Parson Capen house are of course very old, and the original newel and turned balusters of oak are still in place. Much of the interior woodwork, however, and all of the shingles and clapboards are restored. Under the northern ends of the "summer beams," which are among the curious features in the Parson Capen House, being girts spanning the rooms, is incised with a chisel the date, July ye 8th, 1683, so that the exact date when the "frame" was raised is known.

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# KEITH'S MAGAZINE ON HOME BUILDING

## CONTENTS FOR OCTOBER, 1920

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genesis of the Bungalow—R. D. Count</td>
<td>133</td>
</tr>
<tr>
<td>The Modern Dining Room—Marion Brownfield</td>
<td>137</td>
</tr>
<tr>
<td>No Waste Space</td>
<td>139</td>
</tr>
<tr>
<td>Garden Work For October—Adeline Thayer Thomson</td>
<td>140</td>
</tr>
<tr>
<td>Simplicity in Furniture</td>
<td>141</td>
</tr>
<tr>
<td>A Bungalow With a Recessed Porch</td>
<td>144</td>
</tr>
<tr>
<td>A Home With a Broad Frontage</td>
<td>145</td>
</tr>
<tr>
<td>Six Rooms on One Floor</td>
<td>146</td>
</tr>
<tr>
<td>A Home on That Vacant Lot</td>
<td>147</td>
</tr>
</tbody>
</table>

## DEPARTMENTS

**Inside the House**
- Decoration and Furnishing—Virginia Robie, Editor
  - Concerning Curtains                                                 | 150  |
- Answers to Questions                                                 | 154  |
- Table and Food Values
  - Making Money Last—The Budget—Elsie M. Fjelstad                      | 158  |
- Heating Notes
  - What is Fresh Air?                                                  | 162  |
A well-designed Colonial entrance
Genesis of the Bungalow
R. D. Count

The veteran builder laid aside the evening paper and regarded the eagerly questioning faces of the young lovers with an amused smile.

"Where did our present day bungalows originate?" he said, repeating the question they had propounded. "That question can hardly be answered explicitly, yet their history may be traced in a general way if one will use a little imagination."

Noting the absorbed interest of his modest audience, he relighted his cigar and, blowing a smoke ring at the drop light, continued:

"'Bungalow' is an imported word, as well as the style of architecture to which it is applied, and comes originally from India and not from the Pacific coast, as I have heard it asserted. Whether the word itself is a native term or whether it has been anglicized I have been unable to learn but it is applied by natives and foreigners alike to the low, one-story residences of that country whose roofs, usually thatched, are extended beyond the eaves to form verandas. These verandas are usually built around three sides of the dwelling.

"The natives of India evidently evolved the basic style of their bungalows for two very good reasons. First, these low structures with their bamboo walls and thatched roofs are springy and resilient; capable of withstanding unharmed the not infrequent seismic disturbances which would cause walls of stone or brick to crumble and crash. Another reason is found in the verandas which afford a grateful shade and a certain degree of coolness from a sun which is usually inclined to be over-zealous.

"The introduction of the bungalow type into this country seems to have first been made in the western states, particularly in Southern California, where conditions as regards a constant and fervent sun are very similar. California also has earthquakes, though happily they are seldom severe."
"It was the Franciscan monks led by Fra Junipero Serra who, as you will remember, pioneered on our western coast and built the famous chain of missions from the Mexican border to San Francisco. They were the first to use the low, rambling one-story dwellings bordered with the shade producing verandas; though—conforming to the style of their native Spanish monasteries—these verandas were usually built around four sides of an inner court or patio."

The old gentleman paused and regarded his hearers quizzically. "There is an obvious reason, no doubt," he observed dryly, "for this acute interest in bungalows so possibly some photographs will not be out of place." Reaching into the drawer of the library table, he drew forth several pictures and spread them out under the light.

"You will see by the first picture," he continued, "that the mission style still prevails to a certain extent, but mostly as a fad which is almost wholly confined to the mission country."
"Later settlers, coming after the Franciscan padres, found much of merit in the bungalow design, and adopting the style, modified and improved its lines, added improvements and eliminated faults until today a western bungalow is a thing of beauty; a cozy one-story dwelling of three to seven rooms with all modern conveniences; an ideal home for a small family in a semi-tropical climate. In fact, so popular have these little homes become that their fame has spread into other states and visitors to that section, enamoured of their exterior beauties and interior coziness and efficiency have, upon returning to their native states, introduced the word 'bungalow' in toto, and the architecture as closely as climate and environment would permit.

"Especially designed for the small family or those with young children in a climate where most of the daylight hours during the entire year are spent in the open air, it meets all requirements in an ideal manner and the young matron who has grown to womanhood in an eastern house of two or three stories will find the bungalow with its absence of stairs, its convenient floor plan and many novel built-in features a blessing and unmixed joy in the manner in which it lightens household burdens.

"That brings the history of the bungalow to the present time. It is a type which is recognized at once wherever it is seen, though there is a wide variety of detail; but even as a pansy is a pansy in spite of its variegated color schemes, so a bungalow is a bungalow whether its style be mission, Italian, American, or just a vine-covered, cozy home."

Now here are photographs of some more bungalows that have been built about here, that are convenient, up-to-date homes. They have low, wide projecting roofs, but the space above the ceiling is ventilated so they are cool. This vine-covered one is attractive. People say that it is only in California or in the extreme southern states that they can have really vine-covered houses. I believe that it is simply that they don't care enough to go to the trouble to select vines suited to the climate, and then treat them right. This one with the open terrace on the corner is good for this climate because..."
one can have the sunshine all winter, and yet be protected from the wind.

These other bungalows are more like they build in the East, where they expect to shut out the weather. They both have big porches, and are pretty well supplied with windows, and this last one especially is set well above the ground, as a house must be if there are to be windows that will give light for a laundry and basement rooms.

Yes, the bungalow is a pretty good kind of a home to build, especially when it is a little home that you are wanting, and one where the work in the house will be easy.

---

**The Modern Dining Room**

Marion Brownfield

The modern dining room is likely to be somewhat composite in style, so many influences have developed it. The dining rooms of our forefathers were apt to be informal both in type of room and furnishings, while after a period of fifteen or twenty years of quite severely conventional dining rooms, there seems to be along with the revival of period furnishings, a reaction toward informal rather sitting room dining rooms. Some rooms of this type have been developed, recently, via the cottage and bungalow type of architecture. So far has the tendency developed toward making the dining room "livable" that besides desks, couches and fireplaces many an up-to-date eating room has a phonograph with a case carefully chosen to match the other furnishings in wood and period design.

The first real consideration in building any dining room is the exposure. Sunshine, light and fresh air have much to
China cupboards on either side of the glass door

do with making meals enjoyable! And windows planned to take in a pretty view make just bread and butter a feast! Many builders seem to forget that dining room windows have any other use than to fill in a chink above an elaborate buffet. Of course where a narrow city lot makes privacy essential, the high window has its place, but even then larger windows such as are used in living rooms may be thinly curtained, and certainly do add to the sum total of cheerfulness and attractiveness in a dining room.

After the exposure has been thoughtfully planned the size and shape of this room is the next feature. The use the room will have, naturally influences this. Where a breakfast room is used for brief informal family meals, the dining room is usually reserved for dinner, Sunday, and company occasions where more elaborate arrangements are carried out. In this case, a room sufficiently large for entertaining a number of guests is commonly desired. While if a dining room is used every meal time a popular size—neither too large nor small to hamper the woman who does her own work or employs just one maid—is a size slightly bigger than the 9x12 rug often used—say 12x14 feet. However if the conventional rectangular shape of this room can be modified with a bay, a window seat or nook, it is sure to be much more charming.

The finish of woodwork and walls comes next. Just now, white, cream or very light gray enamel are probably the most popular finishes for dining room woodwork. This finish is especially adapted to making the room light and cheerful as well as attractive with mahogany or walnut period furniture. However some of the fumed oak, redwood, or other hard woods, perhaps with a walnut finish, are equally beautiful and in good taste where they harmonize with the dining room furniture. As a rule they cost perhaps a little more than the popular cream enamel that even a home craftsman can apply.

Paneling, wainscoting, tinting and papering have all had their vogue as wall finishes for the dining room. A combination of wainscoting with tinting or
papering above is in general favor at present, although a simply papered wall in tapestry or scenic effect is much used in the revival of colonial dining rooms.

The dining rooms in both of the illustrations are good examples of Colonial, simply and tastefully carried out in detail. Furniture, wall paper, fireplace and mirror, china cupboards and light fixtures are all harmoniously adapted reproductions of the Colonial period.

The light fixtures, it should be observed show some of the newer notes in the dining room today. Those in the Colonial dining room cleverly hold in their midst the indirect bowl fixture now considered the most economical and generally efficient method of illumination. About it are the pendant fringed lamps so popular in the long ago.

Both for convenience and good looks, the dining room may or may not have "built-ins"—namely, a buffet and one or more china cupboards.

A niche built in for the ready built sideboard is rather interesting as it permits pleasing variations of the conventional type. Some of the newest built-in sideboards imitate the movable buffet by having beneath the built-in drawers, four legs of design similar to other buffets. The tops to these affairs are lower than the former type of built-ins. They contain mirrors and indeed, except for being finished in light enamels are not readily distinguished from the movable article of furniture. The china cupboard in the first illustration is rather different built on each side of the entrance to the room, instead of where they close the vista from the living room. The china cupboards in the last illustration harmonize artistically with the general Colonial character of the room. The square paned glass of china cupboard door also harmonizes with the French doors that are both practical and pretty for any dining room where heat must be conserved. The glass doors give the sense of privacy and spaciousness at the same time.

A good Colonial dining room

A color scheme for a dining room is often a vexing one. The day of the red, and then the Delft blue dining room, is over. Instead, the modern tendency is toward a rather quiet neutral or pastel effect, restful at all seasons—summer or winter. For the small house tapestry papers in dull pinks, yellows, greens and blues massed with delicate grays are perhaps preferable to the scenic papers employed so strikingly with period furniture in the large handsome dining room of a palatial mansion. It is just the same with furniture, the simpler designs are apt to be more enjoyable for a long
period, than elaborate carvings, or even the gayly painted cottage sets. While the latter have an undeniable fascination when first seen, they are not so livable in the long run, as the plain darker finishes that will permit a change of draperies, rugs and wall paper, almost any time desired.

No Waste Space

If you want an economical small home—a home with personality and distinctive style—this four-room house offers an ideal, compact arrangement with not an inch of waste space.

Even though small, this home will hold its own on a street with larger houses. Its lines are simple and proportions good. The windows are attractively grouped. Five windows in the living room give plenty of light and sunniness. The entrance door is delightfully individual. Notice the quaint hood above and the hospitable seats on either side of the stoop. The overhang of the roof lends an air of comfort and protection and makes the home look larger than it really is.

You enter the home through a small vestibule. This is advisable, where a formal entrance takes the place of a front porch.

A bed-room on the front of the house opens directly from the hall. This also makes a good room for the man of the home.

Five grouped windows give you a combination living room and sun parlor.

Two bed-rooms and a bath open directly from a private hall. This is a good arrangement, not merely on account of privacy, but because of the variation required in temperature between the bed-rooms and living rooms. Open windows at night in these bed-rooms will not cool off the living room.
The month of October offers much joy to the lover of outdoor work; work that is not only most important to accomplish, but that is pleasant in the doing with so much exhilaration and spice in the air that only October knows how to provide.

October is the best month of the year for bulb planting. The earlier the bulbs are in the ground, too, the better will be the results the following spring. Bulbs must perfect strong root growth in the fall if they are to perfect a successful flowering display in the early spring time. When one sees the bright hued crocus, dainty white snowdrops, sky-blue scillas, deep yellow daffodils, jonquils, and narcissus aglow in all their loveliness in the early spring, the resolution is so often determined on that “next year shall find a host of these lovely flowers in our yard.” The matter, however, is generally promptly forgotten until the early spring favorites are again seen spreading their colors in the golden sunshine. Now is the time to order bulbs—and set them as early throughout October as possible.

Crocus should be planted four inches deep; snowdrops, scillas, grape-hyacinths, and tulips, six inches; narcissus, jonquils and daffodils, eight inches, and hyacinths ten inches deep. No manure should be used at the time of planting as it rots the bulbs. A dressing of well rotted manure or fertilizer may be used with safety in the spring.

October is the month when most varieties of hardy plants and shrubbery may be safely transplanted, divided, and rearranged. A fine rule to remember regarding fall planting is that stock perfecting flowers in the spring and early summer, may be safely transplanted in the fall; whereas, planting varieties maturing fall blossoms should be left undisturbed until spring—their vitality being too greatly reduced in perfecting their flower display to withstand the shock of transplanting with any assurance of safety. In planting all kinds of stock, holes which are to receive the plants should be dug both wide and deep enough to accommodate the roots without crowding, and to have the crown of the plant at least...
an inch below the surface of the ground. When perennials are divided in the fall where they have become overcrowded, or when more stock is desired for planting elsewhere, it will be found if the work is accomplished in October, growth will not be impaired in the least and the newly set varieties will be almost as large and fine, the following season as the original stock. Spring set perennials are always more or less retarded in growth.

October gives away a veritable gold mine to the garden enthusiast in her wealth of falling leaves. It is positively a crime to burn leaves! And one never sees it accomplished without wanting to protest. Autumn leaves are exceedingly rich in vegetable matter and nitrogen—forces so valuable for plant life. Leaves are not only exceedingly valued to fertilize (digging them into the ground in the fall and leaving them to form rich leaf mold for spring use about the yard and garden), but they have no equal for mulching purposes—spreading them over the hardy plants in the fall. Such a mulch gives hardy stock protection against the severity of winter. The leaves should be spread two or three inches deep over the plants held in place by light boards, or sticks. I know a man—a most successful chicken fancier—who pays boys in his neighborhood a generous amount to bring him stores of dry leaves every fall to scatter in his chicken runs. He considers the leaves an invaluable acquisition in supplying insects for his chickens, and a veritable boon for them to scratch among all winter.

An October spaded garden or flower border, permits of better results the following spring than when accomplished at that time, because the fertilizer used becomes more rotted and better incorporated in the soil with the repeated freezing and thawing of the ground.

The month of October is the appointed time for "house cleaning," in the yard and garden. Spent flower stalks should be cut to the ground, that they may not prove unsightly throughout the winter months; weeds pulled, raked, and burned that they may not have a chance to seed; the lawn well raked, and rolled; garden rubbish removed and burned, and one's entire grounds put in order.

Simplicity in Furniture

Among the crafts, says Gustave Stickley, that of furniture-making occupies a very important place, since it ministers to one of the absolute needs of man—that is, the need of comfort—and since it is an adjunct, or rather a branch, of the building art, which provides the human habitation. Indeed, it is not too much to assert that as architecture expresses the great aspirations of
the times through the medium of public monuments and edifices, so the lesser building art reflects the every-day life and the more intimate thoughts of those who fashion and of those who demand. We turn to the belongings of Savonarola's cell, of the Spanish mission houses, of the Flemish and Tyrolean cottages, and the Colonial kitchens. And all these we prize, not because of the historical interest which attaches to them (although it is great), but because they express frankly, and in the proper materials, the essential qualities of a bed, chair, desk, table, or other object of this class. Nor can it be said that we who lack tradition and precedent are the sole, or even the most fervent, disciples of this structural movement. As the “sons of our own works” in all that relates to art and craftsmanship, we should naturally be the first to reject a long-exerted and oppressive influence, just as Colonists grown strong, break and cast off the yoke of the mother-country. But those who have been the most subservient to old ideas and fixed styles, those who long ruled the decorative and industrial art of the world with an unyielding policy, have preceded us in revolution. The structural idea appealed to the French innovators in the forms of natural growths, in the boles of trees, in the stalks of plants, and in the convolutions of flower-petals. But in artistic as well as political revolution, the French, or rather certain Frenchmen, were carried to excess and violence and we had Art Nouveau.

The revulsion to severe simplicity in cabinet-making has been criticised as pointing to a reversion to log houses and homespun, to a crudity of life incompatible with our actual ideas of culture. It is true that our severe and simple style
did err upon the side of crudeness. Yet this very crudity, absolutely structural, was a proof of vital power, in itself a promise of progress, since chaos, that is formlessness, precedes, never follows, crudeness, and since decadence is the natural sequence of over-refinement. Coming after the historic styles, the simple and structural arrests and commands attention, as it could not do did it resemble its predecessors or seek to compromise with them.

With time, the asperities of the structural style becomes softened. But again, this development must not come through conscious effort, the development, in order to be sound, must be gradual and moderate—altogether like that of Nature, which transforms the boy into the man.

But all comparisons laid aside, it must be said that in the lesser as well as the greater building art, the structural lines should be obtrusive rather than obscured. Such lines in cabinet-making declare the purpose and use of the object which they form, and are, in their way, as important as the contours which announce a church, an opera-house, or a business structure, Furthermore, these same lines must contribute to the decoration of the piece, which should result principally from such modification of the constructive features as will not impair their validity.

The final justification of the structural style of furniture-making lies in its treatment of wood as wood; it respects the medium with which it deals, taking full advantage of its qualities, yet making no demands upon it which it is not able to meet. The straight structural lines follow and emphasize the grain and growth of the wood. They draw attention to natural beauties, which in other styles are usually lessened, and sometimes wholly effaced or destroyed. Wood is designed to be cut, and metal to be molded; therefore, when the craftsman fails to recognize these separate and distinct methods of treatment he violates the intuitions of taste and the laws of logic.

It might perhaps be well to add one more point to this plea for the structural style in furniture-making, even at the risk of giving occasion for the censorious to ridicule the comparison of the small with the great, of an industrial with a fine art. But as democracy advances into the province of aesthetics, the question of relative importance, of major and minor, is less and less frequently raised. Or, perhaps, it were better to say that the question itself has suffered a change of base. It is no longer the class into which the work falls that stamps the thing created as distinguished or insignificant; it is the work itself which receives honor or meets condemnation, according to the measure of inseparable service and beauty, or of pure artistic pleasure that it gives. A small and fragile vessel of glass, a flower fashioned from enamels, are now honored, side by side, in the Luxembourg, with the modern world masterpieces of painting and sculpture. Therefore, it will not be considered unpardonable, as once it would have been, to present points of comparison between simple objects of household service and the temple constructions of the Greeks. The latter are at once the plainest and highest examples of the structural style. Their plan is a concept of the primitive man, and, even in their most advanced stage of development, the timber construction, so to speak, is never obscured. The columns, with their fluted shafts, recall more vividly than words can do the boles of forest trees with their grooved bark.

It cannot be too strongly insisted that in these temples the structural quality was never lost, never even greatly obscured to the eye; that the principle of construction involved was a question of weight and mass, and that from it resulted a whole, simple enough to be included in a single glance.
A Bungalow With a Recessed Porch

The garden and porch give a touch of the unusual to this house

E. W. Stillwell, Architect

BIT out of the ordinary is refreshingly interesting, when the design is well handled, and when the unusual is not over-emphasized into giving an effect of oddity. The design of the bungalow which is shown here borrows just a little from the Spanish in seclusion of the entrance porch, and the corner garden. The simple surface and almost severity of outline belong to this early style as typified along the Pacific slope. The garden is made a feature of the house itself, taking the place of ornament which is built on as decoration.

While the rooms are fairly large—the living room is almost 18 by 14 feet, and the smallest bed room is 13 to 12 feet, yet so compactly are they arranged that the bungalow itself is small. Space, convenience and accessibility are all compressed into a small area. Nothing is cramped, even the closets are larger than the usual size as they are 4 by 3 feet.

While the actual area of the kitchen is small, the fact that everything is compassed in small space makes it all the
more desirable, for it saves miles of steps for the woman who does her own work. There are places for everything and each within arm's length almost, of the range and the sink. The refrigerator is on the enclosed entry and the stairs to the basement. Notice, too, the extra closet from the entry. The basement is under all the house except the front bed room.

The two bed rooms connect with the living room, with each other, and with the bath room, through a hall only large enough for the necessary doors, but without crowding. In the bath room, in addition to the usual fixtures is a case of drawers under the medicine cabinet. The ceilings are 9 feet high.

The exterior is buff stucco applied to metal lath on a wood frame. The roof is shingled.

Building a home has to do with life and character itself. Beauty and convenience pay good dividends in making home life.

A Home With a Broad Frontage

SIMPLE in its design and construction the home shown in this design is economical to build, and practical. While it has a broad frontage, the main part of the house is 25 feet in width, with the porch at the doors to the porch on the other and the stairs directly in front. The long living room, dining room and kitchen fill the square of the plan for the main part of the house. These rooms are well arranged and open well together, with the fireplace so located as to serve both living and dining rooms. Wall spaces in the living room are arranged for the larger pieces of furniture. A book case is shown beside the fireplace.
Six Rooms on One Floor

IX rooms and a screened porch, all on one floor, giving very convenient living quarters, are shown in this recently completed bungalow. The photograph shows that the house is new. It is built of stucco with a concrete base, light in tint and with white trimmings.

The screened porch is unusual in its treatment and serves as the entrance to the house. It opens both to the living room and to the dining room. A cased opening separates the living room and the dining room. Another unusual feature of the living room is the fireplace alcove, built out from the living room,

A gray stucco bungalow

J. W. Lindstrom, Architect
with windows on both sides of the angle. The bay containing the fireplace is built out just far enough so the chimney catches the edges of the eaves of the main roof. Book cases are built beside the fireplace, well lighted by the windows in the alcove, and the fireplace ingle is most attractive.

Beyond the living room is a hall or passageway connecting all the other rooms. From this opens three chambers and the bath room, as well as linen and broom closets on the two sides of the hall. Two of the chambers are also connected through the closet, an excellent arrangement for family rooms.

The kitchen is well equipped in its working space. The refrigerator stands beside the door from the outside where it can be iced, if desired from the steps without going through the kitchen. Cupboards and work table fill the rest of this wall, the work table standing beside the refrigerator, a convenient relationship.

Stairs to the grade landing are beside the refrigerator, continuing to the basement.

---

A Home on That Vacant Lot

The time is coming, it would seem, when the man who owns a vacant lot in any desirable part of our communities will either build a home on that lot or will sell it to someone else who will build upon it. What kind of a home will be put upon that lot? Not too small a house, probably, for the families who can live comfortably in small quarters are established in the "small apartment" houses. When the time comes that these families in crowded quarters can expand into real homes it will be a time of great rejoicing for them.

Two homes are shown in this group: the first is a Dutch Colonial house, with its gambrel roof, and a latticed porch, which has four chambers on the second floor. The second has only two rooms on the second floor under the roof. Both
plans show a large living room, with a good fireplace, dining room and kitchen on the first floor. The special feature of the plan is the specially long living room, one end of which is filled with windows. The stairs lead up beside the fireplace. French doors separate the dining room from the living room. The kitchen is well fitted with cupboards. On the second floor are two chambers and a bath room, with closets under the roof.

Both houses have full basement under the entire house, with the usual equipment for laundry, vegetable cellar, fuel and storage as well as heating plant.

A Dutch Colonial Home

The exterior of the Dutch Colonial house is very attractive. It is covered with shingles, laid with alternating wide and narrow exposure of the shingle in an effective way. The entrance is through a stoop with heavy pillars. The floor plan has the central hall, typical of the Colonial, with the stairs set well back in the hall.

The second home is built of brick and stucco, with dark stained trim around the
On the second floor are three bedroom rooms and a bath room, with unusually good closet space.

The main floor is finished in oak, stained brown. The kitchen and the second story are finished in white enamel.

The house is built with substantial frame work and the outside finished in cement stucco, which is carried up and out on the under side of the cornice. This looks well and adds to the warmth of the house. An important thing in frame and stucco treatment that is often overlooked, is the fact that it makes a rigid construction against wind storms. The surface of the stucco is given a “pebble-dash” finish. All outside trimmings, including cornices, are painted brown, and the roof stained moss green. The windows are in groups, giving an attractive appearance to the house with its wide overhang of cornice and low pitched roof.
Decoration and Furnishing

VIRGINIA ROBIE, Editor

Concerning Curtains

LABORATE curtain effects, except in period rooms, should be avoided, and no curtain scheme can be successfully planned without reference to the room in question. Like the wall paper and the rugs, it must be made a part of the general whole. An inexpensive curtain chosen to accord with walls and rugs is better than the most costly fabric if out of harmony. Taste goes farther than money in every department of house furnishing and especially so in window treatment. Not only must the walls and rugs be taken into consideration but the trim of the room also. Light curtains with dark walls and woodwork produce an unpleasant contrast; on the other hand dark draperies when the walls and trim are light are equally out of place.

In many rooms a single curtain the colors of the walls produces the best effect; again a net next the glass with an over-curtain gives a better result. With light woodwork, a dark paper and white curtains, an over-curtain matching the paper will bring trim and walls into harmony, but we would emphasize the decorative error of very light woodwork and a very dark wall except under unusual conditions.

In no feature of house furnishing has greater improvement been made than in window treatment. When we compare the curtain of to-day with the millinery effects of the "brown-stone front" period we may believe that both simplicity and sanity have been attained.

The brown-stone epoch is associated with a rather ponderous style of architecture and a decidedly ponderous style of interior decoration. A ponderous curtain is a failure. The windows of the brown-stone mansion were not always curtained alike, but a scheme somewhat like this was "good form"; next to the glass, a lace curtain, its mission to make a uniform exterior and to shut out the vulgar world; next to the lace a shade, sometimes two shades, one to be seen from within, one to be viewed from without; then came the real curtain of elaborate, and often beautiful, lace. Over this foundation of lace over lace came a "hang-
ing.” If the room were hung in brocade, the hanging was often of this material; if velvet pleased the decorator’s fancy, velvet was used. To make the hanging a little more impervious to the sun rays it was lined, and to make it a little more ornamental it was decorated with a lace applique. It was a very courageous sunbeam that penetrated this mass of lace health, were very expensive. Three hundred dollars a window was a mild estimate. Bungalows and small country houses might have been built for the sum spent on window decorating.

In any curtain scheme the amount of light in the room must be taken into consideration. If your architect has disre-

and velvet. Few beams passed the outer layers, and the consequence was that many people were ordered to the south of France when all they needed was a curtain lecture. But the doctors never thought of the curtains, which was well for the decorators.

These monumental draperies, besides being ugly and really dangerous to regarded what Joy Wheeler Dow calls our greatest inheritance—sunshine—your room is probably dark. Curtain the windows in the thinnest material possible. A transparent yellow will sometimes solve the window problem as nothing else will. It will give a suggestion of sunshine when a white curtain will suggest a perpetual thunder-cloud, but it must be
American print in shades of gray or white and yellow

in harmony with the color scheme of the room. Supposing that the room is well lighted, and that it is the main room of the house, now called "living room" in preference to "parlor," which is stiff, and in "preference" to "library," which is not always applicable—how curtian the windows? There are two general rules; one makes for harmony, the other for variety. The first calls for a curtain matching the walls in effect, a plain material if the walls are plain, a figured material if the walls are figured. The other reverses the scheme and calls for figured curtains if the walls are plain, and plain curtains if the walls are figured. Sometimes better results are gained by one method and sometimes by the other. In a room where there are books in colored bindings oriental rugs, pieces of pottery in varied tones, the plain curtain is usually best—whether the wall be plain or figured. In a room so much in use as a living room the plain wall is also apt to be more satisfactory than the figured one. If the walls are green, golden brown, tan, buff, Venetian red, or old blue, and the curtains match them exactly, there is a certain dignity about the entire apartment which is not obtained with the use of figured material. The plain material may be transparent or quite the reverse, but the harmony is nearly the same. Raw silk is a delightful curtain fabric. It washes well, and frequently looks better after repeated washings. Serge is another excellent thing for living room windows. Casement windows admit of but one

Valance and side hangings of figured material over transparent net
Colonial dining room with valances

curtain scheme, yet these pretty, many-paned openings often cause much perplexity. "How shall I curtain my casement windows?" is a question often asked. "Shall I use shades?" "Can I curtain them without rods?" Never shades if it is possible to do without them. Rods are necessary if the windows must be curtained, but occasionally curtains can be dispensed with altogether. Sometimes one rod is used for a row of casements, but this is possible only where the windows open outward.

As a decorative window feature, the valance has claims to our consideration. Two illustrations show the valance, and a hint of its effectiveness may be gained. One picture shows a living-room and suggests how decorative a figured material may be when used in a simple way. The valance and side hangings are of linen in an attractive pattern. The room is in a country house where rather gay effects are permissible.

The real purpose of the window curtain is to regulate the amount of light admitted to the room, and a curtain so arranged that it cannot be drawn backward and forward at will is but a meaningless accessory. It was not until the beginning of the last century that curtains were used without regard to their practical purpose. The window hangings of the middle ages and of the Renaissance were simply straight pieces of cloth or tapestry hung across the window without any attempt at drapery, and regarded not as a part of the decoration of the room, but as a necessary protection against draughts.
Wall Board for the Interior.
A. S.—We enjoy your magazine very much, especially your "Inside the House" Department. We are building in the suburbs. There are no trees near the house. It will be of gray siding with white trim. The stone work will be of field stone set in cement. We are using wall board for entire house. In the living room, which faces east, I thought I would use gray walls, ivory woodwork with walnut or fumed oak stain; floors, waxed and polished. Should paneling for wall board be finished ivory or stained like doors?

I had thought of using a gray rug with narrow black border, curtains of cream net with mulberry overdrapery, and tapestry furniture in mulberry and old blue. If I used this scheme for the living room, could I use blue for dining room, with same walls and woodwork, blue draperies and blue rug? What should be on the French doors dividing these rooms?

In the library I will use fumed oak furniture. What should the walls and woodwork be, including wall board paneling? Would you use the same woodwork for all the bedrooms? The wall board paneling strips worry me in the color schemes. Bath room will be white and blue, the kitchen in browns and yellow.

Ans.—You have quite an extensive interior to plan—a good deal of space. Your own ideas are, in the main, excellent. The dividing strips of the wall board wall paneling should be painted the same color as the panels, except, perhaps, in the case of the library, when it might be desirable to emphasize the paneling instead of minimizing it. For this room we would suggest golden brown for color of wall panel with the strips stained like wood of doors and furniture. Pale tan ceiling.

Instead of gray walls for living room we would have pale, soft tan—not a yellow tan, but grayish in tone, as this will harmonize better with the walnut or fumed oak doors and furniture. The rug, too, can be a grayish tan. The mulberry hangings of tapestry will be excellent. On the French doors you can either use shirred net like the curtain over the glass, or a paler shade of thin blue silk on the dining room side of the doors, nothing on living room side. We like the old blue for dining room and here we would have the walls the same grayish tan.

Yes, we would paint all bedroom walls deep ivory, ceilings lighter tone. It would be pretty to use blue draperies,
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rug, etc., in one bedroom, and rose in another. Back bedroom would be pretty with curtains of chintz, yellow roses and brownish leaves.

**A Large Living Room.**

G. Y.—Will you kindly answer these questions concerning my living room? I am sending the floor plan and wish to know if 20 feet by 28 feet is too large for my living room where the staircase is in it, doing away with a hall? The ceiling is 8½ feet high.

My woodwork is to be white, and tan or brown paper on walls. Will you suggest the most suitable furniture for living room and shall I be able to use over-curtains of silk? I wish my dining room in blue. If blue wallpaper is used, can I use over-curtains.

Ans.—The living room would not be too large, especially with the staircase. The fireplace projection will take up about 3 feet, including hearth, so that the floor space between will be only about 12 feet.

The brown mahogany furniture with antique cane panels would be delightful for this room. You will need a davenport placed in front and to one side of the fireplace, with a long, narrow library table backed up against it. The cushions of the davenport to be in mulberry, velvet or rep. Two easy chairs, mahogany and cane, seats of mulberry. A fireside chair in wicker, upholstered in rich cretonne showing large deep rose flowers on a black and gray ground. A wicker open writing desk, and a fern stand. Whatever else you like, reading lamps, of course, one tall piano lamp with large rose colored silk shade. The windows should have thin curtains of sprigged lace, with side hangings of mulberry sunfast, or figured silk.

We should not put a wainscot in a dining room with such low walls. Use a figured pastel tapestry design, with blue in it, but never an all blue wall. Then have your side curtains of blue silk sunfast, or blue linen.

---

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Making Money Last---The Budget

Elsie M. Fjelstad

O business can succeed unless it keeps accurate account of its affairs. The affairs of the home are usually simple, but it is poor management to rely on memory for its record. Keep a budget!

The budget is a carefully made plan for dividing the probable income among the necessary and desirable things, such as rent, food, clothing, operating and personal expenses, education, recreation, gifts and savings. It is worked out in advance and written down for easy reference. The amounts given for food, rent and clothing may now be too low.

Start such a budget as the following, taking into consideration the number in the family, and the income, and fitting the items to the mode of living and tastes of the family. Probably no two families would live up to the same budget. In the budget here given only the food item is worked out in detail.

These figures are on the basis of a $300 a month salary, family of 2, 3, 4 or 5.

```
Month          | Food | Shelter | Running Expenses | Sundries | Clothing | Personal Expenses | Savings |
---------------|------|---------|------------------|----------|-----------|-------------------|---------|
January       | $45  | $45     | $25              | $24      | $20       | $30               | $116    |
              | 55   | 45      | 25               | 30       | 18        | 25                | 102     |
              | 65   | 45      | 30               | 36       | 15        | 18                | 91      |
              | 75   | 50      | 30               | 42       | 12        | 15                | 76      |
```

Figures in the first row are representative of what it would cost a family of two to live for one month; figures in the second row for a family of three, one being a child; third row,—family of four and fourth row,—family of five.

Then make out a clothing budget, a foods budget and all the others so that you know you are making the amount you have allowed for that part of your living expense go as far as it possibly will.

A budget which would spend wisely the $45 allowed for food might be worked out in such a fashion:

```
Food

Dairy Products—
Milk .................. $8.50
Eggs .................. 5.50
Butter .................. 5.00
Total $19.00

Groceries—
Fruit .................. 3.50
Vegetables .............. 3.50
Sugar .................. 2.50
Flour .................. 5.00
Cereals ................ 1.50
Total 16.00

Meat and Fish—
Meat .................. $7.50
Fish .................. 1.50
Total 9.00

Total $44.00
```

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These five groups of foods are chosen because they have very definite important functions in the body. Vegetables and fruits furnish some of the materials from which the body is made and keep its many parts working smoothly. They help to prevent constipation which gives people headaches and is one of the fundamental elements of serious illness. The kinds chosen depend upon the season. The cheaper ones are often more valuable than those which are more expensive.

Milk, cheese, eggs, fish, meat, peas and beans help build up the growing body and renew used-up parts. That is their main business. Dried peas and beans make good dishes to use in place of meat part of the time, but for most people meat should not be left out all together. Milk is the most important of these foods. Every member of a family should have in some form at least a pint a day and young children need more. No other food can take its place for them. The wise housewife will save on meat if she must but avoid all skimping on milk.

Cereals—bread and breakfast foods are made from grain, flour and meal and they act as fuel in the body,—making one work as gasoline gives the automobile power to climb hills. In addition, they give the body some building material.

Sugar and syrups are fuel. They also give flavor to other foods. They are a valuable food but many people eat more of these than they need. Sugar and syrup are foods which the human body could get along better without, than any others. Sweet fruits, especially dried ones like dates and raisins contain much sugar and are better for the children than candy.

Fats are fuel. Such foods are needed especially by hard-working people. Expensive fats are no higher in fuel value than cheaper ones. Have your butcher give you your meat trimmings, they be-long to you. Use your bacon drippings and left-over fats. They mean as much to your body as butter.

Money can be saved by using the less expensive foods in each of the above groups, with only enough of the more expensive to give flavor and texture. Foods from one group may be exchanged for another in the same group. For example, vegetables may be used instead of fruits; cheese dishes, or sometimes beans, instead of meat; oatmeal instead of wheat.

Cottage cheese made from skim milk is an inexpensive substitute for meat. It may be used in other ways also.

Use plentifully both milk and cereals. Cereals are usually the cheapest fuel food.

These examples are given in an effort to help the housewife buy foods that will mean most to the body at the lowest cost.

Sometimes food and values are wasted unnecessarily. For instance, ice chest doors are left open or opened too often. Thick dishes which take up and hold heat, rather than thin ones are used in placing foods in the ice box. Warm food and warm dishes are put into the icebox. Water to drink, butter, radishes and olives are chilled for serving by adding chipped ice, rather than in the more economical way of allowing them to stand in the ice chest. Food is allowed to spoil in the ice box because it is not kept immaculate. Ice is purchased in winter when it might just as well be "home-made" by freezing water in a pan and then pouring hot water over the bottom of the pan to loosen the chunk of ice.

The economical housewife plans her food by the week, or better still, for three weeks. She repeats this all year, making only such changes as the season and market demand. In making out her plan she decides how much she will spend for each group of food during the week, in order to keep within her allowance. If she buys a more expensive meat one day she puts down a cheaper kind of a meat or a substitute for the next day. She watches the market. Some foods may be cheaper one day than another.
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What Is "Fresh Air?"

ONE goes to the sea shore or to the mountains for "fresh" air. After a thunder storm some one says "How fresh the air has become after the shower." What is this quality of freshness in the air? In a paper presented to the American Society of Heating and Ventilating Engineers early in 1920, Mr. E. S. Hallett gives ozone as the solution of the fresh air problem.

He speaks of the enormous waste of heat that passes up the vent stacks of our modern school buildings; seven or eight changes of air per hour being delivered and all discharged from the building after passing once across the school rooms, and yet in the face of this elaborate attempt to have fresh air in the rooms there was much complaint.

"It seemed preposterous," says Mr. Hallett, "that a scientific people such as we are, acknowledging no defeat, and fresh from conquests of science and art, should stand powerless before the task of rendering the air which we breathe a harmless and life giving element." Accepting this as a challenge worthy of a life effort, if necessary, results of two years of study and experiment is covered in the paper from which we quote.

"What," he asks, "is that element or condition of the salt air or mountain valley that is so healing to the invalid and so delightful to all?" and answers. "It is simply the presence of ozone, or atomic oxygen," adding; "Ozone is not present in the air of cities because it is quickly consumed by the decaying matter and other oxidizable substances. It must now remain an indisputable fact that human beings require ozone as a normal constituent of the air. The artificial supply of ozone is only supplying the missing element which has disappeared, due to the results of dense population in cities, and we might add, the gathering of oxidizable substances about the habitation.

"Ozone is nothing more than oxygen in an intensely active condition. One authority likens it to incandescent oxygen." "Ozone is the long sought germ destroyer and leaves no injurious residue." The Government Public Health Service has issued a bulletin in which it is shown that ozone is the best and most practicable means of sterilizing water. Quite extensive use has been made of ozone, in ventilation other than schools, in Germany, France, and in the subways of London, and all with the highest satisfaction."

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ratatus now produces ozone without noise or moving parts at a small cost.

**Experiment in the St. Louis Schools.**
The head of the hygiene department of the Board of Education came with a complaint from one of the downtown schools that the air was so bad in some of the rooms that certain teachers threatened to resign on the advise of physicians.
The ozone experiment was started in this building. "The apparatus was set up in the air passage between the air washer and fan, and regulated to produce just sufficient ozone to be barely detected by the odor on entering the building, but not enough to make one conscious of the odor. The result was the immediate disappearance of all stuffy condition and bad smells complained of. The remarkable thing was that every teacher and the principal pronounced the ventilation perfect. They stated that the conduct of the children as to lessons and behavior was noticeably better. No drowsy afternoons followed. Teachers stated that they were as fresh at the close of the day as in the morning. Colds and coughs nearly disappeared. No contagious disease developed during the six weeks trial, although influenza was epidemic at the time."

**In Colored Schools.**
"The experiment was then transferred to a colored school having a plenum system with the Zellweger air-washing fan and with complete recirculation of the air. In this test the pupils and teachers were weighed weekly and a close inspection made by the staff physician of the hygiene department. About 75 per cent of the children gained in weight on an average of one pound each. About 20 per cent made no change and about 5 per cent lost weight. Several very fat girls weighing about 75 pounds each lost from 5 to 8 pounds. No indication of any illness or discomfort was noted."

**An Unannounced Experiment.**
"Further test was made in another school having complete recirculation without the air washer. In this school no teacher or pupil was aware of the experiment. After ten days the principal sent a note to the teachers asking whether they had observed any change, and if so whether for better or worse. Three had observed no change, all the others reported that they had noticed improvement; some were enthusiastic. No complaint of poor ventilation had come to the office during the period."

**Results.**
"To sum up the results of the year's tests with ozone in the schools, the following facts are indicated. Ozone does destroy all odors resulting from the respiration, bodies and clothing of children. It produces a mild exhilaration resembling that of a sea breeze or the air on a morning after a thunderstorm. When used in proper concentration for ventilation it has no odor itself. "The writer believes that the delay in the use of ozone in ventilation has been due to trials made with too high concentration and to the absence of any information on a means of control. Ozone does not destroy dry bacteria but destroys most species of germs when moist. However, the moisture of the mucus membrane will be sufficient to enable ozone to destroy most bacteria."

These experiments give promise of far reaching results in the revitalizing of the air—not only in the school rooms—but of all air vitiated by decomposition or otherwise in our cities.

**The Open Window and the Coal Pile.**
Heated apartments do unquestionably tend to increase fuel waste. It is human nature to do things in the easiest way, especially when no penalty is attached. When a room becomes warm it is usually easier to open a window than to turn off a radiator. For this reason heating men have been evolving radiator valves which will be easier to turn off a quarter or a half, than it is to open a window. Heating systems and devices which allow the heat in a room to be regulated more closely will be very welcome, and will at the same time tend to conserve the coal pile.
CONTENTS FOR NOVEMBER, 1920

Just a Word—Luxuries vs. Home Building ............................................. 170
A Charming Bungalow with Thatched Roof Effect—Charles Alma Byers .......... 173
Good Taste in Furnishings—Katherine Keene ........................................ 176
Ten Dollars For a Kitchen Transformation—Alice Phebe Eldridge ................. 179
A Roumanian Stove—American Red Cross ............................................. 180
A Group of Bungalow Homes
   Built in the Middle West .............................................................. 182
   A West Coast Bungalow .............................................................. 183
   A Two-Family Bungalow .............................................................. 184
An English Cottage ............................................................................... 185
Two Cottages ....................................................................................... 186

DEPARTMENTS

Inside the House
   Decoration and Furnishing—Virginia Robie, Editor
     Dining Rooms of Various Types ..................................................... 188
   Answers to Questions .................................................................... 192
   Table and Food Values
     Standard Rules—Elsie M. Fjelstad ............................................... 196
   Heating Notes
     Oil as Fuel .................................................................................. 200
     Coke in Domestic Heating .......................................................... 201

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A home embodying both charm and distinction

Mellor & Meigs, Architects
A Charming Bungalow With Thatched Roof Effect
Charles Alma Byers

The thatched roof effect seems to be attaining a considerable vogue, if we may judge by some of our later building. At least such effects are having considerable popularity just now on the Pacific Coast. Due to the collective cleverness of architect and builder quite surprising effectiveness has been obtained.

Instead of being genuinely thatched, like the old English cottages, such roofs are, of course, produced by the use of shingles—either of the ordinary wood kind or of the comparatively new composition variety, and, although the former is naturally as yet the more generally used, the effect may be obtained with one kind quite as well as with the other. Moreover, the thatched effect is ordinarily attained very simply. On the greater part of the roof area the shingles will generally be laid in the usual way, the characterizing detail work being confined, mainly at least, to the edges at both eaves and gables. These edges are designed to simulate the thick, uneven effect of the thatch, producing an unusually thick and rounded contour at the eaves. The shingles are soaked and bent to conform to the rounded foundation, laid with the butts suitably trimmed, in irregular or waved courses, giving a broken texture. This irregularity, when confined to the eaves extension, usually begins back some two feet or more from the edge, first, perhaps, manifesting itself by way of an alternation of wide and narrow shingle courses and finally developing into the wavy-lined courses. However, considerable variation, in this respect, is
often to be found.

The one-story bungalow illustrated herewith presents an especially charming exemplification of the shingle-thatched roof. Created from common wooden shingles, this roof not only constitutes an exceptionally good example illustrative of the idea but, due to its unusual and graceful lines, it gives to the house a distinctiveness, an individuality of character that makes this home decidedly attractive.

This bungalow is, however, very interesting and quite worthy of study in many other respects. Aside from its distinctive roof and its pleasing architectural style in general, it possesses a delightfully effective color scheme, no less than three inviting and enjoyable terraces or porches, a quite unique but most attractively designed front entrance, as will be observed from one of the illustrations, and a number of other pleasing details. Referring to the accompanying floor plan, it will be seen that the interior is both conveniently and charmingly planned and replete with practical and desirable features.

The outside walls of the house are of light buff-colored cement-stucco over metal lath and frame construction, and the trimming is done in a deep shade of cream, while the roof is painted olive-green. The front, side and rear terraces are floored with cement, and red brick is used for edging the floor of each of these terraces and for the steps and low walls of the front approach. Aided by the ficus ripen vines that cling closely to the walls, the low privet hedge that borders the front terrace, and the other plants and shrubbery, the outside color scheme of the house becomes very attractive indeed.

While the floor plan will naturally be studied as to the arrangement in detail, there are several interior features that deserve to be especially noted. Near the center of the plan, for instance, is a very charming conservatory, which intervenes between the large living room and the dining room and adjoins the side terrace or porch. Floored with red cement, possessing a large skylight in the ceiling, and having all four of its walls filled almost wholly of French doors and windows, besides being attractively furnished in wicker and further enhanced with ferns and other living greenery, this conservatory is made an exceptionally delightful feature. And in this connection it also should be observed that French doors are further employed to connect both the living room and the small breakfast room with the side terrace and the dining room with the invitingly secluded rear terrace.
The den, opening from the living room, may serve as an "extra room," since the old-time "spare chamber" has gone out of fashion, or it may be given over to the man of the house.

Other features worthy of special notice are the den, the excellent sleeping porch with its small dressing alcove, the bath room with its shower, tiled-in tub and built-in medicine-case, the conveniently planned maid's room, the kitchen with its built-in cupboards and other conveniences, and, further, the fact that each of the two bed rooms has an unusually roomy closet, while in the hall is a linen closet and from the conservatory there are two more closets.

The interior is also exceptionally practical, pleasing and homey in the matter of finish and decorating. The woodwork in the living room and den consists of mahogany, and in all other divisions it is of clear, first-grade pine, either painted or enameled—finished in old ivory in the conservatory, breakfast room and dining room and in white in the other rooms. The walls in the bath room and kitchen are tiled to a height of nearly five feet, in wainscoting effect, while the plastered space above and the ceilings are painted; in the conservatory they are also painted; in the living room, den, dining room, two bed rooms, maid's room and hall they are attractively papered, and in the breakfast room they are finished with a high paneled effect and plate-rail, above which is a hand-stenciled frieze.

Hardwood floors prevail practically throughout the house. In the conservatory, however, as already stated, the floor is of red cement, and in the bath room tile is naturally used, while the kitchen floor is of pine, covered with linoleum.

Draperies of excellent material and pleasing patterns and colors are a prominent and effective feature of the decorations, the liberal use of French doors and windows naturally affording exceptional and very charming possibilities in this respect. Doors of this kind also seem to especially invite the use of glass knobs, which here, at least, are very generally employed. The electric-light and plumbing fixtures throughout are of modern and attractive design, also helping to improve the general interior appearance as to detail.

The bungalow has a large basement underneath the rear, walled and floored with concrete and conveniently partitioned into various divisions, which is reached by a stairway off the rear entry porch, while a good furnace supplies the necessary heat in winter. The house, built in Los Angeles, was designed by Ross Gordon Montgomery.

This is, indeed, a most satisfactorily designed and constructed house in every
A charming bungalow with shingle-thatched roof  Designed by Ross Gordon Montgomery

respect—pleasing in structural lines, durably built, conveniently and interestingly planned, charmingly finished and decorated, and modernly equipped. Also as illustrating the shingle-thatched roof, accomplished through the use of ordinary wood shingles, it is a particularly interesting bungalow.

Good Taste in Furnishings
Katherine Keene

The museums and art centers of the country are taking their rightful place as leaders and teachers in applying the principles of beauty to the intimate relations of home living. The art school and the museum have left their pedestals, where they stood for something beautiful but entirely outside the usual circle of living; they have forgotten, or laid aside their old scorn of "commercialism" and are working side by side with manufacturers to produce satisfying furnishings and fittings for every condition of homes.

The treasures of the Metropolitan Museum of New York are not only laid open to every line of the Industrial Arts, either in the manufacture or in the use; but special members of the staff are detailed to act as guide and assistant in getting together any kind of data, co-operating equally with the manufacturer, the designer, the buyer, or the home keeper.

"Many art missionaries," says Frederick Arnold Farrar, in Good Furniture Magazine, "are going out to preach the gospel of beauty in homes, and these missionaries are working with the manufac-
turers. Whether you go to the state fair or to the largest retail stores or even to the small town furniture emporium, you will find some one ready to talk home furnishing in its best sense, and one of the first things they tell you is not to furnish but unfurnish. The Art Institute of Chicago is sending out these missionaries with draperies, collapsible interiors, paintings, doors, windows and mantelpieces. One week you find them in Oklahoma, another in Michigan and still another in Indiana. They accept no price from the public for their labor, and yet are doing for the country a vast good, preaching every-day art for every room in the house."

"Furniture is placed in direct relationship to appropriateness, to usefulness; and many get the message; all are interested, and new ideas are born. Public interest in this sort of thing is increasing." "People are taught the principles of arrangement, of color, harmony. They are taught that to crowd is to confuse; that logical order is restful."

The president of the Art Alliance of America, Mr. J. Frank Purdy, who has made a long study of the subject, has this to say: "The American people as a people are distinctly alive to the artistic urge in both material and purely aesthetic things. Those who know, not only know that they know but know why they know. Those who do not know, know that they do not know and are not only willing to be taught, shown, demonstrated to, but are thirsting for that knowledge and its opportunities." "The American people want good things, and will buy artistry every time in preference to rubbish, if they can find it."

"But what is meant by good, or so-called artistic furniture? A piece of furniture that is good—artistic, if you will have it so—means simply and solely that it is thoroughly fitted to its purpose, and honest in construction, without sham or pretense in form, finish or decoration. It is beautiful when it expresses—in shape, color, finish—the most effective utility, when it is at once 'a satisfaction and an inspiration.' It obeys no passing fad or fashion. It is not necessarily costly in material, workmanship or ornamentation. Harmony with its surroundings—will it fit the place?—must always be the guiding thought in its selection."

"The proper wedding of art and machinery, more particularly the hitching up, as it were, of trained American creative talent with the great American factory system is, of course, the important point here. While the machine has its limitations, it is today, nevertheless, one of the greatest allies of art in America. Give the machine good designs to exe-
cute, quality designs created to fit its limitations, quality designs that will bear rapid, manifold reproduction without loss of line or contour, and, long misused and abused, it may at last be the means of planting art appreciation in every home in the country."

"This, I am quite sure, is the crux of the matter in the present furniture problem; quality, quantity, and low prices made compatible. Add to this, honest reproduction in the less costly woods; while execution without waste is considered in every stage of the game, from the first sketch to the finished product."

"The comfort and beauty of the American home is no small matter to work for, particularly if we can build up its necessary furnishing on the result of our own art talent applied to our own raw materials. Any intelligent effort that we can make as a nation in this direction must result in our material welfare and cultural advancement. America stands today at the turning point, not only in her political history, but her industrial life as well. Let us hope that both go forward for the greater good and prosperity of all, and that the golden age of art prophesied and promised for our country is now due, and that the spirit of this art shall be largely represented in those things that render practical daily service."

**Importance of Openings**

"In the decorative treatment of a room, says Edith Wharton in The Decoration of Houses, the importance of openings can hardly be overestimated. Not only do they represent the three chief essentials of its comfort,—light, heat, and means of access,—but they are the leading features in that combination of voids and masses that forms the basis of architectural harmony. In fact, it is chiefly because the decorative value of openings had ceased to be recognized that many rooms so seldom produced a satisfactory and harmonious impression.

The return to a more architectural treatment of rooms and to a recognition of the decorative value of openings, besides producing much better results, has undoubtedly reduced the expense of house decoration. A small quantity of ornament, properly applied, will produce far more effect than ten times its amount used in the wrong way; and it will be found that when decorators rely for their effects on the treatment of openings the rest of the room will require little ornamentation. The crowding of rooms with furniture and bric-a-brac is doubtless partly due to an unconscious desire to fill up the blanks caused by the lack of architectural composition in the treatment of the walls."
Ten Dollars For a Kitchen Transformation
Alice Phebe Eldridge

URING these days of the servant problem, like so many other women, I am my own “maid of all work,” and thus compelled to spend much of my time in the kitchen; so I decided, one day, when thoroughly weary of its green walls (the taste of the former tenant), its ugly chairs and table, to work a transformation. As part of my day had to be spent in this room I would see to it that it should become as attractive as practically possible.

Seated in the middle of the room I surveyed my surroundings with a critical eye. Those walls!—such a depressing, ugly color; they must be changed, as well as the floor. It had been a good white oak in its day, but many indifferent tenants had allowed it to become black and grease stained.

First of all I decided upon my color scheme, a warm ivory with a touch of old blue, for why shouldn't a kitchen have a color scheme as well as other rooms in the house?

Then I counted my money and planned to keep as near to five dollars as was possible in these days of the rising cost of everything. At the nearest paint shop I selected enough paint of a deep ivory tone to give my walls two coats and enough white for the furniture. The cost was not quite three dollars. Then I hurried to a second-hand dealer further down the street, one who kept short lengths of linoleum at reasonable prices. Here I found a square just large enough to cover the middle of the kitchen floor. It was in two shades of blue, a dark old blue and a soft light shade. This cost two dollars and fifty cents. I still had my paint brushes to purchase, those, and two small cans of paint, one yellow and one dark blue, and some shelf paper. I had, of course, gone over my five dollars, but I was quite a bit under ten.

So, early the next morning I started in to work. With my brushes and can of paint I was soon perched a-top a ladder in the kitchen, happily watching the dread green walls vanish under the rapid strokes of my brush. Even after the first coat was on one could realize what an improvement it was to be, and, the next day, after the second coat had begun to dry I decided it was well worth the amount of time and labor spent just to look at those warm, light walls.

The next thing to be transformed was the floor. The middle of it was to be covered with the purchased square of linoleum, leaving bare a border of about two yards of the wood. This border, after being scrubbed and re-scrubbed, was oiled with a good floor oil, and being of oak, responded splendidly, even after years of abuse.

Then I started to work upon the forlorn looking pieces of furniture, which consisted of two chairs, a table, and a chest of drawers. The chest boasted a marble top which I had found most useful for rolling pastry upon. These four pieces of furniture were each given two coats of white paint, with lines of deep blue upon the rounds of the chairs and along the edges of the table and the chest. Then a coat of good shellac was put on rapidly after the paint was thoroughly dried. If kitchen furniture is treated in
this manner any dirt or mark can be wiped off with a damp cloth, and so kept absolutely clean and sanitary.

Already the room looked like a different place, only needing those last little finishing touches which, in reality, make or ruin a place. For my curtains I went upon a search through one of those "piece trunks" kept by every woman, and there I found several yards of light blue and white checked gingham. This was made into sash curtains, two in place of the usual one, so that during the day time they might be pushed back and allow more light and sunshine into the room. I painted two flower pots a bright yellow, with dashes of dark blue and planted in them old-fashioned flowers, which would have brilliantly-colored blossoms. These placed upon the window sill, between the little gingham curtains, carried one's imagination back to some quaint country cottage, and away from the hurry and wear of present-day existence.

There are two shelves in my kitchen, one over the sink and laundry tubs, and one over the table. These I covered with a shelf paper done in a Dutch design, and in Delft tones which fitted in remarkably well with my color scheme.

Upon the shelf over the table I stood three old willow plates and a tea-pot, and discovering a few scraps of brightly printed chintz I fashioned them into holders to use for pots and pans when cooking.

Never would this kitchen be recognized for the nondescript room it had been when I first went into it. Then it had been dreary, ugly, unsanitary; now it was bright, cheery, practical and sanitary. Cooking in such a place is not drudgery, but a pleasure. The cost had not exceeded ten dollars, and as for the time and labor expended, I count it well worth it as I move around my transformed kitchen, or glance out from the bright window across the flower-pots.

A Roumanian Stove

Courtesy American Red Cross

The stoves in Roumania probably are the most unique in the world," according to an interesting bit of information kindly sent us by the American Red Cross. "In some cases they resemble church organs, and in others altar edifices. They are of terra cotta with brass fittings and frescoed decorations. They usually reach to the ceiling and have a series of hollowed flues or pipes that are not unlike the fluted pipes of an organ.

"In spite of their great size they are extremely economical. They have a large radiating surface; they heat the largest rooms in an incredibly short time."

"The photograph which is shown may look like a tombstone or even an altar-piece, but it isn't. It is a Roumanian stove. In Russia you seldom notice the stove at all, because it is an integral part of the house. But in Roumania the "made-in-Germany" stove looms out, the dominating feature. Despite their elephantine proportions one good thing can be said of the Roumanian stove: they don't use much fuel, a very little coal or wood going a long way toward heating the largest apartment, for the impressive looking columns are really terra cotta tubes, and make excellent heat distributers. Red Cross has sanctioned their economy and utility by installing one at their headquarters in Bucharest.

In Russia, will stone masons resent the intrusion of the American oil heater? The connection between stoves and stone masons may at first seem rather remote,
until it is remembered that stoves, in Russia, are an integral part of the house. They are built into the structure at the time of its erection by a stone mason under the direction of the architect. The only way to remove them is to tear down the building.

Such stoves have always been regarded as national institutions, and though they take some time to heat up, once the walls of the house are thoroughly heated, the rooms are kept warm for a much longer period than is possible by the use of any other make. In spite of its size, it occupies no space in the plan of the room, because the masonry of the house effectually conceals it, and when installed in a corner, as is the universal custom, the stove heats at least three rooms, and usually six, because the great built-in chimney provides warmth on the floor above.

During the past few years, however, the coal shortage has made it impossible for the Russians to keep fires in these great stoves. So when the American Red Cross brought over a number of oil heaters, for use in hospitals, the officials were besieged with requests for similar portable heaters for private use.

Popular as is the vogue of the American-made portable oil stove, the immovable built-in stove will hold its own, for the Russian will hold to the tradition. Even his kitchen range is mounted on a base of solid concrete or stone.”

Making the heating apparatus an integral part of the house is an excellent idea, and one which is not done as much as it might be in this country. A certain amount of heat is lost in covering our radiators. It is interesting to note that the imposing terra cotta tubes, which look so much like heavily entablatured columns, are really an excellent means of distributing the heat, and efficient in doing so.

A Group of Bungalow Homes

In building convenient, economical homes, people always seem to turn to the bungalow as a solution for their building problems. Never has there been a time when it became so necessary to be economical, especially in building, as now. At the same time that home is most economical which has the most and the best built-in labor-saving devices, for economy is not in the
first cost, but in the day-to-day living. Not only should labor-saving devices be carefully selected, but they should be properly placed, or space left where they can be placed later. The plan should be fully thought out in the first place.

Here are a group of bungalows built in different parts of the country:

**A Bungalow Built in the Middle West**

Built in the colder climates, even a bungalow must have a basement under the whole house, in order to insure warm floors and protection from possible drafts of cold air. The stucco bungalow shown in this design is warmly built to withstand any cold. Three bedrooms, bath, kitchen, dining room and living room and sun porch are all on one floor, with a central passageway connecting all the rooms conveniently. In addition to the enclosed sun room there is a screened front porch which serves as a protection to the entrance and takes the place of a vestibule.

There is a fireplace in the living room and a built-in buffet in the dining room.

The kitchen is well equipped with cupboards. Some housekeepers would prefer to have the sink nearer the cupboards and the range farther from the dining room door.

Two of the chambers are arranged for a family suite, connecting directly through the long closet space. Separate closets could be built if so preferred.

**A West Coast Bungalow**

A roomy plan all on one floor is shown in the first bungalow, which has been built on the Pacific coast.

It is rather a typical bungalow, both as to plan and exterior. In its design the matter of first cost has been considered with unusual care. That is why the
This is rather a typical bungalow with an economical roof

Simple gabled roof is run from front to back over the entire length of the building. This does not make a plain looking house because small side gables, enclosing the chimney and over the bay of windows, effectually break up the long lines.

The interior shows a considerable amount of built-in equipment, with the book cases and desk, the buffet and the cupboards. So much mill work is costly, of course, but it must be remembered that a house well equipped with well designed built-in furniture is easily furnished and made attractive.

The long porch is one of the most livable parts of the house, especially in the mild California climate. The entrance is into the living room. A den, 10 by 11 feet, opens as an alcove from the end of the living room. It is fitted with book cases and desk under the windows. The dining room also opens from the living room with a colonnade, giving a wide open space both ways. Glass doors open from the dining room to the terrace outside. The ceilings are 9 feet high.

This house was planned with a 10x17 cellar for a furnace room under the hall and bath. The stairs go down from the outside only, but the enclosed kitchen porch is large enough for inside steps with a grade landing, if desired.
The house stands on a concrete foundation well above grade. The porch work is all of cement, the cement floor being considered better and as cheap as wood. The outer walls are siding except that shingles are used in the front gable to give variation.

A Two-Family Bungalow

With the present popularity of the three-room apartments this two-family bungalow will prove of interest. Built on a corner it gives an entrance on each street, and each living room faces on the street. The two apartments are entirely independent, quite as much so as though they were built farther apart than the opposite of the same wall. Each apartment has its own stairs to the basement, which is also separated into two parts, with a furnace for each. The chimney is centrally located with a flue for each of the apartments.

For a long time the idea of eating in the kitchen was taboo, and when we did so, we did it rather clandestinely. Now the efficiency idea has revived the old custom,—but with a difference. The kitchen is now on its way toward being the most attractive room in the house, and one may eat breakfast, or even dinner, in the kitchen with a feeling of satisfaction. Each apartment has a rear porch with place for the refrigerator.

The kitchen floors are covered with linoleum, other rooms have hardwood floors. The interior woodwork is of pine and painted white.

The bedroom in one apartment opens from the living room and in the other from the rear hall. While this design shows the minimum in the matter of living quarters there are all sorts of possibilities in the two-family house, planned with separate entrances and frontage. Larger apartments can be planned in the same way, with sleeping rooms under the roof if desired.

This bungalow as shown is of frame construction, covered with wide drop siding, or Colonial siding, with stucco in the gables, and concrete foundations. The basements are fitted for laundry, heating plant, fuel, etcetera. The roof is covered with creosoted shingles. The trim and cornices are painted white.
HIS six-room home in English cottage type shows an unusually attractive exterior design and a very happy arrangement of rooms. The rectangular plan and simple roof lines make this an economical home to build.

The floor plan of this cottage should be pleasant in its spacious arrangement of living and dining rooms. These rooms unite into practically one big, inviting room. As a result the living quarters of this home will be sunnier and more livable, because the combination of the two rooms supplies ample light and air.

The enclosed porch, which is really a sun parlor, is another good feature under the same roof as the house.

Stairs to the second story lead directly out of a small hall in which there is a convenient closet for coats and wraps.

In the kitchen you will find everything has been provided to lighten house work. There is plenty of cupboard space, and the sink is placed beneath the window.

An outside entrance to the cellar prevents unnecessary tracking through the kitchen. In the rear entry there is a special niche for the ice box.

Direct access to the front door from the kitchen is another desirable feature.

On the second floor are two bedrooms, a bath and sewing room. Each bedroom has a good sized closet. Windows, on two sides of the room insure plenty of fresh air circulation. The sewing room can be used as a third bedroom if desired.
Two Cottages

For the small family there is nothing, perhaps, more satisfactory than the cottage type of home. The one-story, or the "story and a half" cottage is often called a bungalow, even when the roof is steep enough for several rooms on the second floor. These cottages are very pleasing in their details, being somewhat of the craftsman order.

The first home in this group might be considered a bungalow. There is only sufficient height in the attic for storage.

This little bungalow is very pleasing in its details. The approach and width of steps gives a very hospitable appearance to the whole structure. A feature of the plan is the large living room lighted on two sides and containing a brick fireplace. The dining room is separated by sliding doors and contains a china cupboard and pleasing bay window. The kitchen is fitted up with cupboards, gas range, sink, etc., and opens upon a rear porch containing refrigerator. The door between the kitchen and porch might be moved enough to allow a drain board on both sides of the sink.

Two chambers and a bath room with

A hospitable looking home
Stucco in interesting combination with brick and shingles

linen closet are placed to open on a private hall. The finish of the living and dining room and kitchen is of Georgia pine. The sleeping rooms are finished in white enamel. All floors are Georgia pine.

The second cottage is much larger in its accommodations for the family, though covering about the same space.

This cottage is very modern and embodies the essential features for a large family in very small space. This is the type of home necessary in these days.

None of the rooms are large but are ample for comfortable living and they are well arranged for the housework.

The second floor has three additional chambers all well equipped with closets and a bath and linen closet.

A combination of brick, cement stucco and shingles form the exterior treatment.
Decoration and Furnishing
VIRGINIA ROBIE, Editor

Dining Rooms of Various Types

OR many years it was an accepted theory that dining rooms should be massive in treatment, no matter what the rest of the house was like. They must be "dignified" at all hazards, said authorities and the result was a room of "baronial" character on one hand and of gloomy pretensions on the other. This theory gave us the really beautiful room hung in subdued leathers and furnished in carved oak. It also gave us the dining room hung in dark paper, furnished in black walnut, and curtained in "maroon." Maroon in a dining room was not cheering; it seldom waited on digestion.

The "baronial" type, when well executed, had dignity and a certain heavy beauty. Today, in houses where there are two dining rooms, one for the family and one for entertaining, carved oak and walls of Cordova leather still make an admirable combination, but the color scheme is not quite the same as it was in the late seventies. The walls are never gloomy, and the great improvement in lighting causes these rooms to have an atmosphere which they could not have in the days of the garish chandelier. Old Flemish oak, Spanish oak, Jacobean oak or well-executed modern copies are usually found in these apartments and details are carried out admirably. Such schemes are expensive. They cannot be imitated in a cheap way, and the wise person does not try to do it.

A dining room treatment usually gives the best results when it conforms to the general scheme of the house, presenting no startling contrasts in the way of woodwork and furniture. There are exceptions, however. Sometimes a dining room may be decorated and furnished in colonial style and the rest of the house in oak, but the architect must pave the way for this arrangement.

The beauties of a colonial dining room are many. The conditions are clearly defined and well known. Possibly the walls are panelled and if so, no further adornment is needed. The old furniture makers were inspired when it came to their designs for dining rooms. Therefore, if you select old mahogany pieces or authentic
reproductions your room cannot fail to have charm. Do not combine a Sheraton sideboard with an American Empire table. If you wish your table to have a round center column, select a sideboard to harmonize with it. Both will then be American Empire. It may be that an old sideboard is the beginning of the dining room furniture. The table and chairs may then be purchased to correspond. Often it will be necessary to buy chairs of modern make. Do not put new chairs of Chippendale style with the sideboard and table of American Empire. If you wish chairs of Chippendale pattern, choose a sideboard of contemporary design. It is now believed that Chippendale made no sideboards, but several contemporaries did. Shearer, Hepplewhite, and Sheraton made designs which may be used with Chippendale chairs. Hepplewhite and Sheraton were also famous chair makers, and it is sometimes possible to secure their designs.

Furniture makers of today have given special prominence to the American Empire table. It is one of the most substantial of designs, may be easily extended, and seldom interferes with the feet of diners—three important considerations.

With Chinese rugs replacing Oriental rugs in our shops and Chinese fabrics coming to us when the importations from European countries were difficult to obtain the Chinese treatment has a place in our decorative effects.

An oak dining room may be made extremely attractive. There is greater latitude in furnishing in this wood than in mahogany, for the variety of design is more extensive. An oak dining room may be very simple or it may be extremely elaborate. It may contain Mission furniture of plainest design or carved Flemish oak, where every piece represents an outlay of hundreds of dollars. Possibly English oak will be used of the Tudor or Jacobean periods, or rarer still, Gothic types of French or Italian extraction.

There are dining rooms decorated in various French styles, in Italian Renaissance or early Spanish, occasionally rooms which are Pompeian, Grecian, or Byzantine. A few of these unusual apartments represent the highest skill of ar-

Where a Chinese scheme has been executed with skill
chitect and decorator and a cultivated taste on the part of the owner; but many are neither accurate nor beautiful and suggest only a vast outlay of money. Others are beautiful in themselves but out of harmony with their surroundings.

The wisdom of period decorating must be determined by the householder. Sometimes the period room is charming; sometimes it leaves much to be desired.

It is not so easy to blunder in a dining room as in other portions of the home, for the requirements are clearly defined. It is not possible to place the miscellaneous bric-a-brac and pictures found in the usual living room, and this absence has more to do with the beauty of many dining rooms than the actual presence of fine furniture, silver, etc. A very simple room, and often a very inexpensive one, will have more charm than one richly furnished if filled with articles which plainly do not belong there. A dining room should never be a curio place, for utility must come first, and out of utility will grow beauty, the only real beauty which is invariably founded on actual needs.

An inexpensive dining room in the country is recalled where the woodwork is painted white and the walls are covered in gray paper carrying white stripes. In this room the furniture is light gray picked out with white. The floor is painted gray and the one big rug has a green ground with short-stemmed flowers in pink and lavender forming a thick border. The rug is Walter Cranish in feeling, the effect is flat and decorative. The curtains are in leaf green bordered with lavender and lined with pink. The china is peasant ware painted in splashy nosegays, outlined in green. The room contains no pictures. The only ornaments, if ornaments they may be called, are small bay-trees in green boxes and flowers arranged in a rather formal manner in plain green jars. The room would not suit a city house, but in its present location it is charming in every way.

Many large dining rooms have a breakfast bay containing a table smaller than the main table. Here breakfast is served and often informal luncheon. Such a scheme is convenient and a great saving in service. Where there is sufficient space a breakfast room fills the requirements even better, and such a place offers scope for interesting treatment. This room may well be quite different from the rest of the main floor, as it is usually placed where it does not become a part of the decorative scheme of the house. Therefore, quite a radical treatment is permissible. Painted furniture goes well here, also papers of decorative patterns. It is a day room, consequently the question, "How will it look with artificial light?" does not have to be answered. Furniture painted white when combined with a white trim and walls of decorative pattern will give good results, so does furniture painted green, and one charming breakfast room is recalled where the furniture and the woodwork are painted peacock blue. The paper has a white ground with small, brilliantly colored peacocks seen through branches of green leaves. A rug of Scotch weave with a green center and border in which peacock shades are blended with green, covers the floor to within six inches of the wall. The floor matches the trim and the furniture. White ruffled curtains hang at the windows. In the paper is a little dull orange which is repeated in a runner on the long, narrow table. This runner of coarse linen and has for a border small bay trees in green cross stitch. On a narrow mantel
are two dwarf trees in tubs painted blue. The china is like the room, a little queer, but very decorative. Such a scheme would have made an eccentric dining room, while in a breakfast room it is merely individual. This room is in a country house and long French windows opened onto a small porch.

Another room is equally interesting though more difficult of execution. Six

old rush-bottom chairs with yellow frames decorated in grapes suggested the scheme of decoration. A round table of common pine is painted yellow and embellished with bunches of grapes. They are painted in the manner of the old chairs, crude but effective. Leaves and grapes are painted in a deep band and enclosed by a broad painted line. Some-

through a "Village Industry" society. It contains black, green, gray and yellow and fits the room as if made for it.

A more conventional breakfast room is in Delft blue with white furniture, rugs blue and white, and blue and white china.

A pleasant, cheerful room in which to take the first meal of the day will be found a great aid to comfortable living.
Blue and Green Walls.

L. R.—Am enclosing floor plan of our new bungalow and ask your advice on interior decoration. The walls are to be painted throughout; woodwork ivory with mahogany doors and beams in dining and living rooms.

I had planned on making living rooms walls green with rose draperies and rug green and rose, furniture mahogany, and my dining room in blue and gold, but with the columned opening between these two rooms that will not do; the two rooms will have to be the same. What sort of rug should I use? I wanted the dining room in blue and gold but do not care for it in living room. Would you use mahogany or walnut in dining room? The den is to be in green and brown. I have a lovely rug in tans, browns, etc., for the den and have green draperies that I wish to use in it also, then will furnish it in brown wicker.

My guest chamber has northern exposure only. Would it be all right in delft blue, walls and rug, with overdrapes of white with Japanese pink figure, and mahogany furniture? But I fear the blue walls will make it too dark. I have the Circassian walnut for back bedroom and will decorate it in a yellowish tan with yellow drapes.

Do you think my living room large enough for a davenport in front of fireplace with a long narrow table backing up davenport? There will be very little wall space, as the house is nearly all windows.

Ans.—You could not possibly have the walls of dining room painted a solid blue, with a different color on living room walls. But you can use one of the soft, foliage designs in pale tones with touches of gold and color; or a formal, conventional, small figure all over it—if you prefer.

Then have a blue and gold Chinese rug—they are much in favor now—with window hangings of Chinese-blue Sun Ray material at the side of each end window of the group and on each side of the center mullion but no valance and no other curtains.

The ceiling, between the beams, should be painted ivory, a lighter tone than the woodwork, which should be deep. With the mahogany door and ceiling beams, we advise mahogany furniture.

We advise paper for the dining room, because in the way we have suggested you can differentiate it from the living room while preserving the same general tone of wall treatment, a necessity on account of the colonnade opening. We advise a large folding Chinese screen—gold on a black ground—to stand in the opening.

You can then paint the living room walls a soft corn or tan, making the last coat a stippled one, a finish that gives a soft surface to a painted wall.

The living room is ample for the arrangement of davenport—library table facing the fireplace, and that would be the best arrangement.

The walls of the den should be the
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Paints
same. Gray or tan or ivory may be used, bringing in color with rugs and furnishings. The whole effect is thus harmonious and refined.

Your living room can have deep rose for its complementary color, and the browns of the den will be just right, only do not use the green curtains in that north room. Old gold is what you should have. Green is very little used anywhere now.

A blue wall would be most unfortunate in the north bedroom. We should have deep ivory walls and a deep rose rug, with rose-flowered curtains. The yellows and browns will be very good with the Circassian walnut.

Some Suggestions.

H. C. M.—We are building a new colonial house. The color of the woodwork throughout the house is ivory, with the exception of the dining room, which is dark oak, and the kitchen, white. The walls are paneled in all the rooms and we wish to have a blue dining room with Jacobean furniture, and a rose and gray living room with mahogany.

Upstairs the main bedroom will have mahogany furniture with rose draperies, while the sleeping porch is to be used as a den, with fumed oak furniture. The guest chamber will have Circassian walnut furniture, with blue hangings, while the rear bedroom, my little girl's room, will have bird's-eye maple furniture with brass bed and pink hangings.

The breakfast room walls will be tinted light gray, with gray furniture and blue hangings.

Ans.—Your color combinations as color combinations are lovely and correct, but exposure must be taken into consideration. For this latter reason use the gold over-hangings (gold taffeta sunfast) in the dining room to neutralize the cold effect of blue in a practically north room, or use a single sash curtain of cream net, over this a pair of orange silk gauze curtains, and over these heavy blue drapery satin over-hangings the shade of the rug. Omit the blue wallpaper and have tan, in tone lighter than your oak trim.

Since you are not observing colonial precedent in furnishing your home, I am not making period suggestions for walls and hangings. However, I hope your living room furniture, at least, is colonial. It is a shock on entering a period house not to find the front rooms, at least, in key with the exterior of the house.

If your mahogany is red, have the rose over-hangings you have chosen a terra cotta shade, a velour.

Since you have so much blue in your chosen color schemes, why not use a spring-like green with the gray breakfast room furniture and walls. A green plaid, or green and white check gingham, or plain green linen are suggestions.

For the hall use an ivory paper.

Warm up the northwest bedroom hanging effect by using a valance and tie-backs of yellow, or else have other yellow touches in the room.

Disguise the head and footboard of your little girl's brass bed with pink and white gingham, and have plain pink over-hangings for windows of sunfast, cotton, poplin, hand-dyed muslin, or cotton crepe.

It is a good idea to unify the window effect, especially if the house is on a corner, by using the same material for all sash curtains. For this a cream net of medium mesh is a very good choice.

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(and their relative values—How is it with you?)

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that "LUMBER IS LUMBER"—(How often do YOU
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with a 5-inch hole bored lengthwise. These were
joined by short iron tubes, tapered at both ends. Not
many years ago these were replaced by the most modern
system. Below is a photograph of a section of one
of the CYPRESS mains just as it was dug up—as sound
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Below is a photograph
of one of the iron con-
nections just as dug up
—most of them rusted
past all usefulness.

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pied by descendants of its original builders, with
the original CYPRESS roof practically intact.

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DEALER'S. IF HE HASN'T IT, LET US KNOW IMMEDIATELY
HE following table gives standard recipes for standard dishes made out of batters and doughs. They should be mixed according to one of the three standard methods, as follows:

Muffin or thin batter method: Mix all dry ingredients together. Add the eggs, then add the milk and the melted fat last.

Cake method: Cream sugar and fat. Add the eggs. Sift the flour, baking powder, and salt together. Add dry mixture and milk alternately. Add flavoring last.

Biscuit method: Sift dry ingredients together. Cut in the fat with knives. Add liquid slowly, stirring as little as possible.

Rice will absorb three times its measure of water and a quantity of milk or stock.

One ounce of butter equals two level tablespoons.

<table>
<thead>
<tr>
<th>Dish</th>
<th>Liquid</th>
<th>Flour</th>
<th>Fat</th>
<th>Eggs</th>
<th>Leavening</th>
<th>Salt</th>
<th>Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popovers</td>
<td>1c</td>
<td>1c</td>
<td>1tb</td>
<td>1</td>
<td>None</td>
<td>½t</td>
<td>1c</td>
</tr>
<tr>
<td>Griddle Cakes</td>
<td>1c</td>
<td>1½c</td>
<td>1tb</td>
<td>1</td>
<td>2t B. P.</td>
<td>¾t</td>
<td>1c</td>
</tr>
<tr>
<td>Fritters</td>
<td>1c</td>
<td>1¾c</td>
<td>1tb</td>
<td>1</td>
<td>3t B. P.</td>
<td>½t</td>
<td>1c</td>
</tr>
<tr>
<td>Muffins</td>
<td>1c</td>
<td>2c</td>
<td>3tb</td>
<td>1</td>
<td>4t B. P.</td>
<td>½t</td>
<td>1c</td>
</tr>
<tr>
<td>Variation Muffin</td>
<td>1c</td>
<td>{1c white}</td>
<td>3c graham</td>
<td>½c</td>
<td>½t soda</td>
<td>¾t</td>
<td>1c</td>
</tr>
<tr>
<td>Steamed Batters</td>
<td>1c sour</td>
<td></td>
<td>3c graham</td>
<td>½c</td>
<td>½t soda</td>
<td>¾t</td>
<td>1c</td>
</tr>
<tr>
<td>Cottage Pudding</td>
<td>1c</td>
<td>2½c</td>
<td>½c</td>
<td>1</td>
<td>4t</td>
<td>¾t</td>
<td>½c molas</td>
</tr>
<tr>
<td>Ginger cake</td>
<td>1c</td>
<td>2½c</td>
<td>½c</td>
<td>1</td>
<td>1t soda</td>
<td>½t spice</td>
<td>¼c molas</td>
</tr>
<tr>
<td>Cake</td>
<td>1c</td>
<td>2½c</td>
<td>½c</td>
<td>2-3</td>
<td>3-4t</td>
<td>1½c</td>
<td></td>
</tr>
<tr>
<td>B. P. Biscuit</td>
<td>1c</td>
<td>3c</td>
<td>4½tb</td>
<td>1c</td>
<td>6t B. P.</td>
<td>½t</td>
<td></td>
</tr>
<tr>
<td>Shortcake</td>
<td>1c</td>
<td>3c</td>
<td>7tb</td>
<td>6t B. P.</td>
<td>1t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat Pie Crust</td>
<td>1c</td>
<td>3c</td>
<td>3tb</td>
<td>6t B. P.</td>
<td>1t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pastry</td>
<td>1c</td>
<td>1c</td>
<td>4-8tb</td>
<td>1t</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doughnuts</td>
<td>1c</td>
<td>4c</td>
<td>2tb</td>
<td>4t B. P.</td>
<td>1½t spice</td>
<td>1c</td>
<td></td>
</tr>
</tbody>
</table>

One cup is 1c. One tablespoon is 1tb. One teaspoon is 1t.
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A battered broken coal-bin window! A damaged foundation with the disfigurement extending even up the side-wall! That's what happens to a house with an ordinary frame-and-sash coal window—every time coal is delivered.

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Cakes: According to experiments a cake batter beaten two minutes has the best rounding top, the finest even grain and a soft elastic touch.

**Oven Temperatures.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popovers</td>
<td>350 to 450 degrees</td>
</tr>
<tr>
<td>Muffins</td>
<td>420 degrees</td>
</tr>
<tr>
<td>Plain cake</td>
<td>380 to 390 degrees</td>
</tr>
<tr>
<td>Gingerbread</td>
<td>360 to 390 degrees</td>
</tr>
<tr>
<td>Bread</td>
<td>360 to 400 degrees</td>
</tr>
<tr>
<td>Parkerhouse rolls</td>
<td>400 to 410 degrees</td>
</tr>
<tr>
<td>B. P. Biscuits</td>
<td>460 degrees</td>
</tr>
<tr>
<td>Plain pastry</td>
<td>500 to 400 degrees</td>
</tr>
<tr>
<td>Sour cream cookies</td>
<td>380 to 390 degrees</td>
</tr>
<tr>
<td>Sponge cake, loaf</td>
<td>300 to 350 degrees</td>
</tr>
<tr>
<td>Sponge cake, sheet</td>
<td>340 to 360 degrees</td>
</tr>
<tr>
<td>Custards</td>
<td>240 to 300 degrees</td>
</tr>
<tr>
<td>Meringue</td>
<td>250 degrees for 15 min. then 280 degrees</td>
</tr>
</tbody>
</table>

Some New Recipes.

**Cheese Straws.**

Make a nice flaky pastry using the proportions and method of mixing given above. Sprinkle with grated cheese. Roll up as for cinnamon rolls and then roll out again. Add more cheese and roll out again. Do this several times. Cut in tiny strips and bake.

**Fruit Rolls.**

One cup flour, one and one-half tablespoons fat, five walnuts, six dates, one-third cup milk, two teaspoons baking powder and one-third teaspoon salt. Use biscuit method of mixing given above. Spread with the chopped nuts and dates. Roll up, cut, and bake like cinnamon rolls.

**Cornflake Macaroons.**

One cup cocoanut, two tablespoons corn syrup, one-fourth cup sugar, two egg whites and two cups cornflakes. Cook cocoanut and syrup in a double boiler until it is soft. Add sugar and cornflakes. Beat in egg whites and bake.

**Oatmeal Nut Cookies.**

Two cups brown sugar, one cup butter, two cups flour, two eggs, one cup chopped walnuts, one cup seeded raisins, one teaspoon soda, one cup oatmeal. Mix according to the batter method, shape into balls, flatten them out and bake on buttered tins.

**Apricot Fritters.**

Beat two eggs and add one-half cup cold water, one-fourth teaspoon salt, one teaspoon sugar, one cup flour and one tablespoon olive oil or butter. Drain thoroughly the canned or stewed apricots, removing the skin, if any. Dip each apricot in batter and fry immediately in hot fat. Drain on soft paper and serve with the fruit juice, thickened slightly with arrow root or cornstarch and flavored with lemon juice.

**Potato Nuts.**

Use one cup of cool mashed potato seasoned with milk and butter, one-half cup water, one-half cup milk, one cup sugar, one teaspoon vanilla, one teaspoon nutmeg, three heaping teaspoons baking powder, one tablespoon melted butter, a little salt and enough flour to make a soft dough. Fry like doughnuts in hot fat.

**Mock Angel Food.**

Mix and sift the following ingredients four times: One cup sugar, one and one-third cups flour, one-half teaspoon cream of tartar, three teaspoons baking powder and one-third teaspoonful salt. Then pour on gradually two-thirds cup scalded milk and add one teaspoon lemon or almond extract. Mix well and then fold into the stiffly beaten whites of three eggs. Turn into an unbuttered tin and bake forty-five minutes in a moderate oven.

**Date and Fig Filling.**

One cup figs, one cup dates, juice of one-half lemon, one-half cup sugar and one-half cup boiling water. Wash, dry and chop figs. Wash, dry, stone and chop the dates. Mix the fruit with the sugar, water and lemon juice and cook over hot water until thick enough to spread.

**Mocha Frosting.**

Two tablespoons hot black coffee, one tablespoon butter, two tablespoons cocoa, vanilla and one cup powdered sugar. Mix together coffee, vanilla, butter and cocoa. Add sufficient sugar to thicken mixture so it won't run.
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HEATING-Notes

Oil as Fuel

RECENT interest regarding the adaptability of kerosene and other hydro-carbons as a fuel for heating homes has led to the reopening of this old subject. It has long served as a cooking fuel where gas was not available; and with the development of the newer designs of cooking stoves and ranges which burn kerosene as a fuel it is a great boon in the work of the household. While it may not be quite so easily managed as gas and electricity, piped or wired into the range, yet the very fact of its being movable, and not requiring these public utilities, and installation, has its own advantages. In the light of present day developments in the coal industry, kerosene has again elbowed its way to the front in a way to challenge the attention of engineers, and of householders.

The topic came under discussion at a recent meeting of the National Warm Air Heating and Ventilating Association, where the speaker made the following points as necessary for the successful liquid fuel burner in the house, according to the Heating and Ventilating magazine: In order to be satisfactory such a burner must be reasonably quiet in its operation as well as being dependable and automatic. It must function perfectly without an attendant. It must meet the rigid requirements of the fire underwriters; it should decrease, certainly not add to the fire hazard. Finally, it must adapt itself to existing heating plants without physical change. Asking if it is possible to construct a liquid-burning device, which will meet all these requirements, he stated that it was not only possible but already an accomplished fact.

The usual vaporizing and atomizing methods of burning kerosene the speaker dismissed as impractical for use in connection with the heating of small homes.

Intense combustion is easily attained with a charcoal fire because the fuel remains solid at the temperature of ignition, presenting a large surface for the oxygen to act upon, and an atom can not break away and go up the chimney. In the combustion of a liquid, however, the fuel is already on its way to the chimney before it is even partly burned, in ordinary devices. The first effect of heat is to separate the carbon from the hydrogen. If the carbon can attach itself to a hot coal, its combustion can be easily accomplished, but if it is carried along in the current of gases it is not only wasted as fuel, but clogs the flue as soot. “If, therefore, a liquid fuel-burning device were constructed in which the walls of the combustion-chamber were walls of flame, and diffusion were well developed if not entirely completed before the beginning of combustion, we would be fast approaching a mixture akin to smokeless powder.”

These being the requirements, the speaker told of the efforts to develop a burner to meet them, which he announced had been crowned with success. In fact such progress has been made with the device under consideration, that in projecting the finely divided fuel mixed with the proper proportion of air into a white-hot flame-walled furnace, every atom of carbon-oxide, simultaneous with its formation, is met by and combined with that other atom of oxygen to the immediate formation of carbon dioxide, which spells complete combustion. The time element, so difficult to control in the combustion of coal, is here absent.

The householder is certainly interested in the further development of kerosene fuel. It has possibilities never fully realized until the present crisis focussed fresh attention upon it.
Coke In Domestic Heating.
Coke should be used for heating houses, because it is a clean and convenient fuel, according to a paper recently published (No. 242) by the Bureau of Mines. It eliminates smoke, reduces the necessity of cleaning the furnace and flues, requires less attention than coal, and gives a more uniform temperature in the house. "It may not be generally known that when one ton of soft coal is coked in a by-product plant, about 5,000 cu. ft. of gas is made available for outside use. Moreover, the process of coking one ton of soft coal yields about 3 gallons of light oil suitable for motor fuel. The following table is interesting:

Value of By-Products Obtained by Coking One Ton of Coal.

Cost of 1 ton of coal.......................... $7.00

1 ton of coal produces—
0.65 ton of coke, worth.............. 6.00
5,000 cu. ft. of gas, worth........... 5.00
3 gal. motor oil, worth.............. .75
9 gal. tar, worth....................... .25
25 lbs. ammonium sulphate, worth... 1.25

Total value of products............ 13.25
Less cost of 1 ton of coal.......... 7.00
Increased value....................... 6.25

Canned Heat.
A solidified fuel, which burns like an alcohol lamp, but is non-spillable and non-explosive and comparatively odorless, has been on the market for some time. It has been fitted with a number of cooking devices which makes it very convenient for camping and picnics. The fuel comes in small cans which may be set under a burner of any kind. A two-burner plate is made, which folds flat when not in use so that it may be very conveniently carried. For the cooking devices prepared especially for it a simple rack or perhaps a flat plate in addition is all that is necessary. It will warm the baby's milk or a square meal can be prepared. Even a curling iron heater is included.

Save the Furniture!
Get some little rubber bumpers for less than a cent apiece for the doors in the kitchen that make marks on the furniture. One cannot see these bumpers easily and even if you do they look better than unsightly marks.
Building Material

Economies in House Building

If you build houses now will want to get good value for the money spent and the following ideas may be useful to them.

The bungalow makes a very convenient and often an inexpensive home, but if one is looking for economy in building and in heating and future upkeep these things should be taken into consideration. The roof and the foundation are expensive parts of a house so the more space we get for a given amount of these the less the house will cost.

The roof will cost the same whether it covers one story or two, and the foundation for a single story will carry two equally well. The difference in the amount of side walls would not be much if the second story was to be full height, but even this is not necessary because, the house called story and a half, that is, with the walls of the second story from four to five feet high, can be made to give nearly as much room as a full two story and at some less cost.

Little Things That Lower the Cost.

To save on side walls and foundation the house should be nearly square, but if the width is limited, the length may well be increased for the end walls will cost the same, whether the sides are long or short.

The foundation can often be made of concrete at a saving over other material, and as the walls will be thinner some space may be saved also. A small house should be planned so that one chimney will take care of all stoves needed, and this can be of concrete.

For the porch there need be no half columns next the house, and the same finish can be used for the sides of the house here as elsewhere, instead of matched ceiling as is often done. The plate and rafters of the porch may be dressed and then they can be painted, and need not be inclosed or ceiled. The roof of the porch may be quite flat and covered with roll or some patented roofing. A saving may be made by using an open cornice, as the roof boards surfaced on the underside are the only ones needed, and short lengths of lumber may be used for these at the gable ends.

One can save by a careful location of doors and windows, often a door can be dispensed with by shifting the others a little, so the two will do as well as three. The cellar entrance may be made a grade door,—which will also serve as the back door of the house.

If two or three windows are put together using double or triple frames, a little may be saved on these and also on the sheathing and clapboarding. The location of the bathroom will make some difference in the amount of piping required, the closer together the plumbing can be placed the less it will cost.

Built in furniture and closets will save space, as they are put where partitions would otherwise be, and this will permit
You spend considerable money in making the walls of your building warm—in getting first-class windows and sash. Yet you cannot set the sash in frame, no matter how perfect, and expect that the joint will be tight. Chamberlin Metal Weather Strips effectively seal the crevices between sash and frame. Chamberlin caulking between frame and brick eliminates dust streaks usually seen around frames, and protects decorations.

Draughts Are Costly and a Menace to Health

It's costly and useless to try and keep your house comfortably and evenly heated when the cold air is sifting in and the heat is escaping through the cracks around doors and windows.

Thousands of home owners have found the way to winter comfort and fuel economy through the installation of Chamberlin Metal Weather Strips on doors and windows.

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You can appreciate why 85% of all homes equipped with weather strips are Chamberlin-equipped when you know that Chamberlin guarantees its product for all time—that Chamberlin Weather Strips invariably outlast the buildings on which they are installed—that Chamberlin is the oldest and largest manufacturer of weather strips in the world—that Chamberlin has a permanent service organization with branches in principal cities where weather strip experts are stationed to give immediate installation and adjustment service.

Your home needs weather strips—Chamberlin Metal Weather Strips. You are paying dearly for being without them in fuel waste—in the danger that besets your family from cold draughts and a chilly house.

Better Send Now for Our Interesting Weather Strip Booklet

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515 Dinan Building
Detroit, Michigan
a little paring down in the sizes of the rooms.

Where the stairs are placed between two partitions and enclosed they do not require any ornamental work and this is a saving.

The openings between the living rooms may be made large, that is, the size of two doors, and these may be closed with curtains, at first, and doors provided later if desired.

If a water supply is not at hand, a tank may be placed in the second story, or a cistern built in the cellar or both.

John Upton.

**A Home Grown Barn.**

Why worry over the high cost of building when you can grow your own barn? Here is the story of an Iowa farmer, and his barn, according to local papers: While most people in the forested areas along the upper Mississippi have been shearing the hillsides of their trees and selling it as cordwood, this farmer has kept his woodland, just cutting enough each year to clear out the deadwood and get rid of the defective or crowded trees. The woodlot under such treatment grew better each year and the trees grew lumber instead of disappearing as cordwood.

This farmer had been accustomed to say that he was growing lumber to build a barn. This summer he decided was the time to build. When neighbors asked how he could afford to build, with lumber so high, he pointed to a hill slope below the old barn where were piled high hundreds of logs of maple, oak, walnut and elm.

"We only cut the largest trees," he explained. Besides harvesting the lumber for his barn, down in the pasture is a rock ledge from which he quarried all the rock for the foundation, and not far from the quarry is a sand pit of yellow sand which has furnished sand for the cement. All together he figures that he will have strictly a homegrown barn when he gets through.
KEITH'S MAGAZINE
ON HOME BUILDING

CONTENTS FOR DECEMBER, 1920

Just a Word—The Two-Family House ................................................. 210
Building a Bungalow Without a Dining Room—Louise N. Johnson ............. 213
Books and the Fireplace—Faith Burton .............................................. 216
Fireplace Inscriptions—Elizabeth Emery ............................................ 218
Prayer For a New House—Louis Untermeyer ................................. 220
Fronting West—Dorothy DeMeritte Dunia ........................................ 221
Values and the New Home ................................................................. 223
Dining Alcoves and Dollars .............................................................. 224
Under a Broad Low Roof .................................................................. 226
A Suburban Home .............................................................................. 228
Attractive Small Homes .................................................................... 229

DEPARTMENTS

Inside the House
Decoration and Furnishing—Virginia Robie, Editor
  The Spirit of Christmas ................................................................. 232
  For the Children’s Room ............................................................. 235
Answers to Questions ....................................................................... 236
Table and Food Values
  Filling the Christmas Larder—Elsie M. Fjelstad ............................. 240
Household Economics
  The Home Time-Table ................................................................. 244
Heating Notes
  Windows Open at Night and Humidity ......................................... 246
  Peat as a Fuel of the Future ......................................................... 248
Building Materials
  What I Want in My House ............................................................ 250
  Preserve the Surface of Wood ...................................................... 252
Splinters and Shavings
  “The Human Engineer” ................................................................. 254
  Sugar From Trees ......................................................................... 254
Contents Volume XLIV ...................................................................... 256

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Copyright, 1920, by M. L. Keith.
Blossoming shrubs set in tubs make an effective entrance decoration
Building a Bungalow Without a Dining Room

Louise N. Johnson

The creative instinct to build or fashion our own surroundings is in the make-up of each of us, and while it may seem buried in the occupants of residential hotels, it isn't often necessary to scratch far beneath the surface to find it. There aren't many women, or men either for that matter, who are quite without the instinct to feather a nest. In some of us it is as inherent as in birds, and few are without it entirely. By "nesting" instinct of course I don't mean a desire to cover oneself merely with some sort of roof, for necessity and convenience compel that.

That magic difference between a "house" and a "home" is best expressed in the quotation—

"Home is not merely four bare walls,
Home is where affection calls."

I am not going to make any sweeping denouncement of those who wander about aimlessly without the anchor of home, for they have missed so much already. Often they are the victims of circumstances rather than inclination. Apartments, unfurnished ones, where the occupant has expressed her individuality by deft original touches in the furnishings, are often little homes in themselves. The furnished apartment, however, I have never been able with an honest conscience to call a real home.

Those who have never had the joy of building, of seeing their own ideas take shape in a structure, be it only a shack, and watched the flowers and shrubbery shoot up and, blossoming, become things of beauty, such people have lost one of the keenest joys of living. To even a person who has made over a house, knocked out a partition here and
there, and lengthened a window or door to suit her own fancy, has come the satisfaction of accomplishment.

A most artistic little bungalow that will prove an interesting study for a prospective builder is designed by an architect for his own home. As the floor plan shows, it embodies some different features that are attractive from more than one angle. That an architect has an advantage over the rest of us when it comes to planning isn't to be denied. His sense of the fitness of things has been developed to the nth degree by observation and experience, so when it comes to building one for himself he is apt to have ideas a few laps ahead of other people.

The exceptional way in which he has laid out the floor space, so that it was possible to have a spacious living room in a comparatively small bungalow is interesting. You see the little home boasts no dining room at all, though anyone would agree that the cheery little nook placed at the end of the living room, connecting through a single door and pass pantry with the kitchen, is as attractive a place to dine as one could wish.

This arrangement made possible a living room of a size not possessed by many homes of twice its size.

In the morning, when the doors are closed into the living room, it serves the purpose of a breakfast nook, and at dinner, with the French doors open into the living room — presto — it is a dining room as effectively separated from the kitchen as in many homes. The built-in seats and buffet are finished in old ivory, as is also the table. Each seat accommodates two people, and there is room for a chair at each end, which gives a seating capacity of six. The panels above the seats are of brightly colored cretonne. When the table is set and the indirect lights cast their soft glow over the room, it is both intimate and homey.

There are a number of talking points
in favor of this clever arrangement. Think of the saving not only in dining room furniture, rugs and hangings, but, what is infinitely more desirable, in the labor of the daily routine.

French doors through the living room, with its artistic fireplace, open on a cheery sunporch, one of the features which makes the home so attractive. The bungalow is built on a hill overlooking a valley, and the porch is placed to get the most of the splendid view. Stepping stones lead from the porch to the bird bath and latticed tea house.

The floor plan shows beyond need of description the layout of the other rooms. The closet opposite the kitchen contains a cooler and shelving. There are also laundry trays, a wall ironing board, and in fact all modern equipment.

The home was built only this year, so that it was not possible to obtain photographs of the exterior, the grounds not yet being in good shape.

The gardens, as well as the house, have been attractively planned. A privet hedge encloses the grounds, in which there are some four hundred plants. In the northeast corner has been planted an exquisite rose garden, and on the west side a variety of fruit trees. Behind these are placed loganberries, raspberries and currant bushes. A latticed trellis, over which rose vines will be trained, is being built to separate the lawn from the berry bushes.

The garden as well as the house has been attractively planned

E. G. Park, Architect

**Epigrams From Ross Crane**

A home should be an impetus for the activities of those in it.

No matter how much I hated a man, I'd never build him a home without a fireplace in a living room. I'd do that much for the sake of his children.

Many family jars are caused because the furniture is out of tune.

Out of the home comes the strength of the nation.

Take art to the people and the people will take to art.
In the coming of mid-winter, bringing with it the holiday season, no feature of the house is more appreciated than the fireplace; especially the big generous fire place with old fashioned andirons, where real logs are burned. Such a fireplace is quite a luxury in these days of the vanishing wood pile. With our thoroughly heated houses it is not for the additional warmth, so much as for the cheer of the blazing logs, or the glow of the coals, that we sit around the fireplace fire. It is the spirit of the fire with its tradition-long tale of hospitality, the symbol of good fellowship and of cheer, together with the gathering round the fireside of family and friends, that warms the heart with a feeling deeper than the warmth which even the best built fireplace can throw out, and which does not fail with the fading of the embers.

The big brick fireplace with its roomy hearth and possibly a seat placed on either side is very welcome as an accessory in planning the festivities for the holidays. If the fireplace be set in oak paneled walls, the decorations may take character from the old English baronial halls, stately in type. In the home of a "mighty hunter" the overmantel of a brick fireplace gives an excellent setting for the deer head or other trophy of his prowess. The photograph shows tall, seven branched floor candelabra of wrought iron, very effective against the paneled wall placed on each side of the fireplace.

At other times than those of festivities, however, the luxury of the fireplace comes
in its close connection with some favorite pastime or hobby. Of course it has the really utilitarian use—often a bit of a luxury—of the little open fire on cool mornings and evenings throughout the open air season of the colder climates, and a still wider usefulness in the milder latitudes, where a little fire is all that is needed for the greater part of the year. The easy chair, a good light, and a shelf of books are the accessories of the fireplace most generally desired. In addition to this, a well-filled smoking stand on one side and a sewing basket, or better still, a dainty sewing table on the other, spells comfort and perhaps accomplishment for a winter evening or a rainy day.

A great brick fireplace with seats on either side

The fire irons are a great comfort to many people, who love to stir the fire and turn the glowing embers.

It will be noted that provision for books beside the fireplace is a very usual arrangement in carefully planned houses. It may be only two or three shelves built in over a seat, or book cases reaching to the ceiling, though the more usual arrangement makes the cases the same height as the mantel shelf.

Oftentimes book shelves may be built in beside the fireplace, finding a more fitting place than elsewhere in the room; or seats and bookshelves may be built together in some of the many attractive designs. One very homey and practical arrangement where the seat is built under windows, places short bookshelves over the ends of the seat at either side of the windows, the seat end extending up and forming the
end of the book shelves as well. If, as in this case, the seat and book shelves are built at the end of a Colonial fireplace, the shelves and seats are all painted white. In this instance the low-ceiled alcove adds to the effectiveness. There are many practical ways in which a cozy and comfortable seat, a good light, books and a fireplace may be brought into companionable relationship.

The dining room fireplace which is shown here is unusual in its use of tile for the overmantel. So effective are the tile as a picture medium that one wonders why such use is not more commonly put into practice. No better medium for reproducing a beautiful and appropriate picture in a permanent form are to be found, than in burnished tile, while with a wider use of such work so that the quantity of production would be greatly enlarged, the expense would drop in a proportional ratio, and the cost would not be beyond the reach of the modest home builder. The metal overlay of the face of the fireplace is also interesting, as is the suggestion of the room with the leaded glass windows over the china cupboards.

The first photograph gives a glimpse of a most interesting room. One sees little of the fireplace more than to know that it is there. The wide book case extending to the height of the overmantel and recessed nearly to the ceiling first takes the attention, and is echoed in the embroidered panel on the other side.

Among the choicest furnishing in a home are the cases of books, but they are not always so docile as other inanimate objects; they seem to partake in some measure of the qualities accorded them by their association with their owners. Without words they tell their own story whether they are friends and at home in the room, or whether they are company and in company dress. A neighborly fireplace bids them to hospitality and asks for human companionship.

Fireplace Inscriptions
Elizabeth Emery

HETHER the house be hut or palace, it can have no fitter decoration than a seemly hearth in each apartment, be they few or many; and no hearth is the worse for an inscription suitable to the room and its purposes. As a matter of fact such inscriptions can hardly be called usual either in this country or in Europe. Fit inscriptions for the hearth, therefore, are not easily found, nor are they easily invented. It is easier to make a posy for a
ring, or a suitable rhyme to accompany a gift, than to put into apt words a proper sentiment to take its permanent place upon the chimney breast. The idea conveyed must be one that host and guest, parents and children, may see before them day after day and not find trite, pretentious, *malapropos*, or priggish. Such a motto should express in well chosen words the finest sentiment of the hearth, and if the room be one of hospitable resort, the sentiment should be sufficiently homely to connote that warmth of heart without which the logs blaze in vain, yet not so intimate as by implication to include in the welcome only those of the family.

**For the Living-Room**

Let no one bear beyond this threshold hence, Words spoken here in friendly confidence.

Home is where the hearth is.

My fire is my friend.

There is no place like a chimney corner for confidences.

All care abandon
Ye who gather here.

*Dissolve frigus, ligna super foco, large reponens.*
—Horace, Ode 9, Book 1.

Drive away the cold, heaping logs on the hearth.

*Breded Digor.* A Breton motto meaning, Always open.

*En servent les a uires, je me consume.*
I consume myself in serving others.

*Sibi et amicis.* For myself and my friends.

*Amor Proximi.*
Motto of a Swedish order of chivalry, meaning Neighbor-love.

*Dum potes aridum compone lignum.*
—Horace, Ode 9.

Lay up seasoned wood while you may.

Warm ye in friendship.
—From a private house in Boston.

*Bene facere, et discere vera.*
A Swiss family motto meaning, To do right and speak truth.

Come hither, come hither,
Here shall ye see no enemy
But winter and rough weather.
—As You Like It.

*Dulce mihi furec est, amico recepto.*—Horace.
I like to sport with my guest.

He that hath a house to put his head in hath a good head-piece.—King Lear.

A hundred thousand welcomes.—Coriolanus.

Your presence makes us rich.—Richard II.

Abide now at home.—The Bible.

And when he cometh home, he calleth together his friends and neighbors.
—The Bible.

**For the Dining-Room**

A good digestion to you all.—Henry VIII.

Let good digestion wait on appetite
And health on both.—Macbeth.

Come thou home with me and eat bread.—The Bible.

*Quis post vina gravem militiam Aut pauperiem?*—Horace, Ode 37, Book 1.
Who can think of war or poverty after wine?

*Nec quid nimis.* Never too much of anything.

There is full liberty of feasting.—Othello.

We have a trifling foolish banquet toward.
—Romeo and Juliet.

The guests are met, the feast is set;
May'st hear the merry din.—Coleridge.

Feast with the best, and welcome to my house.
—Taming of the Shrew.

Let them want nothing that my house affords.—Ibid.

Prepare for mirth, for mirth becomes a feast.
—Pericles, Prince of Tyre.
Some hae meat and canna eat
And some wad eat that want it;
We hae meat and we can eat;
And sae the Lord be thankit.—Burns.

That is a pleasant motto which was found upon a baker's sign at Pompeii: *Hic habitat felicitas* (Here lives happiness), and it might, with proper modesty, be inscribed over the family fireplace in a house given to simple hospitality. There is a delightful motto in a little house in Florence just within the shadow of Giotto's tower, and one well suited to a modest home anywhere. It is nearly equivalent in sentiment to the refrain of "Home, Sweet Home," and thus it runs:

*Casa mea, piccola che sia,
Sei semper casa mea.*

Literally translated it means: "My house, however little you may be, may you always be mine." A briefer equivalent is, *Pauca sed mea*, which is very like Shakespeare's

*A poor thing, but mine own.*

*Bon feu à mal hiver.*
A good fire for a hard winter.

is a pleasing old French motto for a living room fireplace.

**Se taire ou bien dire.** Be silent or speak well.

is a sound old French motto, suitable to a room where the family and its guests gather for converse. Farnham Castle, at one time the seat of the bishop of Winchester, has a fine motto in Norman French, fit for almost any fireside. It is:

*Au Dieu joy, aux amis foyer.*
Faith toward God and a hearth for my friends.

None come too early or return too late.

is a hearty English sentiment proper to a hospitable hearth. Another such is:

*When friends meet, hearts warm.*

More distinctly domestic is the old Scotch sentiment:

*East, West, hame's best.*

The Maitland family motto is good for an unpretentious hearth:

*Paix et peu.* Peace and little.

Literature and folk tradition bristle with mottoes and sentiments suitable to the fireside about which men gather to take a cup "of kindness," and the line of Burns from which these words are quoted is one of the best of such mottoes.

**Prayer For a New House**

*Louis Untermeyer*

May nothing evil cross this door,
   And may ill-fortune never pry
About these windows; may the roar
   And rains go by.

Strengthened by faith, these rafters will
   Withstand the battering of the storm;
This hearth, though all the world grow chill,
   Will keep us warm.

Peace shall walk softly through these rooms,
   Touching our lips with holy wine,
Till every casual corner blooms
   Into a shrine.

Laughter shall drown the raucous shout;
   And, though these sheltering walls are thin,
May they be strong to keep hate out
   And hold love in.
LOCATION which gives the home a west front-age has many good points which, when carefully considered, may equal or even outweigh the advantages claimed for the lot fronting east.

Since the east front lot is generally considered the more desirable, residence lots facing the east are usually priced higher, sometimes several or many hundred dollars higher than the west front locations; and here is a practical item to consider—the difference in price. Purchasing a west front lot in such a case, one has several hundred dollars (under the price of the east front lot) which can be used to develop the property, to add to the house or the grounds. The capital one saves in purchasing the west front site is often sufficient to allow one to make improvements so artistic and attractive that the lot will far out-value the lot across the street, which was originally the more expensively priced lot.

But above the cash consideration stands a more important item—the real value of the property to one, expressed in the use and pleasure one gets out of the land. The west front lot allows one to have, all to one's self, to enjoy in privacy and protection, the desirable east exposure!

After purchasing the west front site, a house may be planned to make the most of the eastern exposure, with living rooms and lounging rooms at the rear where, undisturbed, one can have the benefit of "the glorious morning air." Library, den or sun-room can be placed at the rear of the house, leaving the front of the house for the reception room or parlor, where sunshine from the west, and pretty sunset views, will welcome an afternoon caller.

Morning sunshine is always desirable. It starts one out for the day in a happy frame of mind, assuring one that "all's right with the world," one's inner world. So it seems as though an east exposure is almost a necessity for the room one occupies first in the morning—the dining room or breakfast room. In the house fronting west, the dining room placed at the rear of the house has the attraction of the morning sunshine and the added luxury of privacy and freedom from intrusion.

In a bungalow, one usually plans to have
the bedrooms at the rear or side of the house where seclusion and quiet may be assured. And here again the west front lot gives one the chance to place the bedrooms, at least one or two, at the rear of the bungalow and have the refreshing east winds and morning sunshine to greet one on awakening!

In the desirable sections of cities and towns most residence lots have a restriction requiring houses to be set back a certain distance from the street. This building line varies of course from twenty-five to fifty feet or more; and conforming to this restriction, the house is usually set much nearer to the front of the land than to the rear unless special landscaping or other effects are desired. This allows larger spaces for attractive grounds in the rear, in the one-time backyard, which now we like to call the garden side of the house. Again the west front lot scores an advantage for the largest plot of one's land has an eastern exposure which makes it desirable for outdoor comfort and valuable for gardening and landscaping.

In planning the exterior of the house fronting west, one can have a formal front entrance, which is both inviting and hospitable and yet reserve the rear of the house and the east exposure, for a broad veranda or terrace where one can lounge and read or sew to one's heart's content, free from the annoyance or intrusion when one wishes to rest.

The eastern exposure for out door living quarters is very desirable for it gives one the gentle warmth of morning sunshine and the grateful shade in the afternoon when summer suns are hottest. With the west front house giving one an eastern
exposure with privacy of the back yard, one can build a broad protected veranda, glassed at the north, or have an open terrace, which can be shaded as one desires with awnings or vines trained over beams in pergola effect. And one can get the maximum enjoyment of one's outdoor living rooms and a walled garden or lawn hedged with flowers will give the city dweller a charming place to enjoy the beautiful days of summer or golden days of fall.

If one plans one's house with plenty of windows on the east, one can have the vista of lawn and gay blossoms from the breakfast table or from the sleepy hollow chair in the library, and long French doors opening on to porch or terrace, which are always attractive and may, perhaps, lead the way to a garden filled "with stocks, and phlox, and hollyhocks!"

Values and the New Home

HEN a pleasing and satisfactory new home has been built, value has been created. What before had its determined value as vacant land, wood, brick, mortar, etcetera, and in its own class, labor,—or as we may come to call it—effort, or manpower, has its less easily determined value. Added to these, or back of them and inspiring the effort is the ideal of the home which the owners are asking for, and the creative skill of the architect, which visions the ideal which the owners present to him, and materializes—within hard set limitations—the home they are asking for, as he sees and is able to bring it into form.

The home which is shown here has proved successful beyond the usual. The exterior is simply designed but pleasing in effect. The outside surface is of stucco, over metal lath, and with wide projecting eaves. The windows are well grouped, and the entrance stoop attractive, yet there is nothing particularly different from many other houses which one passes in a day's journey. It is the inside of the house which especially attracts the attention. The plan is both practical and convenient and very com-
plete, as well as economical in building.

On entering the main hall the eye is attracted at once to the treatment of the breakfast alcove, as a glimpse may be caught of its wicker seat ends, through the French door. The living room gives the effect of a very spacious room; and the treatment of the fireplace and book cases with windows over the cases is very attractive. French doors to the sun room give a pleasing vista. On the other side of the hall is the dining room, with a buffet built in a projecting bay. A pass pantry is built under the stair landing, connecting the dining room and kitchen. A coat closet opens to the main hall.

The kitchen is well arranged and equipped. Notice the drop table and ironing board. The basement stairs lead from the entry, with a grade entrance.

On the second floor are three good chambers, one of which is really a sleeping porch; a maid's room; and bath room. In addition to the usual fixtures in the bath room there is a shower over the tub. Good closets are provided for all of the rooms and a private toilet opens from the front chamber. A clothes chute extends from the second floor to the laundry in the basement. A balcony, convenient for cleaning day, opens from the maid's room.

Main rooms are finished in quartered white oak with oak floors. In the living room the finish is fumed oak, with silver gray stain in the sun room. The kitchen is in birch, natural. On the second floor the trim is pine, enameled, with mahogany doors; floors maple. The bath room has tile floor and wainscot.

Dining Alcoves and Dollars

If you want to save space why not eliminate the dining room, which is used only a very small portion of each day? Why tie up so much of your space in a room so little used as the dining room? Breakfast rooms and dining alcoves solve the problem to many people. If you are looking for a small home with all the rooms on one floor, here is an excellent example of that popular style in a well-planned bungalow.

You enter this home through a large
sun porch, which really serves as an additional room. Yet, it is placed at one side so that it does not cut off the light and air of the living room.

A feature of this home is the popular dining alcove. Why give a fourth of your floor space to a room used just three times a day? Why tie up so much of your home in a room that is so little used as the dining room? If there is no dining room, the family must eat in the kitchen or living room. An economical, practical and popular way of getting around this is to set aside a small space between the living room and dining room to be used as a dining alcove. Built-in benches and table will save space and lighten house work. This breakfast room is especially practical and well placed and will seat five people.

The kitchen is compact and planned for step saving. If you like well-arranged room, this plan will fit your needs. There are five closets for clothes and household linens. The kitchen has two windows. It is a step saver, because of the convenient and careful placing of the kitchen sink, table, cupboards and range. There is plenty of space on the second floor for two large sleeping rooms if desired or one large bedroom and play room for children may be finished. Stairs to the basement lead directly from the rear of the house.

If you like plenty of closet room, this plan will please you. There are closets opening from the living room and vestibule. There is place for the refrigerator beside the rear entrance.

This home is planned as a frame structure with heavy exterior bungalow siding. The plan adapts itself easily to the use of stucco on hollow tile or cement block. This bungalow would look well built in brick. The drawing suggests how much a trellis and window boxes will add to the exterior beauty. Careful planting will do much toward making this bungalow as beautiful as a larger home where more money is spent.
Here the lot is wide and a house with a broad frontage is much to be desired, giving plenty of light and air. The broad sweep of the roof is very attractive in the little home shown here, with the low peeping windows letting light into the storage space under the roof.

While this house is built on good foundations with a basement and furnace heat to make it comfortable in cool weather and during the cold season, it is at the same time an open air house, as all of the rooms but the kitchen have double wall exposure with plenty of windows.

The arrangement of the plan makes one side of the house the service end with a service walk leading to it on one side of the lawn, while on the other side is the approach to the porch and living rooms, leaving the lawn unbroken across the front of the house. At the same time the rear entrance could be reached from a walk across the back of the house, so that only one walk is really necessary.

From the recessed porch glazed French doors open both to the living room and to the dining room, with similar doors between the two rooms. Beyond the dining room and opening both to the dining room and to the kitchen is the breakfast room, 10 by 8 feet in size and occupying the
corner of the house. With windows on two sides, this is one of the most attractive rooms in the house, and so convenient that it bids fair to displace the dining room for other meals than breakfast. The kitchen is well equipped with an outside entry leading to the grade entrance and on to the basement.

A hall opening from the living room brings into communication the two bedrooms and the bath room. The farther bedroom also opens to the kitchen, a great convenience when the mistress is her own maid,—as she generally is at this present time.

Very different in plan is the second home shown in this group. The living room has windows on three sides and porch on two sides. There is also an additional bedroom, three in all, with a communicating hallway.

To those not familiar with them, the low pitched roof may not seem strong enough nor steep enough, but they are entirely adequate. The roof is built up on the principle of the tar-and-gravel roof of flat roofed commercial buildings, only some better looking material than gravel or slag is used for surfacing. This is often crushed brick, as in this instance, or crushed granite screenings to make a glistening effect.

The lowness of the attic naturally would

Shrubs and vines make a screen for the porch

E. W. Stillwell, Architect
make it hotter than a high one, were it not for the fact that a surfaced roof reflects much of the sun heat, whereas shingles draw heat. In such houses special ventilators are always built in the peaks of the gable ends.

Hanging baskets are very effective where the span is wide and the open spaces large enough that they do not break up the view or the outlook from the porch. Bay trees or other small tree forms give distinctive touches.

A Suburban Home

In this design we have a commodious modern house of five rooms, besides the breakfast room, on the first floor and four bedrooms on the second floor. The main part of the house is 32 feet wide and 30 feet deep with an extension of 11 feet for kitchen and den, which is not carried above the second floor.

The general style might be called "Italian" with the low pitched roof on simple lines and wide projecting cornices. The roofs may be either tile or slate, and the decks on front and rear balconies are flat and tinned.

The entrance from the porch is through a vestibule with closets on either side for coats and wraps. The wide hall is centrally placed between the sun parlor on one side and the living room on the other, wide openings connecting them. The main stairs lead up from the central hall, while a flight of steps from the rear hall reaches the main landing.

Back of the living room is the dining room and beyond that the den. Both den and living room have fireplaces. Between the dining room and kitchen is the pantry, while a breakfast room is conveniently placed connecting with the kitchen and easily accessible from any part of the house.

The principal rooms are finished in Flemish oak with oak floors. The kitchen and pantry are in white as is also the sun parlor.

On the second floor are four chambers
The sun parlor is one of the most livable parts of this modern home

and a bath room, each chamber is provided with a good closet, with a linen closet opening from the hall. There is a balcony opening from the front chamber and also one at the rear of the house over the den and kitchen, as that part of the house is only one story in height. On plan only one window is shown on the front of the chamber opening to the balcony, but two high windows have been added in building the house as shown in the perspective.

There is a full basement under the house fully equipped with all the usual conveniences. The house as shown is of substantial frame construction, with stucco exterior and a brick course at the grade line. Brick or tile might well be used for the walls. The stucco is shown with “pebble-dash” finish, tinted cream color, with wood work painted white.

Attractive Small Homes

At the present time the small home which is pleasing and well planned, attracts more comment, and—if people are prone to anything so “unethical”—downright envy, than does the mansion or the country home. Attending a social or political function given in one of the beautiful homes such as were built by every one who could afford such an establishment—and many who could not—some ten years ago, comment runs something like this:

“What a perfectly beautiful home, and so homelike, even though it is spacious and elaborate.” “Yes, but I would not want the job of running it; it must take a lot of help.” “How much older Mrs. B is getting to look, and no wonder with all those servants to look after.” “It’s beautiful for a party, but I’d much rather have my own little home.” “Well, I should think you would; your home is so attractive, and then it is so easy to keep.”

Two attractive small homes are shown
in this group, one with the popular gambrel roof and the other with a gable facing the street. The house with the gambrel roof is the smaller of the two, with the living room filling the full front of the house, except for the stairs at one end of the room. A sun room opens from the dining room and could be extended to open from both living room and dining room, if desired, placing the door beside the fireplace. The kitchen opens conveniently both from the dining room and

also from the living room. Under the main stairs are the basement stairs with a landing and an entrance at the grade level. The basement stairs lead from the kitchen.

On the second floor are three bedrooms and bath room. One of the bedrooms is quite small, 7 by 9 feet, with space only for a single bed. Each bedroom has a closet under the slope of the roof.

The second home has living and dining room across the front of the house, with

"It is so attractive, and so easy to keep"
Brick trimmings are very effective on a stucco house

the kitchen back of the dining room. It has one chamber and bath room on the first floor and two chambers on the second floor.

Stucco is used for the exterior treatment of both houses, in combination with brick. A brick course above the grade and brick window sills as well as brick steps are shown in one house, with a very attractive seat at the side of the entrance. The tile roofed garage may be seen in the distance. The vines and planting about the sun room is very attractive in the first photograph.
Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

The Spirit of Christmas

With the approach of the holidays old problems present themselves: What to Give? How to Decorate the House? What to Add to the Christmas Menu?

There is an ancient sameness to our celebration of Yuletide. Yet therein lies the charm. Suppose that holly and mistletoe should disappear, that Christmas trees ceased to grow, that all the candles turned into electric lights, and all the fireplaces into radiators. Suppose that all the cooks should forget how to make plum pudding or that St. Nicholas moved to Mars. It is too tragic even in the thinking.

Because year after year we have bought holly and mistletoe and candles is just the reason why we take particular joy in repeating the purchase this year, just as we shall next year, and the next, and the next. And if for four Yuletides the sound of chimes seemed almost drowned by the roar of cannon, the music now seems sweeter, for there is added the song of service and sacrifice.

If by chance our celebrating of the twenty-fifth day of December seems a bit monotonous, read Leigh Hunt's "Inexhaustibility of the Subject."

Here is a fragment:

"So many things have been said about Christmas that it is supposed by some there is no saying more. What! do they suppose that everything has been said that can be said about any one Christmas thing? About plum pudding for instance? About mince pies? About holly? About joy? About Rosemary? About mistletoe? (Good Heavens, what an immense number of

It is a good way to get into a Christmas mood—this reading of Leigh Hunt. Thereafter it will be difficult to believe that Dickens caricatured Hunt in the unpleasant Mr. Harold Skimpole of "Bleak House." If we care to believe it the rest of the year we can truly forget it on Christmas, remembering that Hunt once said of all disagreeable people in fiction Skimpole stood supreme.

In the interests of the Christmas spirit it will be well to read a little more, but where to begin and where to end is hard to say. If we follow the advice of genial Hamilton Wright Mabie in one of the papers in "By Study Fire," we will turn to Alexander Smith's "Dreamthorp" and read the essay on Christmas. "There are often books of the heart around me," writes this delightful sage of the hearthstone, "but on Christmas Eve it is always 'Dreamthorp' which seems to be at my hand."

And after Alexander Smith, perhaps Washington Irving's memorable English Christmas or "Christmas in the Olden Time" by Walter Scott. And Dickens? Where may one stop with Christmas and Charles Dickens? And of modern things that famous letter by the late Frank P. Church which is printed every year in the Christmas edition of The New York Sun must be reread. Christmas editorials come and go but this particular one written to a little girl who demanded of The Sun by letters to know the truth: "Is there a Santa Claus?"

"Not believe in Santa Claus. You might as well not believe in fairies. Nobody sees Santa Claus but that is no sign there is no Santa Claus. The most real things in the world are those that neither children nor men can see. * * * * Only faith, fancy, poetry, love, romance can push aside the curtain and view the picture the supernal beauty and glory beyond. Is it all real? In all this world there is nothing else so real.
"No Santa Claus! Thank God he lives and he lives forever. A thousand years from now, little girl, nay, ten times ten thousand years from now, he will continue to make glad the heart of childhood."

It is well to read both old and new in the pursuit of the Christmas feeling.

Surely no one could write about Christmas like dear Charles Dickens. But Thackeray's "Mahogany Tree" comes to mind with its rollicking joyous toasts:

"Christmas is here,
Winds whistle shrill,
Icy and chill
Little care we;
Little we fear
Weather without
Sheltered about
The Mahogany Tree."

The carols more than anything else bring the star above the manger near to us.

We may choose the majesty sweep of Milton's "Hymn to the Nativity," with its opening Ode:

"Ring out ye crystal spheres
And bless our human ears
If ye have power to touch our senses so,
And let your silver chime
Move in melodious time;
And let the bass of heaven's deep organ blow;
And, with your ninefold harmony,
Make up full concert to the angelic symphony."

Or the mediaeval quaintness of
"Where wilt thou lodge this eve of grace
O Mother Mary, O Mary Mother?
The wind is cold, the ground is hard.
The crinkled grass with snow is starred
Where wilt thou lodge?"
The second verse continues the theme:
"What dost thou see this eve of grace
O Mother Mary, O Mary Mother?"
And the third:
"What dost thou hear this eve of grace
O Mother Mary, O Mary Mother?"
And the final:
"Who comes to earth this eve of grace
O Mother Mary, O Mary Mother?
A little Child, a Babe new-born
A Rose that blossoms on a thorn;
But fairer than all the lights of morn,
Fairer than all the morn;
For lo God's Son and man's Solace
Is given to us this eve of grace."

Or we may choose the tender beauty of such modern Nativity hymns as "Oh Little Town of Bethlehem," by Phillips Brooks, or his less known "The Silent Stars Are Full of Speech," or his more familiar "Everywhere, Everywhere Christmas Tonight."

It makes little difference. We have found the Christmas Spirit.
For the Children's Room

It is pleasure to find that the designers have not forgotten children. There are three charming patterns of well-known nursery songs, pictures and adapted to decorative purposes in block prints. The first print shows the Ride a Cock Horse to Banbury Cross lady. The second is of that delightful maid who hangs clothes in the yard and allows the blackbird to take off her nose, while the lazy Queen eats honey in her kitchen. The third is a little English Goose Girl, a pensive little maid with nice white pinafore. This tapestry is similar to denim, but soft and far more pliable. It is fifty inches in width, and does not sell by the yard, but by the strip, crosswise of the goods. It is delightful as a bordering for a portiere of plain goods or a sofa cushion. If used in alternating squares of plain, the effect is interesting for a bedspread or table cover. It may also be used in a lengthwise strip across a plain bedspread.

The nursery of a certain city house is a jolly room, and the two small boys for whose pleasure it was planned enjoy it to their hearts' content. There are low chairs to draw up to their very own fireplace, a long window-seat where small bodies can rest without fear of disturbing things, and floors and walls that are so constructed that the word “hush” is seldom heard. There is nothing in the room that small hands and feet can harm, and there are so many things with which to have a good time. The walls of the room are a deep sky blue and the low cupboards and chests are painted white like the woodwork. There are toys and pictures of the kind that are dear to a child's heart, and there are other things that the lads will grow to like later and which are now shaping their ideals—a Della Robbia east of the Madonna and child in lovely ivory tones, and a series of mother-and-child pictures, designed by those gifted women, Elizabeth Shippen Green and Jessie Wilcox Smith. Above the blackboard, which is the favorite plaything, is a colored print illustrating one of the scenes in the Holy Grail. This picture is set in the woodwork and is so arranged that it may be frequently changed. The glass which covers the prints opens out like a small door, and it is a simple matter to insert a fresh subject.
Furnishing a Dutch Colonial House.

C. J. M.—I have just recently subscribed for your magazine, but have been interested in it for some time. We have a Dutch colonial house under construction and I would like very much to have your help on the interior decoration.

We have planned to have oak floors in the living and dining room with birch woodwork to be stained brown like mahogany. The rest of the house is to have maple floors with white enameled woodwork and mahogany doors. My living room furniture is brown mahogany, upholstering in blue velour with cane backs and sides. I will have a new rug for this room. What color should predominate? I am having French doors between the living room and dining room. Would you use the same material on these as the over drapes. My dining room furniture is American walnut with blue tapestry seats. The rug I will use in this room is blue and tan, blue predominating. What color drapes and walls would you suggest?

What would you suggest in hardware and lighting fixtures? Will be grateful for any suggestions you may give.

Ans.—Inasmuch as dining room and living room are so connected, we would use the same tint on walls of both—a soft, warm gray. There is a gray that has enough yellow in it to make it blend all right with the tan of the dining room rug.

For living room rug we advise a Geneva rug in plain taupe center with narrow border of three-inch darker shades. This taupe has hints of rose in it, so that in some lights it is a sort of mauve color.

There is a new Sunfast material we have seen in a brocaded stripe, part thin, part opaque, in a rich, beautiful blue with hints of gold. This would be lovely for overdrapes in living room and you might use it with the new lace shades instead of lace curtains, with the same lace put on plain over the glass of French doors. Then have a floor lamp shade of rose silk and table lamp of gold color.

In the dining room, side draperies of blue velvet, lined with gold satin would be very lovely, though a less expensive material, such as Sun-dure, could be used. For bedroom curtains, with the brown mahogany, we like ivory casement cloth, a gray wall and gray rug. We should choose ivory furniture with cane panels for one bedroom with rose cretonne curtains, ivory woodwork, the rag rugs in deep rose color, deep cream wall with rose border.

Oxidized silver would be good finish for electric fixtures.

The Little House

C. M. S.—I am enclosing the plans of my little house. I expect to build a large home soon, but want to have the little house well planned while I live in it.

I wish to have the woodwork of living room and dining room cream white, and the doors brown mahogany, also stair treads and posts; also should the colonnade between living room and dining room be white or mahogany—what kind
of ceiling should I have? I wanted a brick mantel, but could not get the pressed brick in time, so will have to use a wood mantel and tile.

Should I use the cream white paint or enamel? Please give explicit directions.

Please suggest complete color scheme for walls, rugs and woodwork. I can get new rugs if I need them for color scheme. I am going to get a few antique pieces some time in the future. I would like a canopy over my bed.

Should all picture frames in a room be of one kind or can gold and mahogany be used together?

Please feel free to suggest, as I love beautiful things and can get them, but am not original in working out plans. I am very fond of color rightly used, also "old-timey" things, for bedroom especially. I want my kitchen to have color about it. I want it to be very bright and pretty.

Thanking you for any suggestions you may make.

Ans.—Woodwork for living room and dining room, we suggest ivory enamel, finished as follows: four coats lead and oil paint, two coats gloss enamel, one coat eggshell enamel. Doors, stair treads, rail and newel posts, brown mahogany. Columns between living room and dining room, ivory enamel. Floors finished as follows: one coat bleach oil, two coats varnish, and rubbed. Get tile for mantel as near the color of the wall as possible. For living room and dining room walls, would suggest having them the same as rooms are opened into each other practically as one room. Walls may be in oil, stippled and glazed, or papered with stippletone paper. Ceilings should be quite light, to tone in with side walls. For curtains and overdraperies we suggest using blue and gold over-drapery, so as to give more color tone to your living room. You need the color to brighten up the effect of your tapestry upholstered furniture. In addition to your three upholstered pieces, add a mahogany and wicker chair with seat cushion of plain rose or mulberry velvet to relieve the effect of so much figured coverings. These, with your lamp, yel-
low pottery vases, and two or three plain pillows, will make a very effective room. For the kitchen, have the woodwork white enamel; walls and ceiling, oil paint, soft gray. For the bedroom on the first floor, have the woodwork cream enamel, and the walls papered; ceiling, light cream, either plain tint paper or fresco color. Curtains, ruffled dotted muslin, looped back with ruffled bands of same material. Over-drapery and valance of quaint old-fashioned chintz. Bedspread and canopy curtains of same muslin as curtains.

If new rugs for living room and dining room are used, get plain color Wilton, or two-toned effect.

It is not necessary to have all picture frames alike. One or two mahogany frames used in with the gold are all right.

Regarding drapery for windows by the mantel, if the windows are stained glass use blue draperies only; if plain glass, use both net and over-drapery. No valance on these windows, just the side curtains on short rods.

The antique pieces of mahogany you speak of will work very nicely with your other things.

The Fireplace

H. L. McC.—I wrote you some time ago in regard to remodeling my living room, and at your suggestion I have decided to take out the old style grate and have it faced up with brick to the mantel, and made into a fireplace, with bookcase at one side and seat at the other.

I want red brick; and would you advise smooth or rough brick, and what color of mortar should be used in laying up the brick? The woodwork is curly pine, stained, and very attractive.

I would also thank you very much for your advice as to the furnishings in the room. I intend to buy everything new, and would like the color and furnishings, including the wall paper, that would make it at its best. I shall have the large opening into drawing room made smaller, to give more wall space.

What color wall paper and rug should I use in this room, and also what color and style of draperies for both rooms?

Would you suggest draperies in the openings?

Ans.—For the brick facings of the fireplace we advise what is called “Tapestry Brick”—a rough-suraced brick in the colors of rugs or tapestry. A plain red, smooth brick is better adapted to a Colonial room and furnishings. The tapestry colors will be softer, with the rather strong and heavy character of your furnishings.

We approve of your decision to narrow the wide opening, and think hangings in these openings of rich color like a Khiva rug—a mahogany velvet—would harmonize with the tapestry brick and greatly soften the room. We should use a wall paper in tones of gray—one of the new Japanese tapestry effects, all in gray tones; and a gray rug with narrow black border. We have also seen a gray rug crossed by diamonds of black lines that would be excellent. It should be one large rug—10x15—with small one to match in alcove, and a runner for the open stair. Such rugs you will have to get made to order. We could have this done for you if you cannot get such things at home.

If you have the hangings in door openings, we do not think side draperies necessary at the windows; curtains of figured lace would be sufficient, or curtains of white pongee silk would be excellent in this room, if side draperies are not used.

The fireplace brick should be laid up in quite dark gray mortar. The ceiling of the room should be tinted oyster white.

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Advice by Mail

In all branches of interior decoration and furnishing. Two dollars per room. Samples and complete color guide.

ANN WENTWORTH
former Decorative Editor of "The House Beautiful"

461 Fourth Ave. New York City
A Sunshine Effect.

J. L. H.—I appreciate so much your answers on interior decorations, etc., I should like very much to have you help on a few points that are puzzling me.

We are renovating our old country place. What simple treatment would you suggest for a Dutch door flanked on either side by oblong windows under a porch, the only lighting in the dining room facing north.

The walls are cream; ceiling, cornice and woodwork white, and rug brown, furniture oak. What can we do to radiators and steam pipes, all badly placed and in plain sight—the one glaring defect in the house? Is there not a special paint made for radiators and pipes? Would white radiators against white wainscoting be pleasing, with pipes as nearly as possible like paper on walls?

What treatment would you recommend for old pine floors in fair condition that must be used temporarily? We thought of using burnt umber in linseed oil—two coats, and two coats of floor varnish over that.

Ans.—You have already done about all you can do to lighten the north room, with the white woodwork and cream walls. But an effect of sunshine will be given by using little draperies of orange colored, very thin material, jap silk or marquisette, well pushed back to the sides of the flanked windows and parted in the center and drawn back each side of the Dutch door, the glass portion.

You cannot paint the radiators cream, they would stare everything out of countenance. You had best do them in gold bronzing, unless you can have them hidden under an enclosing frame of open spindle work. The spindle frame could be painted like the woodwork.

Your plan about the floors is very good, except floor wax may be applied over varnish, and take the wear. Later you can lay a thin hardwood floor over the pine, or replace it with regular hardwood flooring.

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CHRISTMAS with its holly and mistletoe, its delightful hustle and bustle, its intriguing atmosphere of mysteries and secrets is with us again. Listen, and you can almost hear the silvery jingle of Santa's bells!

There is much to do—and so little time to do it in. There are packages to be wrapped in snowy tissue and bound with scarlet ribbons; holly wreaths to be hung; trees to be trimmed; and pantry shelves to be loaded with savory goodies. For what is Christmas without its candies and cakes and smoking plum puddings?

Maybe you will find in the following recipes something that will help fill your larder.

Christmas Fruit Cake.
Use two cups of raisins, two cups sugar, two cups hot water, one cup of fat, one teaspoonful each of nutmeg, cinnamon, cloves and allspice. Boil all this together ten minutes and then add four cups of flour and one tablespoon soda. Bake in a slow oven about two hours.

Cheap Christmas Plum Pudding.
One tablespoonful of butter stirred with two tablespoonfuls of sugar—brown—until creamy, one cupful of flour to which has been added one and one-half teaspoonfuls of baking powder. Beat one egg and add one cupful of day-old bread crumbs crumbled very fine. Stir in one cupful of seeded raisins and dried currants, one-quarter cupful of broken or chopped walnuts, the grated rind of one lemon, a little grated nutmeg and a little citron peel cut fine. Pour into a mold and steam four hours.

Fudge Square Cookies.
Take one cup of walnuts, two squares of unsweetened chocolate, one-half cup of butter, three eggs, one cup of sugar, three-fourths of a cup of flour, one-half of a teaspoon of baking powder and one-half teaspoon vanilla. Melt the chocolate, add the butter, stir the butter until it melts and set aside. Mix and sift the flour, baking powder and salt. Add the finely chopped nuts to the eggs, also the vanilla. Then add the chocolate mixture. Spread in shallow pans and bake in a moderate oven. When done, and while still warm, cut in squares.

Sugared Walnuts.
Boil one cupful of sugar and four teaspoonfuls of water until it spins a thread and then add about two cupfuls of walnuts. Stir until the sugar hardens on the nuts. A little salt improves the flavor.
Walnut Molasses Brittle.

Boil twelve tablespoonfuls of dark molasses, eight tablespoonfuls of sugar, eight tablespoonfuls of water and four tablespoonfuls of butter until it cracks when tried in water. Be careful not to let it burn but do not stir as it cooks. Have a buttered platter ready and just before pouring add one cup of walnut meats.

Tea Cakes.

Use two eggs, two-thirds of a cup of sugar, one-half cup of flour, one teaspoonful of baking powder, one-half cup of walnut meats and one-half cup finely chopped dates. Beat eggs until light, add the sugar; put in the flour, containing the baking powder, also the finely chopped nut meats. Bake in a sheet and cut in narrow strips when cold. Roll in powdered sugar. These are delicious served with tea or ice cream.

Nut Marshmallow Pudding.

One-half pound marshmallows cut in pieces with buttered scissors, one-half cup chopped walnuts, one-half cup sliced maraschino cherries, and one teaspoonful of their syrup, one-half pint cream, whipped, two tablespoonfuls sugar and one-half teaspoonful vanilla. Combine the above ingredients and mold. It is ready to serve in 30 minutes.

King Edward Cake.

Use one and one-half cups brown sugar, one-half cup butter, two eggs, one cup sour milk, one and one-half cup flour, one and one-half cups chopped raisins, one cup chopped walnuts, one teaspoonful soda dissolved in a little hot water, and one teaspoonful each of cinnamon and nutmeg.

Mix as any cake and bake about one hour in a slow oven. This makes a very excellent cake.

Oatmeal Nut Cookies.

Two cups of brown sugar, one cup of butter, two cups of flour, two eggs, one cupful of chopped walnuts and one cup seeded raisins, one teaspoonful of soda, one cupful oatmeal. Mix with the hands and roll in small balls. Flatten them out and bake them on buttered tins in a slow oven.
Squirrel Bread.
It rises in 30 minutes and bakes in a slow oven only one hour. Take two and one-half cupfuls of white flour, two and one-half teaspoonfuls of baking powder, one cup chopped walnuts, one-half cup sugar, one-half teaspoonful of salt, one cup sweet milk and one egg beaten with milk and salt.

Ice Cream Candy.
Four cups of granulated sugar, one-half cup water, one teaspoonful cream of tartar, one-half cup vinegar, one tablespoonful of glycerine and one teaspoonful of flavoring. Boil the sugar, water, vinegar and glycerine together until the mixture will spin a heavy thread. Remove from the fire, and when it no longer boils add the cream of tartar and flavoring. Pour into a platter and when cool enough pull until white and cut in strips.

Kaffee Kranz (Coffee Cake)
Use one quart of light bread dough and work into it one-fourth cup of melted butter, six tablespoonfuls of sugar, the yolks of two eggs and the white of one egg, also one-half cupful of raisins. Mix all together and add flour until a stiff dough is formed. Set away to rise and when double in bulk, cut down, knead slightly, divide into portions and braid in one long braid. Bring the ends together to form a circle or crown and set away to rise again. Before putting in the oven to bake, spread generously with sugar and cinnamon or when done pour over it a quantity of melted sugar (sugar melted in milk) and chopped nuts.

Chocolate Nut Fudge.
One cup milk, three cups sugar, one-half cup melted chocolate, one-fourth teaspoonful of salt, two tablespoonfuls of butter, one teaspoonful of vanilla and one cup chopped walnut meats. Place the sugar and milk in a pan and boil until it forms a soft ball when dropped into cold water. Remove from the fire and add all other ingredients except the nuts. When cool, beat until it begins to grain. Then add the nuts and pour out instantly.

Date Tapioca.
Cover one cupful of tapioca with cold water and let stand over night. Drain and add two and one-third cups of boiling water, the peeled yellow rind of half a lemon, one cup of stoned dates cut in quarters and one-half teaspoonful of salt. Cook until the tapioca is transparent. Flavor with vanilla and serve with unsweetened cream.

Date Cookies.
One large cup of dates stoned and cut in pieces, one cup sugar, two-thirds cup butter, a little salt, cinnamon and nutmeg. Stir all together in two teaspoonfuls of baking powder, one-half cupful of milk or water and enough flour to make stiff enough to handle with the hands.

Butter Scotch.
Melt together one and one-half cups of brown sugar, one tablespoonful of water and one tablespoonful of vinegar. Add butter the size of a walnut and boil until it hardens in water. Pour into a plate and cut when it begins to harden.

Karo Fudge.
Two squares of chocolate, one cup of chopped nuts, one-half cupful of cold milk, two cupfuls of sugar, one-third cup of Karo syrup, two tablespoonfuls of butter and one teaspoonful of vanilla. Cook the milk, sugar and Karo until a soft ball is formed in cold water. Remove from fire and add vanilla, butter and nuts. Beat until creamy and pour into buttered tins. When cool, cut into squares.
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The efficient housewife knows that a well-kept time schedule is almost as important in running a household as in running a railroad. With it the hours actually seem longer, work seems lighter and a crowded house seems more spacious.

While to the old housekeeper it will seem trite to say it, there is infinite wisdom in making out a weekly and a daily schedule of the things which should be done on certain days. It is also a good idea to note approximately the time which various tasks usually occupy, and which one should begin with the day. Many housekeepers have such schedules half unconsciously in mind and if not crowded with work this is all that is necessary. In the household where there are many tasks to perform, however, with only a few hands to perform them, a written schedule is a wonderful help. It serves to speed up the work, and likewise to keep the worker from neglecting one task for another.

The larger the family the more rigid should be the hours for meals. And with this rather rigid schedule for meals should go the understanding that meals will be begun at approximately the same time each day, whether all the family have arrived or not. Children soon acquire more prompt habits of homecoming if they know that the meal will be begun if they are not at home on time. If they think of it as a moveable feast they tarry by the way, feeling confident that an indulgent mother and patient cook are waiting for them at home.

A few facts which sometimes are of service to the home buyer and meal planner are: one pound of dried fruits and vegetables counts as six pounds of the fresh. Milk, cream and ice cream count as one-fourth their weight or one-half pound to the quart. One pound of molasses or syrup counts as three-fourth pounds of sugar; one pound of jelly, jam or rich preserves counts as one-half pound of sugar. One pound of bread counts as three-fourth pound uncooked cereal.

Indelible Ink.

Equal parts of turpentine and ammonia will remove indelible ink when all else fails, according to an exchange. Saturate the garment well, let it soak, then rinse in warm water.

The Convenient Brush.

Don't be without a small scouring brush within reach, when cleaning cooking utensils. It is also convenient when washing vegetables.

Helps with Dusting.

A few drops of cedar oil applied to dust cloths will not injure the furniture and will be a great aid in removing the dust. If the oil is applied to the cloth when clean and rolled tightly and let lay a few hours it will be all the better when used.

Home-Made Funnel.

When you want to pour ink or some such liquid into a small mouthed bottle of some sort just tear off a corner of an old envelope and then clip off the point of the corner, and you have a funnel which can be thrown away after it is used.
You spend considerable money in making the walls of your building warm—in getting first-class windows and sash. Yet you cannot set the sash in frame, no matter how perfect, and expect that the joint will be tight. Chamberlin Metal Weather Strips effectively seal the crevices between sash and frame. Chamberlin calking between frame and brick eliminates dust streaks usually seen around frames, and protects decorations.

Don’t Risk the Danger and Discomfort of a Draughty House

Shoveling in the Coal Won't Make Comfort

You can’t have healthful heat in your house when icy currents of air are sifting in and heat is being forced out through cracks around doors and windows.

Forcing the furnace is costly and of little benefit under such conditions.

The solution lies in the installation of Chamberlin Metal Weather Strips. They effectively seal up these cracks and stop the draughts that make your home chilly and endanger the health of your family. They enable you to heat your house evenly and comfortably at a considerable saving of fuel. They shut out dampness, germ laden dust and dirt—your home stays clean longer. They even exclude noises.

Chamberlin Metal Weather Strips have been the standard for 27 years.

You can appreciate why architects generally specify Chamberlin, and why 85% of all homes equipped with weather strips are Chamberlin-equipped when you know that Chamberlin guarantees its product for all time—that Chamberlin Weather Strips invariably outlast the buildings on which they are installed—that Chamberlin is the oldest and largest manufacturer of weather strips in the world—that Chamberlin has a permanent service organization with branches in principal cities where weather strip experts are stationed to give immediate installation and adjustment service.

It is to your advantage to know all the facts about this Chamberlin Weather Strip service before you install weather strips.

Send Now for Our Interesting Weather Strip Booklet

Chamberlin Metal Weather Strip Company
527 Dinan Building
Detroit, Michigan
HY do we always want open windows in our sleeping rooms at night? In an address on "Humidity," before the National Warm Air Heating and Ventilating Association, Harry P. Gale had this to say:

"The one and only benefit that comes of having open windows at night is the high average humidity, which soothes the tired nerves, envelopes the body in air fit to live in, and deposits the dust on the floors instead of leaving it to float in the air to be breathed. Remember, however, that the more fresh air at night, the more water during the day to make the house clean and wholesome.

Inadequacy of Most Water Pans.

Discussing the water pans in warm air furnaces, Mr. Gale said that out of 36 heaters examined, 26 showed some form of a humidifier, but that only three had the pot so placed that any appreciable amount of water could be added to the air passing. In cold weather the air is usually displaced from three to four times per hour, and from the amount of outside cold air taken in, it will have about 20 per cent relative humidity. It is this dry-kiln effect that destroys furniture, makes the chairs creak and causes the mucous membrane to swell in the attempt to moisten the air for the lungs.

Placing the Responsibility.

"One of the largest builders of central New York," said Mr. Gale, "has said to me many times that if I could convert the heater makers so that they would make a heater that would keep the air at a proper humidity (so that the woodwork would not shrink), nine-tenths of their kicks would cease when they build a house of value. Dry air is always dusty air. Dusty air is always an irritant. I have repeatedly changed a room of 25 per cent relative humidity and a dust count of 225,000 to 30,000 count by simply changing the humidity to 50 per cent. Take any bedchamber at 20 per cent relative humidity and look at the dust betrayed by a sunbeam when you dress: old skin, wood fibre, lint from cotton, linen, feathers. All of these we breathe, but they are quickly deposited if the room has a humidity of 50 per cent. The floors and furniture are a better place for these than the lungs. You will 'wolf' about your city water, but pass this question of dust that is your particular responsibility."

Comfortable Temperatures.

"In 1820 books called a good heat for a house 50° to 55° F.; in 1850 it was said to be quite comfortable at 62° F.; in 1890 at least 72° F. was needed, and now 78° F. is quite common. These increases in temperature mark clearly the passing from Fireplaces to Stoves to Furnaces to Steam."

Healthy, Humid Heat.

"Can you imagine a case of nerves on a June morning? The air from a register at 50 per cent relative humidity feels very much like balmy June, but air at 20 per cent relative humidity burns the skin, as it sucks the water from you as from a sponge. Blood-pressure is always higher with a low humidity, and low with a high humidity. I wish to make one statement now—I want it to sink in, penetrate—that no house has healthy air if frost does not form on the windows on a cold or windy day. This is proper mark of humidity.

"Storm windows effectually prevent frosted windows on account of the air.
Permanent
Kewanee "Armor Plate" All-Steel Chutes are built to last. Can't break like the cast iron chute shown here.

Automatic
Kewanee "Armor Plate" Chutes lock automatically with a lock that works. Can't jar loose from the foundation.

Guaranteed
for five years against breakage. Will last a lifetime.
Economical. No repair bills. If your building material or hardware man hasn't the Kewanee, write us direct.

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414 N. Tremont St., Kewanee, Illinois

Save Fuel This Winter
Waste of fuel due to overheating can be prevented by Kees Draft Controller. It reduces fuel bills. Keeps the temperature even.

Kees Draft Controller
operates with unfailing precision. No springs or electricity. Easily installed on warm air furnaces. Write to Dept. 100.


Add Individuality to Your Home
Whitney Windows will not only make your new home more charming and distinctive but also more comfortable, cozy and cheerful.

They afford better protection in cold and stormy weather—permit a wide sweep of cool breezes thru the house in warm weather—afford perfect control of ventilation at all times.

WHITNEY WINDOWS
are the new-type, trouble-proof windows—the last word in window construction. They do away completely with all rattling, sticking, leaking, slamming—all the faults and annoyances of ordinary hinged casements. They open outward out of the way—don't interfere with screens—work easily and quietly—easily moved to any point in the opening—permitting wide unobstructed view—stay rigidly where placed.

We furnish windows complete in Ready-Fitted Sash Units, ready to set into openings.

Write for our booklet "Progress in Windows." Contains valuable ideas in artistic window effects.

Whitney Window Corporation
138 East Lake Street
Minneapolis, Minn.
One will realize what a small proportion of the space between the two plates of glass, and this test for a proper humidity can be given by raising the inner window. With a satisfactory humidity the outer or storm window will show frost when the air of the room comes against it, on a cold or windy day. Taking this as a test one will realize what a small proportion of the time in the winter is there sufficient humidity in the air of the ordinary house. If the air is so dry that it cracks the furniture, what wonder that it cracks childish lips and makes sore the delicate mucus membrane of the throat. Healthy air must be moist air. This fact must be taken into account in the building of the home.”

Peat as a Fuel of the Future

Peat is being mined, processed in preparation for use as a fuel, and burned in the heating plants of several large office buildings and hotels. The experiments tend to show great possibilities of this old-time fuel as it has been adapted to modern use. Peat bogs are numerous in many parts of the country and are large in extent. The peat bog in Minnesota, from which was taken the peat for this experiment, contains something like half a million tons, according to estimates.

The peat is taken from the bog by a machine perfected by a member of the American Peat Society. At present it is dried and then hauled to the University of Minnesota, where, under the direction of the Engineering Department, it is pulverized. It is then delivered to the power plant where it is to be used. One building was equipped last winter to burn atomized coal or peat. Others are being prepared and expect to follow the same course for this winter.

In burning pulverized fuel, the powder is merely blown into the firebox through a pipe and it flames like gas, leaving practically no gas or free carbon. In eastern cities, where it is extensively used, it is delivered in tanks. Compressed air blows the fuel out of the tank wagon into the bin at the plant.

Officers of the company said that, in tests in this office building, it had been found that pulverized peat is 90 per cent as efficient as pulverized coal and twice as efficient as mine run coal when hand stoked.
Anthracite or Garbage

A customer writes: "In my HESS furnace I have burned everything, from Anthracite to garbage, and lots of heat from all of it."

It burns ANYTHING COMBUSTIBLE, and that's worth while, in these days of fuel shortage and high prices.

It's one reason why our sales of

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both PIPE and PIPELESS

for 1920 have far exceeded those of any previous year.

**Clean Heat From Any Fuel**
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It is absolutely wind, weather, storm, fire and lightning proof.

HOME-BUILDERS—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new book on beautifying the modern American home by use of Metal Spanish Tile is yours for the asking. A postal will bring it.

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Building Material

What I Want in My House

FIRST I want a basement, not a cellar; the difference is that a cellar may be simply a space enclosed by a wall or foundation, and may be lacking in light, but a basement is a well lighted, useable and useful room, where there may be a furnace, a laundry, a room for fruit and one for vegetables, also a place for storing fuel.

To get this I shall want foundation walls of concrete, so that the wall can be thinner than where stones are used. I also want what is called a grade entrance to the basement—that is, a door at the level of the ground, opening onto a platform from which one may go up to the living rooms or down to the basement.

I want a heating system that will heat the house quickly and keep it warm for a time without much attention. For this a combination plant may be used—that is, a hot air furnace, with a water heater in it, so that pipes can be run to radiators placed in the main living rooms.

Another thing wanted will be a useable bath room—that is, one that can readily be heated even in the coldest weather, and that will be warm enough for use at all times, being heated and supplied with warm water from the kitchen range, or with an oil stove in warm weather.

Next will be a library or a den, where I can have a desk all to myself, so that I may leave books and papers there and expect to find them later. In the library will be shelves for books and also cupboards, so that old magazines and boxes of clippings may be kept at hand yet out of sight. I want a fireplace in this room for ventilation, and also to warm it in moderate weather.

The kitchen will be small so as to save travel in getting meals, but not too small to allow room for a small table for eating breakfast and lunches.

I want many large closets with good, wide shelves, so that all sorts of things may be packed away in good order and protected from dust, and yet readily found and reached when wanted.

I want two flights of good, easy stairs, one from the living room to the basement, and one from these rooms up to the sleeping rooms on the second floor. I want these to be of good width, with wide treads and low risers, so one may go up and down easily.

I want at least one large bedroom on the first floor for my own use, and should like to have the second one as well, to be used in case of sickness.

I want a full equipment of storm doors and windows to make the house comfortable in winter and save fuel; then, for summer, I want screen doors and screens for the windows the full length, so that the sash may be raised and lowered without removing the screens.

—John Upton.

Preserve the Surface of the Wood

"There seems to be a tendency on the part of property owners," said Mr. Cousins, speaking before the Master Painters' Association, "to consider paint as a
Is Your House Disfigured Like This?

A battered or broken coal-bin window, beaten to shreds when coal was delivered—even the foundation and side-wall damaged! Is your house disfigured like this?

This is not an unusual occurrence. The upper illustration shows what happens to thousands of houses, every year. It proves that an ordinary coal window cannot withstand the shattering force of bonding lumps of coal—that it does not provide adequate protection for your house. Costly repairs are soon necessary, or your whole house is disfigured and rapid depreciation results.

A Majestic Coal Chute will protect your property, year after year. Install one in your present property now and thus prevent further depreciation or costly repairs. When building, don’t neglect this essential feature.

Write for our catalog which shows also the Majestic Underground Garbage Receiver and the Majestic Milk and Package Receiver

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Simply built, stays in order, is easily cleaned, burns any fuel with best results because of its longer fire travel. Send us your plans. No charge for laying out a Heating System.

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USALYTE makes every gas-jet a furnace. It gives you heat where and when you want it. It uses no heat where you don’t need it. USALYTE, the heating marvel, will keep you warm on the coldest Winter day—at a negligible cost. The coal it saves will pay for it a dozen times over the first season you use it. It is almost everlasting, safe, and free from carbon. In two styles: for heating only or, with the new and exclusive in-built mantle, for heating and lighting.

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IXL HARDWOOD FLOORING

"The Finest Milled Flooring in the World"
Color and a luxury instead of a wood preservative and a necessity. When the oil is out of the wood, dry rot sets in."

When the paint surface is worn or weathered through to the wood and the wood itself exposed, time and weather will then begin to work on the body of the wood. Delay will mean new siding. When paint is off the surface of cornice work it won't be long until a new cornice is needed. Paint is cheaper than new cornices. Some buildings may look shabby, however, and yet be good for another season, before paint is needed.

It has been stated that less than 50 per cent of the painting that ought to have been done in order to keep the wood in proper condition has, in the last three years, actually been done. It is safe to say that nearly half of the dwellings and many business buildings are the worse for not having been painted. Owing to this condition the campaign with the slogan "Save the surface and you save all" works for the conservation of the structure, while at the same time improving the appearance of the buildings. Many sections of the country are losing millions of dollars in value in the deterioration of property through ignorance or neglect, according to members of the Master Painters' Association.

The strikingly admirable quality of the budget is that it tells folks where their money goes and thus, indirectly, helps them to "cut down" where they are spending too much.
Painting in Winter

The advantages of the winter months as a time for interior painting and decorating was also emphasized by the Master Painters’ Association. The painters and decorators will be able to give better service on interior jobs in winter than in the summer.

Taxes and Rents.

The man who builds an ordinary six or seven room house for rent will find his taxes mounting—a penalty for building a house for some one to live in. Is there any wonder houses are scarce? But high taxes on lots have the opposite effect. The higher taxes on lots, the cheaper lots will be. The more it costs to hold lots idle the sooner the owners will hustle to build on them. Moral: Reduce taxes on houses and increase taxes on lots, and there will be plenty of houses.—Exchange.

Statement of the Ownership, Management, Circulation, Etc., Required by the Act of Congress of August 24, 1912,

Of Keith’s Magazine on Home Building, published monthly at Minneapolis, Minn., for October 1, 1920.

State of Minnesota, County of Hennepin—ss.

Before me, a Notary Public in and for the state and county aforesaid, personally appeared M. L. Keith, who, having been duly sworn according to law, deposes and says that he is the owner of the Keith’s Magazine, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, to-wit:

1. That the names and address of the publisher, editor, managing editor, and business managers are:

   Publisher—M. L. Keith, Minneapolis, Minn.
   Editor—M. L. Keith, Minneapolis, Minn.
   Managing Editor—E. Bartholomew.

2. That the owner is:

   M. L. Keith, Minneapolis, Minn.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are:

   None.

   M. L. KEITH.

Sworn to and subscribed before me this 1st day of October, 1920.

W. M. KOON.

(Seal.)

My commission expires August 23, 1922.

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BUILDING the HOUSE

A Handbook Every Home-Builder Should Have

A great many homes are built without an architect’s supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

See that your home is built right. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

Revised Edition
Price, $1.25; postage, 4c.

Published by
M. L. KEITH
204-5 Abbey Bldg., Minneapolis, Minn.
The Human Engineer.

A NEW term has appeared to be given to the specialist in medicine, engineering, and industrial management, and the coordination of these as applied to living conditions: that of the "human engineer."

The doctor, it is stated, who holds himself in readiness to only give first aid attention to persons injured or taken ill while at work, no longer meets the full need which virtually every manufacturing establishment presents in the medical or allied fields. To be thoroughly efficient, the factory doctor must be something of an engineer, as well as manager.

The duties of the "human engineer" will include a study of dust and other local conditions in places where people work and will also embrace the matters of safety, sanitation and general welfare.

The "human engineer," it is predicted, will first of all be called on to determine if an applicant who is fitted by training or otherwise for a job he seeks is physically capable of filling the position. To do this intelligently, the "human engineer" must familiarize himself with the different jobs in the plant, with the different steps in the manufacturing processes, and then formulate a set of standards with which the applicant must comply in order to fill the position to the best interests of both his employer and himself. It is pointed out that many communicable diseases can thus be detected and their introduction into a factory prevented.

The work of the "human engineer" may well be applied to community work and give counsel and advice as to healthful conditions in the home; and how to get a proper humidity in the air; possibly how to cool the house in summer as well as to heat them, and manifold other things.

Publicity for Costs and Profits.

Sound price levels are fundamentally a matter of publicity; for, with confidence in the justice of present prices restored which would follow full publicity of costs and profits, fear that a slump may be just around the corner will be removed. Then normal buying will be restored by the knowledge that lower prices can only be had as a result of slowly deflating the world's currency and slowly increasing the world's production, processes which will require time to accomplish. Without such knowledge, investors will hesitate to build and banks will hesitate to finance new projects.

Sugar From Trees.

Although maple sugar is the only form of tree-produced sugar that is known to most persons, there are several other species of trees that produce, or more exactly, exude edible sugars. Among them, according to Western Canadian botanists is the Douglas fir. In fact, the Douglas fir is said to surpass the maple in that it gives off a sugar ready made or crystallized, instead of merely yielding a sweet sap. The sugar of the fir trees on the dry hillsides of British Columbia has been known to the Indians of the region since before the advent of the white man but the latter has evidently passed it by until now. Little white globules of sugar from a quarter of an inch to two inches in diameter, appear on some of the Douglas firs; the smaller masses form like white drops at the tips of the leaves and at times several of the leaf tips are caught together in a larger drop. This sugar when handled is not sticky but rather hard and dry. Not all Douglas firs are sugar bearers; only those that stand on comparatively open and sun-exposed spaces. They are most numerous between the 50th and 51st parallels of latitude and the 121st and 122nd of longitude.

There is also a palm tree sugar called "jaggery" made in a crude way in the East Indies from various species of palms. It is raw and dark colored. "Australian manna" is another sugary exudation which occurs in rather large quantities on varieties of eucalyptus trees.
Five Places Where Your Home Needs Protection

When you build be sure your home is protected with metal lath at the five danger points where fire is most likely to start: Thus (1) all bearing partitions; (2) inside of exterior walls of frame construction; (3) exterior stucco; (4) basement ceilings, especially over heating plants and coal bins; (5) under and around stairs. If your architect or contractor specifies that

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be used at these points your home will be highly fire-resistant. Moreover by using Kno-Burn as a base for all plastering your walls and ceilings will never crack or streak. Their beauty will be permanently preserved. Let us send you a sample of Kno-Burn and Builders' Handbook.

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M. L. Keith
EDITOR AND PROPRIETOR OF KEITH'S MAGAZINE
PRESIDENT AND TREASURER OF KEITH CORPORATION
## Contents Keith's Magazine—Volume XLIV

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>236</td>
<td>Answers to Questions 30, 76, 112, 154, 196</td>
</tr>
<tr>
<td>108</td>
<td>Apartment, The Small—Virginia Robie</td>
</tr>
<tr>
<td>64</td>
<td>Automobile in the House, Keeping</td>
</tr>
<tr>
<td>57</td>
<td>Back Yard Meat Shop—Enice Marcia Smith</td>
</tr>
<tr>
<td>216</td>
<td>Books and the Fireplace—Faith Burton</td>
</tr>
<tr>
<td>93</td>
<td>Building Construction, A New—Monroe Woolley</td>
</tr>
<tr>
<td>213</td>
<td>Building a Bungalow without a Dining Room—Louise N. Johnson</td>
</tr>
<tr>
<td>133</td>
<td>Bungalow, Genesis of the—R. D. Count.</td>
</tr>
<tr>
<td>124</td>
<td>Bungalow with Thatched Roof Effect—Chas. Alma Byers</td>
</tr>
<tr>
<td>173</td>
<td>Bungalow—See Planning the Home</td>
</tr>
<tr>
<td>235</td>
<td>Children's Room—Virginia Robie</td>
</tr>
<tr>
<td>201</td>
<td>Coke in Domestic Heating</td>
</tr>
<tr>
<td>150</td>
<td>Concerning Curtains—Virginia Robie</td>
</tr>
<tr>
<td>38</td>
<td>Community Kitchen, The</td>
</tr>
<tr>
<td>124</td>
<td>Concrete Sash Weights</td>
</tr>
<tr>
<td>232</td>
<td>Decoration and Furnishing—Virginia Robie</td>
</tr>
<tr>
<td>235</td>
<td>Children's Room</td>
</tr>
<tr>
<td>150</td>
<td>Concerning Curtains</td>
</tr>
<tr>
<td>188</td>
<td>Dining Rooms of Various Types</td>
</tr>
<tr>
<td>28</td>
<td>Do's and Don'ts in Framing Pictures</td>
</tr>
<tr>
<td>74</td>
<td>Found in the Shops</td>
</tr>
<tr>
<td>26</td>
<td>French Schemes</td>
</tr>
<tr>
<td>70</td>
<td>Midsummer Furniture</td>
</tr>
<tr>
<td>108</td>
<td>Small Apartment, The</td>
</tr>
<tr>
<td>25</td>
<td>Summer Wall Papers</td>
</tr>
<tr>
<td>232</td>
<td>Spirit of Christmas, The</td>
</tr>
<tr>
<td>137</td>
<td>Dining Room, The Modern—Marion Brownfield</td>
</tr>
<tr>
<td>188</td>
<td>Dining Rooms of Various Types—Virginia Robie</td>
</tr>
<tr>
<td>5</td>
<td>Discovering the Doorway—Esther Matson</td>
</tr>
<tr>
<td>90</td>
<td>Driven to Home Ownership</td>
</tr>
<tr>
<td>218</td>
<td>Fireplace Inscriptions—Elizabeth Emery</td>
</tr>
<tr>
<td>40</td>
<td>Food From the Back Yard Garden</td>
</tr>
<tr>
<td>13</td>
<td>Log Houses, Practical? Are</td>
</tr>
<tr>
<td>26</td>
<td>French Schemes—Virginia Robie</td>
</tr>
<tr>
<td>162</td>
<td>Fresh Air? What Is</td>
</tr>
<tr>
<td>221</td>
<td>Fronting West—Dorotha DeMerritte Dunlae</td>
</tr>
<tr>
<td>140</td>
<td>Garden Work for October—Adeline Thayer Thomson</td>
</tr>
<tr>
<td>176</td>
<td>Good Taste in Furnishings—Katherine Keene</td>
</tr>
<tr>
<td>44</td>
<td>Hollow Brick, A New</td>
</tr>
<tr>
<td>244</td>
<td>Home Time-Table, The</td>
</tr>
<tr>
<td>84</td>
<td>House, Old and New—John Upton</td>
</tr>
<tr>
<td>254</td>
<td>&quot;Human Engineer, The&quot;</td>
</tr>
<tr>
<td>44</td>
<td>Light and Safety</td>
</tr>
<tr>
<td>13</td>
<td>Log Houses Practical? Are</td>
</tr>
<tr>
<td>170</td>
<td>Luxuries vs. Home Building</td>
</tr>
<tr>
<td>60</td>
<td>Make Place for the Princess</td>
</tr>
<tr>
<td>70</td>
<td>Midsummer Furniture—Virginia Robie</td>
</tr>
<tr>
<td>46</td>
<td>Nation's Income, Per Capita, The</td>
</tr>
<tr>
<td>126</td>
<td>New England Frame House—17th Century</td>
</tr>
<tr>
<td>200</td>
<td>Oil as Fuel</td>
</tr>
<tr>
<td>96</td>
<td>Outdoor Living Rooms — Dorotha DeMerritte Dunlae</td>
</tr>
<tr>
<td>122</td>
<td>Paint, When to</td>
</tr>
<tr>
<td>248</td>
<td>Peat as a Fuel of the Future</td>
</tr>
<tr>
<td>229</td>
<td>Planning the Home—Attractive Small Homes</td>
</tr>
<tr>
<td>103</td>
<td>Brick for the Home</td>
</tr>
<tr>
<td>144</td>
<td>Bungalow with a Recessed Porch</td>
</tr>
<tr>
<td>65</td>
<td>Country Home, A Modern</td>
</tr>
<tr>
<td>186</td>
<td>Cottages, Two</td>
</tr>
<tr>
<td>224</td>
<td>Dining Alcoves and Dollars</td>
</tr>
<tr>
<td>100</td>
<td>English Cottage, An</td>
</tr>
<tr>
<td>185</td>
<td>English Cottage, An</td>
</tr>
<tr>
<td>106</td>
<td>Duplex, The Modern</td>
</tr>
<tr>
<td>182</td>
<td>Group of Bungalow Homes—Built in the Middle West</td>
</tr>
<tr>
<td>183</td>
<td>A West Coast Bungalow</td>
</tr>
<tr>
<td>184</td>
<td>A Two-Family Bungalow</td>
</tr>
<tr>
<td>16</td>
<td>Homes for Warm Weather</td>
</tr>
<tr>
<td>147</td>
<td>Home on That Vacant Lot</td>
</tr>
<tr>
<td>145</td>
<td>Home with a Broad Frontage</td>
</tr>
<tr>
<td>102</td>
<td>Is It Cheaper to Build Than to Rent?</td>
</tr>
<tr>
<td>21</td>
<td>Livable Quality in the Home, The</td>
</tr>
<tr>
<td>139</td>
<td>No Waste Space</td>
</tr>
<tr>
<td>67</td>
<td>Planning the Room Arrangement</td>
</tr>
<tr>
<td>62</td>
<td>Plans for Attractive Home</td>
</tr>
<tr>
<td>20</td>
<td>Practical Little Bungalow</td>
</tr>
<tr>
<td>195</td>
<td>Seven-Room &quot;Community Cottage&quot;</td>
</tr>
<tr>
<td>142</td>
<td>Six Rooms on One Floor</td>
</tr>
<tr>
<td>118</td>
<td>Six-Room Stucco Home</td>
</tr>
<tr>
<td>228</td>
<td>Suburban Home</td>
</tr>
<tr>
<td>226</td>
<td>Under a Broad, Low Roof</td>
</tr>
<tr>
<td>223</td>
<td>Values and the New Home</td>
</tr>
<tr>
<td>53</td>
<td>Porches for Summer—Charles Alma Byers</td>
</tr>
<tr>
<td>220</td>
<td>Prayer for a New House—Louis Untermeier</td>
</tr>
<tr>
<td>252</td>
<td>Preserve the Surface of Wood</td>
</tr>
<tr>
<td>180</td>
<td>Roumanian Stove—American Red Cross</td>
</tr>
<tr>
<td>42</td>
<td>Safety Engineer and His Work, The</td>
</tr>
<tr>
<td>30</td>
<td>Side Lights on Cost of Building Materials</td>
</tr>
<tr>
<td>141</td>
<td>Simplicity in Furniture</td>
</tr>
<tr>
<td>108</td>
<td>Small Apartment—Virginia Robie</td>
</tr>
<tr>
<td>61</td>
<td>Small House Service Bureau and Its Work</td>
</tr>
<tr>
<td>254</td>
<td>Sugar from Trees</td>
</tr>
<tr>
<td>57</td>
<td>Summer Rugs—Faith Burton</td>
</tr>
<tr>
<td>80</td>
<td>Table and Food Values—Elsie M. Fjelstad</td>
</tr>
<tr>
<td>34</td>
<td>Ending the Meal—Summer Dessert</td>
</tr>
<tr>
<td>240</td>
<td>Feeding the Folks in Hot Weather</td>
</tr>
<tr>
<td>240</td>
<td>Filling the Christmas Larder</td>
</tr>
<tr>
<td>116</td>
<td>Filling the Fruit Cellar During a Sugar Shortage</td>
</tr>
<tr>
<td>138</td>
<td>Making Money Last—The Budget</td>
</tr>
<tr>
<td>196</td>
<td>Standard Rules</td>
</tr>
<tr>
<td>2</td>
<td>Tax on Idle Land</td>
</tr>
<tr>
<td>250</td>
<td>Ten Dollars for a Kitchen Transformation—Alice Phebe Eldridge</td>
</tr>
<tr>
<td>246</td>
<td>What I Want in My House</td>
</tr>
<tr>
<td>98</td>
<td>Windows Open at Night and Humidity</td>
</tr>
<tr>
<td>98</td>
<td>Value of Details—Anthony Woodruff</td>
</tr>
</tbody>
</table>