The New Year Outlook

The coming year opines to be one of extreme importance in history making for it shall see agreements among nations that will bring prosperity to all. The first of these agreements cover large reductions in expense for military forces and is nearing consummation. This momentous international arms parley will be followed by a similar conference including a larger number of nations, on war debts, in their relation to international trade.

The world had to be saved for humanity but it cost a terrible price and many nations are so exhausted that if trade is to be resumed, they must be given time to rest, then they can produce and we, the great United States, can buy from them. When we buy we can also sell them our products and normal international trade again becomes a reality. But before this can come about, relief from the pressure of debt and further extension of credit and assistance to the debtor nations must be assured. How important, therefore, that the next great conference of nations quickly follows the "arms parley." Mr. Samuel Gompers, who was recently reelected President of the American Federation of Labor, in discussing the Proposed International Economic Conference, says he believes that such a conference, to follow the successful Disarmament Conference, might set the idle factory wheels turning, bring work to idle hands, and solve many of the sorrows of human needs, as well as untie the closely knit tangles of the world's economic and financial system.

Shall the United States put her shoulder to this stupendous task and cancel her bill for over ten billions of war loans and another billion of interest already overdue? Perhaps, eventually, but not now. She will put her shoulder to the wheel all right and will undoubtedly carry this load and more for many years, but to agree now to wipe out this debt, even though strong enough to do so, might prove unwise. The debt can be cancelled any time when it seems right to do so. The bill might with justice be cut in half and the nations given a longer breathing spell before being required to pay even the interest. We would not suffer by this action but in truth would benefit. It would help those debtor nations to get on their feet and do business. This would result in the re-establishment of foreign commerce so necessary if this United States is to see prosperity. Again, would the pulse of our industries be quickened, unemployment disappear and with this general revival of business, the accomplishment of that new home so much desired and so long deferred?
WHERE TO OBTAIN BUILDING MATERIAL AND NEW HOME EQUIPMENT

**Metal Lath.**
- Associated Metal Lath Mfgs., Chicago, Ill.

**Metal Building Corners.**
- Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.

**Millwork.**

**Paint.**
- National Lead Co., 111 Broadway, New York.

**Plumbing Goods.**
- Hardin Lavin Co., Chicago, Ill.

**Ready Cut Houses.**

**Refrigerators.**
- Herrick Refrigerator Co., Waterloo, la.

**Roofing Material.**
- Creo-Dipt Co., Inc., 1022 Oliver St. No., Tonawanda, N. Y.

**Sash Balances.**
- Caldwell Mfg. Co., 6 Jones St., Rochester, N. Y.

**Screen Cloth.**

**Sewage Disposal.**
- Kewanee Private Utilities Co., 123 South Franklin Ave., Kewanee, Ill.

**Shades (Porch and Window).**
- Aeroshade Co., 976 Oakland Ave., Waukesha, Wis.

**Sheathing Board.**

**Shingle Stain.**
- Berry Bros., Detroit, Mich.
- Creo-Dipt Co., Inc., No. Tonawanda, N. Y.

**Stucco Board.**

**Vacuum Cleaners.**
- Kewanee Private Utilities Co., Kewanee, Ill.

**Varnish.**
- Berry Bros., Detroit, Mich.
- Lowe Bros., 465 E. 3rd St., Dayton, Ohio.
- Johnson & Son, S. C., Racine, Wis.

**Wall Board.**
- Beaver Board Co., 653 Beaver Rd., Buffalo, N. Y.
- Upson Co., 151 Upson Point, Lockport, N. Y.

**Waterproofing Compound.**
- Philip Carey Co., Cincinnati, Ohio.

**Water Supply System.**
- Kewanee Private Utilities Co., 123 South Franklin Ave., Kewanee, Ill.

**Window Hangers.**
- Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.
- Whitney Window Corp., 138 E. Lake St., Minneapolis, Minn.

**Wood Stain.**
- Berry Bros., Detroit, Mich.
- Johnson, S. C., & Son, Racine, Wis.

**MISCELLANEOUS.**

**Ash Receivers.**
- Sharp Rotary Ash Receiver Co., Binghamton, N. Y.

**Ironing Devices.**

**Medicine Cabinets.**

**Weather Strips.**
- Chamberlin Metal Weather Strip Co., Detroit, Mich.
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A Delightfully Planned Spanish House
By Charles Alma Byers

It is but natural, of course, that, to the home designers of southern California, the Spanish type of architecture should ever continue to be a source of new inspiration; and it is therefore equally to be expected that new interpretations of the style will constantly be appearing. Shown by the accompanying illustrations is a recent product of this Spanish influence, which is the work of a Los Angeles designer, and certainly it constitutes a most attractive and practical home.

From the reproduced photographs and floor plan a fairly clear understanding of the general style and arrangement of the house, both outside and inside, will doubtless be very easily obtained. However, there are many features that well merit especial attention.

In the first place, considering the house from the outside viewpoint, it will be noticed that the walls are comparatively plain. They are, nevertheless, kept from being unduly severe by such inconspicuous touches of ornamentation as the small circular recesses in the gables, the little bas-relief medallions of a section of the front wall, the composition staff-work about one of the end windows, and so forth, and especially by the introduction of the arch in a number of the windows and doorways, as well as by other appropriate details of designing and construction. The large window in an end wall of the living room is, in fact, as the illustrations of it show, a particularly enhancing feature—and from the inside as well as the outside.

The front entrance to the house, it will be observed, is by way of a large walled-in terrace or uncovered porch and a small vestibule. The low walls enclosing this terrace are perfectly plain, and facing
upon this space from the living room are three narrow full-length or French windows designed with rounded tops. The vestibule is accessible from one end of the terrace or porch through a pair of wide arched openings, and in the front end of this vestibule is a slightly smaller arched opening, from the lower part of which is extended a most interestingly designed balcony-like enclosure. An ornamental electric light, of the standard type and of wrought iron, is another interesting feature of the entrance.

Typical of the Spanish style, the plan quite naturally includes a patio. It is located just back of the living room, from which it is directly accessible, and to it also opens a pair of French doors from the dining room. It is outwardly enclosed by high garden walls, with a most attractive gateway to provide access from the grounds; and a fountain, with the customary basin, is built against one of the side walls. The space is partly paved with cement, the remainder of the area being devoted to
grass, flowers and shrubbery. It constitutes a very inviting outdoor retreat where the utmost privacy is assured.

In the rear is still another delightful outdoor lounging place. It is comprised of an ordinary porch, well secluded from street view, into which there are doors that open directly from each the kitchen-entry porch, a small breakfast room and the maid's room.

The house occupies a corner lot, and the automobile driveway, in consequence, is extended in from the side street. This has enabled the building of the garage directly in line with the house, with the result that a series of three gables is presented to the side street. The garage, which is of sufficient size to accommodate two cars, is actually linked to the house by a wall similar to that which encloses the patio, with an arched gateway in the center, and a short walk further connects it with the rear porch.

The walls of both house and garage are finished with an exterior of cement-stucco, over frame construction, and are tinted a deep buff shade. The arched openings of the vestibule are finished with slightly extended border of cement which is colored a rich brown, and the wood trimming is finished, basically, in cherry color, over which greenish gray was next applied and rubbed to permit the cherry to show through. The roof covering consists of composition shingles, in variegated colors—various shades of brown, green and buff predominating. All porches, including the vestibule, are floored with cement, that of the vestibule being of deep red. The walls and ceiling of the vestibule are in rich brown color, like the outside border of the arches, and the front door is of mahogany.

Opening off the vestibule is a small entrance hall, to the right and left of which opens a slightly arched doorway to the living room and a bed room hall respectively. The living room is designed with an arched, or barrel-vaulted ceiling, and contains a good fireplace, with a nicely modeled mantel in white cement, and a tile hearth. The woodwork of the entrance hall and living room consists of mahogany, and the walls of the latter are finished with cement plaster and painted in a mottling of browns and buff, while in the former they are papered.

The dining room is accessible from the living room through a broad open doorway hung with heavy portieres. The woodwork in this room is also of mahogany, and the walls are painted.

Pine woodwork prevails throughout the remainder of the house, which in the
halls, bed rooms, maid's room and little breakfast room is in old ivory finish and in the bath rooms and kitchen is in white enamel. The walls of the breakfast room are finished with a paneled wainscot, the space above being decorated with stenciling, while the walls of the halls, bed rooms and maid's room are papered. The kitchen and bath room walls are finished to a height of four feet six inches with a smooth, hard plaster coat which is enameled like the woodwork. Hardwood flooring prevails throughout except in the kitchen and bath rooms. In the family bath room the floor is of tile, while in the maid's bath and kitchen pine floors are laid, covered with linoleum.

The equipment in the way of closets and built-in features is especially practical and labor-saving. The front bed room, for instance, possesses an excellent little dressing room, with a built-in dresser against the outside wall and with a wardrobe closet off the other side. The family bath room has a shelf and drawer cabinet and a box seat, and in the breakfast room is a small built-in china-cupboard, while the kitchen is equipped with a draught cooler-closet, good cupboards and the other usual conveniences. Besides the closet for each the back bed room and the maid's room, there is also a linen closet in the bed room hall.

The house has a small basement, walled and floored with concrete, which is reached by an inside stairway off the bed room hall. The equipment includes a good furnace and all modern conveniences.

Altogether, this little Spanish bungalow located in Los Angeles constitutes an exceptionally charming home, distinctive and pleasing in outside style and appearance; and practical, convenient and attractive in interior arrangement and finish. Unlike most Spanish interpretations, this home is also of such design, especially in respect to the roof, as to make it suitable for almost any climate.

The large window in the end of the living room and gate to the patio
Possibilities for the Children's Room

Katherine Keene Tucker

The idea of creating a visualized Child's world in which these bits of humanity will feel more at home than in the stereotyped rooms of their elders has taken a great hold on the mind, and has materialized in many ways and to many degrees. The intention seems to be in the first place to take away from this room the things which trouble the child, and which a childish fancy may easily turn into factors which disturb his peace of mind. When a "grown-up" has passed through a long illness during which his mind was set out of its usual grooves, and wandered helplessly about the four,—no the five walls which seemed to enclose him,—for the ceiling is always a most disturbing wall, hanging over him as it does; he gets a little of what may be a child's point of view. Then he finds himself particularly sensitive in the matter of decoration for the walls and questions much which under other circumstances he considers the rational common sense of his period.

Of course the child is completely independent of the material things in his room. He can see the procession of bears and elephants, and a funny little dog; or the fairies, or birds or rabbits, without any help from the outside. It is only when these pictures bring something new into his world, or when he visits with "the babies" or "the birdies" that they are really adding to his "atmosphere."

He will love a chair or a table which "just fits," or one whose color or decoration especially appeals to him. Perhaps the greatest gain to the child is the sense that the room has been made for him, that the grown-ups have relaxed all of their own preconceived, and to him, inexplicable notions;—to replace them by other perhaps equally inconceivable notions; again in his faith, and his imagination he accepts the will for the deed.

Very charming is the "nursery frieze" as we often see it, designed to amuse the child and, at the same time to guide his budding taste; good in design, charming as to color, and often very clever in its
drawing. One longs to be a child again, under the fascination of the group of dancing children, the delineation of a favorite tale, the six funny waddling ducks, or the bunch of funny puppies. But as day after day and week after week they still dance the same step, or waddle with the same foot up-raised, the grown-up mind recoils and wonders that Sonny, the fastidious, retains his satisfaction. The limitation of "the repeat" of the pattern is, of course, the condition which makes possible our well designed wall decorations at a cost within popular limits. If only an artist might be available who would draw a whole series, giving the rhythm without the monotony.

And why should not such artistic efforts be forth coming? With our art schools filled with students who are looking for a field for creative work, why is not this the opportunity for which they are looking. Probably it is a field which has not as yet been given the urge of a conscious demand. Such work for the nursery should be done very simply, when it comes to the final execution. The design must previously have been given most careful study and criticism; but this is the recognized function of the schools. Why should not successful designs be put into execution on some basis arranged by the schools under some satisfactory conditions to all concerned? If this proved satisfactory in such simple decorated rooms as the nursery, it would be in demand for other parts of the house. This is by way of suggestion.

The services of a competent artist not, in general, being available; here is a suggestion which might prove successful, and would unquestionably be interesting.

Children love the continued-story, or work which waits until Mother or Auntie "has time." How children used to count the time to the afternoon when mother
would have time to cut and paste pictures in the old scrapbook, or screen. How happy they were in watching the progress of the work and sometimes advising as to its details. The periodicals of today are literally crammed with fascinating material for the nursery friezes, no two spots of which are alike, though a story may be illustrated, or a color scheme be carried out, and this all done in the time given to the child, in fact,—as the easiest way of taking care of the children, and at times when nothing else could have been accomplished. When finished the whole may be varnished to give permanence and cleanliness.

A room which has proven of unusual value and attractiveness has a frieze of photographs of the “Children in Paintings” set uniformly, just above the wainscot, with flat mouldings on the wall. The photographs are uniform in size and color and show a beautiful series of the Christ-child as depicted by the masters, old and modern. There are several Raphael Madonnas with the child, and many others which are all beautiful. Any art store or gallery will show the wonderful list of child pictures available for such a frieze.

The youngest child loves pictures of babies; they seem to be his companions to whom he talks. One may start with just a group of Baby pictures increasing the group as he grows older by adding the famous boys and girls,—either portraits or fragments which are taken from larger paintings. There is a long list on which one may draw, selecting ones own favorites, and the child will grow to love them too. Baby Stuart alone, or the group of three children with the beautiful dog, by Van Dyck, The Age of Innocence, and Sir Joshua Reynolds child portraits, Browne’s groups of street urchins, Valesquez’s Boy with Sword, are a few famous child pictures which come first to mind. The list may be extended almost without limit and may be made to give satisfaction and pleasure to the grown-up as well as being a constant joy to the child. Here is subject for stories,—unlimited.

Such a frieze may be made to illustrate bible stories. Prints from the illustrations of the Tissot Bible, with their color and story would make a wonderful decoration for a room. Modern child picture of any kind may be selected.

The use of picture-tiles in the cap of a low wainscot, or in the fireplace, gives an interesting decoration. A fireplace faced in blue and white tile with a frieze of boats under the mantel shelf and a larger boat framed in the tile is particularly suitable for the child’s room and sets the key for its decoration.

In any case the child’s room should be dainty and sweet and clean, yet not easily put out of condition by the child in his play. There should be absence of sharp corners, and edges to hurt bumped heads. Rugs should be soft, and the floors should not be slippery.
How To Use Standardized Plans

The proportion between the cost of building the small home and the larger home of simple appointments is out of all proportion to the cost of the completed buildings, with an increasing ratio as the house becomes smaller. Only with designs so standardized that they will fit the needs of many people and may be built several times can the overhead expense of the planning of the very small home be met, under ordinary conditions.

A certain amount of latitude is possible, even with the most completely worked out set of drawings, without losing any of the fine points in the design. The drawings may be "reversed," so that if the house has been originally planned to face east, and the lot on which the second house is to be placed gives a west frontage, the living room will still be on the south. To do this the tracings are blue printed "reversed," and then it is only necessary to read the drawings correctly, which is a difficulty easily overcome.

The home which is shown here has been recently completed in Minneapolis, and though the photo shows that it has been lately built yet it is a very attractive home. The plan was reversed because of lot orientation. The house was enlarged four feet in width, and one foot

A Gambrel roofed house, distinctive in line and detail.
in length, and a porch 10 by 14 feet, added at the rear. The detail of the entrance vestibule was changed, also the stairway leading to the second floor was widened. The home was built by one of the architects associated with the Bureau. The basic arrangement could hardly be improved, for a six room house of the two story type. Therefore he used the plan with minor variations to meet his personal taste.

The sloping lines of the gambrel roof, in the well designed Dutch Colonial homes, have a tendency to draw the building to the ground as though it had grown there and belonged in that place. This feeling of stability and of being rooted to the ground is one of the features so often found in old world building. It may be found in many types of design and is one which we seek in our building of homes.

This home was designed with the intention of getting six pleasant, good sized rooms in the smallest possible area and at the same time avoiding waste in space and materials. The large, airy living room is one of the pleasing features of the excellently planned interior. A nicely proportioned brick fireplace with wood mantel is located between the two windows on the outside wall. The living room connects directly with the rear entry and through it to the kitchen. The dining room has windows on two sides.

Opening from it directly is the kitchen which is well equipped and well arranged. A broom closet is built in beside the chimney. The cupboards and sink are in a good relationship, so that dishes may be washed and put away without extra handling. The refrigerator, standing at the end of the sink may be iced from the outside, where steps are shown by which the ice man may reach it.

In the basement there is a large laundry extending under both the kitchen and dining room. With its four windows this can be used as a drying room in winter or on bad days.

On the second floor are three bed rooms, a bath room, linen cupboards, and a seat in the hall. Each bed room has cross ventilation, and a good closet.

The exterior is finished in narrow siding on frame construction, with shingled roof.

Standardized or stock plans should always be studied with the understanding that the room arrangement may easily be reversed, as was done in this case. It will be noticed by the location of chimney on the other side of the house from the plan as shown. The rear porch addition may also be seen.
Variations in Standardized Plans

It is a curious fact that people will go into a store and buy a pair of shoes that is shown to them from the regular stock and be entirely satisfied. They will buy a suit of clothes with only such alterations as are required—usually by some faulty proportion in their own physique; suits are made for the "perfect" size, theoretically. There is seldom a question of "alterations" in the matter of a hat,—for man or woman. But in the matter of building a home,—the wide range of a large plan service will often fail to give just the combination of arrangement which is desired in the individual case.

The plan service, under whatever name it may be known, is really bringing to the builder of the small home what ready made clothing has established and standardized in the matter of clothing, and is accomplishing better results because when the house design is built many times it is put to the test of many and often diverse conditions and improved from time to time. Several variations of plan may be devised which will give the same appearance on the outside. For that reason alternate plans have a value in showing the latitude which a design may be given.

Two plans are shown for the first bungalow in this group of homes. The upper plan, influenced by the present necessity for enclosing the smallest amount of space which will satisfy the conditions has eliminated the dining room, making the living room as large as possible, and placing a convenient table and seat under the window in the kitchen. The living room is 17 feet long and 13 feet 6 inches wide, a good room. Other than this omission of the dining room the plan is very complete, giving two bed rooms and bath room within the compass of 28 by 30 feet, exclusive of the porch. The closets are unusually large, 2 feet 6 inches deep by 4 feet 9 inches. The linen cupboard is in the hall. The chimney is centrally
Two plans are shown for this bungalow  E. W. Stillwell, Architect

Two plans are shown for this bungalow located so that it is available for any use.

The alternate plan is 4 feet longer and has a smaller living room, 14 feet 6 inches by 12 feet. The dining room is an extension of the space with only posts and cases making a division between the rooms. Stairs to the attic space lead up from the dining room. The dining room opens directly to the kitchen which is well proportioned and well equipped with cupboards, the sink being placed between cupboards and under the two windows.

A sleeping porch with two sides filled with windows takes the place of the rear bedroom of the first plan, but may be used as a second bedroom, as it has a good wardrobe, which to many fastidious people is more convenient than the usual closet.

On the exterior the house is sided and painted white or a light color. The windows are numerous and well grouped.
As here built the attic space is used only for storage, ventilation and light coming through the louvre openings in the peak of the gables.

**A Larger Home.**

The next home shown in this group is a full two story house, of a popular type. As to the general room arrangement on the first floor it is not unlike one of the smaller plans, except that the breakfast room comes in between the dining room and the kitchen, a very usual arrangement in California, where this house is built.

The stairs are in the center of the house, giving immediate access to all the rooms, on both floors, and connecting directly with the well arranged rear entry on the first floor. The convenience of the details in this plan merit special study. Note the toilet, the broom closet, the placing of the refrigerator, and the clothes chute.

On the second floor are four bedrooms, bath room and sleeping porch. All of the closets are large. Notice the dressing room, the linen cupboard, the broom closet in the upper hall and the cabinet in the bath room.

Stucco is used on the exterior for the first story while the second story is shingled. There is a full basement under the house with furnace and fuel rooms, fruit room and storage.

**Built in Brick.**

Another home, similar in size, and built of brick has the same arrangement of living and dining room, but with a wide central hall between, well back in which are placed the stairs. But the most distinctive feature of this home is the building of the garage in connection with the house and reached through a pas sageway from the rear entry.

The living room, 14 by 25 feet, extends across the full width of the house. There are no sleeping rooms on the first floor. A sun parlor opens from the living room with sliding doors. Since it is opposite the fireplace it extends the width of the room at the place where greater width is most desirable, making the fireplace...
A home planned for brick construction

Charles S. Sedgwick, Architect

A home planned for brick construction

and the sun room each close the vista from the other. On one side of the fireplace is the wide cased opening to the hall and on the other side are book cases.

On the dining room side sliding doors close the opening to the hall. Coat closets opening from the hall are placed on either side of the entrance vestibule.

Beyond the dining room is the kitchen, well equipped with table and cupboard space. A broom closet and clothes chute are shown, with a door to the rear of the main hall, giving good communication to the stairs.

The rear hall gives entrance to the basement, and opens both to the living room and to the kitchen. It also opens to the passageway connecting with the garage, which gives protection as a rear entry.

On the second floor are three chambers and bath room, with linen cupboard, broom closet and clothes chute opening from the hall. Connecting with the owner's chamber is a very practical sleeping porch. There is just good room for two beds. Open on two sides there is not likely to be an objectional draught. The chamber itself may be kept warm and used as a comfortable dressing and sitting room. There is a very roomy closet with built in cabinets.

Stairs to the attic lead up over the main stairs.
Utilizing the Space Under the Roof

Is there economy in building second story rooms under the roof, or does the cost of the framing and workmanship mean more than the saving in materials over the full two story house? This is a question which comes to every one who wants more sleeping rooms than those on the first floor. The first popularity of the bungalow came, in part at least, from the fact that all the rooms were on one floor. Its greatest opposition was found among those people who did not like to sleep on the ground floor.

As a matter of fact there is a point between the two which merits consideration. In case as much space is needed on the second as on the first floor it is rather unnecessary to camouflage the situation. Beyond the fact that it is not a strictly honest presentation of the facts,—and sincerity is the first canon of art—; such a house will invariably look top-heavy, as the lines can not be properly proportioned when fixed unalterably from the inside demands. The gambrel roof, owing to its double angle, comes nearer giving a good second story and at the same time a satisfactory exterior than any other type of roof lines. At the same time perhaps no other type of roof must be designed with such nice proportions, in order to be good looking. It is the type of house which the amateur may not attempt with any assurance of success.

At the same time, with a fair sized house, two or three rooms may be fin-
ished in the attic, to give very satisfactory rooms, without raising the pitch of the roof beyond what the eyes asks a satisfactory roof covering for the house. Care must be taken not to raise the roof to too great a pitch. Windows in the gables and with a dormer at the front and rear very good bed room space may be arranged, especially for the rooms which are not used so much as are those which are regularly occupied by the family.

The home which is shown here is built of brick to the sillsof the first story windows, with cement stucco above. The pitch of the roof permits good rooms to be finished on the second floor, the larger chamber having windows on two sides.

The sun room and living room are combined in one, with the grouped windows in the front of the living room. High windows opposite the fireplace makes place for larger pieces of furniture, davenport or piano. The fire place is centrally located, and beyond it the stairway leads to the second floor. There is a seat built in with the stair rail forming one end.

Folding doors separate the dining room from the living room. The dining room also has a group of windows across the front of the room. Beyond the dining room is the kitchen, which is of good size and well equipped. The stairs to the basement are under the main stairs with an outside entrance at the grade level.

The stairs are built in a rear dormer giving good height. On the second floor are two good rooms and a bathroom. The closets are built under the roof.

There is a full basement under the house, providing for the heating plant, storage, and laundry equipment.

This home is attractive in its combination of stucco and brick work, with shingles in the gables. The outside steps are of cement.

A Popular Type of Home

The second home shown is shingled, and of a very simple and popular type. The entrance is from the wide porch. The fireplace end of the living room has been made into a den. The stairs lead up from the corner of the living room, easily accessible from all parts of the house. A pantry fitted with cupboards connects the dining room and the kitchen.

Under the roof three good sized chambers are finished, the dormers giving additional height at the windows. The glass of the window sash are divided with white wood muntins and the outside trim
is painted white, including the porch railings. Flower boxes are hung at the top of the railing.

**A Shingled Bungalow**

Much smaller is the third cottage, and rather new when the photograph was taken. Vines have not yet covered the trellises at the porch piers, which will eventually carry vines, and possibly rambler roses up over the pergola covered stoop.

Dining room and living room fill the front of the house with a cased opening between them and with a cased opening, where portieres may be hung, on either side of the fireplace opening to the sun room on one side and to the stairs on the
mathematical creases has lost favor with the passing of the long table. Except for family gatherings, and such holidays as Thanksgiving and Christmas, the long festive board is obsolete in most houses. Round tables and round cloths have become so much the mode that this fact has made many changes in the weaving of table linen. Special patterns are woven for round tables, and incidentally a much simpler scheme of design has come into existence. The cloth that almost swept the floor was of intricate pattern. There was an outer border with an elaborate corner piece, an inner border which outlined the table, and usually a large floral center-piece. This type is seldom seen now. If the cloth is designed for a round or a square table there is usually but one border. In place of the elaborate central design, a plain damask "field," broken at intervals with leaves and flowers is preferred.

Designs have steadily improved, and many of the patterns are admirable in drawing and composition. Cloths for round tables may be woven square, but the border is round and deep enough to give the designer an opportunity for large decorative effects. A beautiful cloth shown by the American representatives of a Belfast firm is in one of the lily patterns, and the broad arrow-shaped leaves and decorative flowers form a striking contrast to the large spaces of plain damask. The effect of light and shade in the pattern is marvelous, and it is this quality that makes the best work interesting. Other patterns made by this firm are various shamrock motifs, always popular in America, and exquisite fern cloths. Also there are linen luncheon cloths embroidered in shamrocks and luncheon sets of "Baby Irish" lace including centerpieces and doilies, at prices which are very reasonable.

In our enthusiasm for the exquisite foreign tablecloths it must not be forgotten that American products have been steadily gaining in merit, but climatic conditions here are not favorable to the highest development of the industry, and America's linen will probably never equal that of Scotland and Ireland. A moist climate is necessary for the growing of flax and for bleaching, etc., and this is one reason why Ireland leads the world. The French and Belgians make beautiful table linen also.

Tablecloths, towels, and all the pieces which comprise the contents of an ideal linen-closet may be found, ranging from the plainer weaves to those exclusive patterns which are the finest products of the flax loom. And what charming creations they are, smooth as satin and bleached to the whiteness of snow.

Belfast, the great center of the in-
dstry has several big linen depots filled with the products of hand and power looms. It was my pleasure several years ago to make a personal visit. Between Belfast and Dublin the meadows are white with long strips of linen bleaching in the alternating rain and sun of Northern Ireland. A trip to the linen districts is full of interest, whether it be the primitive hand loom of the cottage or the great power looms of the factory. County Down, County Antrim, and County Ulster are famed for their productions, and much of the Irish damask of our shops comes from these localities.

The process of weaving a table-cloth of finest damask is an intricate one, and one that the average buyer knows little about. A member of one of the largest linen firms gave me the following information about pattern cards, and other technicalities.

“Everybody who has seen a Jacquard loom at work,” he said, “is aware that the pattern is produced automatically through the agency of certain mysterious cards with holes punched in them, which flap over each other as the loom works. Not one casual observer in five hundred is able to carry away with him a very clear idea as to how the ultimate result is effected by these cards. Explanations will possibly not make it clearer; but for a trial: The design to be woven in the cloth is carefully reproduced in color by a draughtsman on a large sheet, or series of sheets, of paper, ruled into little squares, these being again subdivided into smaller ones. The lines which form these represent the threads in the patterns.

When the loom is arranged for a cloth these threads are counted, the perpendicular ones being warp threads, the horizontal ones being weft threads. The warp threads are arranged on the weaver’s beam and stretched out on the loom. For every thread of weft in the pattern a card is provided. The weft, it is to be understood, is the thread thrown by the weaver’s shuttle. Then the paint, as the colored drawing is technically called passes into the hands of the card-cutter. It is a buxom young woman in this case, who, by long practice, is as expert at reading a pattern as the most finished of
boarding school young ladies at reading music at sight. It is as difficult an accomplishment to acquire in the one case as in the other, and in this instance a false note means disaster. Carefully she runs along the thread in the drawing—so many blanks, then the color touches a square, and bang goes the punch—bang, bang, bang,—three holes in succession, then a space, and so on; card follows card, and when all are finished they are laced together in the order of their working, so that they will fold over each other. In the machine these cards pass in order over a box with perforations through which needles project; where there is a perforation in the card the needle passes through; where there is no perforation the needle is checked, and acts with a lever movement upon a perpendicular wire attached to a cord which controls the movement of the warp thread. The result is a continual raising or depressing of the warp threads in accordance with the exigencies of the pattern.

The beauty and subtlety of these woven designs in damasks can be appreciated only by realizing that they are simply produced by white on white; that there is no real color; and that the color effects are produced simply by disposing the threads so as to reflect the light at different angles. The item of card-cutting is a heavy one in the manufacturer’s expenses of production. Some designs require 15,000 cards; where there is a repetition in the pattern, of course the cards can be used twice or oftener; but with a greatly diversified design the multiplication of cards is enormous, and as many as 50,000 have been required for a pattern of damask six yards and a half in length.”

One of the patterns requiring the highest number of cards specified is a game cloth in which the plumage of Irish pheasants is shown with remarkable fidelity. Another pattern requiring many cards is of water fowl and fish with seaweeds and sea-grasses arranged most cleverly. But as a matter of fact many of these elaborate patterns do not reach America. Our taste in table-cloths and napery does not run to game and fish, and importers have discovered this and buy more conventionalized designs for American patronage.
Unity of Design.

L. D. K.: I am enclosing a copy of Floor Plan of my proposed semi-bungalow, together with picture of house.

We have substituted a breakfast nook off the kitchen for the screened porch.

We have planned the woodwork of living room and hall in red birch, stained mahogany, dining-room with 6 foot dado in old ivory, pantry and kitchen in natural finish pine with buff walls and breakfast nook like kitchen with cretonne curtains for the breakfast nook to match the cushions on seats.

What would you suggest as an appropriate finish for the chambers? As you will note from the plans, all the chambers lead direct from the hall. We would like to get away from the mahogany finish in these rooms and select a finish that would require less care, yet that would look well with the hall.

We are planning to carry out old gold and old blue in the dining-room in the curtains, rug and paper. Would it be proper to select mulberry as our main living room color? As I have got to purchase a new rug for the living-room, what colors would you suggest? Also tell me what color of wall paper to use in the living-room and overhangings at windows. These rooms are connected by French doors. I have thought of a fine net or madras for these. Should the window hangings correspond?

Ans.: Reference to your plan shows a long, narrow hall, from which all the rooms open. We advise carrying the ivory finish of the dining room into the hall, with mahogany treads and stair rail. To use mahogany stain for the woodwork in hall with oak treads, would not look well, the oak floor is all right, oak floors are used with any woodwork. We would then finish the woodwork of the bedrooms either white or ivory, as best suits the furniture, with birch doors stained mahogany brown. In this way there will be no conflict anywhere.

As to stair runner, we suggest, if you like mulberry tones in the living room, carry the same color into the stair runner and think a floor runner down the hall, preferable to small rugs. A hanging of mulberry, would be the choice for the opening from hall to living room.

Regarding wall tones, the paper used in hall should be very light—we would use a light, soft gray tapestry, small all-over design, in both hall and living room. A small house like this, gains from a unified effect. Have the hall ceiling tinted ivory, the living room very pale gray. Get a gray Wilton rug for the living room—you will have color enough in the mahogany and hangings. Yes, use the same sheer, sprigged net for the French doors and glass curtains of the windows. A lighter tone of the mulberry, in the brocaded Sunfast material, would be the
best choice for side draperies at windows.

You do not give the exposures of the rooms, so we cannot tell whether blue and gold would be suitable for the dining room. In general, blue is not so good a choice to open from a room done in mulberry. If the room faces north or east we would like a paper in soft gray, with touches of rose and gold, above the ivory dado, and curtains of old gold.

Wainscoting.

M. T.—We have just bought a story and a half shingled house that is partly finished. It is plastered in all rooms; but in living room and dining room, four feet have been left for wainscoting. Would it be right to finish plastering this all the way down in living room, and finish it with panelled wood wainscoting in dining room, or would it be better to plaster both in the same way?

Ans.: It is quite right to have the living room wall plastered to the base and to have a panelled wainscoting in the dining room. In fact the wainscoting is especially well adapted to dining room treatment. At the same time, in good work it is customary to carry the plaster completely down the wall, whether it is to be wainscoted or not, and set wainscoting, like other wood work, over the plaster.

Selection of Woods for Special Finish.

L. B. C.: Please tell me what kind of wood to select for interior finish in new cottage. Much of the work is to be enameled. Can I use poplar for these rooms, and what wood should I use for mahogany or brown stains. What treatment should be given chestnut, oak and ash?

Ans.: Replying to your inquiry, poplar is perhaps one of the best woods to take enamel finish which can be adjusted to ivory or any other shade desired. Beech and birch are naturally well adapted to finish in mahogany stain since the grain is favorable to that finish. American walnut will also finish well in a dark or brownish cast mahogany. Chestnut, ash, oak or any other open grained wood require paste fillers and in the event that it is desired to finish them natural light colored prepared wood filler is best adapted.

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A Dining-Living Room.

P. M.: At various times, I have noted your helpful answers to the problems that seem to confront almost every homemaker.

My own particular problem is this. I wish to furnish and decorate a dining-living room which extends across the front of the house, with windows and doors as per sketch attached. The woodwork is in medium brown finish and is very plain, the windows are casements, the floor is oak. While the two rooms are really together, they are separated in appearance by a 10 or 12 inch plastered arch.

What color scheme would you use? I have a lovely rug, 9 x 12, with colors of tan and old rose predominating, also two overstuffed brown leather chairs, a rocker and a straight chair. Could I use these to advantage in the living room? What other furniture would you suggest? I had hoped to be able to place a davenport, but fear it will tend to lengthen and narrow the room.

What kind of window hangings would it be best to use? I should like something plain and inexpensive, but do not know what style would be best for a room with as much light as this one has.

Ans.: We should treat the rooms as one. The whole length is only 26 ft., which is not a large room and the effect will be much better. The room is rather narrow—12 ft.—but by placing a davenport in front of the fireplace, about 3 ft. back, the long, narrow effect will be lessened rather than increased, and it will add much to the hominess of the room. For this davenport we advise a walnut frame with antique cane seat and back, using a long, loose cushion of old rose velvet or mohair on the seat, with a long-shaped pillow in the center of the back and a bolster like cushion or pillow at each end, of the same material. We should emphasize the rose of the rug in the furnishings, and it would be very pretty to place one of the long narrow library tables, back of the davenport, with a mat on the table of rose velvet and a table lamp with old gold shade. Then a tall piano lamp with a rose silk shade to stand near the piano. Your big leather chair could be placed in the arch-way, so as to leave a clear passage to the hall and the straight chair in the corner by the bookcases. A writing desk could stand in the space between the doors to porches and the room would then be very completely and attractively furnished for the living room end of the room.

We should not use heavy dining room furniture. A small round table in the deep ivory finish with four ivory and cane chairs, a buffet under the high windows, and a fern stand filled with ferns in the south window, would give a charming little dining room. If you prefer walnut to the deep ivory, it would be all right. We would use a smaller rug, in tan shades. Now for walls and curtains: On the walls use a small, all-over tapestry design in shades of tan, with plain tinted ceiling in deep cream.

The living room faces north, and has none too much light, but the big south windows in dining room end make it very light. We would make all the curtains of natural pongee, with hemstitched sides and ends. This material is not expensive and is elegant, and requires but the one set of curtains.

We are sorry you did not mention the character of the fireplace, but hope it does not conflict with our scheme.

Shades.

G. D. D.—What shall we use for shade with our light woodwork? Should we have shades throughout the house, including the dining room?

Ans.: Regarding window shades, most people feel the need of shades throughout the house as a protection against sun and light. These may be duplex—or two toned, cream white on the inside, and on the outside a color to accord with the outside color of the house or with the outside trim.
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A Stillwell—California Colonial Bungalow
Choice of Foods—Cafeteria Meals

ELSIE FJELSTAD RADDER

CAFETERIA gadding is getting to be quite the vogue nowadays. Like so many other things, much can be said both for and against it. Let it suffice to say here, that although meals at home are to be urged because of the home life they make possible, yet, the cook needs a vacation, and because cafeterias are sometimes able to serve at less cost, they present a very attractive proposition to families where the pocketbook must figure in all such decisions.

At cafeterias, each member of the family is put on his own resources as regards the choice of food. The man of the family has as much responsibility as the mother. Children cannot be expected to know what is best to eat, and they must be skillfully guided past the pies and cake and jams, which they would invariably choose as a steady diet, to soups, vegetables and other things which should make up the bulk of food for the child.

Placards are presented by many modern cafeterias, especially those conducted by Universities, under the direction of their Home Economic departments, telling their patrons how to choose a correctly balanced meal. The data given herewith obtained from such placards at Indiana University, may be found helpful not only to families who take an occasional meal at cafeterias and restaurants but also to the mother who daily plans and prepares meals for her family.

The substances necessary for growth of the body are shown in the tables. It will be noticed that some foods supply several of these elements, in other words, have a more universal food value. The substances necessary for the body to do its work are the energy producing foods. “In addition to substances necessary for growth and substances necessary for energy, the human body requires bulky

<table>
<thead>
<tr>
<th>Foods Necessary for Body Growth</th>
<th>Mineral Matter</th>
<th>Proteins</th>
<th>Vitamines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>Milk</td>
<td>Milk</td>
<td>Milk</td>
</tr>
<tr>
<td>Cheese</td>
<td>Eggs</td>
<td>Eggs</td>
<td>Eggs</td>
</tr>
<tr>
<td>Eggs</td>
<td>Meat</td>
<td>Cheese</td>
<td>Cheese</td>
</tr>
<tr>
<td>Spinach</td>
<td>Fish</td>
<td>Fish</td>
<td>Fish</td>
</tr>
<tr>
<td>Lettuce</td>
<td>Peanuts</td>
<td>Peanuts</td>
<td>Peanuts</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Cottage Cheese</td>
<td>Peas</td>
<td>Peas</td>
</tr>
<tr>
<td>Turnips</td>
<td>Beans</td>
<td>Beans</td>
<td>Beans</td>
</tr>
<tr>
<td>Carrots</td>
<td>Custards</td>
<td>Custards</td>
<td>Custards</td>
</tr>
</tbody>
</table>
Energy-Producing Foods.

<table>
<thead>
<tr>
<th>Fats</th>
<th>Starch</th>
<th>Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cream</td>
<td>Peanuts</td>
<td>Sugar Syrups</td>
</tr>
<tr>
<td>Eggs</td>
<td>Beans</td>
<td>Beets</td>
</tr>
<tr>
<td>Meat</td>
<td>Peas</td>
<td>Figs</td>
</tr>
<tr>
<td>Salmon</td>
<td>Potatoes</td>
<td>Dates</td>
</tr>
<tr>
<td>Cheese</td>
<td>Sweet Potatoes</td>
<td>Raisins</td>
</tr>
<tr>
<td>Nuts</td>
<td>Bread</td>
<td>Apples</td>
</tr>
<tr>
<td>Peanuts</td>
<td>Cake</td>
<td>Oranges</td>
</tr>
<tr>
<td>Peanut</td>
<td>Rice</td>
<td>Cake</td>
</tr>
<tr>
<td>Oil</td>
<td>Bananas</td>
<td>Candy</td>
</tr>
<tr>
<td>Pie</td>
<td>Hominy</td>
<td>Sweet Desserts</td>
</tr>
<tr>
<td>Cake</td>
<td>Macaroni</td>
<td></td>
</tr>
<tr>
<td>Doughnuts</td>
<td>Spaghetti</td>
<td></td>
</tr>
<tr>
<td>Ice Cream</td>
<td>Breakfast Cereals</td>
<td></td>
</tr>
<tr>
<td>Chocolate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fried Foods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oleomargarine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salad Dressing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The digestive organs are meant for work, and if an individual eats largely of liquid or semi-liquid foods all of the time, his digestive organs will fall into disuse and an organ which does not function properly in time loses its ability to function. Hence, the body needs foods which give bulk.

Proteins

Bulky Foods.

<table>
<thead>
<tr>
<th>Green Beans</th>
<th>Lettuce</th>
<th>Turnips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrots</td>
<td>Greens</td>
<td>Potatoes</td>
</tr>
<tr>
<td>Parsnips</td>
<td>Cabbage</td>
<td>Oatmeal</td>
</tr>
<tr>
<td>Beets</td>
<td>Onions</td>
<td>Wheat Cereal</td>
</tr>
<tr>
<td>Rutabagas</td>
<td></td>
<td>Fruit</td>
</tr>
</tbody>
</table>

The mineral in food, in addition to being substances very necessary to growth, are also very important to the body because they supply material for supply and repair of teeth, muscles and blood cells; they regulate digestion, circulation and other systems of the body. Vitamins, also, have an importance that cannot be over-emphasized. Thus the foods rich in mineral matter and vitamins, which may be classified rightly into milk, eggs, cheese, vegetables and fruits, are of the utmost importance to every human being. This is a point sometimes neglected by working men, whose need for energy causes them to choose foods that will give them their desired amount of "pep."
Health and Food.

Health follows proper food, properly prepared, eaten regularly in balanced proportions. When people come to recognize this which scientists claim to be a general fact, a headache will become a “social error,” and will lose caste as an excuse for many things. If the food program is right and the body in good condition, even “a little cold” will lose its hold. In fact it seems as though, in the development of time, sickness might come to be looked upon as a sin against natural laws, and criminology be placed under medical treatment.

If these ideas continue to prove themselves, a little study of the facts, and the laws of health will enable people to feed themselves exactly the right kind of food, and the right amount of food, at the right times—and there would be no such thing as sickness.

What to Eat,—For the Clerical Worker.

The person who does only moderately hard work, physically, such as the business man, bookkeeper, or college professor the following menu is suggested.

**Breakfast**
- Fruit
- Cereal
- Eggs or Bacon
- Toast, Rolls or Muffins
- Coffee, with Cream
- Occasionally:
  - Waffles
  - Pancakes
  - Fried Toast

**Luncheon**
- Soup
- Fish or Cheese Dish
- Rolls and Butter
- Plain Dessert

**Dinner**
- Clear Soup with Crackers
- Meat
- Potatoes
- Rice or Macaroni
- Bread
- A Cooked Vegetable
- A Crisp Vegetable as Lettuce or Celery
- Ice Cream or Pudding or Fruit

With Heavy Muscular Work.

**Breakfast**
- Cereal
- Sausage or Liver or Bacon
- Toast or Muffins or Corn Bread
- Coffee and Cream

**Lunch**
- Beans or Peas or Macaroni with Cheese
- Rye or Graham Bread
- Fruit: Fresh or Sauce Cake or Pie
- Coffee with Cream

**Dinner**
- Meat
- Potatoes
- Dumplings
- Bread
- Heavy Vegetables, such as:
  - Tomatoes
  - Onions
  - Cooked Cabbage
  - Pudding or Pie
  - Coffee

For a Woman, with Ordinary Work.

Typical **Breakfast**
- Orange
- Omelet
- Toast, Butter
- Coffee with Cream

**Luncheon**
- Vegetable Dish
- Salad
- Rolls, Butter
- Milk
- Plain Cookies

**Dinner**
- Creamed Soup, Crackers
- Lean Meat
- Baked Potato
- Sliced Tomatoes
- Tapioca Pudding

For a Woman Doing Heavy Work.

**Breakfast**
- Fresh or Stewed Fruit
- Cereal with Milk
- Codfish on Toast or Bacon and Eggs
- Toast or Muffins
- Coffee with Cream

**Lunch**
- Thick Soup with Crackers or
- Escalloped Eggs and Tomatoes or
- A Vegetable Salad with
- Bread and Butter
- Eggs and Tomatoes or a Vegetable
- Salad with Bread and Butter
- Stewed Fruit and Cake or Pie

**Dinner**
- Soup, with Rice or Noodles
- Meat
- Potatoes or Rice or Macaroni
- Cooked Vegetables as Onions or Cabbage
- Simple Salad or Celery or Lettuce or Olives
- Simple Dessert as Jello or Baked Apple

Eating to Gain, or Reduce.

Thin people should eat such things as grape juice, dates, butter, cream and sugar, ice cream, chocolate, beans, whole wheat bread, apple, prunes, grapenuts, chocolate pudding, egg in orange juice, buttered vegetables, salted almonds, oil salad dressing, custards, escalloped potatoes.

Person wishing to reduce should eat in a day: breakfast, orange, egg, graham bread and black coffee; lunch, bouillon, soda cracker, fish or bacon, asparagus, boiled potato and raw apple; dinner, raw oysters, lean roast meat, string beans, boiled potato, sliced tomatoes, cheese or pineapple for dessert and black coffee.
It's Planning Time

None too early now to have your plans under way if you are to build in the spring. For the most satisfactory home is the one that is well planned in advance.

It's just as important to plan for materials as for design and arrangement of rooms. Home builders who want beauty with economy are building of brick.

An attractive, brick home, built with the Ideal Brick Hollow Wall, costs less even in first cost than any other type. And it's always beautiful, for the hand of time serves but to soften and enrich its charm. The adjacent column tells about this most economical yet most attractive kind of home.

THE COMMON BRICK INDUSTRY OF AMERICA
1319 SCHOFIELD BUILDING, CLEVELAND, O H I O
Good Construction for the Fireplace

GOOD fireplace, to most people, is one of the essentials of a really satisfactory home. While it may not be the intention that the fireplace shall be depended upon to heat the house, or only in mild weather; and while it may be wanted equally for its decorative qualities; never-the-less it should be built right in the first place. A fireplace which smokes can have no decorative value after once using, for smoke and soot cannot be cleaned away entirely. Not only has a poorly constructed fireplace no value, but it is a disadvantage and disappointment.

The proper construction for the fireplace and flue has been pretty well standardized and, given proper attention, there should be no difficulty in getting a good fireplace. Like the good cook who says she "just knows" what to put into her cakes, and has no rule, there are builders who have the reputation of "knowing how" to build good fireplaces and chimneys, and such a man will generally build a fireplace which will "draw," if he is permitted to build it in his own way, but to such a man, changes from his usual sizes and conditions are likely to make trouble.

The cut shows a standard chimney construction which is generally considered good construction. It is shown in section through the depth of fireplace and flue, and also with some of the brick work cut away showing longitudinal section of chimney breast and the drawing in of the flue. Below it is shown in plan, reversed and looking up. Correct fashioning of the throat and smoke chamber is very important.

In the section the throat is the point where the fireplace contracts, just above the fire, in order to give a good draught. The damper is located in the throat to shut off down draughts and to control ventilation. The shelf back of the throat forms the bottom of the smoke chamber and tends to intercept down draughts of smoke. A cast iron throat is smooth, giv-
NO MAINTENANCE EXPENSE

The first cost is the only expense when you buy a Kewanee Coal Chute. All-steel construction—no glass or cast iron to break. Easily and quickly installed in any house—old or new. GUARANTEED for five years against breakage—will last a lifetime.

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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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Published by
M. L. KEITH
204-5 Abbey Bldg., Minneapolis, Minn.

Good Construction for the Fireplace—Con’t

A lintel, supporting the masonry above. The narrowing of the throat increases the velocity of the smoke and gases, projecting them into the smoke chamber. The latter, according to some authorities, should be of concrete, finished smooth, with square angles or shoulders, and having an area of gradual reduction to the point of connection with the tile flue lining.

The tile flue should have a minimum of 4 inch brick work laid in cement mortar, and 8 inches of brickwork with outside exposed linings. To prevent smoke and a one sided fire, according to the same authority, the flue should always be drawn to the center above the fireplace, and any necessary change in location made above this point.

The depth of the fireplace should be from 14 to 20 inches, or 24 inches, if the fireplace is very large. Greater depth is generally unnecessary, nor should the opening be more than 30 inches in height, except for a very wide fireplace. Usual sizes are from 2 feet 6 inches to 3 feet 6 inches in width, by 2 feet 4 inches in height and 16 to 20 inches in depth. This requires a flue lining 8½ by 13 inches, to get 8 by 12 inches in the clear. The splayed jambs and sloping back, shown by plan and section, project the heat into the room. The walls of a fireplace should never be less than 8 inches.

Cracks in Plaster

Plaster cracks are due to settling of the house, walls, foundations, etc. When the frame work moves or settles the plaster goes with it. The use of unseasoned lumber is another cause of cracking.

Assuming the lumber is as well seasoned as the market affords, the only cause of cracking that can be controlled is the settlement. The joists should be strong enough to carry the weight without sagging. Joist-bearing partitions should be placed directly over each other wherever possible. Where this is not possible it may be better to use a steel beam instead of wood.

The use of metal lath, lapped in the corners of the room, will greatly reinforce the plaster and prevent corner cracking.
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WRITE FOR PARTICULARS

Keith Corporation
MINNEAPOLIS, MINN.

Developments In Gypsum Plaster.

A new process of manufacturing gypsum plaster is announced which will keep the plaster continually fresh, preventing its going "dead" while in storage. This process consists in scaling each minute particle of gypsum against atmospheric moisture. The plaster looses none of its sand-carrying capacity, even when stored for many months. Other economies, it is claimed, are the rapidity with which it takes the water in mixing, and its unusual plasticity under the trowel.

Up to one year ago but little advance had been made in the manufacture of gypsum wall plaster since 4,000 years ago when the Egyptians first used this material in their temples and pyramids. Other building materials have been improved for convenience, practicability, or durability, but gypsum plaster remained fundamentally the same as when originated by the ancients.

Pointing Masonry Joints

When mortar falls out between masonry joints it is usually due to the action of the weather, usually, frost and moisture, and the remedy lies in pointing up the wall. The pointing is generally done as soon as completed by raking out the joints to a depth of about 3/4 in. The joint is then cleaned with a wire brush and wet down so that the mortar will stick.

Pointing should be done with a mortar of equal parts of cement and sand, using whatever coloring is desired. It should not be done in freezing weather nor in extremely hot weather.

Suburban Fire Protection

An original and practical scheme for fire protection in a rural community is being practiced in one district in Massachusetts. The town, which is the hub of the community, purchased a number of three-gallon extinguishers, which were placed in the farm-houses near by. They remain the property of the town, and the farmer agrees to keep the extinguisher from freezing and always have it available for use. The town engineers make an annual inspection, and recharge the extinguishers. The operation of this scheme has already saved several buildings located more than two miles from the hose house in the center of the village. The victim of a fire not only uses his extinguisher but his nearest neighbors bring theirs and do effective work until the auto-truck arrives. The ultimate plan is to supply every house lying outside the limits of the town water system with an extinguisher costing about $20. The scheme calls for only a small contribution from each resident, and evidences a community spirit of high order.—World's Work.
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Practical Experience With Ozone

The possibility of ozone, not only as a health tonic but also as a fuel saver, brings it into discussion both among engineers and at Board of Health meetings. Experiments with the use of ozone have covered several years and have been reported from time to time in the Heating and Ventilating Magazine. Especially worth quoting is this paragraph from a paper presented before the American Society of Heating and Ventilating Engineers by E. S. Hallett, chief engineer of the St. Louis Board of Education: "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 undisputable fact that human beings require ozone as a normal constituent of the air, and the artificial supply of ozone is nothing but supplying the missing element which has disappeared, due to the results of dense population."

Mr. Hallett says further that ozone "produces a mild exhilaration resembling that of a sea breeze, or the morning after a thunderstorm. When used in a proper concentration for ventilation, it has no odor itself. To this should be added the evidence adduced by the medical authorities of France that ozone increases greatly the oxyhemoglobin of the blood, thereby increasing the oxygen carrying capacity of it. This, in turn, cures anemic persons. The introduction of ozone in ventilation would probably remove the necessity for open-air schools now common in most cities."

It is a significant statement that St. Louis, after having fifteen schools equipped with ozone, has just contracted for five more schools to be so equipped. Each of these schools accommodates around 1,000 pupils and the entire work is under rigid medical supervision.

Ozone and Recirculation of the Air. Following many careful tests there is a growing feeling that bad air is dead air, that is, air which is stationary; that motion in the air, as a general thing is the important thing. Tests seem to show that sufficient fresh air to keep up the living qualities in the air of a house leaks in, even around the best constructed windows and doors, and also through the walls themselves,—in case the air does not remain stationary.

Bringing large amounts of outside air into the house and raising it from zero weather to the temperature of the rooms, while passing out the warm air, is an unquestioned loss of heat, but one which seemed necessary in order to have good air in the house. Recirculation of part, at least of the air used is a conservation of this heat. By injecting into the air a stream of ozone which releases nascent oxygen and literally burns up all oxidizable impurities, the recirculated air is made not only satisfactory, but, it would seem has vastly more of the vital elements than ordinary outside air.

While the work which has been carried on experimentally has largely related itself to large institutions, schools, and industrial plants, the same thing is needed, at times, in the individual home, and there is a very especial need in apartment houses and apartment hotels.

It seems that the different manufacturers of ozone producing apparatus also put out portable units designed for such service as that required of a portable fan. Eventually this important branch of conditioning air for human use will achieve the development which it deserves.
Uncovered Pipes and Heat Loss.

Uncovered pipes carrying steam or hot water act as radiators during their whole length. The cellar and the rooms through which they pass, may be heated in this way with considerable effect. But as the intention is to carry the heat to other parts of the house, instead of distributing it along the way, such an installation is very unsatisfactory in the matter of heat loss. Naturally the pipe will radiate heat wherever it has that opportunity. The efficiency of covering for the various kinds of pipe has been tested in research work relative to heating. An air cell covering gives insulating qualities, and adds materially to the percentage of heat that is carried to the parts of the house to be heated.

Heat Generation and the Atmosphere

"With the millions of tons of wood and coal burned every year and the additional amounts of oil and gas which are turned into heat, does it not seem logical that all of this heat generation should make the air warmer?" "Does this account for the mild winter?" These questions came to an engineer in 1920, as he was watching the lines of automobiles rushing back and forth on the streets and avenues of New York City. "Surely all this burning gasoline must have an appreciable effect on the earth's atmosphere." when added to all the heat generated. Thus argued the questioner. So interested did he become in the matter that he gathered figures from the leading authorities on coal, gas, oil, wood, as the probable approximate amount of each of these which is burned in a year, estimating the B. T. U. It was not difficult to get the pound pressure of the atmosphere of the globe. Putting these together he found an effect of 1/54th of a degree. In other words, all of the heat produced on earth per year will increase the temperature of our atmosphere only 1/54th of one degree Fahrenheit. That is, it would take 54 years for all of the heat, applied at the same rate every year to raise the temperature of our atmosphere one degree.

"In view of this extremely small temperature increase per year," he concludes, "in view of the fact that vegetation absorbs carbon dioxide, one of the products of combustion; and in view of other things that we do not fully understand; I conclude that the temperature of our atmosphere remains unaffected by the activities of human beings."

It is interesting to know that this has been worked out mathematically, and settled so satisfactorily.
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 Life of Wood

Evolution and experience have pointed to the frame house as the 'fittest survivor' of the existing conditions in New England. It is cheap, warm, dry, easy to build, to enlarge or alter. It is practically as safe from conflagration as a house with exterior walls of masonry if built with fire resisting roof and with proper space between houses. No other kind of construction offers the same combination of advantages. Masonry offers less resistance to cold and heat, as engineers have proved. It is not so dry. It is more difficult to enlarge or alter, and presents more work in building, especially in winter. It costs more, though somewhat cheaper to maintain."—Wm. Roger Greely, architect, Mass. Homestead Commission.

House Built in 1677—Yet Standing

The opening to the public of the William Harlow house, built in 1677, is one of the most interesting features of the Tercentenary Celebration at Plymouth, Massachusetts, of the landing of the Pilgrims.

This is one of the few buildings now remaining which stood within the lifetime of any of those who came on the 'Mayflower,' and it has a particular interest owing to the fact that it was framed with oak timbers from the old fort, which, as Winslow relates, "was built in 1622 on the top of the hill under which the town was located."

After King Philip's War, when danger from Indian depredation had passed, the fort was dismantled and the timbers sold to Sergeant William Harlow, a man of prominence in the colony, who used them in the construction of his house on the ancient highway where it still stands.

About forty years ago, in repairing the house, the oak posts and beams were uncovered and the ancient mortises, made in fitting the frame of the fort, were disclosed. An old hinge was also found, which is one of those on which the gate of the fort hung.

There is thus established in this house a connecting link between the founders of the first permanent settlement in America, three hundred years ago, and the present generation.

Ancient Wooden Doors

Among the famous doors of history are the carved wooden doors of the church of Santa Sabine, Rome, depicting in relief, scenes from the Old and New Testament. These are one of the most remarkable examples of early Christian sculpture extant.

Ancient Wooden Doors

Among the famous doors of history are the carved wooden doors of the church of Santa Sabine, Rome, depicting in relief, scenes from the Old and New Testament. These are one of the most remarkable examples of early Christian sculpture extant.
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The fact is, a room 14x14 feet, for example, can now be floored for from $20 to $30, in the highest plain grade, at average prices throughout the country.

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In the earliest times, as in Babylon, doors swung on sockets instead of hinges. In Roman days wooden doors were decorated with bronze and inlaid, and throughout the Middle Ages richly carved doors of wood adorned the churches. In the Gothic period, wooden doors were decorated with wrought iron hinges which were often elaborated into intricate ornamentation covering a large part of the door. The doors of the cathedral of Notre Dame in Paris of the 13th century, are fine examples of this class. During the Renaissance in Germany and France elaborately carved doors were among the most beautiful products of wood sculpture.

Some of the old English doors were formed of narrow planks placed side by side and in dwelling houses generally, in the Middle Age the doors were small and fairly simple, meant for strictly practicable purposes and often provided with some means of defense. The doors of the Norman period were round-headed, while with the 13th century, came the doorway with the pointed arch and later the flattened arch.

In the case of interior doors splendid old polished mahogany doors were important features in some old English homes and there were old oak doors of wonderful beauty, especially when found in oak panelled rooms.

Decay in Buildings

Research was recently started by the Forest Products Laboratory to determine the "killing points" in temperature and humidity of common fungi found in American buildings. Field and laboratory studies indicate that much more care should be exercised in the selection of timber and in the construction of buildings to avoid conditions favorable to decay. A number of inspections of buildings which have given trouble on account of decay have shown that any one of the following causes may result in rapid deterioration of the building:

1. The use of green timber.
2. Allowing timber to get wet during construction.
3. Allowing the timber to absorb moisture after the building is finished because of leaks or lack of ventilation.
4. The use of timbers containing too much sapwood.
5. The use of timbers which have already started to decay.

The avoidance of these conditions will as a rule, it is said, prevent decay. In special cases, however, decay can only be prevented by preservative treatment. It is stated that for this purpose salts, such as zinc chloride and sodium fluoride, are better than creosote for buildings.

Making Floors Sound-Proof

Whether wood floors can be made entirely sound proof or not, it is quite possible to deaden the sound by special construction. In ordinary frame construction the floor may be deadened to sound by laying heavy felt paper over the floor joists and nailing over this some 2"x3" furring strips on 16" to 24" centers. Lay another layer of felt paper over these strips and, if there is a rough flooring, lay a third sheet of paper between it and the finished floor. Filling material, such as mineral, further tends to absorb vibration and prevent noise, if placed between the joists.

Measurements for Flooring

To determine the amount of flooring required, compute the number of square feet to be covered and add as follows:

For flooring 3/8x1 1/2-inch face, 33 1/3%.
3/8x2-inch face, 25%.
13/16x2-inch face, 37 1/2%.
13/16x2 1/4-inch face, 33 1/3%.

Forest Patrol of War Airplanes

Four hundred sixty four forest fires located between May 16 and July 1, by the airplanes of the War Department was the record of this new service, for last spring, as announced by the Secretary of War. The fliers were in the air 1,995 hours and patrolled 6,247,091 square miles of timber land. "It is impossible to estimate the saving in timber, in dollars and cents," Secretary Baker said, "but there is no question that the army has materially contributed to the peace-time progress of our industries."

The first base was established at Fresno, California, and began operations May 16. Bases were subsequently established at Mather field, Red Bluff and March field, California, and at Medford and Eugene, Oregon.
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is the title of our illustrated booklet on this subject. It tells you how to heat any house, with any furnace, in simple terms, easily understood and applied. So well is the subject treated that many copies are requested annually, for information only, where purchases of heaters are not contemplated.

Educational institutions use them for student instruction in domestic engineering. Among recent requests is the following letter from the Librarian of COLUMBIA UNIVERSITY, NEW YORK CITY

"Gentlemen—Will you please send us ten copies of your catalog descriptive of Modern Furnace Heating, for use in our engineering classes?

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In planning your home—church—store—cottage, etc., you can do no better than to consult us in the matter of heating. Our planning and estimating facilities are yours for the asking, free, and no obligation. Send us your plans or sketches, and let us tell you how to heat the building and what it will cost. The booklet is sent free on request.

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If Orphant Annie herself could read her own stories and see the quaint, charming and captivating pictures with which Mr. Gruelle has illustrated them, her big eyes would grow bigger yet, and more luminous and far away, with the wonder and the beauty of them.

And if the beloved Hoosier poet, James Whitcomb Riley, could see into what lovely fancies his Orphant Annie had blossomed, he would know a keen delight.

Even the "grown-ups," hard and wooded as their minds are, cannot resist the alluring charm of this lovely book; for this grown-up, just had to stop and read all the stories, instead of only glancing at the first one as he had intended.

From the beautiful and tender dedication to his beloved poet, to the last fascinating glimpse of Witch Crosspatch, the Orphant Annie Story Book, is a delightful creation, of a delicate and fertile fancy; and the pleasure it will give to thousands of children, can hardly be excelled by Riley's own matchless charm.

A Course in Mechanical Drawing, for school use and for self instruction; a practical treatise on the art of making working drawings, lettering and dimensioning; by Louis Rouillion, Director Mechanics Institute, New York City; Published by The Norman W. Henley Publishing Company. Price $1.50.

This course in Mechanical drawing is the result of a number of year's work with evening classes, the author tells us, and has been evolved from a careful study of the needs of such classes. The course covers a period of two school years of about twenty four weeks each. The course given at the end of the book, forms a parallel independent course permitting the use of the book as a text book. The plates on free hand lettering are good, and a little unusual in showing methods.


Wood turning is the application of the machine to the art of wood carving. To give the best results the wood worker should combine the skill of the craftsman with the appreciation of the artist for beauty in line and form. This little book is intended primarily for the use of students in normal and high schools, colleges or similar institutions, and for lovers of all things useful and beautiful in wood turning, giving such facts about wood turning as are needed by students and teachers. In addition it is a book of problems, in the designing of which the author aimed at beauty of form while at the same time filling the utilitarian conditions. There are 39 full-page plates.

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<td>Upson Co., 151 Upson Point, Lockport, N. Y.</td>
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<td><strong>Waterproofing Compound</strong></td>
<td>Sam Cabot, Inc., Boston, Mass.</td>
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<td>Philip Carey Co., Cincinnati, Ohio.</td>
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<td><strong>Water Supply System</strong></td>
<td>Kewanee Private Utilities Co., 123 South Franklin Ave., Kewanee, Ill.</td>
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<td><strong>Window Hangers</strong></td>
<td>Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.</td>
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<td>Whitney Window Corp., 138 E. Lake St., Minneapolis, Minn.</td>
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<td><strong>Wood Stain</strong></td>
<td>Berry Bros., Detroit, Mich.</td>
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<td>Johnson, S. C., &amp; Son, Racine, Wis.</td>
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<td><strong>MISCELLANEOUS</strong></td>
<td>Sharp Rotary Ash Receiver Co., Binghamton, N. Y.</td>
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<td><strong>Ash Receivers</strong></td>
<td>American Ironing Machine Co., Chicago, Ill.</td>
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<td><strong>Ironing Devices</strong></td>
<td>Hess Warm. &amp; V. Co., 1217 Tacoma Bldg., Chicago.</td>
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<td><strong>Medicine Cabinets</strong></td>
<td>Chamberlin Metal Weather Strip Co., Detroit, Mich.</td>
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HE generally expressed opinion today is that the coming year promises to break all records as a home building year. The shortage of homes is so great that the figures become more or less meaningless to us, they contain so many numerals. However, the conditions which have been holding building back are tending to adjustment. Reports from all parts of the country show large housing projects starting, or already under way. From the east and from the west come reports of building activities far beyond the usual ratio for the latter part of the year. Instead of falling off as is usual at that season, the volume of building permits for November, 1921, not only broke all recent records for that month, but was the highest for any month, of the year.

In the northwest, building activity during December was far in excess of the November total, and a corresponding increase was recorded over the preceding December. Of the total spent for building during the year 1921, twenty-eight per cent was for residences; twenty-seven per cent for public works and utilities; eighteen per cent for educational buildings; and nine per cent for business buildings.

From the eastern section, reports say that building conditions are improving, money is easier, and as a result, builders and contractors are going back to par. This is an important point in the building situation, as much of the money which must do the building of the immediate future, is carried as invested capital until the time is ripe for the building operation. If the money is tied up in securities which, for the time being are low in price that their sale means a sacrifice, naturally nothing will be done in the matter and the building project is put off. A general improvement in labor conditions has also come about.

Building costs, as measured by Government statistics, continue to decline from 2 to 9 per cent during the fall, but it seems to be quite generally accepted by those who have a wide view of the situation that any further general decrease in the cost of construction must come in a slow evolution such as followed the Civil War. As the year gets older and the great mass of building gets under way, prices may be expected to naturally stiffen. The new home which has been fully planned during these slack years is now ready to go ahead and the owner can take advantage of the conditions. He will, at the same time, help to start the constructive season and lessen unemployment in general lines.
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Every man and every woman desires a house and garden, but the most important and fundamental problem to most is how to obtain them. Plans are made by people for houses and gardens much oftener than they are carried out. The inconvenience, because of city business, of reaching a country home, or the price involved in making such a home—all prevent the launching of such homes by people of taste, who remain frequently, against their desires, in apartments or closely-built up sections of cities.

A successful effort to help this problem locally was started in 1900, by three men of Philadelphia: an architect, an exterior decorator, and a business man. They bought a farm of 160 acres in northern Delaware, of attractive character, 300 feet above sea level, and fifteen minutes walk from a railroad, at convenient commuting distance from Philadelphia. The farm they laid out, according to principles of landscape architecture, into building lots, but reserving for parks the open land and woodland containing creeks.

The three men went through legal process in Delaware of becoming Trustees of this piece of land. They then leased the house-lots for 99 year terms the yearly rental going into the treasury, and paying taxes, improving roads and paying back gradually the original purchase price. The absence of purchase price to the house-lots, as these were leased, at once made many applicants for house or garden purposes, or both, and, after twenty-one years, the place is well cultivated and built. Attractive cottages and gardens are on all the house-lots.

The place, which was named “Arden,” has the advantage over the usual real estate ventures, that the money paid yearly by the residents goes into their
own general treasury, instead of in the pockets of a real estate company, and comes back to them in road and other improvements. In other words the increase in the value of the property goes to the people, who by building their homes there, have raised these values in building up the community, instead of going as "unearned increment" to those who happened to own land adjoining or near the lots which have been built upon and improved.

The land covered by the leases which are ground rent in perpetuity, covering on the average plots of about a half acre each, is in the center of the whole plot and comprises something over sixty acres, the remaining nearly one hundred acres being taken up by seventy acres of woodland, the roadways, the Woodland Green, the Sherwood Green, and the Meadow Green, open spaces held as Commons, on which are the baseball field, the picnic grounds and the like.

No attempt has been made to restrict the size of the holdings. From the beginning anyone who desired land without a purchase price, could file, with the town clerk, an application for such as he desired, and whatever land was vacant would be shown him, he could select what he desired or wait until other land was vacant, as he wished.

The old Colonial road known as Grubbs Lane passes through the lot nearly in the middle, the eastern side being known as the Woodlands and the Western side as Sherwood.

In the center of the Sherwood side is the guild hall, the home of the Arden Club, in which centers the social life of the village. Near it is an old grave yard so old that there is buried in it a man who lived in Shakespeare's century, and it is at the end of this that the church is purposed to be built, following the lines of the church at Stoke Pogis, where Grey wrote the Elegy. Drawings have already been prepared and much of the stone secured.

On the Woodlands side is another center—the Craft Shop—and still another the village store, and in the summer time the ice cream room, ordinarily known as the "Cooler."

The laying out of the new roads was governed largely by the edge of the woods. They were laid out by the architect, Will Price, who designed the church and the guild hall and the first permanent dwellings.

By roads are meant the private roads that intersect the farm, which is on both sides of the highway. The house-lots are quarter-acre to acre in size. As each is leased to an individual, the houses and gardens are individual, and there is no uniformity, but a pleasant diversity on every side.

No rules at all were adopted as to cost or style of house—that was left to the expression of the person himself in his own taste. A meeting of residents once a month makes an exchange of ideas, and a majority vote at this meeting determines the spending of the general treasury of rents.

An advantage of the lease hold to the builder was that the ready money of each person went directly into house or garden, instead of the usual long waits in buying land, and again after buying land, before building, or before planting. A local craft shop helped by supplying local labor.

To those who know it so well, it seems that if this Arden experiment were well known, it would be copied in many localities, to the quickening of the businesses of architecture, building, and everything involved in a home. It is really an experiment no longer, but an achieved success—none the less because it is of small area.

The Arden system recommends itself for a time of business slackness and for
the neighborhood of factories that are running half-time. Men in Arden build their own houses in spare time, therefore lessening the labor cost. There is no purchase price to the land. When a lease is transferred, money is paid for the value of improvements only.

The financing of home building has been through two loan organizations. Of these, the Arden Building and Loan Association, which is the largest building and loan society in the State of Delaware, holds mortgages on buildings, and takes transfer of leases to land, until loan is repaid. The assets of the Association are about $18,600.00.

The other loan organization, called the Raiffeisen Guild, a form unusual in America, has unlimited liability for its members, and money is loaned on personal reputation for integrity, two endorsers required, but not on tangible property. It has the record of ten years' existence without the loss of a dollar. Its assets are about $8,000.00.

The Arden plan is a practical way of attaining homes. Such an undertaking can be talked up among friends—no advertising is necessary. It is like a group of people building a town of their own. The land, as house lot, of course, must precede the house and garden.

The legality of the process, and the security of holding the house-lot, has been demonstrated, and could be done anywhere.

The problem of Arden in its twenty-first year is a waiting list impossible to cope with, because all the house-lots are taken, and subdivision of house-lots is very undesirable, as they were laid out originally with care as to size and shape, with a view to the future.

The bungalows are varied and attractive—trees, hedges, shrubbery and flower gardens being universal. The landscape architecture has been well designed, though results arrived at gradually. Quick growing trees, like poplars, were used much on the roads, and dogwood for the picturesque.

There were frequent springs on this farm that made good water supply, and, in conjunction with artesian wells, are adequate to the water system.

A water company, composed of stock-
holders and incorporated, of about fifty
subscribers, provides water service, so
far as water is furnished through pipe
lines. Other residents have sunk their
own surface or Artesian wells, with hand
pumping. Sewerage is by septic tanks
—the houses being too far apart to re-
quire general sewerage system as yet.

From the point-of-view of usefulness,
vegetable gardens and chicken pens,
grape vines and dwarf fruits are on most
of the places. Bush fruits and mush-
rooms are also raised, and, for decora-
tion, small cedars and sweet gum trees.

Cement and rough stone have been
used a good deal in building, with some
half-timbered and brick effects. Holly-
hocks and iris, as well as rambler roses
and honeysuckle are much used. A
Country Club, composed of residents, has
a swimming-pool in the creek, and open-
air theatre as well as a guild hall.

The Arden Craft Shops turn out hand-
woven materials, hand-made furniture
and hand-wrought iron. It also supplies
architectural designs as well as building
contracts, along lines that are English of
the Middle Ages. Artists and sculptors
are also represented among the residents
of this place.

The charm of the cottages are their ir-
regularity of size and of style. No very
large ones, of course, are included. There
is a plan for a church, to be built of rough
field stone. In driving around the roads,
the abundance of greenery is noticeable,
as forestry is carefully practised.

Small effects are just as pleasing as
large ones and are more possible in the
radius of a few miles around cities. For
the great majority of the business men of
a city, or business women, a home, to be
convenient, must be within commuting
distance.

It is time that ways should be sought
to quicken business that has been some-
what inactive since the world war, and
the two special undertakings of house
and garden,—so they will be among the
possibilities for all people,—are particu-
larly of the class referred to above.

All industries engaged in supplying the
necessities for house-building ought to
unite to encourage this idea that has been
demonstrated by Arden for twenty-one
years. Arden has been considered an ex-
periment in democracy, and it is founded
on the idea that all industry is interde-
pendent.

Naturally, a few foreigners, mostly
Italians, accustomed to cultivation in
their own country, have come to the
place, because of the garden work in
which they find employment, and which
is congenial to them. Basketry also is
practised by them, and dyeing has been
lately added, as a craft.

The desire to be out-of-doors, for
health and sports, as well as for garden-
ing; and out-door bathing,—has caused
the houses to be made small and conve-
nient, as well as pretty and home-like.
The women do not like to be too much
confined to the house, and screened
porches are the rule.

The possibility of such development in
the environs of cities, as is here described,
opens up much for which camping and
daylight-saving have paved the way.
People are experienced in open-air liv-
ning; as they have never been before, and
would avail themselves of such oppor-
tunities speedily.

The two complaints which we most
often hear,—of house shortage and short-
age of garden products, could be relieved
by this method to a great extent. The
desire for art, too, and for architecture,
which seems to be inherent in people,
would find great chance for expression by
this method.

The desire for a home that shall be the
expression of individual taste seems to be
a native instinct in the American people.
WHEN once the task of decorating and furnishing one's home interior has been completed one naturally expects that it shall remain so more or less permanently. However, one will rarely lose interest in making or desiring certain changes, or the addition of new or re-newing touches. In some homes, in fact, it is quite the custom to somewhat alter the general scheme of interior decoration, especially in the living rooms, at least twice each year. One effect, for instance, will be established for the spring and summer, and another for the fall and winter. This is, of course accomplished principally through merely making certain changes in the draperies —using a bright and airy kind for the warm months, and for the cold season a kind that will suggest warmth, the set not in use being carefully stored away until again desirable or seasonable.

The autumn colors of Nature are the yellows, browns and reds. These colors also are the ones principally suggestive of warmth—winter cheer and coziness—when used to predominate in schemes of interior decoration. Hence, when properly combined with analogous or complementary colors or shades, to give relief from any tendency to monotony, they are especially appropriate and effective for the season at hand; and, in their various shades, they offer a very wide selection. It should be remembered, however, that there are also, when used in certain combinations, warm shades of blue, green and even gray, and, further, that the colors commonly designated as plum, mulberry and so forth offer still other possibilities at this time. And, whereas light-weight materials are generally to be preferred for the spring and summer, the heavier kinds of draperies, such as velour, damask, frizette, etc., usually seem particularly suited to the fall and winter months.
Perhaps, therefore, to those who are desirous of making seasonable alterations in their home interiors, the accompanying illustrations and brief descriptions of them will carry some appreciable suggestions.

Winter is the season when one naturally takes special interest in fireplaces and their settings. Shown in one of the illustrations is a fireside that is rendered particularly inviting. In design and construction, the fireplace itself has a cast-composition mantel finished with neat, attractive ornamentation and in white, with a mantel-shelf of black marble, and its facing is of light brownish-buff handmade tile. The lambrequins over the windows are of brown taupe with a dark brown border, and are finished with a light cream fringe. The window and doorway draperies consist of warm brown velour, and the wall paper is patterned in light brown on a light buff background. Reds, browns and blues are combined in the several Oriental rugs and in the upholstering of much of the furniture.

In one of the photographs reproduced is shown a most effective treatment for a tall arched doorway. The vista unfolding through the doorway is especially interesting, particularly as regards color scheme. The woodwork is of old ivory and mahogany; the doorway draperies are of heavy inconspicuously-figured silk, in brown taupe; and the side curtains of the window beyond are of hand-blocked linen, in brown, green and blending yellows, with small dashes of brilliant red, while the electric fixture revealed between the hangings is of Roman gold mounting. The doors close without interfering with the draperies, as drawn back and their being of glass permits the vista to remain at all times, whether the doors be closed or open. The draperies, however, may of course be released, when they naturally will close the view beyond.

In another of the illustrations is given a corner view of a living room effectively
handled in Queen Anne style. The attractively paneled walls are in white and old ivory, while the arched-top French windows—the outstanding feature of the corner—are framed in mahogany. The looped-up draperies at these windows are of silk damask, figured in sage on a greenish-buff background, and the chair, with a neat antimacassar thrown over its back, is upholstered in tapestry, patterned in gold, sage and red on a dark blue background. The floor lamp, with a gilded hand-wrought standard, has an amber parchment shade, hand-decorated to match the colors of the chair, while the embroidered foot-stool also brings out the same colors. Silk gauze of soft ivory, fringed at the bottom, is used to curtain the glass.

The sun room, if it be properly designed and equipped, need by no means be purely a summer institution. In fact, the sun is generally more welcome in winter than any other time. In one of the illustrations is shown an especially delightful and practically planned sun room. The radiators are enclosed with ornamental radiator faces. With the large window spaces admitting so much sunlight in addition to being so very attractively and cozily decorated and furnished, the room constitutes a very inviting living place throughout the year. It is floored with dark brown and white squares of glazed tile, covered with rugs, and is finished, as to woodwork, including the lattice-like treatment of the walls, in light old ivory. The lambrequins over the windows are neutral toned, bordered in black and edged with fringe, and the draperies and seat cushions—from which the room receives definite character in the decorative sense—are of hand-blocked linen, brilliantly figured in green, yellow, brown and red. The Oriental rugs naturally present corresponding colors, to
gether with blue to match the blue-birds with which the wall lattices are ornamented. The furniture, which includes a little portable book-case, is of wicker, in natural shade.

There are, in interior decoration, vast possibilities in the matter of creating "group" or "spot-light" effects, and there are always right and wrong ways of handling them. Certain relativity is essential. In the two remaining illustrations are shown some very pleasing group effects. One is of a dining room corner, and introduces the use of a hand-decorated leather screen to create a background for a small stand and a tall vase of chrysanthemums, while nearby is fittingly kept the tea-cart. The other group utilizes for background a narrow wall panel and a broad open doorway. A picture, it will be noticed, is centered in the panel and directly underneath it is placed an ornate chair. A hand-painted leather screen is used to close a part of the doorway, and before it stands a floor lamp with an ornate standard and silk shade, while a hand-decorated vase containing "cat-tails" and a couple of fancy pillows complete the group. The arrangement, at first glance, may seem to have been made without thought or study, but, on the contrary, it represents a carefully worked-out scheme.

While these rooms are shown as they appear during the winter season, spring is on the way, and in a few months they may be changing to their summer dress; never the less the suggestions as to interior decoration here presented may be adopted with good taste quite irrespective of season—in fact, for decorative schemes of year-round permanency.
Sanitary Walls
Emma Gary Wallace

The evolution of housekeeping demands wall surfaces which can be made and kept clean at a minimum of effort and expense. One may have a beautiful wall when the decoration is completed, but after a few weeks or month it begins to grow gray and often becomes quite grimmy before the winter is over, in a heated house or apartment. We can dust the chairs and furniture. We can rub the glass of the window, but the walls must not be touched, or they become smeared as well as gray. Is there any kind of a satisfactory wall decoration which can be kept clean?

There was a time when it was customary to tack carpets over the entire floor surface of most of the rooms of the house, but the difficulties in the way of keeping them clean led to the hardwood floor and the movable rug. We are now seeing the same kind of an evolution in regard to wall surfaces. Either they must be of such a nature as to be frequently renewed, or it must be possible to clean them easily. Many progressive housekeepers are favoring finishes which can be kept sanitary without these frequent upheavals, and expensive redecorations.

It is to meet this growing demand that washable wall surfaces have been designed. Some of these are painted directly upon the plaster, which of course, must be sound and of suitable finish to take this surfacing effectively. Stippled tints and plain walls of neutral colors, either with or without conventionalized stencil designs, are very satisfactory, and even when the time comes that it is desirable to renew the surface, it can be done at reasonable expense, and again the walls be ready for a long period of usefulness.

But some plastered walls are not good enough to finish this way. Perhaps they are cracked or rough or have been papered for years. To give a sanitary surface to such walls, we have available the washable wall coverings in the form of enameled paper, or a surfaced covering with a cloth or fabric background.

These must be applied with care by a decorator who knows how to do the work properly. The expense of hanging is slightly more than for the regulation wallpaper, but the results are so permanent and beautiful as to show a marked economy in the end.

The painted wall is a washable wall, whether painted in a plain tone, stippled, or stenciled in a more elaborate design. But in regions where soft coal is used the problem of keeping the walls clean and beautiful is still a very real one. Even using these washable material the rubbing necessary to remove the grime from soft coal smoke, mars and dulls the wall surface so that before long redecoration is necessary.

However, and this is the point of this article, a very satisfactory method has been evolved for keeping such surfaces clean, fresh, and beautiful at relatively small outlay of effort and almost no expense. The wall is protected by a special treatment given to washable walls, preferably when they are new, or at any time to arrest further deterioration. The principle is a simple one and may well be illustrated in the processes of Milady’s toilet.

For example, the woman who is going motoring knows that the flying dust and moisture from the air will fill the pores of her skin and coarsen and darken it.
She also knows that "prevention is better than cure," and so she cleans the skin with a suitable cold cream, wipes it off, and dusts her face with a good grade of powder. Then she goes gaily forth knowing that when she reaches her destination or returns home, she can bathe her face with a little soap and water, and that it will be fresh and clean and unmarred by the action of elements and dust.

In exactly the same way, the Starch Process is used to protect washable wall surfaces. The walls must first be clean or new. The method is to glaze them with a very light dressing which can be washed away very easily, bringing all the smoke, dust, and soft coal grime with it.

Ordinary laundry starch is used. Purchase that which is in the finer or smaller lumps. To each pint measure of starch, take a quart of cold water. That is, one part of starch to two parts of water. Put into a good-size container and rub quite free from all lumps. Have ready a gallon of boiling water and pour this over the starch paste, stirring briskly at the same time. The hot water will cook the starch and the result will be a rather heavy solution. This should be set aside until cold, at which time it will be even thicker as a natural consequence of the cooling process.

The next step is quickly finished. Add as much cold water very slowly and stirring energetically at the same time, as will reduce the starch mass to the consistency of rich milk. Rich milk, be it noted, is of a creamy nature without being as heavy as even light cream. As different brands of starch thicken differently, it is difficult to give an exact rule for the thinning process, but it is evident that too heavy a starch solution would give a streaked or pasty surface, which when it dried, would be likely to crack off. The idea is to have a cooked starch water which when applied, and dried, will be invisible.

The last step is important. Having diluted the starch mixture to the consistency of rich milk, add two quarts of fresh buttermilk, and beat and stir for about ten minutes, in order to produce a lightly emulsified mass. Strain through clean muslin.

There are two ways of putting this Starch Process on and both are excellent. Which shall be chosen depends upon the nature of the decoration of the under surface.

Take a broad, clean paste brush or one which is used for calcimining. Wet thoroughly in warm water and wipe nearly dry. Dip into the starch mixture and go quickly over the entire surface exactly as if varnishing or painting, being careful to guard against brush marks. The starch mixture must be applied very evenly as it is desirable only to have a thin glaze which will be practically invisible.

The second process is to coat a portion of the wall with the starch solution and then to stipple this much of the surface with the ends of the bristles of the brush, so as to prevent any suspicion of brush marks. This is ordinarily the easier method to use, even with the stippled finish the glaze can scarcely be detected, only giving a fresh, soft appearance.

When the walls need cleaning, it is a simple matter to take clean, warm water and a soft cloth or sponge, and to wash off the glaze which will come away without the least trouble. If the water is frequently changed so as to keep it clean, there is no danger of streaking, and the under surface will be fresh and new again after an astonishing amount of dirt has been removed. The process can be repeated and the walls are ready for another period of use.

This method of surfacing the walls will preserve the decorations almost indefinitely, and the housewife has the satisfaction of knowing that her home is clean.
Walls should be made completely sanitary to be safe. The tenacity of life of disease germs is often illustrated.

Repeated instances are on record of various contagious diseases which have lurked about certain rooms or apartments until thorough renovating was done and then someone, perhaps in the right physical condition to contract the disease, became the victim.

The Starch Process is desirable because of its simplicity and inexpensiveness, and its use is in line with the teachings of the new thrift which urge decorations and other undertakings of a reasonably durable nature.

The Popularity of Colonial

It is not difficult to understand why the New England type of Colonial makes such an appeal to the person who is wanting to build a home, especially since Colonial building is no longer slavish copying of a favored model so much as an effort to get the spirit of the American home which many of these old houses seem to embody. Colonial traditions are fine because they stand for good workmanship and sincerity in construction. The fine period of Colonial building in New England was around the commencement of the nineteenth century when the colonies were beginning to enjoy the fruits of independence; when there was leisure, and a measure of prosperity. Homes were built
then, not for the builder so much as for his children and children's children, after the manner of the "Old Country." Materials were comparatively cheap and the workmen had plenty of time. Craftsmanship was an art in good standing during that period and endless care was taken with all the minute and delicate details of the Colonial style. Intricate dentile courses were used in the cornice moldings in these fine old interiors, mantels were adorned with carving, and—most elaborate of all, the twisted spindles of the stair railings were all carved by hand, in a different design for each length of spindle.

In our modern building larger tools take the place of the small ones used in Colonial times. In place of the carving tools the turning lathe is used, and "the machine" about which we are so apt to be scornful. The time is coming when we shall begin to realize that "the machine" is only a glorified tool, and if mixed with brains in the same proportion as the smaller tool;—commanded as a servant rather than feared and allowed to dominate and tyrannize over the human spirit which wields it, it will do man's bidding and again the tool will become the servant and the helper. Craftsmanship will again come into its own, using the machine in its proper capacity.

Our modern Colonial does not copy the older building, it seeks the effect of sincerity and of quiet dignity set forth in the older types. We speak of our modern work as a free use of the Colonial, in
which many of the charming details are used, small paneled glass in the windows give scale not easily attained with large sheets of glass; shutters give a quaint touch of color. A compact modern plan takes the place of the rambling room arrangement of the older houses. Space is not given to the central hall and stairway, and the living room is made as large as possible. A porch may be added or not as the case may be. As a matter of fact the porch, as we use the term, was unknown in Colonial days. Then people were satisfied to build a warm shelter, entirely enclosed. Their daily life took them out doors so much of their time that they had no desire for out-door rooms.

Two homes built after the manner of the Colonial are shown in these photos. The first is full two stories in height, with a simple dignity of line and proportion, and with a Colonial portico. The second is of the so-called Dutch Colonial type, with a gambrel roof. It has small paneled glass in the upper sash and blinds on the second story windows.

The houses are much the same as to general size and proportion. In one plan the living room extends across the front of the house, and across the end of the other plan. On the second floor of each are three bedrooms and bath room. The gambrel roof cuts the height in the corners of the bedrooms in the Dutch Colonial design, but leaves the rooms ample in size, as this house is slightly larger in dimensions than the other. It is 28 by 23 feet in outside measurements. The first plan is 25 feet by 27 feet 6 inches.

Wardrobes are shown in some of the bedrooms, which while they take less space from the rooms in most cases, are so carefully planned that they make very satisfactory closet space.

As is usual with Colonial houses these are painted white, though a cream or even a buff color may be very good, with white trimmings. The Colonial house, whether of brick or of wood had wood cornices and trimmings and these were usually painted white.
OOD stucco has a beauty of its own, both as to texture and tone, and it offers a wide opportunity for individuality in the treatment of the design of the home. It lends itself to a picturesque treatment; it may be dignified or even monumental in its final effect. The facility with which stucco may be used includes a wide range of construction. Hollow tile or poured concrete may be given a stucco finish and stucco is also applied over metal lath or even over wood lath on wood construction. In fact the very facility with which it may be used is sometimes a real drawback to its successful use and beauty.

A fundamental rule in the design of a stucco building is: "keep water from getting behind the stucco." Neither should any concentration or flow of water get to the stucco at all. As a general thing it is better not to run stucco to the grade, not only because of the danger from frost action, but also to avoid staining the stucco by dirt and moisture. A course of brickwork or of solid concrete at the grade line is always good looking. Special attention should also be given to flashing and drips, wherein a little foresight will prevent much unsightly discoloration and possibly more serious defects.

For exterior work, in most latitudes, stucco is generally applied over metal lath. The usual practice is to sheath the frame of the building as for siding; cover this with insulation and building paper, metal lath and stucco. While diagonal siding is considered excellent construction under siding or shingles, it is not so
good under stucco. It has a tendency to bring uneven shrinkage to the stucco coating over it, and this diagonal shrinkage has possibility of cracking the exterior.

The frame should be thoroughly braced, and stand solidly of itself before the exterior is applied, if the stucco is not to crack. Any vibration or shrinkage or movement of any kind brings a strain upon the plaster which is, however, largely overcome by the reinforcement of the metal lath. At the same time it is well to avoid any needless source of danger.

A stucco finish fits very well into Colonial design: in fact it was used in some localities and conditions in Colonial times. But if stucco is to be used at all it should be dealt with fairly, and given a fair chance for satisfactory development. The details of a stucco house, as well as the house itself should be designed for stucco, rather than be merely a translation from wood into stucco. The designer must think in terms of stucco if he is to get the best results.

The Roof Pergola.

Much latitude has been given in the design of the stucco house with the pergola covered roof treatment for the second story porch. The plans show the room arrangement both for the first and for the second floor, in considerable detail, showing how completely the home has been planned, with built-in cases and cabinets. The service wing is particularly well arranged with the set tubs in the entry, and the sliding kitchen door, which does not take any space when the door is open.

Before anything else is done the house should be completely planned, down to the last detail of construction and of convenience. Too much emphasis can not be placed on this matter, as it is the only way to get satisfactory results. If the contractor is expected to stop his workmen and make changes after his work is all laid out and is well under way, it must mean additional expense and delay.

With Wide Projecting Eaves.

Often times, especially in the southwest, the stucco house is built with a flat roof, the stucco walls carried up as a parapet. In the east and the middle west the wide projecting roof is favored, giving a certain protection from the sun in warm weather, and strongly marked
shadows, or the roof may be of tile or other material and given a low pitch, but without projecting eaves. Particularly attractive is this plan with the living room across the unbroken front of the house. The sun room on one side balances the entrance porch on the other side. Back of the side entrance hall is the dining room and kitchen, quite set apart from the living room, and with a screened porch opening from it.

The kitchen is well arranged, with ample cupboards and good arrangement of sink and working space. A breakfast alcove opens from the kitchen.

On the second floor is a very large front chamber with bath room, smaller chambers and sleeping porch.

A Compact Plan.

Perhaps no type of building is more economical to build than the square type

The wide projecting eaves gives strongly marked shadows
Built in stucco and brick  
Charles S. Sedgwick, Architect

of house. It costs no more in wall and foundation to enclose a projection inside than outside the walls of the building; the roof and the floors make the chief difference. The square planned house which is here shown has a projecting sun parlor beside the entrance and covered porch. The house is quite compactly planned, and the main living rooms open well together. The coat closet has been found a place near the stairs, and the basement stairs and side entry are well arranged. Some people would wish a door cut from the living room to this side hall. The breakfast alcove is placed near the dining room and enclosed with the rear porch.

On the second floor are three sleeping rooms and bath room. The sleeping porch is a practical sleeping room with two sides filled with windows. The linen closet is large and well placed.

Brick has been used on the exterior up to the sills of the windows. This makes an excellent construction, in the protection it gives the stucco, which is carried from the brick work up to the roof. A foundation course of brickwork adds value to the house also, from a commercial point of view and is apt to more than pay for itself in the satisfaction it brings.
People are only beginning to realize the combinations by which it is possible to obtain what they want in building a home. When first the plan is right, then the exterior may be made to develop from it along any lines desired,—provided that no sham is intended. When one wants the outside of the house to look as though there were many things inside which are not there, then satisfactory results are impossible. Honesty is the first principle of art as well as living.

The smaller cottage which is here shown has been built more than once, and from two plans, only one of which is shown. In the first, from which the photo was taken, the dining room was back of the living room with a wide opening between and the sleeping rooms were on the side of the house with bath room and closets between them. The other plan is here shown. In both cases two rooms were finished under the roof in the same way.
Planned for a wide lot

house has been carefully considered and placed before the work is started gives an assurance that these results may be obtained and at no unnecessary cost. Nothing is more costly in building than uncertainty, which usually materializes in extras, even if there is no tearing out of work already done in order to make desired changes.

The second cottage is planned for a wide lot or for a suburban home, where the view and possibly the breeze is at the front of the house.

The breakfast alcove provided with a seat across two sides and with space for a good sized table, if so desired, permits the other space to be used as a thirty foot living room, except on unusual occasions when a real dining room is desired. The sun room opens from this space with four double hinged French doors, which fold back on each other when open.

This cottage has three bedrooms, two of which are finished in the gables under the roof, with good windows as may be seen in the photo. There is excellent storage and closet space under the roof.

The foundations and porch railings are of brick with cement for steps and porch floor.
The Practical Value of a Sewing Room

It was my good fortune to visit last year in one of the most beautiful houses of my acquaintance. This home had always seemed to me as nearly perfect as mortal dwelling could be, but on the third day I discovered a flaw. That morning a seamstress appeared, and then I found that my dream house, as I had always called it, had no sewing room. In the bedroom of my charming hostess the seamstress worked. Materials had to be gathered from all parts of the house, and the morning was half over before the real work of the day had begun. By the time poor Miss Needles was well under way, luncheon was served.

The eastern windows flooded the room with morning sunshine, but the architect’s scheme of oak and stained plaster was not conducive to a well-lighted interior when the sun left the east side of the house. By four the room was full of shadows. Nor was the artificial lighting of much assistance for actual work. Through amber glass and wrought copper a delightful restful glow prevailed the room. At a finely equipped craft desk was a low drop light of sufficient power to enable one to write a note. The beautiful appointed dressing table with its copper accessories had its special fixture, and the white and silver bath room, adjoining, was fitted up with the cleverest scheme, but nowhere was there enough concentrated light to sew a button on properly. Miss Needles came four days, finally completing, by taking home at night, what, under favorable circumstances, could easily have been finished in three. During the visitation, the beautiful room was in a chaotic state. The rugs, woven especially for the room with long brown nap, a particular feature of this well-known loom, made “picking up” a difficult task.

Moreover, the rugs were so large and heavy that they could be shaken only by the house man. The litter remained until the ordeal was over, when I was not surprised to hear my hostess say, “After I have had a sewing woman at the house I feel ready for a sanitarium.”

In this big house were three guest rooms, seven regular bedrooms, numerous bath rooms, a large service wing, a living room, a drawing room, a library, a reception hall, a billiard room, a bowling alley, a dining room, a breakfast room and a conservatory. Surely a corner should have been found somewhere for a sewing machine and a sewing table.

Not long before I had visited in a small comparatively inexpensive house where the convenient well-appointed sewing
room made a great impression upon me. It was lighted by eastern and northern windows and had a most convenient scheme of cupboards, etc. In the morning there was plenty of sun, and the two large windows toward the north gave almost a studio light in the afternoon. If it were necessary to work after dark, an excellent electric scheme provided a low, concentrated light. Two people could sew comfortably, with a third at the machine, and there was plenty of space for “trying on.” The polished floor was bare, except for a small rug in front of each chair. It is not pleasant to sit for hours without a rug for the feet. The small rugs of short nap were easily shaken at the end of the day. Everything was planned for convenience in picking up and keeping in order quite as much as for actual work.

Several devices impressed me as adding greatly to the general success of the plan. Shallow drawers were built into one side of the room, and on the other wall were shelves with dropped lids like those of a linen closet. In the drawers in well-divided compartments were spools of thread, silk, and every kind of article needed for up-to-date home dressmaking.

On the shelves the unfinished work could be placed. In a small closet hung clothes poles and hangers for such gowns as needed an upright position. Each sewing chair was provided with a wide-mouthed bag into which the materials in immediate use could be placed. These hung on the chair backs; also tied to the
chairs by long tapes were sewing scissors—happy thought of the house mistress—always at hand, never lost, never taken away to be brought back in a minute.

At the windows were shades, the color of the walls, a pleasant gray green. There were no curtains, except at the east windows, where lower sash hangings could, when the sun was over-powerful, be drawn across the panes. Between the windows toward the north a mirror six feet in height was inserted. Every detail of a costume could be seen at a glance.

The mistress is saving toward a big triple mirror which can be fastened to the wall, the side panels folding together like small doors—a most useful and convenient accessory for sewing and dressing rooms.

Such a device was seen recently in a big studio where the walls were hung in gray canvas. The side panels when closed showed a surface like the walls. In each panel a fine Japanese print of long, narrow proportions was inserted. When the canvas doors were closed there was no suggestion of a mirror, so flat was the whole thing. A Japanese artisan had made the affair, so I was told, and I no longer wondered at its completeness.

In planning a sewing room, space, light and air are three essentials, but if every inch is put to use, a large room is unnecessary. Architects now figure very closely as to inches where once they figured as to
feet. All space not put to constant use is regarded by them as wasted. In bedroom planning the matter has been reduced to a fine point, too much so in many houses where the rooms of the second story are unnecessarily small. Particularly with country houses, where land is plentiful, the cutting down of space in the upper rooms is open to question. An amusing exception was noticed not long ago in a country home planned by a woman. The bedrooms were so large, so sunny and commanded such fine outlooks that they were used as sitting rooms, while the actual living rooms below were almost deserted. A reception hall, a small reception-room and a drawing-room were seldom required except on formal occasions, consequently they were rather dreary places.

From the enormous bedroom of the mistress of the house a very fine sunset view was obtained. Informal afternoon tea was served there, known to her friends as "sunset tea." In one corner of the room was a canopied four-poster, but it was thirty feet from the sunset windows. A large fireplace in the center of a wall, forty feet in length, made a cozy meeting ground in spring and fall. A small city apartment could easily have been packed into this room. As a bedroom it was not an unqualified success. As a general family room, all-round sitting room, sewing room, play room on rainy days, school room in mid-winter, it was quite without a rival. "I wanted a big bedroom," said the owner of the room, "and I had to be my own architect to get it."

The exterior of the house proclaimed the fact. It was ugly in the extreme, as most houses are when built by an amateur. With all the lady’s two years of scheming on paper, she had made no provision for a play room or for a sewing room. One of the two guest rooms did duty for sewing when it happened to be vacant, but the arrangement was not convenient. The room had none of the first essentials for comfortable working, and as guests were frequently coming and going, it was seldom available. The alternative was a corner of the big bedroom, temporarily screened off during the invasion.

It might be said that home dressmaking could be planned when visitors were not expected, or that it might save wear and tear to have all the work done outside. The argument is an excellent one, yet there never lived a real family in a real house where a sewing room was not a convenience.

**ANCIENT WELSH DOOR-VERSE**

Hail, guest! We ask not what thou art:
If friend, we greet thee, hand and heart:
If stranger, such no longer be:
If foe, our love will conquer thee.

—*Ancient Welsh door-verse.*
Paneled Walls.

N. F. D.: Am planning a five room bungalow. Living room with open fireplace,—dining room and kitchen on one side and two bedrooms with bath between all openings from small hallway on the other side. Have found much help through your magazine and am taking the liberty of consulting you on the interior decorations.

Living room furniture is overstuffed suite of tapestry. Dining room suite, mahogany, kitchen all in white. Bedrooms, one suite mahogany and one suite light gray finish.

What would be best finish for woodwork in all the rooms?

We do not like plain papered walls so was thinking if there was some way the dining room and living room could be paneled this would be effective. Should both these rooms be finished in same color woodwork since they are closely connected there being only a colonade between? When walls are paneled are the entire side walls papered in same design or could two contrasting papers be used?

Windows are to be to floor in living room and front bedroom and a smaller type on sides of house. Bedrooms are to have a window seat.

**Ans.:** You ask what would be best finish for woodwork in all rooms, but do not state whether wood is hard or soft. If the latter, then an old ivory finish through is best. If hard wood and stains are used, much depends on the color and style of rugs and furniture. With heavy, over-stuffed tapestry, a brown stain is usually safest. Even if the stain is used in living room with the mahogany furniture, an ivory finish could be in dining room and these walls could be paneled, while in the living room an all-over wall paper would harmonize best with your furniture. If ivory woodwork be used in dining room, a wall paper in soft dull old blue background with Adam design in the panels in pastel rose and green picked out in black, would be very charming. You do not use two kinds of paper in such paneling, because the paper is designed for the panels. Do not have panels divided by wood strips.

Wall Painted or Papered.

H. C. C.: My house is new and the walls have not been decorated yet. For the living room and dining room I wish a deep cream or buff. Would you advise paint or paper? The ceilings are low—about 7 feet. Would you advise a molding? Could anything be done to give the effect of height?

Upstairs, one of the bedrooms has enameled furniture of soft, light gray with decorative designs of rose and blue. The cretonne hangings, cushions, etc., are of light gray and rose. The woodwork is ivory. Would you advise paint or paper, and what shade, for these walls? The room is large with two windows.

**Ans.:** As to the use of paper or painted or tinted walls; it is entirely a matter of
choice or expense. Under some conditions the plain tinted or painted wall would be preferable. With your extremely low ceilings, we should advise a wall paper for the living room showing a decided stripe or vertical effect. We know of no other way to increase the apparent height. The moulding should be only a picture moulding—a mere finish at the ceiling. The bedroom with ivory woodwork and enameled furniture would be pretty with a wall paper showing a gray ground and narrow stripes of rose and blue, small flowers, about 4 or 5 inches apart. Then have a plain gray rug with a black stripe on ends—to give a little tone and strength.

Rugs and Draperies.

A. L. M.: We are planning to build a bungalow pictured in your magazine and should like ideas as to inside decorations, papering, rugs, draperies, etc. All inside finish will be hard pine finished in oak except bath room which will be white enamel. All furniture is oak.

Ans.: Considering the wood finish and the oak furnishings, also the small rooms, we advise in living and dining rooms the same paper be used, giving the effect of a plain wall. Some of the self-toned small designs in a soft shade of golden tan, or what is called a "crepe" paper. Plain rugs, with rich-colored cretonne hangings would be attractive in these rooms, especially if there are figured tapestry pieces in the furniture.

Of course in the bedrooms, you can use some of the pretty, figured chintz patterns in the wall papers; they are lovely with simple ruffled muslin curtains. But if the woodwork is the dark finish, do not get delicate colors for the paper but gay bright patterns in small flowers such as blue bachelor-buttons or nasturtiums on a white ground. Then the white curtains and white bed-spreads will be charming.

Living Rooms and Bed Rooms.

N. E. E.: We are subscribers to your magazine and have found it very helpful in the building of our new home. In a recent issue we saw an idea for a bathroom we copied almost identically, as it was the best we had seen.
The woodwork in our living room and dining room is to be oak, finished dark brown, with plate rail in the dining room. Walls to be finished rough plaster and tinted for the present and would like to know what color you think best, taking the number of windows, etc. into consideration. Our rugs have the mulberry shades predominating with blue in the living room and shades running into almost a purple in the dining room rug. Also what would you suggest for curtains and drapes in these two rooms? Kitchen and breakfast room to be gray enameled as it will be much easier to take care of than the popular white enamel, and linoleum on the floors. What would you suggest for curtains? Also what would you tint the walls in these two rooms?

We have white ivory furniture for two of the bedrooms and expect to buy new furniture for the third room but have not decided what as yet. Woodwork we expect to have enameled ivory, and white in the bath room. Front bedroom to have ivory furniture and rose as the main color. What color would you suggest to tint the walls in this room and what kind of curtains and drapes? And also what color for the other rooms would you suggest for the walls and would like your idea as to the curtains and drapes?

If this letter is not too lengthy and not too many questions asked surely would appreciate your suggestions and ideas, as our home will be ready soon and want to get the curtains and drapes made before we move in. I am enclosing stamps for the return of the floor plans which I send to you, as I wish to preserve them for future reference.

I wish to thank you in advance and will be looking forward to your answer, as we look forward to your welcome and helpful magazine every month.

Ans.: Your house is small, but well planned, with a generous living room. You do not say whether the fireplace facings are brick or the color. All these things enter into a decorating scheme. But inasmuch as the woodwork is dark oak and the walls rough plaster, the choice of a tint for the walls would lie between a gray or a soft tan. The warm gray would probably be the best choice for both living and dining rooms, as the walls should be the same in both rooms on account of the wide, columned opening. The ceiling tint may be either a lighter tone of gray or oyster white. In the panels of the wall below the plate rail, we would introduce some color. As you speak of a purple tone in the rug, we would use a decorative paper in the panel spaces, a sort of tapestry effect of grapes and foliage, the grapes in purplish and reddish tones, the foliage in dull gray on a grayish ground. The additional charm of the dining room will be well worth the slight extra expense. The background of the paper and the tint of the upper wall, should tone together, and it might be well to find the right thing in the paper first, and tint to correspond. For the curtains, you might find an inexpensive voile, in the reddish tone of the grapes, voiles come in so many shades now, and if you made curtains down the outer sides only of the large group of windows with a fourteen inch valance between them, you would need no other curtains. Use short curtains of the same at the windows over buffet. Then in the living room have thin, figured lace curtains with over-drapes of mulberry colored Sunfast material, figured or plain as you prefer. Tint the walls of kitchen and breakfast room soft, dull yellow, which is very pretty with gray woodwork, and gives the place a cheery effect. In the breakfast room use curtains of gay blue and yellow chintz or of Japanese crepe.

We prefer the ivory woodwork for the bedrooms, especially with ivory furniture. Your plan for using rose in the front bedroom is very good. For curtains, you can use either ruffled muslin, which has come back into fashion, or hemstitched voile or fine cheesecloth, with or without over-drapes, as you please. If you need color, then use over drapes of a flowered material.
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The average man or woman usually overestimates the cost of Oak Flooring 100% to 300% or more. All agree it is the most handsome, durable, sanitary and easy-to-clean. Many know that it adds 25% or more to selling and renting values. But few seem to know the facts about the cost.

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A room 14x14 feet, for example, can now be floored in the costliest plain grade for $20 to $30—depending on locality. Less, you will note, than the cost of ordinary flooring, plus carpets.

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A 3/8 of an inch thickness is also made for laying over old floors, which costs still less. Under these conditions no one planning to build or re-model this year can afford to omit Oak Floors.

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February Parties
ELSIE FJELSTAD RADDER

February is logically the month for parties. At no other time has the host or hostess such an excellent opportunity to give a party decidedly out of the ordinary—especially as far as decorations are concerned in the carrying out the menu.

And what kind of a party shall it be—a Valentine party for the kiddies, an informal luncheon or tea party on Lincoln's birthday or a family dinner, Martha Washington supper, George Washington evening party or after theater party, on our first president's birthday?

Valentine Party.

Of course, nothing is nicer for the kiddies than the Valentine party the tiny red hearts appeal so to their wee senses of artistic beauty.

And really, such a party can be planned so that it costs mother the minimum amount of labor for decoration and refreshments that any party could cost.

Because red hearts can be used so effectively in decorating it is best not to try to be too original. Originality may come in, in using different sizes of hearts and arranging them in novel manner throughout the rooms. They may be supplemented with red paper cupids.

A heart shaped cookie cutter cannot be dispensed with on this occasion. It may be purchased for a small amount.

Being a "between meal" repast for the little ones the lunch should of course, be simple. The following menu might be effectively carried out.

Peanut Butter Sandwiches
Buttered Raisin Bread
Cocoa

Heart Cookies

Heart Cakes
Ice Cream Stuffed Dates

Peanut Buttered Sandwiches.
Butter one slice of brown bread with butter and the corresponding slice with peanut butter. Place together and cut with the heart shaped cutter. Wrap in a damp towel until time to serve. The raisin bread may be cut with the heart cutters and simply buttered.

Heart Cookies.
Mix together as for pie crust two cups of flour, two cups of oatmeal, one cup of brown sugar, one teaspoon baking powder and one cup of shortening. Then add one small cup of sour milk and one teaspoonful of soda. Roll out very thin and cut with the heart shaped cutter. Bake as any cookie. Cook one pound of figs to a mash, adding as much water as is necessary to keep them from sticking. Sweeten with a small cup of sugar. Place a teaspoonful of this paste on each heart shaped cookie and place another cookie over it.
Heart Cakes.
Make a cheap sponge cake as follows: Beat the yolks of three eggs until light and add to them a cup of sugar. Continue beating with the egg beater. Add one tablespoon of hot water with one cup of flour, two teaspoons of baking powder, one half teaspoon salt, which have been sifted together. Also, the whites of three eggs beaten until very stiff and two tablespoons of vinegar. Spread in a buttered or floured pan so that it will be not more than one-half inch thick when baked. Bake about one-half hour. When this cake has stood 24 hours, cut with the heart shaped cutter. Frost with a plain white icing. Frosting that is sure to turn out just right can be made by putting one egg white, one tablespoon of water and four tablespoons of sugar together in the top of a double boiler, over boiling water and beating until of the desired consistency to spread. Frost the cakes, on top and also the sides. Decorate with heart shaped candies, pink and white candy drops, caraway candies, candied violets, rosebuds, cherries or mint leaves.

If it is desired to save labor when it comes to the ice cream, many factories will make for you a brick ice cream with a little red heart in it.

A very attractive serving of an ice or sherbet or bulk ice cream can be had by covering a sherbet glass with shirred red and white crepe paper. Bend a wire into a heart shaped handle and wind it with paper. Applique to the side a wild rose ornament. The ice itself may be decorated with candied rose leaves.

The Washington Party.
For the evening George Washington party, the following refreshments will be found to be dainty and appetizing:

- Boat Salad

- Date Sandwiches

- Ice Cream

Boat Salad.
Take one banana for each person to be served. Form the banana peel into the shape of a boat. To the diced banana meat add cherries and nuts and more cherries. Moisten with dressing made like filling for a lemon pie. Arrange in the "boat" putting an olive in the prow and a small American flag in the stern.

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.
Date Sandwiches.
Make a date paste by adding one cup of water and one small cup of sugar to each pound of dates. Raisins and chopped nuts may be added. Cook to a paste and mash. Spread as a filling between two lady fingers and serve.

A brick ice cream containing something to tell what day it is, such as a hatchet or cherries, would be appropriate with these refreshments.

An Innovation.
If the big family party that is usually held on Thanksgiving or Christmas Day may have been omitted this year, let me suggest the substitute of a Martha Washington supper. Wouldn't it be a change to eat turkey alone once, and entertain all the relatives at a party that would be decidedly new and novel?
The following menu will prove to be delicious and a delightful saving of labor.

<table>
<thead>
<tr>
<th>Fruit Cocktail</th>
<th>Potato Croquettes</th>
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<tr>
<td>Celery</td>
<td>Radishes</td>
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<tr>
<td>Fried Chicken</td>
<td>Potato Croquettes</td>
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<tr>
<td>Corn Fritters</td>
<td>Hot Rolls, Buttered</td>
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<tr>
<td>Nut Salad</td>
<td>Cheese Straws</td>
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<tr>
<td>Martha Washington Pie</td>
<td>Coffee</td>
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Fruit Cocktail.
Dice and mix together oranges, bananas, pineapple, apples, grapes and any other fruits obtainable, in the desired proportion. Make a sugar and water syrup and pour over the fruit, allowing it to stand long enough to draw out the fruit juice before serving.

Fried Chicken.
Select a fowl of last spring's crop. Dress and cut as for stewing. Boil as for stew, adding boiling water so as to conserve all the juices possible. When it has parboiled until tender, roll each piece in flour, and fry in hot fat, a mixture of butter and lard. Arrange the chicken on a parsley garnished platter and place the potato croquettes and corn fritters around it. Sauce for the fritters may be passed if it is desired.

Potato Croquettes.
Rice boiled potatoes and season with butter, salt, pepper, celery salt and cayenne. Moisten them with one beaten egg and shape. Dip in toasted bread crumbs, egg and crumbs again and fry like doughnuts in hot fat.

Corn Fritters.
Chop one can of corn, drain and add to it one cup of flour, one teaspoon baking powder, two teaspoons of salt and a little paprika, which have been sifted together. Add two egg yolks which have been beaten to a lemon color and fold the mixture into two stiffly beaten egg whites. Fry until done in hot fat.

Nut Salad.
Mix together one part of chopped nut meats to two parts of shredded lettuce. Arrange on lettuce leaves and put a spoonful of mayonnaise dressing on top.

Cheese Straws.
Make a rich pastry and roll out thin. Spread with grated cheese, fold over and roll out again. Repeat several times. Cut in narrow strips and bake.

Martha Washington Pie.
Make a rich pastry and let stand on ice over night. Roll out, line individual pie tins, putting an extra rim around the edge. Beat two egg yolks and add one-half cup of sour cream, one-half cup of New Orleans molasses, one-half teaspoon soda (Dissolve the soda in hot water and add the molasses to the mixture), and one and one-half cups of flour. Beat with an egg beater. Add one teaspoon of ground ginger and fold into the whites of two eggs which have been beaten until very light. Sprinkle large seedless raisins on the bottom of each tin and pour in the mixture. Bake. This mixture is enough for one ordinary sized pie. When this pie is partly cooled mix together one-fourth of a cup of ice water, one teaspoon of cream of tartar and enough confectioner's sugar to make a frosting which will pour. Put a thin layer of this icing over each pie to harden.
Price Guarantee, 1922

January first we resumed the practice of reducing prices on furnaces and fittings during the dull season, from January 1st, to May 1st. In normal and pre-war times this was always our regular annual practice. The prices during this period are the YEAR'S LOWEST RATES, and a saving can be secured greater than a whole year's interest on the purchase money. To make these rates attractive and to assure our friends that this means a REAL SAVING, WE AGREE AND GUARANTEE that if, before October 1st, our prices shall be reduced below these dull season rates, we will refund to each purchaser, buying for delivery before May 1st, the amount of such reduction from the price charged him. This guarantee, in purpose and effect, will give to the dull season purchaser of a Hess Furnace the benefit of the lowest prices we shall establish before October 1st.

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CHICAGO
V. ODERN thought seeks to reach the root of the trouble which it combats. Labor saving devices and step-saving arrangement of space is the key for household planning, particularly relative to the kitchen and the service wing of the house. The advent of the gas and electric range for cooking has revolutionized the work of the household and has eliminated much of the work and discomfort in the kitchen. It has, in fact, made possible the tiny apartment and the kitchenette. Now in the progress of affairs the disappearing range is talked about, and the whole kitchen paraphernalia can be shut away behind closed doors.

A kitchen equipment including the range on one side, the refrigerator on the other and a sink between them, all with shelves or cupboards over and with a table extension over the refrigerator are placed across the end of the kitchen,—or of the dining room for that matter,—Four doors hinged in pairs will cover the whole equipment, and may be so placed if it is wished to use the room otherwise during the day. Such a room, with a dainty painted table and chairs perhaps of peasant design makes a charming room where breakfast or lunch may be quickly and easily prepared, under the camouflage of play, or a regular dinner may be prepared for a small number of people.

While it is usually in the small apartment that advantage is taken of such arrangements, at the same time it is a very sanitary and practical method of installation. If both the range and the refrigerator were placed in metal cabinets, with the cupboards over them also of metal, and doors could be shut before any sweeping or dusting is done it would certainly be possible to keep the range in better condition. A range gathers dust more readily than on other pieces of furniture and requires eternal cleaning; though possibly the electric range, not giving so fierce and so quick a heat may escape some of the troubles incident to other fuels.
You can now have all the convenience and comfort that come with electric light and running water in your country home no matter where you are located. One complete, compact system furnishes them both.

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save money on the first cost, last longer, require fewer repairs than any other installation, and never fail to give absolute satisfaction year in and year out. There is a Kewanee System to fit every need.

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MINNEAPOLIS, MINN.
Metal cabinets are being advocated by home economic authorities for large apartment houses, and apartment hotels where the tenants are changing often, as being proof against some of the difficulties incident to the constant changes. Mice and vermin can not gnaw through or get into closed metal cabinets.

Many kitchen cabinets are now made in pressed metal, and enameled, looking not unlike the cabinets made of wood.

In a Small Apartment.

The minimum plan for living comfort is being set forth now in the planning and arrangement of the small apartment, which is serving as at least the temporary home for so many good people at this time. A good example of such a plan is shown in the cut, which has one good living room, and might be supplemented making it into a two-room apartment by communicating with a similar room through the tiny hall where a closet is shown, which should have its own outside entrance to the main corridor.

Beside the small reception hall entrance to the apartment is a service entry which does not permit the delivery man to enter the kitchen, but only to open the service doors to the ice box and the delivery cabinet, which presumably has an automatic double locking action which locks the door after the delivery. Many of the newer apartments have such delivery cupboards in each kitchenette, and indeed they are adapted to use in private houses, and may be very simply done. There are special cabinets which may be placed either in the outside wall or even in the outside door, with an automatic, double locking contrivance so that one of the doors to the compartment shall always be locked. When the cabinet is empty the door on the inside is locked preventing opening to the house, and after the delivery this door is left unlocked and the outside door automatically locked.

In the plan the kitchen is equipped with such a cabinet as shown, with a broom closet at the end of it. Cupboards make a screen between this end of the room and the dining alcove in the other end of the room, giving a fairly complete dining room and kitchen.

The bed is the kind which turns up and swings with the door into the dressing room, but when made up for use may be pushed to any part of the room.
It's Planning Time

None too early now to have your plans under way if you are to build in the spring. For the most satisfactory home is the one that is well planned in advance.

It's just as important to plan for materials as for design and arrangement of rooms. Home builders who want beauty with economy are building of brick.

An attractive, brick home, built with the Ideal Brick Hollow Wall, costs less even in first cost than any other type. And it's always beautiful, for the hand of time serves but to soften and enrich its charm. The adjacent column tells about this most economical yet most attractive kind of home.

A Charming Home

The main characteristic of this attractive, brick California bungalow, shown below, lies in the grouping of the rooms so that the family can live practically out-of-doors during the long period when bright skies and the equable temperature make open-air life most pleasurable.

Note how this is accomplished by building the house around a patio or open courtyard, generally converted into a miniature lawn. And if you build on a city lot you can secure all the exclusiveness you desire by means of an attractive garden wall along one side, as shown in the plan.

You can obtain complete working drawings of this bungalow, known as the Catalina, for the nominal sum of only $10, exclusive of garage drawings, which will be sent for $1.50. The drawings are made by capable architects and are thoroughly well studied.

A good home in any clime

This is one design of 36, which you receive by sending for "Brick for the Average Man's Home". 72 pages. The variation of design and drawings of all these homes illustrated is very unusual. For all these designs complete working drawings are available at small cost. You will find this book a wonderful aid in deciding upon your plans.

$1.00, postpaid, from the Common Brick Manufacturers Association, 1319 Schofield Bldg., Cleveland, O.

Ideal Wall Saves

Another book that you should have is "Brick, How to Build and Estimate", 72 pages. New, revised, third edition. It treats thoroughly on the Ideal Brick Hollow Wall. This book may save you hundreds of dollars when you build your home. Describes how, by means of the Ideal Wall, in which the brick are laid on edge, you save 1/3 in cost of brickwork and secure brick construction, real-honest-to-goodness brickwork at a lower cost than any other kind of construction. 25 cents, postpaid. Send $1.25 to the Common Brick Manufacturers Association, 1319 Schofield Bldg., Cleveland, O. and get both books.
OME interesting figures have appeared recently as to the relative costs of building with frame construction, surfaced with wood or stucco; hollow tile, stuccoed; and brick. The figures which are given below were given out by the National Lumber Manufacturers' Association. The figures apply to the latter part of the year 1921. The house is a small, attractive home in a typical American midwest community.

Frame with wood siding..............$4,080.00
Frame, cement stucco on wood lath.. 4,177.00
Frame, cement stucco on metal lath.. 4,213.00
Stucco on hollow tile................ 4,627.00
Common brick (solid)................ 4,717.00
Common brick with face brick front.. 5,007.00

Attention is called to the fact that the cost of the interior construction—windows, doors, floors, partitions, trim, etc.—for this house remains constant regardless of the character of outside walls, but slight changes in detail of exterior finish are required to suit different materials slightly affecting cost. The cost of various materials when used for the enclosing walls is:

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost</th>
<th>Percentage of Total Increase Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame with wood siding</td>
<td>$656.00</td>
<td>16%</td>
</tr>
<tr>
<td>Frame, cement stucco, wood lath</td>
<td>709.00</td>
<td>17%</td>
</tr>
<tr>
<td>Frame, cement stucco, metal lath</td>
<td>745.00</td>
<td>14%</td>
</tr>
<tr>
<td>Stucco on hollow tile</td>
<td>1,064.00</td>
<td>82%</td>
</tr>
<tr>
<td>Common brick (solid)</td>
<td>1,186.00</td>
<td>81%</td>
</tr>
<tr>
<td>Common brick with face brick front</td>
<td>1,436.00</td>
<td>119%</td>
</tr>
</tbody>
</table>

Tax Exemption and Home Building.

Figures recently issued by the building commissioner of Greater New York show a tremendous increase in the number of building permits issued in that city. This building boom is attributed largely to the tax exemption which has been granted on new buildings for a period of five years, together with other favorable local conditions. It is stated that this tax exemption will affect a reduction in building expense of about 10 per cent, permitting thousands of families to undertake a building enterprise which shall place them in homes of their own. The tax exemption enabling the family to add that much to the payments on the loan for the first five years turns the scale. More than that it gives the assurance that there will not be a growing tax assessment during the hard years of the first payments. At the same time it has revived building and is making a start on the solution of the city's greatest problem—housing.

Lime in Frozen Ground.

Early spring building is often delayed on account of the difficulty in starting excavations, where it is necessary to wait until the frost is entirely out of the ground. The following paragraph may prove helpful.

It is sometimes difficult to dig a trench through frozen ground, and yet there may not be enough scrap lumber around to warrant its use as kindling to thaw out
Ask Your Contractor about the "Peggy" and its Ten Sisters

He will tell you that you are wise and will save money in the end by having a home protected against fire and made largely of material that grows stronger with age, rather than weaker—Ambler Asbestos Lumber, Ambler Linabestos Wallboard, and Ambler Asbestos Shingles.

Ambler Asbestos Building Products are made entirely of two of the most indestructible materials, long-fibre asbestos and Portland cement, rolled out with pressure of 3000 tons to the square foot into the most enduring of building material.

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Eleven different styles of these handsome, permanent homes are shipped complete except for foundation, ready for your contractor to cut and erect. Costs are very moderate, considering the fact that you get a substantial home of the most economical style.

We will take pleasure in telling you more about the Peggy and the other ten styles. Just mail the slip below.

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Address. .............................................................................
the ground. Quicklime may be used to excellent advantage for this purpose. Break the lumps up to about 2-in. size, or even a bit smaller, and spread them in a 4 to 6-in. layer over the section of ground to be worked. Cover this layer of lime with straw or old boards and then slake the lime, being careful not to use too much water. The heat given off by the slaking lime will thaw the ground remarkably well, and the troublesome smoke and sparks of a wood fire will be avoided. This same method may be used for thawing frozen gas water lines.


Fire Resistive Wall Boards.

Any material which shall tend to reduce the fire hazards in the building of homes is most warmly welcomed into the company of our building materials, entirely aside from any other qualifications which it may present. The fire resistive wall board has been added to this class. There are several types of such wall boards on the market which may be used as a lining board in the kitchen of the small house, or around the range, especially if coal or wood is used. This board may be placed under all wooden stairs, and line the walls of stairways and halls, which when a fire starts are so liable to communicate fire to the surrounding rooms. Such a material is particularly desirable as a ceiling for the basement, especially over and around the furnace; preventing that usual cause of fire—an overheated furnace. A board which is both rat-proof and fire-proof is very useful.

In addition to their fire resisting qualities, some of these boards will take a good enamel surface and may be used for wainscoting, giving much the effect of tile, but being in sheets the crack of the dirt-gathering, insanitary, joint is avoided. At the same time, so strong is the tradition of the tile wall or wainscot, that it is suggested that this board might be grooved to represent tile, before it is painted and enameled.

In Rented Homes.

More than half of the 24,351,676 families in the United States in 1920 were living in rented homes, according to census bureau reports, whose enumeration results have recently been made public. The bureau's statement said the term "home" as employed in the report signified "the abiding place" of a single family and did not therefore necessarily denote an entire dwelling which may house a number of families as in the case of an apartment building.

The number of families renting their homes was 12,945,698 compared to 10,666,960, who owned their homes. Of the owned homes 6,522,110 were free from incumbrance and 4,059,593 were incumbered, while for the remaining 285,248 the status of incumbrance was not stated.
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In order for the dealer to successfully negotiate these sales he must be in position to interest and help the prospect in choosing a home.

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Ave you ever had the experience of doing a job of painting about house or property some where, and of finding that there was a little of this color and quite a good deal of that left over.

Naturally your sense of thrift dictated that this should be saved, and so you put it away as carefully as possible, either covering the surface of the paint with oil, or tying paper over the can, or fitting down the cover snugly. Then the paint cans were set away with the idea that a little of this or that would be handy to “touch up with.”

Whereupon, you forget all about the said paint, and when you went to clear out the basement in a year or so, it had dried up, gone all to skin, or had grown “Fatty.” By growing “fatty” I mean changed in consistency from a smooth oily mass to a stringy, ropy one. If you have ever tried to use “fat” paint you have learned that it will not mix with oil at all, and usually such masses are thrown away in disgust.

“A prominent painter and contractor whose opinion was asked about leftover odd lots of paint and the best way to retrieve or get some good out of “fat” paint, expressed himself as follows:

“I have never found it policy to set away a little dab of this and a little dab of that colored paint. Paint is one of the hardest things to match up anyway, for many colors change decidedly after they have been exposed to the light and air, and paint that was left from the job will seldom serve to cover worn places without looking decidedly patchy. ‘Fat’ paint has the peculiar characteristic of being what we painters call tackey,—that is, it will rarely dry out properly, but will have a sticky cohesion long after it has been applied.

“Fat” paint, however, can be used in this way. Take into the open air and mix it and cut it with about one-third gasoline and two-thirds turpentine. Work until it is smooth. You can then apply it for roof paint, and it is especially desirable for coating bare places of a tin or metal roof. Or much reduced will answer as a stain for shingles. In fact, When I have a little of left over odd colors I mix them all together, add a little dry coloring to bring to a reasonable tint, and use this for porch roofs, garage roofs, or wherever it can be applied to advantage. I find that if it is set away, it is practically lost.”

Paint costs money and that isn’t all of it. The lack of paint exposes surfaces to decay. Coat the surface with paint and you will preserve that same surface for a long, long time.

Proper Surface for Painting.
The best of materials;—good paint, the right kind of brushes, etc.—even a skilled painter cannot get a good job of painting if the surface of the wood to be painted is not in good condition.

If paint is applied to new wood that is only dry on the surface, trouble will follow. The wood is not well seasoned; there is moisture just beneath the surface. The sun soon brings the moisture to the surface, which, in turn, forces the paint away from the wood; blisters result, and the paint peels off. New wood also often contains considerable sap and pitch. The latter is usually found in and around the knots in the wood.

Probably the surest way to rid new wood of moisture, sap, and pitch is to allow the surfaces to go unpainted for several months. The elements soon bring moisture to the surface and carry it off by evaporation; pitch and sap are
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and its EQUIPMENT should be carefully PLANNED.

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at less cost than in any other type of construction. And when the stucco is properly applied over a base of Metal Lath to keep it firm surfaced and free from cracks, it is so permanent—so economical in "upkeep."

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METAL LATH

"The Steel Heart of Plaster"

will also keep your interior walls and ceilings from streaking and cracking. "Home Building" (sent free) explains why and contains other valuable information for home builders.

NORTH WESTERN METAL COMPANY

965 OLD COLONY BLDG., CHICAGO
either washed away or hardened after they come to the surface. But this treatment of unseasoned wood is seldom practicable; the building usually must be prepared for occupancy as soon as possible, a time limit that does not allow for seasoning of wood. The painter must, therefore, overcome these surface defects by artificial means.

A common method of treating knots so that they will not appear in the finished work is first to remove all pitch from the surface, then rub the surface smooth with sandpaper, and finally apply a coat of shellac varnish. Put semi-flat coat over the shellac.

Wood containing sap or moisture should receive a priming coat with a small amount of coal-tar naphtha in it. Before the second coat of paint is applied all the holes in the surfaces should be filled with putty. Each coat should be sandpapered before the next is applied.

**Painting Old Walls.**

It is often necessary to clean old painted surfaces before new paint is applied, and such cleaning is usually done with a wire brush or broom. The amount of cleaning depends on the condition of the paint, and where an even, slightly chalking surface exists a simple brushing down is all that is necessary. If the paint is cracking and scaling the loose particles must be removed with a wire brush before any new paint is applied.

**New Walls.**

In painting new walls the surfaces must first be primed in such a way as to fill and seal the porous spots and cracks before the body and finishing coats are applied. A coat of glue size may often be used to good advantage over the priming coat or over the body coat where extremely porous conditions are encountered. Glue size should never be put directly on the plaster.

**Tiffany Finish.**

When a wall is to be painted a Tiffany finish is often desired instead of a plain flat color. To those who are intending to have some redecorations this spring the following note giving instruction as to the method of getting a Tiffany blend of color will prove of interest.

To obtain good results a ground coat having an eggshell finish should first be applied and should be of a color to blend properly with the finish, but usually lighter than the finishing colors. After the ground coat is applied, two or more different colors mixed fairly stiff with oil and a little turpentine are daubed on in different places. The spots of color are then blended into each other with a cloth or brush until the desired effect is obtained. After the finishing colors are dry, it is usually desirable to put on a thin glaze coat made with flatting oil or very thin varnish.

**Cleaning Painted Woodwork**

Strong soap should never be used on paint, and there are better ways of cleaning such wood work than using soap, at all. The free alkali in a strong soap is very apt to combine with the oil in a paint thereby injuring the painted surface that you are trying to clean.

Take some whiting on a piece of flannel that has been dipped in clean warm water. Rub this on the painted surface and dirt or grease will be quickly removed. Delicate colors will not be injured.

A tablespoonful of aqua ammonia in a quart of lukewarm water will also serve the purpose. In this case merely wipe the flannel over the paint. Do not rub.

**Good Building Is Fire Preventive.**

Fire prevention, as applied to building construction, is simply another name for "good construction" based on scientific thought and experience—the kind of construction that is "economy in the long run," and very often in the very short run, too! says Mason E. Strong, an authority on chemical engineering, in the New York Evening Post.
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In Owning a Home of Your Own
—Especially if it is Constructed throughout of

BISHOPRIC

No one can realize the value of a home of his own, until he actually owns it and lives in it.

STUCCO is smartest in style and is unquestionably the most satisfactory type of house to build today.

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Cincinnati, Ohio

FACTORIES: CINCINNATI, OHIO and OTTAWA, CANADA
Spring Building Shows

At this time of the year the building industry and its many allied interests are unusually active in putting their products before the public by means of both national and local conventions and building shows. These "shows" are a fine thing as they serve the double purpose of educating the public and of bringing the businessmen in this great industry closer together.

Each year greater interest is taken in these shows by the public as well as by exhibitors until they are now looked forward to as quite an annual event.

There has just closed in Minneapolis, a convention of building contractors resulting in a clarifying of a number of problems which the building contractor has had to face the past season. One of these has been to reach a more unified agreement as to the labor wage scale for 1922. Another convention of the building material dealers of Iowa emphasized the importance of co-operation of all parties concerned in a business deal rather than the practice of the "Survival of the Fittest." To forget the past experiences of hard times and be optimistic. These conventions are a great "leavener." They broaden the individual vision and bring the seller and the buyer to terms of better understanding.

To the prospective home builder the building shows provide an opportunity which should be grasped with open arms. Everything from the latest electrical device for home convenience to metal lath and brick is on exhibit in wonderful display. Attendants are on hand to give the minutest explanations of the uses of these improved materials. The homebuilder sees the practical demonstration of how best to use this material and that and the reason therefor. They make possible that closer contact of the buyer and seller which is bound to be helpful to each. Don't overlook the next building show within your reach and you will be well repaid.
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A touch of color in the brick work as well as vines
Wanted: A GARDEN

Eloise Vidal

If you live out of town you probably have one; if you're a modern cliff dweller, you long for one. If you are fortunate enough to live out of the city you probably have some kind of a garden, or at least you have a few shrubs and trees planted about the place. The town dweller however, frequently confines his gardening to a perusal of the seed catalogs and a few neglected potted plants, instead of making the small back-yard a beauty spot. There is scarcely a bit of ground that cannot be made by cultivation, to produce a vine to clamber up a bare wall, or a shrub to hide an ugly foundation, and as for window sills, they can be transformed into a riot of color.

Who doesn't love window boxes filled with sweet scented things whose perfume is tossed into the room with every passing breeze? The humblest home be it in the city or country, can afford this kind of garden. Window boxes well made and matching the window trim, add indescribable charm to the house, especially when used above the first floor as well as on the street level. The box must be strongly built and provided with good drainage else the plants will not survive the hot mid-summer sun. Plants must be selected with regard to the location too, for all will not thrive in the same

Window boxes and planting for Massachusetts home
exposure. The soil in window boxes should be rich in leaf mold for these comparatively small reservoirs of energy have to supply more plants than would naturally grow in the same given space.

Window boxes should receive sun at least half of the day. Some of the most successful plants for this kind of garden are, dwarf nasturtiums, coreopsis, fringed petunias, lobelia, marigolds, candy tuft, heliotrope, trailing fuchsia, ivy leaved geranium, periwinkle, verbena and sweet alyssum. Vines that will climb gracefully around or over the windows are the maurandia vine, manetta and cobaæa scandens. These are all flower bearing vines. A few trailing vines are desirable and the following are effective: weeping lantana, nasturtiums and abutilon. Most of the ferns, begonias, nasturtiums, trailing abutilon, trailing and erect fuchsia, manetta vine, dracenas, and wandering Jew, will do well in a location where they receive sun part of the day. The more delicate plants should have an eastern or southern exposure.

Don't forget to be orderly in the planting of your window garden. The best effects are to be had by a balanced arrangement of plants and colors. It is usually safest to repeat the color scheme by planting the same variety at both ends of the box, reserving for this purpose the tallest specimens. From eight to ten plants is a sufficient number to plant in the average size box. An occasional thinning out of dead leaves and loosening of the top soil, with an abundant supply of water administered daily, will keep the window garden in bloom the entire summer.

The planting of evergreens about the door-step not only provides another kind of garden for those fortunate enough to possess that much ground, but dwarf trees and shrubs have a friendly way of softening the outlines of the foundation walls which, oftentimes, are none too attractive. Care must be taken not to plant too many evergreens or the effect will be funereal. Shrubs are at their best when planted in groups, the tallest next to the house and about three feet apart, and placed with reference to the windows, then the medium height plants; small ones may be set in back under the windows. In choosing shrubs it is wisest to limit one's choice to the species that are known to thrive in the vicinity, than to experiment with expensive imported specimens. Flowering shrubs that bear berries as well, will attract birds to the garden. A few of those that are attractive the year round are, the shad bush, Japanese barberry, silver thorn, snowberry and cornelian cherry.

Little is known about wild flower gardens, in spite of the fact that its loveliest jewels may be gathered freely in woods and fields, bogs and highways. Perhaps it is nature's prodigality that makes most of us unappreciative of the wild things. The first requirement of successful wild flower gardening, is the making of an environment similar to that from which you take your plants. Nearly all the woodsy things will want light soil which may be bought at the hot house, mixed with leaf mold which you can bring from the woods, but some will require more moisture than others, some full sunlight and others partial or total shade. Ferns will most likely, form the backbone of this garden, to which you will want to add Jack-in-the-pulpit, anemones, squirrel corn, adder's tongue, hepatica, bluets, partridge berries, blood root and all the wild violet family. Take a notebook with you and when you gather your plants, and jot down any particularities of soil, location, or habits. Once the wild flower garden is established it will require little attention other than an occasional weeding and a light protective bedding for the winter.
Few people know what a beautiful thing a rock-garden can be. Tucked away in some shaded nook, it has great possibilities. The soil in which the plants are placed should come from the woods, but the main body work may be of ordinary garden earth. Begin to build the rock-garden from the bottom up. Each stone should tilt so that the rain will run into the garden and not away from it. Plants gathered in the woods can be successfully transplanted.

There is one thing that every gardener should consider before all else—that is color. How often, alas, how often, one sees the utter disregard for color harmony in gardens. Scarlet sage planted against red brick walls, is just one instance. Red brick must always be considered, if flowers are to be grown before it. It forms a good background for shrubs, for white flowers, yellow and dark purple, but those of pink, lavender, or any shade of red or orange must be avoided. The crimson rambler on a red brick wall is a common error, but replace it with a yellow rambler and you have provided a background entirely suited to bring out the beauty of the flowers. The neutral gray or buff of stucco is just right for any color flower you may wish to

Carefully fill all spaces around the stones with earth, as air spaces will prevent moisture from being drawn from below, and have the top of the mound come in direct contact with the ground. Eight or ten inches above the surrounding ground is high enough for such a garden.

There are more than one hundred little plants not including the fern family, that may be used in the rock-garden. These can be bought from nurseries, but many
grow against it. Such walls are delight-
fully relieved by a flanking of blush-pink
hollyhocks with their feet planted deep
in yellow coreopsis or daisies. Tall single
plants with red or deep pink flowers,
swaying in the breezes, have an old time
charm that is difficult to equal. Holly-
hocks make an excellent screen for the
service end of the house, or to separate
the kitchen garden from the lawn.

Badly arranged colors are not confined
to old-time railroad station grounds,
where it was felt that the flash of bright
colors and growing things, irrespective
of the selection would relieve the weary
traveler, and associate the spot with a
pleasing memory. Too many gardens
are planted on the same principle. Bad
combinations of color are too often seen.
Hyacinths and tulips, lovely in them-
shelves, wonderful in massed color, may
lose much of their beauty,—or least in
the pleasure which they give, by a poor
selection of color or unfortunate color
combinations. Conventional figures, stars
and crescents, set out in flowers are usu-
ally meaningless and shows a paucity in
design. The intermingling of colors in
the center of the flower bed is seldom
successful. A bed of pink or blue hya-
cinths, or one of yellow tulips, is lovely
bordered with white. In fact white may
be brought into almost any color scheme
to its advantage, especially if it is not
working out satisfactorily. If there is
danger through too many vivid colors, the
green of the foliage makes a good back-
ground, and the introduction of white
acts almost like magic in bringing war-
ring colors together. Green will also
tone up the too delicate colors that the
brighter ones would eclipse.

THE POPLAR
Evelyn M. Watson

There are so many trees I love, because
The soft green leaves are cool and sweet,
But there is one I care for most—
The poplar tree across the street.

It stands up high above us all,
Stately, stern among other trees,
Its twinkling leaves like whirring wings
Of crowded, murmuring bees.

The cars go up and the cars go down,
And people pass, a noisy throng,
But straight and true my poplar stands,
So gentle and so strong.

It minds me fair of country lanes,
Brings whole green worlds to me,
And I who strain at city bonds
Look up to find me free.
About eighty furloughs northwest of Seattle is Port Madison, and there, all but hidden away among tall firs, cedars and verdant shrubbery; set beside a small bay,—smiling when the sun shines and dreaming when it is rainy and hazy,—and overlooking Puget Sound is the Log Cabin.

Solidly built of logs, overlooking the bay which smiles or dreams.
drift logs from the Sound, where they have been pickled and preserved by the bromine and iodine in the salt water, it has been given immunity against the ravages of all worms and borer—for all time. These logs need no paint to protect them nor to make them beautiful and they will last for generations. No overcoating could add to the natural beauty of the log in the finished building. It is a natural part of its surroundings and has day needs. Building a house in pioneer days was a comparatively simple affair. Building a home for people accustomed to living in steam heated houses, is quite a different matter. Never-the-less it can be done, with eminently satisfactory results as the photographs here shown will witness.

The logs are fitted together with a groove inlaid with hemp rope and cemented. At the intersection of the walls that sense of fitness and of belonging in its place which marks the triumph of the greatest building. It is a part of the environment, not something pushing and intruding itself into alien surroundings,—so common to the works of man.

Building with solid logs is an art in itself, known only to the few who have lived among them and learned the traditions from those who built with them in the time when building with logs was the usual construction of the pioneer, and then adapted those traditions to present the logs are "halved together" as may be seen by looking closely at the photographs, with the ends projecting well beyond the intersection, making a construction which is stable and solid, the logs being held securely in place by their own shaping and weight. What would our flimsy nails amount to in such a construction?

The entire building is of logs, as may be seen in the porch and interior views. It is all "exposed construction," there is no ceiling to cover up any thing. The
The dining room as seen from the living room

Fire place end of the living room
beams and the rafters are all of logs or poles. Even the steps are of logs, flattened on top, and laid almost in the manner of stone steps, an entirely natural manner of construction.

A wide porch extends nearly the whole length of the front of the building but is narrower by the bedroom door to make room for the steps. The steps at both ends of the porch, and the raisings are made of logs and round poles. The rafters are round cedar poles with the bark left on, boarded over, and covered with asbestos roofing.

That there is nothing crude in the construction may be judged by the finish of windows and doors. The frames are set against the butts of the logs, leaving a reveal of the rounding projection. The mill-work in the living room and bedrooms is stained green. The dining room, which is connected with the living room by French doors, is finished in gray, and harmonizes with the logs, which are left in their natural color and have a very homely feeling.

The chimneys, fireplace, and even one whole end of the living room are built of boulders and small rocks. This treatment is quite an unusual feature, as may be seen by the photos. About eight feet of the fireplace end of the living room is built of boulders, including the floor, forming an alcove about the fireplace. The door to one of the two bedrooms, as well as the double window opposite, coming within this space, are framed in the boulder wall. At the inner termination of this wall is a pillar built of rocks and round stones, supporting a massive log at the height of the door head, which carries a boulder wall to the ceiling, giving the effect of a recessed Ingle and fireplace. The mantle shelf itself is a knotty log, smoothed and varnished, and imbedded in the rock and cement.

Incidentally, there is no danger of these walls becoming marred by scratches or pencil marks. “Old Man” can put his feet up against the walls if he feels like it, and it will not cause any gasps of dismay from “Old Lady.” So they say, but at the same time it is a very livable and modern place. Seats and chairs for the porch have been made, at odd times, of the materials so lavishly at hand, in keeping with the general construction.

A miniature lake and fountain, from a spring on the place, and a rustic bridge leading to the cabin are some of the features of the grounds, which are very charmingly laid out. Some of the large hollow stumps are roofed over with bark and make very cosy “tepe” play houses.
The Basement Play Room

By Emily H. Butterfield

The attic for the children's play, especially on rainy days is legendary, but the basement, a location less productive of dust and dirt throughout the house, is in most ways quieter and altogether more desirable for all sorts of play. A cement floor for this room is practical or with a trifle additional expense a wood floor may be laid above the cement, small blocks having been inserted in the cement, and furring strips placed across, upon which the flooring is laid. The concrete floor should be sloped toward drains, an extra precaution against moisture. If the furring strips be cemented up level, the wood floor will be straight and true. By this method a space for air, insuring dryness, is obtained.

Perhaps the most difficult problem in the construction of a comfortable basement play room is this very question of the floor. Furring strips put into the concrete are feasible if the concrete be first painted with a water proofing; 2x4's laid flat are better as a basis for the flooring proper. The most satisfactory flooring for general purposes and one that costs no more than the usual concrete floor is made by placing 4"x12" hollow tile flatways and close together and holding with mortar. Between these rows of tile, place 1"x5" rough oak pieces on end. The yellow pine flooring is laid on this. The tile holds the oak firm and there is an inch air space between the tile and pine. The oak will endure during the lifetime of the average modern house and while hemlock might be preferable from the point of longevity, oak holds the nails more firmly. Do not run your pine flooring quite to the walls. A neat but inexpensive mould may be fitted to cover this crevice, which is one of the greatest safeguards for wood floors against buckling.

Hollow tile building blocks laid smooth side up make an excellent and attractive floor though there is always the danger of their being perforated by a falling hammer or tool. For a basement game room, however, they are admirable. A good smooth concrete floor is the choice.
if the children wish to roller skate or ride velocipedes as the energetic child often does. A so-called cork carpet laid over the cement, or on smooth flooring is ideal.

Frequently a fireplace can be built in this room in conjunction with the flue for the living room fireplace and a brisk fire for even a short time will freshen and vivify the air, while on the colder days of winter or autumn and during the long evening of the year there is no more ideal place for either grown-ups or children, if toasting marshmallows or roasting apples and popping corn be the program. The ceiling heights of basements are usually low, but an additional inch or so may be obtained by putting the plaster board or even the lath and plaster in between the first floor joists, a few inches below the flooring. Plenty of natural light should be arranged. By staining the joists or other woodwork an attractive color effect may be obtained.

The equipment of the playroom may be as complete as financial expenditure and the originality of the grown-ups suggest. A shower can be installed in the basement at moderate expense by using a corner of the masonry walls for two sides and painting them with waterproof pig-

![Finished Flooring](image)

Section Showing method of placing plaster board between first floor joists.

ment and sloping the cement floor to a drain located in this corner. This shower will be of great service if the children are fond of vigorous outdoor sports.

Shelves, cupboards and benches or tables for shop work and corresponding furniture for the girls and their dolls, cases for books or magazines, built-in blackboards and bicycle racks all contribute to the usefulness and attractiveness of the room, and aid in training the child and developing his resourcefulness and love of home. In such a room even a miscellaneous collection of pets, furred or feathered, can be given much liberty.

In a home where the interests of the little folks are paramount, the basement play room will be a welcome feature.
A Garden in the Desert

SIDE from the fact that they show the studio and the home of the author of "Best Sellers" these photographs which also show what can be done in the heart of a desert have an interest of their own. The romance of the Imperial Valley took its hold on Herald Bell Wright, and as he brought a rough but new world into consciousness of the novel-reading public in the story of Barbara Worth and her desert, he made for himself an audience which has carried him into the fame of one of the most sought authors of "Best Sellers." He writes of this wonderful valley when it was still a part of the great American desert, with trails between the few water holes; which the vision of the Seer sees blossoming as the rose—or truck garden of the country—if only water can be brought to its alluvial sands. Three hundred feet below sea level this valley, "The Palm of God's Hand," as it is called by the indians remaining from the ancient civilization, and by the Spanish Mexicans, is the delta of an ancient river built on the bed of a more ancient sea.

In the meantime the Valley has become a garden. It has its cities and its homes. Trees have been set and fields planted. Barbara Worth is a name to conjer with in the Valley and has been given to its finest hotel, so that tourists carry the name all over the country, and so occasionally recall the stories of the Seers who have made the Valley habitable.

There is nothing bespeaking the desert in the broad spacious bungalow, set among trees and shrubs. There is even real grass, that greatest luxury in the Southland. The building is wide spreading and low. It is the ranch house of Herald Bell Wright, set in the garden spot of the Imperial Valley of California.
WHETHER the new home may be more or less picturesque or if a more formal type will be better, depends usually on the plot of ground where it is to be built and the setting which will receive it. In some settings either the picturesque or the more formal type of house may be equally appropriate and the unqualified choice is open. Questions of this kind are not settled, as a general thing, through a matter of choice so much as that it is a matter of personality. While some people feel the need of symmetry in everything which surrounds them, others find themselves in complete rebellion against anything which is formal or predetermined, and wish to feel an absolute freedom—if such a thing were possible—in the disposition of every part. There is much to be commended in each type, and in fact if it could be carried far enough there would be found a place where these two would meet, where, with the utmost freedom, the thing that is most desired yet has a symmetry which is satisfying.

The house which is picturesque must depend more or less on the environment in which it is placed. Nature is the best landscape artist, and it is better to accept her own designs as far as is compatible with requirements. A house that fits into the landscape, and grounds that follow the general contour of the land, emphasising its natural beauties, are always most successful. At the same time the level lot offers the easiest development, and usually requires only the time for the planting of various kinds to grow about the place to make it homey and attractive.

The interestingly designed small home which is here shown has been built in Minneapolis. It has the element of the picturesque in the hooded effect of the projecting eaves, with the nicely designed Colonial entrance.
The dining alcove is the unusual feature of the plan, placed as it is opening from the living room, beside the door to the kitchen and near enough to the fireplace to be cozy on cool days. As will be noted the plan was reversed in the building of this home,—which means that it was built on the other side of the street, or facing in a different direction from that for which the plan was made. Reversing the plan adapts the arrangement to the other exposure of the rooms. This is a very usual expedient in the use of ready-made plans.

On the first floor are two sleeping rooms and a bath room, separated by the hall from the living rooms. Stairs from this hall reach a bedroom on the second floor which is large enough for two beds. This room need not be finished until later.

The exterior of the house is painted white, the blinds are green. This type of house is not only practical in floor plan and arrangement, but represents good investment value, with resale advantages.

More formal in type is the stucco house, built in South Dakota. It is built on entirely simple lines. A belt line at the sills of the second story windows carries the line of the balcony railing and together with the well studied roof lines accents the horizontal lines of the house.

The living room arrangement is pleasing, and while not entirely symmetrical, is well balanced. The fireplace and the
A home of the more formal type, built in one of the Dakotas

seat opposite both center on the main axis of the room. The sun porch at one end of the room balances the stairs at the other. The opening to the dining room is beside the fireplace, while the single door on the other side opens to the side entrance and kitchen. A toilet is conveniently placed in this space.

The house is of frame construction with stucco over metal lath for the exterior finish. Brick is used with the stucco and concrete for the stoop and steps.

Planning the Smaller Home

The home which seems to be most in demand at the present time is that which will satisfactorily house a small or medium sized family. The smaller cottage has no space under the roof unless for storage only. Two plans are shown for this cottage, slightly different in size and proportioning of rooms. A sleeping porch is added to one of the plans. If a separate dining room is desired, the living room designated on the plans could be used as dining room and a living room added at the front of the house, extending the full width of the house or with an entrance porch taking part of the width.

These arrangements are very closely planned to give all the needed conveniences in the small space of the plans. The built-in cabinet enclosing ironing board may be noted, and the draft cupboard so usual in warm climates, which has full circulation of air from the ground to an opening under the roof or between the rafters. In each kitchen is a Pullman alcove fitted with seats and table. Each bedroom has a good closet.

The photograph shows, in a very attrac-
The massed growth of vines distinguishes this cottage

E. W. Stillwell, Architect
With Many Windows

Many window openings give a feeling of openness to the smaller home, even though the planning is very compact and the area covered is small. When there is a particularly fine view the windows should be set with reference to the composition of the picture outside, framed by the window opening. Indeed a "picture window" may be set with special reference to the framing of a view from an especial point, as for instance the view of the mountains or of the sea from a landing of the stairs. No stained glass design or framed picture could be so effective, or give more pleasure, even though it may be a museum piece.

In the home here shown, much of the front wall of the living room is filled with glass, presumably overlooking the lake, with high windows at either side of the fireplace. It is generally the high window which frames the mountain view. No room in this cottage has less than two windows.

Five rooms and a porch are encompassed in the space 28 by 36 feet, all on one floor. On the second floor is good storage space, or one or two small chambers might be finished.

The house is set high. The porch is screened, and may be glazed if desired. The exterior is cement stucco and shingles, with which the vine covered brick chimney is effective.
A Homelike Cottage

The sense of hominess is one of the things especially sought in the design of the home. Entrance is direct to this living room from the porch, with the dining room beyond only partly separated from the living room. Stairs lead up from the living room. The dining room is small but well proportioned, with a projecting bay window in which the buffet stands. Two chambers and a bath room, with a hall connecting with the living room, fill one side of the house. The chambers have good closets.

On the second floor are two chambers, in the gables, and a sewing room in the front dormer. The stairs are given head room under the rear dormer.

The porches are under the main roof, with exposed rafters. All wood trim is painted white. The exterior is narrow siding.
The typical American home, for the family with a moderate income is the two story house.

The second story may be finished under the roof but, except in the warmer parts of the country, one or two rooms at least are usually finished on the second floor.

There is a straightforwardness of design when the full height of wall is given to the second story, even when the roof sets closely over the window heads, which has the merit of sincerity, and usually gives a dignity to the whole design. In our development of "style"—so called, whether the house be more nearly related to Colonial, Italian, Spanish, or with the gables and timber work details of the English, the plan is strictly American. In fact we are only borrowing an outer garment for our plan as modistes go to Paris for models in clothing, chiefly because "everybody does it." It is notable, however, that the historical type, strictly carried out, is coming to be less usual, while interesting details of any type may be made the motif around which a more or less American design is centered. In so doing we are gradually evolving types of building which are indigenous to the country, which are really admirable in design, with much charm in the details, and which are essentially "American" in type.

Among the essential points in good design is the study of proportions, both in line and in mass. The placing and grouping of windows often makes the difference between the mediocre, and the charm of individuality.
Clean-cut Stucco Design
What might be called a strictly modern development of the substantial American home is shown in the clean-cut stucco residence here shown. The entrance is attractive, whether one enters from the porte cochere, or from the sidewalk, through a terrace which is not entirely covered. While the details of the porch are Colonial in design, of the more elaborate type, yet the house itself is not stamped as Colonial. In plan the Colonial arrangement has been followed with the central hall, which is eleven feet wide, and connects the living room and dining room, but may be shut from each by doors, secluding either or both rooms.

The house is well planned throughout. On the second floor are five sleeping rooms, including the sleeping porch. One bath room forms a suite with bedroom No. 3 and the sleeping porch, with one on the other side for general use.

Built of stucco the design is very satisfactory, or it could be built of brick with the roof of tile.

A Brick Veneered Residence
Built of hollow tile or brick veneer is the next home shown, which is somewhat smaller in size. The terrace across the front of the house is only covered at the entrance. The projecting bay in the living room makes a feature of the front. The main entrance hall is fitted up as a den. Both this and the stairs open to the living room. Especial attention is called to the stair arrangement, with its
side entrance at the grade level, and toilet room beside the entrance.

The living room is a very pleasant room, with the projecting bay at the front, the fireplace at the end, and French doors to the dining room and to the sun parlor. Opening from the hall is a Pullman alcove fitted with seats and table, and with a cupboard opposite, very convenient as a breakfast alcove. Beyond is the kitchen proper. The ice box is built in between the kitchen and the porch.

On the second floor are three chambers, insulation against changes of temperature, making a house easier to keep warm in the winter and cool in warm weather.

**Simple Construction**

The simplest construction will usually give the least costly type of house. For that reason the two-story house, more or less square in form, without projections or recesses in the wall, and with simple roof lines, which are not cut into by dormers nor many gables will be an economical house to build and will give the maximum space at minimum cost.

Sleeping porch, a large linen closet, and a tiled bath room. A shower opens from the bath room.

A house built of hollow tile or of brick has of necessity a thicker wall than when the construction is frame. When outside measurements are considered this means a few less inches in the space inside the walls, slightly smaller rooms, but this is more than compensated in other ways. The air spaces in the construction with either hollow tile or brick, give an in-

If one wishes to keep the effect of a small house or cottage, the apparent height may be decreased, as in the home here shown by carrying the stucco, or the color of the first story only to the heads of the first story windows or to the sills of the second story windows, and a darker stain for the upper story.

The room arrangement of this house throws the living space well together. The sun room opening from the living room adds to the apparent length of the
A square house giving almost a cottage effect.

room. The fireplace is centrally located, giving a flue for the kitchen range as well as a central chimney stack for a warm air heating plant. If that method of heating has been selected, a central chimney is a great advantage, in fact almost a necessity, as it allows the furnace to be so located that all the warm air pipes can have direct passage to the room to be heated,—a matter of great importance in the heating of the house.

The kitchen has been carefully planned, with the sink under the windows. The cupboards have been placed in a pantry between the kitchen and the dining room, with a window to the rear entry.

On the second floor are good bed rooms. The front room which is presumably the owner's room is unusually large, a very satisfactory way to build it, as the tendency has been to build bed rooms too small to be really satisfactory if the rooms are used for anything but sleeping.

The stucco of the exterior makes an excellent background for planting.
HERE is no better time of the year for a general survey of a house, than that long after-the-holiday-period, which seems to last in some localities until spring planting begins. Defects, unnoticed in the colder weather loom up clearly. The plain paper of the living room fails to blend as well as formerly with the curtains. Or is it the curtain material showing the effect of winter sunlight, and the general wear of a year or more? It is surprising how new curtains will freshen an entire room.

Taking up the theme of the dining room wall paper: perhaps a verdure pattern with soft greens and blues, a little golden brown and other tapestry shades. The green is repeated in over-curtains and in a large plain rug. In the beginning the three greens were alike, but they have faded on independent lines. In the paper it has grown dingy with a brownish cast. The rug, by contrast, looks too blue a green, while the curtains have taken on a yellowish hue. On the whole the paper has improved, as is often the case with foliage, verdure, landscape and tapestry motifs, but the harmony of the room is gone. Changing the paper seems too great an undertaking. Moreover, it has but recently become a general favorite, for it is an unusual family that agrees on a dining room paper when it is first selected. To discard the rug is not to be thought of, for as the salesman predicted, it has worn like iron. New curtains will solve the difficulty and bring all the conflicting tones into accord. Inasmuch as green was first chosen, we take an entirely different color, still choosing something which repeats a tone in the paper. Blue will be a safe choice, for the blue of the paper has held its own, though by contrast with a fresh roll would show a softer quality.
The variety of plain materials in curtain goods is extensive. As summer, not winter, is approaching, a linen or cotton is recommended. Tub things are desirable at this time of the year. The cost of dry cleaning is also greater than the laundry charges, and this item in the long run counts.

The blue linen, once in place, with under-curtains of net or muslin, the room immediately takes on a different aspect. The green of the paper takes on an entirely new character. It does not assert itself as faded green, and need no longer be reckoned as much. The green of the rug, which seems to have lost its blue cast, may be repeated in linen borders on the curtains, or it may have recognition in a few pieces of green pottery. Or it may be partially ignored. Its color will, by contrast with the blue curtains, again seem the right thing.

In my decorative work I am often asked whether under-curtains—"glass curtains,"—should be pure white, cream color, or deep ecru. The woodwork and the ceilings must be taken into consideration, before deciding this point. With ivory woodwork, use ivory net, with pure white woodwork, the same white, and with dark woodwork, net of deepest ecru. Few decorators in this country use a dead white on the ceiling and this tone is no longer popular for draperies. Where the ceiling is ivory an ivory net is the best choice, and in such a case, over-curtains are often unnecessary. The simpler the curtain scheme the better at all times, and never anything added, unless for an excellent reason. A faulty room, poor in its color treatment and disappointing in woodwork, may sometimes be helped by two sets of curtains. An occasional room will take advantageously a single curtain of dark material but only where the circumstances are unusual. Such schemes are the byways and highways of interior decoration not its main travelled road. Sometimes an inner cur-
tain of silk gauze is wonderfully effective, as for instance gauze of changeable tones, with an over-curtain in a solid color repeating one of the tones in the gauze.

Among the most helpful of the season's contributions to household renovating are the decorative stuffs with black backgrounds. These are quite different from the materials in vogue a half a dozen years ago. They have sufficient warmth of color to be suitable for late winter and early spring, and of sufficient beauty of design to make them interesting additions at all times. A judicious use of black cretonne, say, perhaps as slips for several chairs or as covers for two tables, or as upholstery for one large chair and one medium sized table, would quite make over a room which had grown common-place and over-familiar. Anything that makes for variety is greatly to be desired at this time of year.

Wicker furniture and chintz have been summer stand-bys for years, but they are just as suitable for other seasons if used with discrimination. Rooms done entirely in wicker and cretonnes might not be desirable with a February landscape outside, but February and March and April would be more interesting periods if they did not continue the decorative treatment of November, December and January.

The sprightly cretonnes and linens are as cayenne and tabasco, highly appreciated at the right time.

It is the wise home-maker who realizes the value of new schemes or new arrangements of old schemes, and who seizes the opportunities before the rest of her household realize that it is time for spring fever. There would be less need of "change of scene" if there were a more frequent change in the living room furniture. A new scheme of things in the dining room has special points, for the spring feeling usually begins with breakfast. If new curtains can give zest to life, they should be regarded in the light of household benefactors, saving trips South, and possibly doctor's bills.

If the dining room has plain putty colored walls, try curtains of pink cockatoos and peonies on a shining black ground. If figured paper, try draperies of a new shade. And do not forget the saving graces of paint, not alone for woodwork, but for odds and ends of furniture as well. Chairs and sofas of wicker, which have grown dingy and dull in service, will take on an entirely different aspect if painted. Stains also have their place in the spring calendar, and now that manu-
Manufacturers furnish such instructive instructions the old fear of spoiling things need not interfere with the wish to do over old chairs and tables. Reed furniture takes a stain admirably; willow pieces take very kindly to paint. With stains, hold to silver grays, soft greens and fumed tones, avoiding dark and heavy effects.

With paint, strike out boldly and do not fear yellow, peacock blue, black, mauve, jade green, orange or even sealing-wax red, if you have a place where a little "pep" is needed. It might not be well to create opportunities for so vivid a color as bright scarlet, but if you feel that a certain room would be helped by such a brave dash, do not hesitate to try the experiment. Sometimes a room so neutral in tone as to suggest a fog off the banks will fairly cry out for golden yellow or Chinese crimson or some other highly keyed color. A row of geranium pots, vivid scarlet as to flowers, has been known to make such a room altogether charming.

Pottery of orange, as inexpensive Sedji, which are usually known better in the gray-green glaze than in other colors, or a bit of really fine Chinese embroidery, or lacking these, a little paint in the right place would have had the same effect—namely, of adding brilliancy where it was badly needed. A room must have its high lights, as well as its shadows, and the early spring is a fitting time to plan it.
Wood Trim.

F. R. G.: Upon the arrival of each succeeding issue of Keith's if there is anything that impresses me as desirable to incorporate in the "home of my dreams" I make a note on a slip and insert. It begins to look as though next summer would see the start of my final home. Please give some detailed information about the woodwork and interior finish for my rooms. Ceiling will be 9 feet. Doors will be 7 feet high. Would you advise keeping the tops of doors and windows in line? How wide should window trim be made?

Ans.: The present tendency does not emphasize the trim and wood finish in a house. It should be sufficient to finish the opening nicely, but without involved moldings which catch dust and add to the cares of the housekeeper. Trim must be nearly 4" to cover weight box of double hung windows and head casing must be wide enough to take curtain fixtures. The trim is simply a frame for the opening. Picture molding may be carried in line with head of doors and windows, or at the ceiling depending on the effect desired. It is customary to keep heads of door and windows in line. The base is usually about 6" and should not be molded to catch dust. The ideal base meets the floor in a cove, but this is only practicable with tile or a plastic substance.

The house about which you inquire is of the so-called "Prairie Style" so much in favor in Chicago and vicinity, in which the horizontal lines are emphasized and the heads of doors and windows are kept in line. It was rather customary to use 2½" or 3¼" trim in this type of a house with perhaps 6" head casing, but such a casing is hardly wide enough to cover the weight box of a double hung window.

An Inexpensive Home

W. W.—I am now having a small cottage built (24x24) in the suburbs of Baltimore, and, as I am doing all the painting and interior decorating myself, would like your advice on the following points. You must understand that the floors have to stand rough usage, as I want the floors safe for my children to play on.

The living room extends across the front,—no hall,—with closed-in stairway to right of door. Dining room entrance very wide—almost making one room of the two.

Which kind of treatment brings out the natural grain of wood best—wax or varnish? Which will require the least attention or renewal?

Can you suggest a good color to paint the walls in the different rooms, so as to give them such an attractive appearance that the smallness will be overlooked? Can you tell me whether to have the dining room a different color from the living room? I am going to paint the white coat walls, rather than paper them.

The articles seem to deal with only those having plenty of money to carry out
their ideas. Now, I have the ideas, but my money is very limited, as you can guess from the size of my house.

Ans. In reply to your letter asking advice . . . the walls in living and dining room in so small a house, should certainly have the same treatment. You cannot do better than a soft tan shade, using paint with an egg-shell—not shiny-finish.

In regard to the woodwork, we do not advise a varnished, natural finish with anything. Such a finish will make any room look ugly.

Stain your woodwork a pretty brown—not too dark—then varnish, but rub down the varnish with pumice and water to remove the shiny, glossy appearance.

We think there is no difference between wax and varnish in showing up the grain of wood.

You must first give the walls a coat of size, before painting them. On the contrary, we make a special study, of attaining attractive effects as inexpensively as possible. But some money is necessary; you cannot get a pretty house for nothing.

Shingles and Cobblestones

E. M. O.—I have been getting much pleasure out of your department and should like your help in regard to some of my problems.

I am building a 6-room bungalow on a hill-side, commanding a view of a large orchard district. The house is facing east with cobblestone fireplace on face of front wall. Porch pillars also of cobblestone.

Now, I should like very much to finish the exterior in shingle stain, "old Virginia white," with terra cotta roof. Would this be in keeping with style of the house? The bungalow is a shingled one, and I should like to get away from the ordinary stains commonly used on these homes.

The living room is 14x24 with cobblestone fireplace. I should like old ivory finished woodwork, with walnut or fumed oak finish on one-panel doors; walls grayish-tan. Now there are two sets of French doors opening to the veranda. Should these be finished ivory, like the woodwork, or stained to match doors? I thought of using a gray rug with con-
ventional border and should like my furniture in Flemish oak. What would you suggest in regards to this? Also, what sort of hangings and draperies could be used?

Ans. Your ideas as to treatment of your exterior, are after our own heart. The old Virginia white with the terra cotta red roof, will be delightful, and entirely in keeping with the style of your bungalow. The stain will give the shingle a texture like plaster, very much softer than paint, and getting away from the everlasting green and brown.

We also like the idea of using a walnut stain on the one-panel doors, in combination with the ivory woodwork. The French doors should be finished in the ivory. We have found this treatment very pleasing.

We hope you will decide on brown walnut with panels of antique cane a shade lighter than the walnut, for the furniture. It will be very charming with the woodwork and more in harmony with the bungalow idea than the heavy Flemish oak. Also it will be a sort of mediator, between the ivory woodwork and the cobblestone fireplace.

We like the gray rug and with your east facing you cannot do better than warm gray walls and deep rose or wisteria color for accessories. These need not all match exactly, but be in harmonizing shades. A wing fireside chair, in light brown wicker, upholstered in one of the adorable figured linens, is a necessity.

A Rented Flat

L. L. S.—I am about to build a two-flat, Spanish-type home; exterior walls to be soft, light yellow or deep cream; to be rented unfurnished, and would appreciate suggestions for tinting of walls and ceilings, also color of pressed brick for fireplace. The woodwork will be old ivory. I am enclosing floor plan.

Ans.—Reference to your floor plan shows the main rooms facing north and east. Considering this and the character of furnishings used by most tenants, it is advised to tint the walls in both living and dining rooms a warm gray, not dark, but a soft warm shade. Such a gray is very agreeable with ivory woodwork and makes an excellent background for either mahogany, oak or wicker furniture. We would use a rather colder, light gray on the bedroom walls; because pink or blue or pale green can then be introduced in the furnishings to suit the tenant.

The kitchen walls will be pleasant and attractive painted, not tinted, a primrose yellow, with white, varnished woodwork.

A Brick House

D. M. G.—By being a reader of your magazine I am writing for advice on interior of my house. I am enclosing a pencil sketch of floor plan of front rooms which open into each other. I have planned to use cream and ivory tints on walls and ceiling with white woodwork and mahogany doors. I want to know if the mantel should be mahogany like doors or white like woodwork and what color tile to use for hearth. The mantel in sun parlor will be all brick. I would like advice also about window shades. What color shades should I use with these interiors? The house is red brick with stone trimming, gray slate roof, faces northwest. I want a shade that will give a good effect from outside and inside. My drapery will be blue and gold with mahogany furniture.

Ans. Replying to your inquiries . . . The only door in living room and sun parlor seems to be the front door, and we would give this a brown mahogany stain. Also the two service doors in dining room. You do not state the facings of the living room mantel and this makes it hard to say what the hearth should be. We can only advise to match the hearth as nearly as possible to the mantel facings. The wood mantel will be best finished in the white, also the French doors.

With the red brick and stone exterior we advise a reddish brown duplex shade white on the inside, except in the sunroom, where the brown shade alone will be sufficient.
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OES your supply of jellies and jams and marmalades get dangerously low in the spring—so that you feel that you can’t have company because you can not add that homemade delight to your meal?

That’s all right. Don’t be afraid to admit that you calculated a little short. You wouldn’t be the most practical kind of a housewife if you had over-calculated; for who knows but what strawberries and currants will be cheaper another year, and then it wouldn’t pay to have any left.

“Spreads” made of “all-the-year-around” fruits now come to the rescue. Do you know what delicious things can be made out of cranberries and raisins and dried fruits?

According to experiments made by household experts of the United States Department of Agriculture, jellies, jams, marmalades and conserves may be made with a saving of one fifth to one-half of sugar if salt is added. Simply add one-half teaspoon salt for each cup of juice or fruit pulp. This makes the absence of sugar less noticeable and the salty taste disappears after a few weeks. Also, in jams and marmalades where acid fruits such as oranges and lemons and grapefruit are used, the mixture may be made with one-half syrup. The acid taste of the fruit covers the syrup flavor.

Raisin Apple Marmalade.
Wash and dry two cups of raisins. After putting through the meat grinder, place in a saucepan with water to cover and a little salt and boil for one half hour, slowly. Then add two cups of apple sauce and enough lemon juice to give it a tarty taste, about one tablespoonful. Cook until it thickens and pour into glasses. Seal with paraffin.

Pineapple Apricot Marmalade.
Soak one pound of dried apricots overnight. In the morning cook until tender. Drain the juice off of the apricots and one large can of pineapple. Put the “meat” through the meat grinder. Add the juice and measure. Add an equal amount of sugar and cook fifteen or twenty minutes or until thick. Care must be taken to keep it from burning. Seal in jelly glasses.

Cherry Preserves.
Cook two cups of raisins, which have been put through the food chopper, in six cups of water until the raisins are tender. To the water in which the raisins were cooked,—there should be two cups—add one cup of canned cherry juice and two and one-half cups of sugar. Cook like a syrup. Add the cherries, pitted red cherries are best,—and there should be three cups—and cook until the mixture begins to jelly.
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Pineapple Strawberry Preserves.
Put the “meat” of one large can of pineapple through the food chopper. Add to the pineapple, one small can of strawberries and three-fourths their weight of sugar. Cook slowly until the sugar is dissolved and then rapidly until thick. This amount makes one and one-half pints of preserves.

Orange Rhubarb Marmalade
Combine two quarts of canned rhubarb, four oranges, pulp and grated rind, one package of raisins and three pounds of sugar and cook until thick. The amount of sugar may be diminished if the rhubarb has been sweetened or in case it is desired to add figs or dates instead of the raisins. Can.

Grapefruit Marmalade
Shave one lemon, one orange and one grapefruit very thin, or grind, rejecting nothing but seeds and cores. Measure the fruit and add to it three times the quantity of water. Let stand in earthen vessel over night and in the morning boil for ten minutes. Let stand another night and on the second morning add pint for pint of sugar. Let boil steadily until it jellies. This will make twelve glasses. Cook until it looks like thick syrup. Turn into glasses and seal with paraffin.

Pineapple Preserves
Put pineapple through a meat grinder. Add three fourths its weight of sugar and cook until the syrup is thick. Can.

Rhubarb Conserve
Put through a meat grinder three oranges, two lemons and one pound of raisins. Add to them four pounds of rhubarb, cut in small pieces, four pounds of sugar. Boil until thick, about one-half hour. Seal with paraffin.

Rhubarb Strawberry Jam
Mix together one quart of strawberries, two quarts of sugar and three quarts of rhubarb which has been washed and sliced thinly. Stir until a liquid forms. Cook slowly until sugar dissolves and then boil rapidly until thick. Can.

Raisin Rhubarb Marmalade
Wash, dry and cut into small pieces one quart of rhubarb. Add one-fourth cup of water and two cups of sugar and cook slowly until the sugar dissolves. Boil fast for a few minutes and then add one-half cup of raisins which have been washed and put through the food chopper. Cook until thick. Fill glasses, cool and coat with paraffin.

Rhubarb Jam
Combine two cups of thinly sliced rhubarb, two cups of sugar, one orange, grated rind and juice, and pulp of one lemon. Heat until the sugar is dissolved. Boil until clear. Add one-half cup of finely chopped walnuts. Seal.

Apricot Marmalade
Soak over night and cook separately two pounds of prunes and one pound of apricots. The prunes should be stoned. Add one and one-half cups of sugar and boil all together until very soft. When it has cooled add the grated rind and the juice of one orange.

Orange Marmalade
Remove rind from two oranges. Slice three oranges and the rind of one very thin. Slice thinly, the pulp of one lemon. Pour over the fruit three quarts of water and let stand twenty-four hours. Boil slowly for one hour. Add four pounds of granulated sugar and let stand over night again. Boil until it jellies, which should be in less than two hours. Pour into glasses and cover with paraffin.

Cranberry Jelly
Add one-half pint of water to one quart of berries and cook only until the berries are soft enough to rub through a seive. Rub well until only the dry skins remain in the sieve. Add one pound of sugar and return to the fire, bringing to the boiling point when it should jelly.

Apricot Jam
Soak and cook apricots until the pulp may be rubbed through a seive. Cut raisins in half and cook until tender. Allow one-half cup raisins, two tablespoons of lemon juice and one small cup of sugar to two cups of apricot pulp.
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Carrying things up stairs is one of the bits of drudgery about a house which is not all on one floor. The time will doubtless come when an automatic elevator will be one of the necessities of the “modern house,” just as a heating plant and plumbing installation have been the modern elements in different periods. As more convenience and comfort are required in our homes new ways are found to eliminate the various discomforts and inconvenience. The necessity of going up and down stairs has always been one of theplaints, even of people who are unwilling to have sleeping rooms on the ground floor. An elevator, or at least a dumbwaiter which can save the many trips necessary in order to get “things” carried up and down to their proper places, is a solution of the problem. While the elevator may be completely out of the question on account of the cost, in many cases, no such insuperable difficulties stand in the way of a dumbwaiter, or small lift, which may indeed be simply constructed in place. Unless, indeed, a dumbwaiter is large enough to carry a trunk,—in which case special provisions must be made for it,—a small car which will carry books and packages, the laundry, or a sewing basket will serve the housekeeper very well. Such an affair can be built into any house, if planned so that it can be built into the corner of a wall that is unobstructed from basement to attic. The clothes chute and dumbwaiter may well be placed side by side as each must be continuous through the different floors. The shaft for the dumbwaiter must carry up at least 3 or 4 feet above the top door to give space for the installation, and a panel or door should open to this space.

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A dumbwaiter is simply a strong, light-ly constructed box, hung on ropes which pass over pulleys and have weights at-tached which balance the weight of the box, when loaded. The hand rope is geared over a larger pulley, to lift the box easily.

As a general thing the inside dimension of the well should be built about 3 inches larger than the outside dimension of the lift. In a plastered well the vertical studs are almost never exactly where required for the guides. It is advisable, therefore, to have horizontal bridging in both sides of the enclosure, located on 30-inch centers. The guides are fastened to the bridging by long screws, passing through the plaster if the well is plastered. Otherwise, horizontal cleats may be put on the outside face of the wall, in which case not less than 5 inches must be allowed between the size of the lift and the inside of the well, allowing an inch on each side for the thickness of the cleats. Ex-posed cleats are objectionable as they form shelves for catching dust and dirt. If it is possible to secure vertical cleat-ing this difficulty is overcome.

Doors from the dumbwaiter shaft should be as wide as the lift and 4 feet high. Generally the bottom of the door will come about the height of a table from the floor. A table will usually stand near if not under it.

Where the cellar is cool foods may be placed in the car and lowered into this cool place so that it serves as a cool cupboard for foods, sometimes doing away with the need for ice.
HEN the site for a new home has been selected one of the first things which must be taken into consideration is the character of the soil and the general drainage conditions. Whether the sub soil is clay or sand or gravel, whether the soil is wet or comparatively dry, depends the kind of treatment necessary to insure a dry basement. Built upon sand, gravel, or chalk sub soil, a basement is not likely to be troubled with water, unless the ground is very low. In a wet soil there should be drainage about the foundation walls. There are several ways of keeping dampness out of the cellar. The best methods are those which treat the outside of the walls, preventing the dampness from coming into the structure at all.

Every site must be judged for itself, as oftentimes the nature of the ground varies even in a short distance. Sandy and gravel soils are naturally drier and warmer than clay and, on account of their openness, water rapidly sinks through them, and they contain a considerable quantity of air.

**Outside Drain**

A usual procedure is to lay a tile drain with open joints, outside the foundation walls and below the basement floor. This may be laid just outside the footings at the level of the bottom of the footings, about six inches below the level of the cellar floor. The joints should be left slightly open, but dirt and sand should not be permitted to enter the joints and fill the drain. To prevent this, the joints may be encircled with strips of burlap or similar material, about six inches wide and fifteen inches long. Sometimes tarred paper or specially constructed earthenware gutter cap pieces are used. Nothing less than four-inch tile should be laid. After the laying of the drain the trench should be refilled with coarse material. Screenings or pebbles, one half to one inch size, should be used to the depth of a foot, to cover the top of the pipe, with a deeper layer of screened gravel, broken stone, slag or brick. Over the top of the broken stone it is well to spread burlap or bagging to prevent fine material falling or washing down to the stone. Sod, grass side down, hay, straw, cornstalks or brush are suggested as having been used with fair success. Where a building is located on a hillside and the soil against the cellar wall is likely to be saturated, the coarse stone filling should be brought up near the surface of the ground. The top soil should be graded to throw the water away from the building, and seeded or sodded, to protect itself and the cellar wall.

**Damp-proofing**

Where greater precautions are necessary than drainage around the outside of the foundations, different kinds of waterproofing are to be considered. When such conditions are realized before the building is begun, the most logical thing
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to do is to make the concrete of the wall itself waterproof, either through an integral waterproofing or by making the concrete sufficiently rich. A brick or other type of wall may be plastered thickly on the outside, with a rich concrete mixture of Portland cement, before being filled around, extending both above and below the ground. If more than this is needed, the application of a heavy, penetrating, tacky, bituminous damp-proofing paint may be applied to the wall before the plaster coat.

Where it is necessary to shed seepage of water, in addition to the absorption of moisture, more stringent methods may be necessary. Under such conditions a priming and bonding coat of liquid bitumen, mixed with a strong solvent, may be applied cold, with a large brush. After the primer is set and dry, a bituminous compound is melted in large kettles and is swabbed on hot, with a roofing mop. The coating should be thick, tough, and somewhat elastic and yielding.

To give a thorough protection, the waterproofing course must extend over the footings and on top of the underbed of the concrete floor, as well as the outside of the walls in contact with the surrounding soil.

Where damp-proofing of a structure is contemplated and the method has been decided upon it is necessary to get full directions and specifications from the manufacturers of the product to be used, as all such products are more or less highly technical in their make-up and require proper handling if satisfactory results are to be obtained.

While there are many ways of preventing dampness from permeating the basement, or of preventing ground water from finding its way into the house; if the matter is given consideration soon enough there are usually ways of draining the water off before it reaches the fabric of the house. In such case, it is necessary that the drained area has sufficient depth to be below the bottom of the cellar.

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The house is only twenty-six feet wide by thirty feet deep with an additional ten foot depth for the front porch. Note how roomy this porch is—nine feet three inches wide and twenty-four feet six inches deep.

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Just a Word

New Building Rules

Secretary Hoover has, through the co-operation of experts in the various building lines, set the task of eliminating waste in the building industry as far as possible, reducing unnecessary and costly requirements in the building codes and standardization in manufacture, which should reduce costs. Committees of these experts are now at work in drawing a standard building code, which shall in all essential points be applicable to cities all over the country. Concrete and lumber meet the same requirements in New York as in San Francisco, yet city aldermen, who are not usually engineers, or building experts, arbitrarily set higher requirements than building experts say are necessary. This method of enacting laws is not in keeping with the time, for this is an age of exactness. We demand that experts accustomed to figuring such problems be employed in bringing about a just and practical solution of these important considerations.

In response to the request of the president, Secretary Hoover has appointed committees, the members of which are selected from all parts of the country, each of whom is an expert in the particular line to be investigated. These committees are working along the following lines: General situation in the construction industry—Simplification of municipal building rules—Simplification of plumbing rules and practice—Standardization of contractors' specifications—Expansion of small house design bureaus and organizations—Simplification of clay products—Lighting fixtures—Paint and varnish and finishes.

The simplification of plumbing rules and practice is a matter which has been under discussion for many years. Some authorities claiming that, in practice, much that is really unnecessary has been required and which, of course, added greatly to the cost. With no authorized ruling and with nominal and frequently biased individual opinions, building departments of municipalities hesitated to eliminate any of the conditions once established. The same is true in a multitude of lines, especially in the use of the newer materials and methods of construction. Newer uses of old materials have virtually been given unnecessary handicaps in competition with an older manner of building and we may say this is notably the case in the matter of fire resisting materials. Prevailing rules for fire proofing have been generally drawn with reference to heavy construction, while it is equally needed in the smaller homes of crowded districts, where the required use of fire resisting materials is extremely important in the protection of these homes.
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A satisfying home carries almost universal interest.
Among the boys whom the war took abroad were naturally many who, professionally or embryonically, were especially interested in architecture. Naturally, also, they found, "over there," much in old world architecture which interested them, and hence, returning, have brought to us quite a multiplicity of what might be called "borrowed" architectural ideas that are being introduced here with some very pleasing results. One such contribution to home designing, in southern California, is, for instance, the so-called Belgian type of bungalow, a representative example of which is shown in the accompanying illustrations.

It is, of course, only in its exterior—for its interior is planned in quite the American way—that this little house gives evidence of its Belgian inspiration, and here only in a considerably modified manner. As a result of this influence, however, it is given a general outside appearance that is, first of all, distinctive, and, further, decidedly artistic and in all ways pleasing. Craftsman-like handling of the adaptation has also resulted in the creation of a house that, beyond being attractive, seems exceptionally practical for any locality or climate.

In exterior observation of any home, it is, no doubt, to the front entrance and approach that one instinctively gives first consideration. The entrance of this little "Belgian bungalow" is of particularly interesting design. It consists of an open vestibule, with an arched opening of three feet three inches on the front and a nine-foot arched opening on the side. Against its inside side wall is an unusual effect, after the manner of a wall-fountain, the basin of which is constructed of brick, set on end, and is used for holding living plants and a little ornamental statue, instead of a fountain. The wall space above
The color scheme of roof, stucco and woodwork is an effective contribution to its exterior charm.

The basin is slightly recessed, in an arch, with the recessed wall tinted bluish gray and finished with a neat stenciled border of dull, dark blue squares. The front door opens from this vestibule directly into the living room.

This entrance vestibule, it further deserves to be noticed, is open to a small corner terrace, which, like the vestibule, is floored with cement, and is edged with red brick, while the steps leading thereto at one corner are likewise of brick. An electric light of the standard type, of black wrought iron, artistically designed,
is effectively featured at the outer corner of the vestibule, and a group of three French windows, with a narrow stenciled border of dull blue, charmingly faces upon the terrace from the living room.

Still other exterior details of this house deserve to be brought to special attention. These include, naturally, the detailing of the roof, with particular reference to the clipped gable peaks and the graceful curve that is given to the eaves side walls of the house are of cement-stucco over framework. They are finished with a rough-troweled surface and tinted a rich buff shade, while all wood trimming is painted a grayish olive-green. The roof covering consists of composition shingles, in variegated colors and shades, with reds, blues and graduations of buff predominating. The color scheme, therefore, is a very effective contribution to the exterior charm.

The arrangement of the interior is shown by the reproduced floor plan. Features of the planning that deserve to be especially observed are the little dressing room off the front bedroom, the excellent sleeping porch on a rear corner, the breakfast room that faces upon the rear porch, the many delightful closets and built-in conveniences, and particularly the general convenience of communication between the different divisions despite the fact that very little floorspace is given over to hallway. It will also be interesting to know that glass or French doors are used between the

There is a vaulted ceiling in the living room
living room and dining room, between the latter and the breakfast room, and to give access to the side porch from the dining room and to the rear porch from the breakfast room.

With more specific reference to closets and built-in features, it should be noticed that the dining room has a pair of china cupboards, the breakfast room a single feature of this kind, the kitchen a draught cooler-closet, commodious cupboards and so forth. The little dressing room has a dressing table and linen cabinet, in addition to a wardrobe closet. The bath room has both a box seat and a shelf and drawer cabinet. In addition there are closets for each of the back bed rooms and the sleeping porch; there is also a little closet in the hall.

The interior is simply but very attractively finished and decorated throughout. The woodwork of the living room, dining room, breakfast room, two bed rooms and hall is finished in old ivory, Colonial style, and in the bath room, kitchen and sleeping porch it is in white enamel. The plastered walls of the living room and dining room are finished with a smooth, hard surface and painted in oil, the color tones of which are light chocolate for the living room and grayish buff for the dining room. The ceiling of the former room is designed in vaulted style, and the top of the walls in both rooms is decorated with a neat stenciled border in dull blue, gray and cream. In the breakfast room, two bed rooms and hall the walls are papered, and in the bath room and kitchen they are given a smooth, hard plaster coat and enameled like the woodwork, while in the sleeping porch and kitchen-entry porch they are tinted. Hardwood floors prevail throughout, except in the bath room, kitchen, sleeping porch and rear-entry porch, tile flooring being used in the bath room and pine elsewhere. The mantel of the living room fireplace is of cast cement, in white, and the hearth is of dark grayish brown tile.

The house is located in Los Angeles, and it has no basement or cellar. It is equipped with gas radiators built into the floor, for heating, and with all other modern conveniences of good quality. Beside the house is a garage of corresponding style and construction. This is indeed a most attractive, well-planned home in every way.

THE ROOF

Aloft I raise my shield: the pelting rain
And rattling hail assault my slope in vain.
The burning sun, the weight of winter snow
Alike I scorn,—then rest secure below.

Ancient House Verse
NOTHING else, perhaps, carries a wider interest than pictures of interesting and beautiful homes.

The picture is studied as a whole for the effect which it creates on the mind, and then it is gone over in detail, and studied bit by bit, generally with reference to some embryonic project back in the mind of the individual studying it.

"In the first place, art is creation," says Frank Alva Parsons. "It is the personal expression of the individual in any material or combination that completely conveys his conception of what he is trying to project." It is necessary to express a need which the man feels. "This need should be the reason for the art expression. Spurred on by the need, a man creates something which will fill the need."

The building of the home is his great need. Its creation should fill his need of expression, at the same time that it is making a home for him. It must be the expression of his own feeling; an expression which will satisfy him in his constantly changing moods. This it can do only when it fits his personality like a glove, responding to every movement, with satisfaction—as far as humanly possible.

This is what a man, and his family, have a right to demand in a home, but it can only be achieved by the closest cooperation with a resourceful architect. It is a curious fact, however, that, even

The home of an Architect

H. G. Morse, Architect
though very diverse in mood or in thought, what really pleases one will please many. "It is attractive; it is pleasing," is a statement of fact that passes without challenge in a surprising number of cases. When this is not wholly true it is often a matter of elimination. "On the whole I like it, but certain parts of the detail are not pleasing, as I see it." Bring the objectionable part into harmony, and a larger class of people are pleased. Perhaps one can not state too strongly that a pleasing whole is often largely a matter of elimination. In other words the thing
has received very careful study and thought. Unity and balance are only achieved by a careful fitting of needs to conditions.

We are showing here a group of smaller houses, one of which might be called a bungalow; the others are cottages or perhaps, more properly, small houses. They are quite unusual in their designing, and show the individuality of the owner, in each case.

The first photo shown is, as might be guessed, the home which an architect has built for himself, and speaks the charm of the interior. The leaded casement sash with transoms, the small-paned glass in the dormer of the room over, indicate interesting room interiors. The great leaded window on the other side of the entrance, at a higher level, with casement windows on the side of the room to correspond with the large window, show the adaptation of the plan to the conditions, with a fascinating variety.

The garage is placed under this part very charming home. Built of stucco and cobblestones, with low hanging eaves, and diamond-paned glass, it embodies the many picturesque details of English story, even though it is very modern and American in the application.

The entire face of the dormers is shingled and stained with the roof, carrying as a part of the roof. The cobblestone chimney is well built, with shoulders at each change in size, and concrete cap.

The projecting bays of windows give the effect on the inside of windows with deep reveals, such as were necessary with the great masonry walls of olden time.
In the photo one merely glimpses the charming porch beyond the living room. The entrance is nicely designed, with a touch of the Colonial in the design which is in keeping with the general quaintness of the house.

The stucco bungalow with shingle-thatch roof is very attractive. The porch extension on one side is balanced by the covered porte cochere on the other side. The stuccoed surface is carried unbroken to the up-standing course of brick at the grade line. Brick is used at the steps and for the buttresses at the entrance. The timber work, stained dark, and the dark framed openings, receiving the white painted sash, give a very effective touch.

A shingled cottage built in the woods, of a newer development, is shown in another photograph. The shingles are stained to the effect of naturally weathered shingles, with trim painted a lighter tone. The ground is terraced up to within a step of the entrance level, and the windows reach to the floor. The walls of the sun room are filled with French windows of the same height.

The size of the fireplace in the living room is indicated by the great size of the chimney as shown above the roof, which with its several flues, is effective in its broad extent.

At the other end of the house the garage is placed as a part of the building and balancing the sun room. The whole building sets low on the ground.

Beauty Among Stones

Evelyn M. Watson

The first time I went to see the Barbers in their new home I noted that the house looked bleak. It was in a recently opened part of the city, a big gray structure set high on a stone foundation. There were a few trees on the street and the yard was not without its shrubs. However, the second time I went I beheld a revelation," narrated John Donner to his business partner one morning on the trolley city-ward from their country places.

"Barber himself told me how it was—they planted perennials right up near the stonework, and the stones made a suitable background for the hardy flowers. Hollyhocks went on the bleak north side, with honeysuckle vines near the gateway—mostly gorgeous pinks and soft toned pink things, and at the south, which was the back door, were gold things, such as Japanese sunflowers, calliopsis, and the like. The east, which was their front door yard was glorious with deep scarlets. The west was a riot of blues. Of course, the family will have bushes, too, but these perennials will be tight up against the house, growing each year—and bushes are always set out a space.

"As for the bushes already set in, Barber has planted little low perennials close the roots of the taller ones. Why? Well, you don't have grass to cut by hand under the bushes, nor can you run the lawn-mower under there. The same is true about the house, it makes the lawn mowing easier,—those rows of blossoming things.

"It certainly makes that house look like a different place. Why, I believe they could nearly double their money on it if they were willing to sell. I am going to try it myself, about my place. I believe it is good business."
One may dress the bed in any way or in any color which will harmonize with the general color scheme, and the other furnishings of the room. Since the bed is the largest surface among the furnishings it must in a way dominate, and for that reason often gives the contrast or the balance with the draperies. For instance, if there is much figure or color in the over draperies and couch or chair coverings, the bed covering will be plain, else there will be so much figure in the room as to give a sense of restlessness. Or if the hangings and walls are plain, the bed may be dressed more elaborately, or in color. This is probably the reason that the all-white bed spread holds its own against all fads and fancies, and adds the white that is needed to keep the balance in a room of dainty color. At the same time many housekeepers use a white spread chiefly because of the ease with which it may be kept clean, and the little danger of being spoiled in the laundry.

Every type of bed has its beauty best brought out with an appropriate spread. For example, a beautiful walnut bed becomes all the richer in tone because butter yellow poplin, laid over with net, is

A walnut bed becomes richer in tone with a butter yellow spread
used on the bed. For the bedstead of the period type there is quite a tendency to use silk coverings. Tan satin was used in a room done in tan and blue. A mauve taffeta bedspread made an affective contrast in a room with cream enamel furniture, and rose taffeta is always popular for the pink bed room. Silver or gold braid, ecru insertion, silk fringe, and fillet insets, are among the variety of trimmings which may be used.

For the pink and white bedroom, the ever charming cretonne with rosebuds scattered over it is a suggestion much favored, as this is so easily laundered, even without ironing.

For the young girl's room nothing is daintier than the quaintly frilled dotted Swiss. A valance to the white bed and a few simple draperies above are usually draped over a soft color. Organdie is another very dainty and up-to-date bedspread. Ready made ones of this sheer fabric come in such colors as canary, blue, lavender and pink.

A very pretty blue and white bed spread can be chosen also from cretonnes, blocked prints and chintzes. With a cream or polychrome tinted bed of the low typed Italian style, one of the scalloped ready made satin spreads may be used. Often the decorations on period furniture suggest the flower to use in the decoration of the bed room.

Bedsteads with wicker panels look prettiest with a pastel tinted cover that contrasts, such as rose or pale green.

Hand embroidered bedspreads are easily made by women clever with the needle, for numerous designs in colors come already stamped. One attractive one is unbleached muslin with a large effective pattern of birds and garlands to be outlined with dark mercerized cotton.

For the four-poster mahogany bed of Colonial design, a patchwork quilt is considered smart. Blue and white patchwork is ever so charming in a blue and mahogany room. The elaborate designs of patchwork are among the real art-
works bequeathed us by our grandmothers and enthusiastically used by the artistic woman to-day.

Quaint patchwork coverlets are very nice for the children's beds, too, as one can use plenty of gay colors and work out such patterns as Mother Goose and other fairy tales that appeal to the young. Think how fascinating a brownie coverlet would be to some youngster. Just think of having a border of these wee people running around a yellow spread!

**Stencil Borders**

Stenciling is coming into favor again. Good results can be obtained with a one-piece stencil. Suppose it is a grape leaf design: After striking a line to follow around the room, place small amounts of burnt sienna, burnt umber and chrome green on a tin sheet a foot square.

"Use a one-inch fitch for each color and carry a wad of cloth to wipe out surplus color (which will also help the appearance), allowing the ground color to show through. Just moisten the tips of each fitch with turpentine and after picking up a small amount of color, work it well into the brush.

"As green is the predominating color, put the stencil into place and holding the brush at right angles to the wall, give the tips a medium pressure and brush the color in with a rotary motion, instead of the usual pounding.

"Wipe out some of the color with cloth over thumb and then with the stencil still in place use the burnt umber brush at the base of the leaf and on the two lower fan shapes and then the burnt sienna brush on the three outer fan shapes. If too much color shows, wipe it out."
Concerning the Laundry
Basement or First Floor

Here are two points of view to be considered in the planning of the laundry: either it is in almost constant use, in one way or another, and should be easily accessible from the kitchen, also from the living room, and should even overlook the children's playground; or it is used only on stated occasions, when the laundress makes a day at the house, and therefore should be entirely away from the living parts of the house.

For the first set of conditions an enclosed rear porch, or one which is glazed during the cold season, equipped with set tubs, and electric plugs, and with the various laundry conveniences, gives an excellent solution for the problem.

In the house where there are small children, and where the mother prefers to have a little girl to play with and look after the children, rather than one to help with the housekeeping, the porch laundry is a great satisfaction. Here the little things can be washed out, without getting very far from the kitchen, and at the same time keeping an eye on the children in the sand box. The porch need not be very large in order to have room for an electric washer beside the set tubs. In a cold climate the plumbing must be well protected if the tubs are to be set against
the outside wall so as to have good light and air, but it is a very simple matter to bring the water pipes through the house wall, with little danger of freezing. Laundry tubs on a porch should have a cover, either hinged to the wall, or removable, which will convert them into a table when not in other use. A gas plate is easily placed on the porch, set so low that the boiler need not be lifted. An ironing board cabinet may be built into the porch at a convenient place for ironing, with an electric plug, and a bulb to show whether the current is on or not.

In a city house where there is a maid for laundry work or where a laundress generally comes several days a week, and where the clothes are dried inside by artificial heat, the basement laundry is very satisfactory. Quite a complete laundry equipment is shown in the accompanying photos. The washing machine is connected up beside the tubs. One might note that there are three tubs, instead of the usual set of two. A table stands at one end of the tubs, so that the clothes basket may be placed on it and save stooping. While it is a basement laundry, yet the areas about the windows allow them to be of good size, double hung, and opening easily. The heat is supplied through radiation hung on the ceiling. Even the clothes rack is conveniently near.

On the other side of the room is the ironing machine, big enough to take the widest table cloth or bed spread with only a center fold. It is found advisable to change the fold, however, from time to time, using a center fold one time, for a very wide piece, and another time folding it into three parts, leaving the center without a fold. In this way the linen is not so likely to wear and cut on the fold, as it is so apt to do in the course of time, when the fold always comes in the same place. The wide table beside the ironing machine will hold the large pieces which are not to be hung up. Beside it is the ironing board, with overhead cord so that it is not in the way as the electric iron is passed back and forth over the board. The entanglement of the cord is one of the troubles of a poorly placed connecting plug for the iron. The light bulb is also high, and presumably there is a bulb showing whether the power is turned on or off.

The clothes dryer is at one side of the room, shown in this photo, and beside it is the gas plate for the boiler, placed low enough that it is not necessary to lift clothes or water high to get them in the boiler.

There is a wider range in the selection of labor saving equipment for the laundry, perhaps, than for most such devices. This is particularly true of washing machines, which are manufactured on widely varying principles, but which seem, nevertheless, to accomplish their purpose in quite a satisfactory manner. In making the selection it is advisable to
study the principle on which the machine works, familiarizing oneself with several different types; to be sure, not only that one understands the general principle, but that it seems a good way to do the work. There seems to be a certain amount of "temperament" in machinery, or the temperamental individual communicates something of that quality to everything with which she works. It is a good thing for the temperaments to be in harmony, and this is especially true with labor saving devices.

The drain in the laundry floor is a very essential part of the laundry making it easy to be kept in good condition.

Easy access to the outside is one of the advantages of the first floor laundry, especially if the clothes are to be hung outdoors whenever the weather permits, without carrying them up and down the basement stairs.

Five Dollars Will Plant A Border 25 by 2½ Feet
Adeline Thayer Thompson

HAVE five dollars to spend on perennials for my yard," a friend said to me not long ago, "and I am afraid I can't make any sort of a showing with that amount of expenditure; but if it is possible, what varieties would you suggest that I buy, and about how many would I be able to get for five dollars?"

This query, put in so doubtful a manner, together with others I have received along the same line, suggests the possibility that there are individuals actually hesitating to put any money into this invaluable class of plants, because five dollars—or less, perhaps—is deemed too small a sum to procure a satisfactory flower display.

Five dollars! Why, five dollars will stock a border twenty-five feet long by two and one-half feet wide with glowing blossoming perennials! One may buy with such an amount at least forty strong plants all ready, and eager, to perfect a fairy-like showing the first season of planting; plants that indeed seem endowed with magical power, inasmuch as they not only outrival one's dreams in form and coloring, but also that they endure year in and year out, in spite of the severity of winter, awakening to an ever-increasing growth and beauty with the first touch of spring.

While it is possible to purchase forty different varieties of perennials for the amount named, one will attain better results regarding immediate artistic effects and harmonious color showing, if the collection is chosen, say, in only a dozen different varieties comprising three or four plants of the same kind. This plan is suggested as being the most practicable and satisfactory, as it is easily recognized that any flower scheme presenting masses of blended color in a few shades, is far more effective and exquisite than a display owning many different varieties of plants flaunting colors of many, possibly conflicting, tones.

If one desires, however, to procure as many different kinds of hardy plants as one's money can buy and is willing to wait for artistic effects, one may choose the perennials in the forty different varieties (picking off the blossoms as they mature that spoil the harmony of color)
and own plants at the end of two or three years that will be individually large enough to divide into two or three parts as strong and thrifty as the original plant. If this plan is carried out, one would be equipped in the end with plants of a kind to make a fine display, and own, of course perennials in a greater variety than when choosing the smaller group.

The average person, however, is unwilling to wait two or three years for planting results, but rather is impatient to have his dream of riotous blossoms realized at the earliest possible moment after purchasing the plants. And so, returning to the original recommendation, the following dozen varieties of perennials are presented, representing—according to the writer's experience—the most satisfactory and desirable small group. Before listing the plants, one might add, in passing, that the enthusiast choosing this group might easily sow seeds of perennials not included in the list, thereby enjoying the display of the smaller group of plants purchased, and at the same time have maturing scores of small seedlings that at the end of the season may be transplanted to the border to fill in and increase the collection. Perennial seed is inexpensive and the seedlings are as easily raised as are annuals.

There are two fine varieties of hardy plants for the April flower display—the Hepatica, bearing a wealth of blossoms almost before frost is out of the ground, and the Columbine, heavy always with nodding, bell-like flowers charged so heavily with honey that bees and humming birds are in constant attendance. Hepaticas maturing blue or white flowers are advised, and the Columbine chosen in light pink, or pale blue shades; the single varieties also being preferred to the double sorts. In many localities Hepaticas may be procured in the nearby woods.

No collection of perennials is complete without the Peony—that old-fashioned, new-fashioned plant that for so many years has scattered broadcast so much beauty and happiness. The exquisite shell-pink species—Kohinoor—will be found to be an unusually satisfactory and prolific bloomer. This variety, together with that other splendid perennial, the German Iris, Madam Cheareau (a grand, white petaled variety edged with violet), will clothe the flower scheme with loveliness throughout the entire month of May. The Columbine also will continue its flowering well into this month.

For the flower display in June, there are four highly prized hardy plants that one should not be without—the Delphin-
ium (larkspur), holding aloft huge spikes of intense, clear blue flowers; the Pyrethrum, covered with a glory of pink, daisy-like blossoms; the feathery weighted Garden Heliotrope (Valerian), and the flaming Oriental Poppy. We have been over-partial perhaps, some one will think, in selecting for the June display four varieties, but no collection should be without these splendid plants. The Peony and Iris will continue to flower well into June also. The Delphinium and Pyrethrum have a long blossoming season and will carry on their pageant of color well into the month of July. If the stalks of the Delphinium are cut to the ground as soon as they cease flowering, the plants will bloom again in the fall.

The golden-bronze Gaillardia, deep yellow Coreopsis and large white petaled Shasta Daisy, scattering sunshine down the pathway of July and August are two fine varieties. Both of these plants bear flowers in great profusion and will give a beautiful color display until freezing weather actually appears.

The perennial Phlox, Jeanne d'Arc, spreading dense heads of pure white bloom throughout September, completes the list of perennials recommended for the collection.

Regarding the best time to plant perennials: I have found, after repeated trials in fall planting, that spring is the best time by far to set the plants. Fall planted stock does not as a rule become established well enough to withstand the ravages of winter, while perennials set out in the spring seldom suffer from transplanting.

**Financing of Home Building**

In building a home, as in most other things, in so far as you can pay cash, you will be able to save money. That is, of course, the first difficulty, as most people can not pay cash, beyond the amount necessary for the required first payment.

Financing companies usually loan about one-half the value of the home on a first mortgage. The amount beyond the cash payment and that obtained on the first mortgage must be obtained under second mortgage or contract of some kind.

In many cities financing corporations have been organized for the purpose of financing homes beyond the amount of the first mortgage. Through such organizations one can usually borrow about four-fifths of the value of the home.

Suppose you have saved one-fifth of the proposed total cost of the home, or possibly a little more. Most financing organizations require the home builder to put a certain amount of money into the property before they will consider a proposition. Usually they expect the lot to be owned, clear of encumbrance. Perhaps they take it that a family which has already saved enough to buy a lot is a good risk, and will probably pay out on the home. In the meantime they must be shown that the home which is to be built will be a commercial asset. Plans for that home must have been worked out very completely, and specifications cover good grades of materials, and good workmanship. People who have the money with which to build might be permitted to put up a flimsy shack—"built to sell"—if they were able to pass the building inspector and get a permit. But
when people build on borrowed money, the right kind of financing companies want to know that the house is right, before they will loan money with which to build it.

One should be able to pay for all labor promptly, and to buy all materials for cash, thereby getting advantage of the lowest cash prices, along with any discounts which may be given for cash. The financing companies advance the amount necessary to fully complete the building, in order to prevent any liens for either material or labor being put on the house, as in most states such liens take precedence over the mortgages.

In borrowing money you must pay for the privilege of using it, and therefore are interested in getting the lowest rates consistent with good financing methods. A commission is generally charged the borrower for the money loaned. Because commission rates on first mortgages are much less than on second mortgages and on contract for deed, it is usually advis-

able to get as large a first mortgage as possible, thereby reducing the amount of the second mortgage.

In building a home for one's self one can be assured that it is well planned and well built. The little home shown in the
photo is of this type. Having been recently built it has embodied many of the newer ideas in compact planning. Note the relation between different pieces of equipment in the kitchen; the table, sink and cupboard. Also the communication of rooms and ease of access, together with the many closets make this home very complete.

It is not so small as it appears, as there is a good living room, with a Pullman alcove near the kitchen end of the room and also near the fireplace, and there are three bed rooms and a bath room, all on one floor.

Planned on broad lines is the larger home, built for a mild climate, where the requirements in the way of heating are less strict, and where the demand for outside exposure to the living rooms is of the greatest importance if one is to get the most out of living. The living room opens to porches on both sides and has a fireplace between windows at the end of the room. The dining room also opens to porch and pergola on two sides, with the wall between filled with windows.

The entire house is very completely planned, with a maid's room opening from the small hall. The house is well provided with closets, both up stairs and down. On the second floor are three large bed rooms and a sleeping porch, reached from the hall.
The house is quite unusual and very attractive with its clipped gables and unusual dormers.

There is also the United States League of Building and Loan Associations with a nation-wide membership of more than four million members. Since the average size of the loan is about $4,000, and the amount loaned may run as high as 80 per cent of the value, it shows that the building and loan funds are used for houses costing somewhere around $5,000, medium size and small homes.

Sometimes people think that when they buy a house with a small amount of money paid down, and the balance on contract, that they are paying no commission, since they do not see it written in the bill. You may as a matter of fact be paying more for the use of the money than the usual commission. One advantage in building the home yourself is that you may know the quality of the materials which go into the structure, and that it is not "built to sell." Only the reputation of the builder for integrity, and for well built houses, can give you this assurance when the house is built.

Completely Planned Small Homes

French doors open to the porch from the living rooms

Much importance can not be given to the fact that one should know just what is wanted in the home before work of building is begun. Every one knows how costly are the "extras" on a job of building. When the contractor gives an estimate on the new home which is to be built, he may sometimes be of that old-fashioned type of builder who knows what his client will want eventually, and figures on all the things which are likely to be wanted even though they are not shown on the plans. When building was easy this sort of
builders were not unusual; but when competition becomes close, the figures of the estimated cost do not cover anything but what may be required under contract, and everything which is not directly shown on the plans or specified explicitly, is likely to be ruthlessly omitted from the estimate, and if these things are wanted, they are put in as the inevitable "extras." A full understanding as to what will be wanted, and complete plans and specifications covering all these points, will save unnecessary cost in many ways.

In this group of designs are shown compact economical homes of the smaller type. The first is rather unusual in design, and gives great openness to the interior in that hall, living room and dining room all open together. It is of the central hall type of house, with sidelight on either side of the entrance door. French doors open both from the living room and dining room to the porch.

The living room is the full width of the house with windows on three sides and fireplace on the center of the outside wall. Beyond the dining room is a nicely planned breakfast alcove, with a cupboard on the opposite wall.

On the second floor are three chambers and a bath room; one under each gable, and one with windows in the wide front dormer.

The house is roofed on simple lines, with the porch under the main roof. As here built the exterior is covered with shakes, or extra long shingles laid wide to the weather. There is an element of
A cozy cottage set among trees

Colonial in the details of the porch work and entrance. The porch posts are a simple Doric in design, with a Colonial architrave. Brick and cement are used in the steps and floor.

Very homey is the second photo, almost a bungalow in appearance, with its low pitched roof, yet with bed rooms finished on the second floor. The long living room extends across the full width of the house, and the entrance is directly into this room. A hall, from which lead stairs to the second floor, connects the living room with the other rooms. There
is one chamber on the first floor, with sleeping porch opening from it. A toilet is placed beside the kitchen. On the second floor are three bed rooms and bathroom. The finish is of fir, with oak floors for living room, dining room and hall.

Porches at either end of the house give an assurance of comfort through the warm season. The windows are all of the casement type, hinged to swing in.

Native basaltic rock, which is available in many western states, has been used most attractively in connection with the shingles in this bungalow.

This cozy little home is set among the trees and trellised for vines which will eventually fill the space under the high windows of the dining room. There is a basement under the house, equipped in the usual way. There are two chimneys, one on the outside wall, for the fireplace, and one from the kitchen, near the center of the house, which can be built with a flue for the heating plant in case it is not possible to build one centrally.

More compact is the other house plan, with rooms somewhat smaller, yet very good in size. The porch is under the main roof. Living room and dining room communicate nicely, and the screened porch beyond gives an excellent vista from the living room and entrance. It has all been planned very carefully. Steps from the kitchen meet those from the living room on the stair landing, giving access to the second floor. The pantry is roomy, and could be fitted as a breakfast alcove if so desired.

On the second floor are four bed rooms and a bath room, and each bed room has its closet. There is a linen closet in the upper hall and a clothes chute beside it.

The combination of stucco, cobblestones, and shingles has been very well handled to give a pleasing exterior. Awnings at all the windows speak comfort for the warm days.
HERE is a great demand at the present time for what might be called the minimum plan for a livable house. Two sleeping rooms, living room, and kitchen, seem to comprise that minimum plan. The dining room is a part which many people think it is possible to get along without; some even maintaining that they prefer the space devoted to other uses. The Pullman alcove, fitted with seats and table, will generally accommodate four people at a simple meal. The table is of course small, in many such alcoves, but may be made as roomy as desired. At the same time a dining room is a good room to have, as many housekeepers find. It is entirely a matter of individual choice, or, more often, a choice in what can be eliminated with least general disadvantage.

A Seven Room Bungalow.

The first home is a bungalow, wide-spreading and low, six or seven rooms, if the sun parlor is counted, on the ground floor. While a stairway to the attic is shown, no living space is finished under the roof; it is for storage, only.

The entrance is through a vestibule into the living room. The living room, dining room and sun parlor open well together. One of the three bed rooms opens from the living room, and could have an entrance from the porch in case it

Cobblestones and stucco are effectively used

Chas. S. Sedgwick, Architect
should be used as an office or den. Two bed rooms open from the hall beyond the dining room. The bath room is placed between two bed rooms. Many people would sacrifice part of the closet space in order to reach the bath room from a small passage reached from the living or dining room and possibly from the bed rooms. A bath room which is reached through bed rooms becomes of necessity part of a private suite, very convenient when there is another bath room in the house.

Cobblestones and bowlders are used very effectively in the exterior treatment, with flower boxes on the caps of the piers. Stucco is used above the course of the window sills.

**With Trellised Porch.**

The second cottage is also of stucco, but is quite different in aspect. Although it is small in dimensions, it has two bed rooms, and also a fireplace, but it does not have a breakfast alcove, using one end of the living room for dining space. Many people would want another door in the closet which would allow the front bed room to communicate with the bath room without going through the living room. It could still be used for hanging space, although used as a passage way also.

A lattice across the front of the porch

*Screened from the street by the porch lattices*
gives a certain amount of privacy, and the shrubbery is kept trimmed so as not to shut off the view of the street. The entrance is from the side, with the lawn at the front of the house unbroken, entrance being from the paved way to the garage.

**A Simple Cottage.**

The last cottage shown in this group is so simple in construction as to be, for that very reason, most unusual in appearance. With its luxuriant growth of vines it gives the effect of a simple, old-world cottage of the humbler sort, yet more attractive than many even more or less palatial homes. In this cottage there is only one bedroom, and the living room has one of those large closets fitted with a “door bed,” which makes it possible to extend a certain measure of hospitality to a friend. The Pullman alcove is at the end of the hall, convenient to the living room and to the kitchen, with a double window, which may flood the table with sunlight, or give a lovely view to add zest to the breakfast.

While the kitchen is small, it is so carefully planned that the small size is an advantage rather than a drawback in the work of the house. Note the draft cupboard, on an inside wall, the broom closet and refrigerator by the entry.
LILAC

CHILDS

LIVING ROOM

BEDROOM

PASSAGE

DINING ROOM

KITCHEN

SECOND FLOOR

BEDROOM

BATH

BEDROOM

FIRST FLOOR

KITCHEN

DINING ROOM

LIVING ROOM

IVY CROFT

CHARLES SAXBY ELWOOD, ARCHITECT.
The Bungalow and the Patio
What the North May Learn from the South
Virginia Robie

E SOMETIMES think of the bungalow as a product of California and the Middle West, forgetting Florida. Yet the Southern type closely resembles the real bungalow of East Indian origin. Florida is a land of sunshine and abundant foliage, consequently this one story structure of tropical ancestry has a consistent setting.

No style of dwelling needs a background of trees and shrubs more than the bungalow, and none has suffered more for the lack of it. Barren lots in bleak localities are uncongenial surroundings, yet under such conditions are many of these popular houses built. Florida is particularly blessed with a beautiful native growth, and with soil and climate favorable to much tropical vegetation.

The illustrations show variations of the Southern style as developed
in Bradentown, on the west coast, in the vicinity of St. Petersburg and Tampa. Some are winter homes of people from the North; others are occupied all the year. This section of the state is cooled by the Gulf of Mexico, and seldom has the extreme heat of a Northern summer, although the average temperature is higher. The winter climate is ideal.

The Patio Becomes a Garden Room in the House

A Mexican patio proved the inspiration for the Bennett bungalow in Manatee, near Bradenton. With modifications this type could be transplanted to a cooler climate. Difficult of transportation would be the date palms and century plants. Yet a Northern gardener might work out an equally interesting scheme on similar lines. Many vines which reach perfection in February in this semitropical climate, mature in summer in the north, as for instance, wistaria, honeysuckle and trumpet vine.

In oriental and in tropical countries the patio is a fundamental part of the dwelling place. Both on the Atlantic coast and on the Pacific, the patio came to us from old Spain and the country of the Moors. While jealously guarding their women from public gaze, the Moors sought to give them pleasant gardens perfumed with flowers, shaded with palms and cooled with fountains and pools. Now the women are coming to be the keepers of the garden, and the patio becomes their outdoor living room.

In the South and the Southwest we see the patio; also the pergola with its fine architectural or simple details and enchanting color. Such a treatment would...
suit many a Northern home and prove an attractive feature for summer use.

Suggestive of the tropics is the winter bungalow built by a New York man in Florida. So cleverly has the pitch of the low roof been handled that there is no lack of light and air within, yet the wide verandas are cool on the hottest day. A pleasing note of color is shown in the lining of the veranda roof and in the window ledges, which are painted apple green. All window casings are lustrous black. The spacious living room is approached by two doors on the South, which is the street side, and two on the North, which is the river side.

Between the doors are high casements which open in, fastening to the ceiling as windows in sleeping porches sometimes do. The interior finish is Florida pine. A generous fireplace fills part of the west wall. Doors to the living portion of the house lead from the east. Naturally it is a one story plan with all rooms on the ground floor. The kitchen is semi-detached, as is so usual in warm countries, and the dining room, built later, fills a corner of the north veranda. Everything considered, this comfortable dwelling is one of the most practical bungalows it has been the writer's good fortune to enter. Its fine proportions and pleasing lines are recommended to Northern builders planning a summer home.

On quite different lines is the Hadley bungalow, which, with its rather unusual type of recessed dormer and high roof pitch, approximates more nearly the Northern type. A beautiful lawn is one of the charms of this homelike house. Over the chimney grows the brilliant flame flower. This vine, often called by its botanical name, bignonia, shares honors with the bougainvillea, in Florida.

There is a hint of Colonial design in the architectural treatment of many of the Southern homes, which finds a beautiful setting in palms and other tall trees of the Southland. The lawns of velvet green show what may be accomplished with time, skill and expenditure. The interiors are charming, and in many cases much more spacious in appearance than the exterior would indicate.
My illustrations are selected for the many suggestions they offer Northern builders. The bungalow has come to stay. Its days of probation are over. If in our house-designing we can gain inspiration from Southern examples let us be grateful for practical hints. As for picturesque and consistent settings, these may be accomplished with skill, love and labor. In localities where nature is not quite so lavish as in Florida, man must work a little harder. When it comes to beautiful lawns the Northern householder has the advantage. Grass does not take kindly to Florida sands. So, perhaps, in the end the scales about balance. Nature does not intend to do all the work in any locality, although a generous “first aid” to landscape beauty.

As the Decorator Plans
Beatrice W. Hutton

For the amateur who intends to do his own decorating, it will save time and money to plan his work, and work his plan as the professional does.

Planning to move in the near future, people often dash out to a furniture sale and buy a large dining room set or three-piece living room set, only to find out later that they must give up the apartment finally located, or get rid of their furniture because it overwhelms their rooms. The importance of assembling all one’s schemes and knowing just where each piece is to go before buying is readily to be seen.

The professional decorator sees the rooms, or plans of rooms, which he is to decorate, notes the location of each room and what things of the owners are to be kept of the old furnishings. He keeps a large note book with pages for each room. A floor plan is made indicating where the windows and openings are, fireplace and location of base receptacles for lamp wires. Furniture is blocked out in the spaces it is to occupy. A list like the following is made out for each room, to be filled in when decided upon.

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Knowing approximately what may be spent on the entire house or apartment, the proportion for each room is allotted, then an amount for each item in the room may be set down. Allowance must be made for remodeling, decorating and dyeing of the old things which are to be used with the new; for oftentimes the very loveliest of rooms grow from the in-
spiration of some one beautiful thing or
group of things; often pieces the client
has wisely decided to build around for his
decorative scheme.

As we are concerned only with the
business side of the decorator in this
article, we will leave the subject of color
schemes and periods to many fine books
on the subject.

After all materials are decided upon, a
sample of each is pinned or pasted on its
own page in the note book, and where it
is to be used is written underneath. Each
room would probably have samples of:
Wall paper or paint, carpet, curtain ma-
terial, bed covering, chair and couch up-
holstery, lamp shade material, cushion
and sample of paint for furniture, also
trimmings, fringe, gimp and ribbon.

Prints of furniture, sketches and photo-
graphs of unusual drapery arrangements,
are most helpful and should be kept in
the note book. If you are making your
own curtains you will need to make a
note of the size of windows and openings
in each room. It may be years before
you carry out all your decorating plans:
perhaps you intend to go slowly, but it
will be worth while to plan out your
rooms as you wish them to be eventually.
In addition to the satisfaction in the
rooms themselves, will come the joy in
the creative work, the planning and carry-
ing to completion of satisfying rooms.

Colors for the Walls

The question of color for the walls of
our rooms is one that deserves far more
attention than it receives.

William Morris always maintained
that there were not many tints suitable,
and gave them as followfs:
(1) A solid red, not very deep, but
best described as a full pink, and toned
both with yellow and blue — a very
fine color if you can hit it; (2) a light
orangy pink, to be used rather sparingly;
(3) a pale golden tint, that is, a yellowish
brown—a very difficult color to get;
(4) a color between these last two — call
it pale copper color; (5) tints of green,
from pure and pale to deepish and gray;
(6) tints of pure pale blue, from a green-
ish one to gray, ultramarine color—hard
to use because so full of color, but in-
comparable when right.

Considerable attention has been given
by alienists and students of psychology
in the past few years to the mental effects
produced in a greater or less degree by
the colors with which the walls of rooms
are decorated. There is good reason for
believing that these have a marked effect
on some persons, and careful considera-
tion should be given in the choice of col-
ors and patterns in wall-coverings to se-
lect those least offensive to the sensitive.

One authority gives the following gen-
eral rules on the subject:
The most restful wall-paper is of one
tint, without any pattern. This is good
for nervous people, and is especially to
be recommended for the sick-room,
where large figures are particularly an-
noying.

Red is supposed to be rather bad for
nerves, but it is warm and cozy, espe-
cially if patternless.
Light browns and drabs depress sensitive people, while, on the other hand, a rich, clear brown has been found to have a quiet, soothing effect.

Green is fine for the eyes, and may be recommended for writing-rooms and for libraries. Exhilaration and self-confidence are produced by a clear but not too vivid yellow, while violet and lavender depress the spirit.

All of the pale blues are delightful to the eye. A little white is necessary, but too much white is glaring and comfortless. A soft color is usually better.

A good hue for walls where prints or photographs are to be hung is a rich yellow brown, somewhat on a leather color. Lustre to the black of the print or the tone of the photograph is thus imparted.

It has been the experience of many women that a paper that looks delightful in the sample books of the decorator seems to sprawl when placed on the walls of the room. It is, therefore, well to choose papers of a small design for most rooms, for it will be found that the furniture, hangings, pictures and other belongings will give sufficient variety to a room without the large patterning that tends to break up all its large spaces.

Friezes of landscapes and floral form cannot be indiscriminately used with any style. A side-wall that is of a neutral design can be made especially interesting by the use of this form of frieze, and it can be introduced panel-like in certain sections. It is never necessary that the frieze go entirely around the wall.
A Colonial Bungalow.

E. B.—We are building a small colonial bungalow and would like your advice as to a color scheme. We are painting the exterior white with a little red brick work on the porch. There are to be trellises on each side of the front windows. I would like them white but it seems to me there ought to be a contrast between them and the white of the walls. Do you think green trellises would be more effective?

It seems unfortunate that the living room, dining alcove and kitchen should have northern exposures, but we did not care to sacrifice the fine view to the north by reversing the plan. I thought the rooms need not be gloomy if we choose the right treatment. The wood-trim throughout is to be birch. We thought of having it finished in ivory enamel with brown mahogany stain for doors in the living room and two chambers. Would that be too formal for so small a house with no extensive vistas? For the living room we have several pieces of mahogany furniture—black leather—and a Wilton rug in soft green, cream and black. Will this rug harmonize with gray paper and rose curtains? What suggestions have you for paper and drapes?

The southeast chamber will have old-fashioned dark walnut furniture and the southwest chamber old ivory furniture. What color scheme do you suggest for walls and drapes?

The dining alcove will need to be quite cheerful. We were thinking of finishing cupboard, table and seats in ivory enamel. Will colonial yellow be suitable for the walls? What kind of drapes would you suggest? For the kitchen, we were thinking of gloss-white enamel for wood-trim and painted walls. What color would you suggest?

There will be two-toned shades for all the windows. What colors would be right for outside and inside?

As a subscriber of your magazine, I look forward to its coming each month and have received many helpful suggestions from it.

Ans.—First, as to painting the trellises on the exterior, we think white the better choice. When the vines cover them, the white trellis will be the prettier.

In regard to the shades, we wish you had mentioned the color of the roof. If green, then green shades with white or cream inside. If red, then a reddish brown outside shade and cream inside.

With the north and east facing of your living rooms, we would have the deep ivory woodwork. The birch doors will take a lovely brown mahogany stain. We do not think this would be too formal. In fact, all ivory demands a rather larger and more formal house. If you had made your house with a hooded front door, and a larger porch on the north and French doors opening to the porch (the French doors done in the ivory finish) the effect would have been charming.

We are sorry about the black leather
furniture. It does not chime with ivory woodwork. Could you not sell it, and get natural wicker, upholstered heavy cretonne, much dark green and big rose-red hibiscus flowers? Then the green rug would be kept in countenance, yet the room would not be made gloomy. Do the wall in a soft warm gray, and have side curtains of the same cretonne, on the outer sides of the group of windows, only. Recently, we saw a bungalow with ivory finished woodwork, and the living room treated in this way with one or two pieces—a table, a desk in old mahogany, and the effect was very pleasing.

The little breakfast nook can add much, if you paint the cupboards and table ivory, the walls a pumpkin yellow, have a small plain green rug on the floor and gay curtains at the windows, bright colored parrots and flowers on green branches. The two rooms will then go together and be very cheery and livable, in spite of the north facing. We would like yellow walls for the kitchen. For the southeast chamber with old walnut furniture, soft gray walls and ruffled white muslin curtains. For the southwest chamber and ivory furniture, use soft dull blue wall and curtains of blue voile or Sunfast.

Dark Oak Woodwork.

A. W. R.—Have just recently bought a new home and ask your suggestions.

Woodwork is dark-oak all over house. Would it be practical to remove stain, if so please advise how you would do it, and what you would substitute for it.

Ceiling in living room (14x22 ft.) is beamed and most of windows are casement. The lace net on them is to be left—shirred at top and bottom, but it does not have a finished appearance. Can you suggest a better arrangement? The floors are oak and have been waxed. We want to tint or paper the walls in living and dining rooms, and would be pleased to have you offer suggestions in the way of color scheme, selection of furniture, rugs, etc. I fancy I would like it worked out in the tans or grays.

Ans.—In regard to the dark stained woodwork, it is always difficult to change. Our advice is to let the columns of the

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opening into dining room, and the doors, remain in the oak finish. Also perhaps the sash of the windows. Also any wood part of the fireplace mantel. This leaves only the door and window casings, which we would paint deep ivory, putting on four coats to cover the stain. The ceiling beams also would be left in the dark oak. Or, you can leave the living room as it is, making the dining room only, ivory, and this perhaps will be the better plan. The living room can have very sunshiny treatment in curtains and furnishings. We would paper it in a small figured tapestry paper, the darker shades of tan on a soft creamy tan ground, with ivory tint on the ceiling between the beams. Then at the windows use a casement cloth for side draperies, a figured material, rose and light green on a gold colored ground, with sunglow gauze against the panes. These are guaranteed fast colors.

The furniture must be either oak or walnut, but it need not be heavy. A davenport with an oak frame and antique cane seat and back, with loose cushions of old gold velour, would be charming. Use table lamp with a gold shade. The rug can be in soft leaf browns, creams with a little rose. Have a large screen to stand in the colonnade opening, covered with the material of the window draperies, or a Japanese screen in black and gold. Then make the dining room charming with ivory woodwork, except the doors, walnut furniture, a rug in rich old blues, plain, deep ivory grass cloth on the wall, and curtains for the casement windows of Della Robbia chintz, the rich Della Robbia blues and a little soft orange and dull green on an ivory ground. No other curtains. You will have no trouble in opening the casements, if you hang the curtains on a rod running across both windows, with the curtains well back on the window casings.

Over your buffet, if possible, hang a Della Robbia, in low relief. The rich detail of the glazed coloring of the fruits and flowers, against the ivory grass cloth of the wall, will be a striking and artistic feature of the room.

An Unusual Interior.

F. R. H.—On the back of this letter is a sketch of the five-room bungalow which we are building. The trim in living room and dining room is to be red gum, Circassian walnut finish. Please give me suggestions for colors of wall papers, enamel, and draperies for each room, including styles and kind of furniture to buy, as I have to buy all new furniture.

Ans.—We think the all Circassian trim will be very pretty in living and dining room, with ivory enamel in the bedrooms and bath, and with white or light gray in kitchen and breakfast room. Circassian walnut is quite gray in tone. We should make the sash of the windows and French doors white, and the bedroom side of the doors opening from living room to bedroom, like the trim of the bedroom. As to the walls, on the living room, use an all-over, small tapestry design, two tones of warm gray, on an ivory ground. In dining room, put a gray grass cloth above the molding, and in the panel spaces below, use a gay Chinese design in red and black, with a gray rug and draperies at the windows, on the outsides only of the group, with glass curtains of plain white net. This will make a lovely east room, with the gray of the Circassian wood trim. Get the same gray rug for the living room, with rose draperies. Have the frame of the davenport in a walnut, and upholster in deep rose, with a big stuffed easy chair in brocaded velvet—with some red, blue and dull green, on an elephant gray ground. Have the library table in the walnut, but get a couple of fire-side chairs in dark gray wicker, and upholster in a chintz, repeating the colors of the brocade chair, or else a black instead of a gray ground. Paint the table and benches in breakfast room a Chinese blue with green and yellow stripes, and use cushions on the seats of one of the gay striped materials, with white muslin curtains having three ruffles across the ends, the ruffles bound with bright blue braid and a blue and yellow rag rug on the floor.
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Most people overestimate the cost of Oak Flooring. They associate it with homes of wealth, where it is the rule.

You will be surprised to learn, perhaps, that Oak Flooring for a room fourteen feet wide and fourteen feet long can now be bought in most localities for $20 to $30. This does not include labor cost for laying and finishing.

So, if you are building, find out what other flooring would cost, plus carpets. And what Oak Flooring would cost, plus rugs. Then bear in mind that Oak gives you the dustless, durable, sanitary, easy-to-keep-clean flooring. And that it increases selling and renting values 25% or more.

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OAK FLOORING MERCHANT
of the U. S.
1042 Ashland Block, Chicago, Ill.
O you remember the time when you were a youngster and every spring, about the last of March or the first of April, a succession of doses of sulphur and molasses was the order of the day? And do you remember how you hated to go to school? All the boys played hookey and the girls sat and pouted; mother called it "spring fever."

The same conditions today give the housewife an additional motive for urging her family to deprive themselves of some choice bits during the Lenten season. Winter, with its round of steaks and chops and roasts is past. Folks are "tired" of the "same old things."

A period of "something different" to eat is the solution. At the end of such a time, the old things will be like new. One will be tided over that spring fever period when one goes to the table and finds that nothing looks good enough to eat.

The merits of fish as a food, especially for the summer season, is being urged upon the housewife, irrespective of the fact that it is less costly than meat. As a substitute for meat; cheese, peas, and beans, also supply protein.

Fish meat, with few exceptions is less stimulating and nourishing than other meat, but it is usually easier to digest. Fatty fishes, as salmon and mackerel are exception to this rule.

Although fish are cleaned and dressed at the market when ordered, they usually need an additional cleaning. This is done simply by using a knife and working from tail to head and removing any scales that have not been taken off. The fish should be wiped well inside and out with a cloth wrung out of cold water.

To be prepared so it will be most delicious, fish should be both skinned and boned. To skin, completely remove fins along the back and cut off a narrow strip of skin the full length of the back. Then, loosen with the fingers the skin from the bony part of the gills. Once started, thus, it may easily be removed if fish is fresh. To bone a fish begin at the tail and run a sharp knife close to the back bone. Follow the bone with the knife, making as clean a cut as possible. This removes the flesh from one side. The other side may be done the same way. Small bones remaining must be picked out with the fingers.

Until a few years ago, preference in the choice of fish was given to salmon, white fish, trout and a few others. Now there is a growing importance attached to many other kinds of fish such as cod, haddock, halibut, flounder, turbot, smelts, bluefish, mackerel, shad, lobster, shrimp, crabs, frogs and terrapins. Of these, shad, lobster, shrimp and crabs, when combined with celery, lettuce, pimentos, nuts and salad dressing, make delicious salads.
KEITH'S MAGAZINE

189

SELECT CALIFORNIA BUNGALOWS
New 64-page, up-to-date book of bungalows; size 73-1/4x10-1/4, on heavy half-tone paper with heavy flexible covers. Shows floor plans and exteriors of bungalows of 3 to 11 rooms in the various styles of architecture, such as Colonial, Swiss, Italian, Spanish, etc. Not the designs of any one firm, but selected from the thousands of beautiful bungalows of California. Teeming with suggestions for architects, contractors and prospective home-builders. Working plans and specifications for any of the bungalows, at rea-so-nable prices. "GET IT ALL IN ONE BOOK." Price $2.00 postpaid anywhere. No stamps, please.

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is respected and selected by all classes of refrigerator users for the stent-ling qualities that make it the aristocrat of refrigerators—the embodiment of highest manufacturing ideals.

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FOOD SAFETY" tells proper way to arrange food in any refrigerator and describes specific advan-tages of the HERRICK. Send at once or clip this memo as a reminder to write at the first opportunity.

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HERRICK REFRIGERATOR COMPANY
804 River Street, Waterloo, Iowa

FOOD SAFETY" tells proper way to arrange food in any refrigerator and describes specific advan-tages of the HERRICK. Send at once or clip this memo as a reminder to write at the first opportunity.
In boiling fish, it is well to wrap the pieces in cheesecloth. Otherwise they will cook all to pieces. Fish should be boiled in salt water to cover. If lemon juice or vinegar is added the fish will keep its white color.

Cod, mackerel, haddock and bluefish are usually split in two and broiled whole. The pieces should be wiped as dry as possible, sprinkled with salt and pepper and placed on a broiler. They should be turned frequently.

In baking fish, it is well to put a piece of cloth on the bottom of the dripping pan so the fish may be removed to the service plate intact. Fried fish should be seasoned and rolled in egg and bread crumbs. It may be fried in a small or large amount of fat.

**Stuffed Trout**

Take a three-pound trout, wash and bone it. Sprinkle with salt and press into shape. Make a stuffing with bread crumbs. Soak them in milk and add seasonings and beaten egg. Fill the fish with this and fasten together with skewers or toothpicks. Make four or five double incisions on the fish and insert strips of fat bacon. Season with salt and pepper and dredge with flour. Bake about one hour.

**Fish Souffle**

Bring to a boil a mixture of one cup of milk, one cup of water, one tablespoon of butter, one-half tablespoon of sugar and one teaspoon of salt. Add one-half cup of cornmeal, stirring all the while. Cook five minutes and allow to cool. When partly cooled, add one-half cup of cold cooked minced fish, the beaten yolks of two eggs and one tablespoon of baking powder. Fold this mixture into the stiffly beaten whites of two eggs. Transfer carefully into a greased baking pan and bake in a moderate oven until an inserted knife comes out clean. Serve immediately.

**Halibut a la Rarebit**

Sprinkle small slices of halibut but salt, pepper and flour. Brush over with butter and add a little lemon juice. Place in a dripping pan and bake until done. Remove to a platter and pour over them Welsh Rarebit.

**Sauces—Drawn Butter**

Melt one-sixth cup of butter and add to it three tablespoons of flour, salt and pepper. Pour on gradually one and one-half cups of hot water. Add one-sixth more cup of butter, in small pieces. This is to be served with boiled or baked fish.

**Shrimp Sauce**

To Drawn Butter Sauce, add one egg yolk and one-half can of shrimps, cleaned and cut in pieces.

**Sauce Italian**

Cook in butter for five minutes two tablespoons each of chopped onion, carrot, lean raw ham, 12 peppercorns and two cloves. Add two and one-half tablespoons of flour, one cup of brown stock, one and one-fourth cups of diluted vinegar. Strain and reheat. After pouring around the fish, add finely chopped parsley.

**Maitre d' Hotel Butter**

Put one-fourth cup of butter in a bowl and work with a wooden spoon until creamy. Add one-half teaspoon salt, one-third teaspoon pepper and one-half teaspoon of finely chopped parsley. Add three-fourths tablespoon of lemon juice very slowly.

**Tartar Sauce**

Mix together one tablespoon vinegar, one teaspoon lemon juice, one-fourth teaspoon salt and one tablespoon Worcester-shire Sauce in a small bowl and heat over hot water. Brown one-third cup of butter in an omelet pan and strain into the first mixture.

**Hollandaise Sauce**

Put one-half cup of butter in a bowl, cover with water and wash with a spoon. Put one-third of the butter in a sauce pan with the yolks of two eggs and one tablespoon of lemon juice. Stir over boiling water until butter is melted. Add one-third more of butter and stir as it melts. Add the last third and do likewise. Add one-third cup of boiling water, cook one minute and then season with salt and paprika. If mixture curdles, add two tablespoons of thick cream.
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Economic Cost of Housework

HEN a housewife who has always been accustomed to doing her own housework without paid assistance feels the need or finds the opportunity of taking a real vacation, putting the household into the hands of some one else, even for a short time, she realizes the commercial value of her own time. She is apt to be appalled at the price which she must pay even for very mediocre assistance. The time has passed when the housewife says, "You know, my time is not worth anything."

The cost of washing dishes, for instance, during a year's time, mounts up to quite a tidy sum. Here are some figures which have been worked out.

By careful test and observation it has been ascertained that 40 minutes is the average time required for washing the dishes. This is equivalent to having one person work steadily, eight hours a day, seven days a week, for three months out of the year.

Employ a servant to do all this, and at this rate, the 800 hours of dish washing by a servant will cost $200 during the year. A pretty price for a distasteful job.

What compensation is offered to make such work attractive? It is part of the home maker's job. Every job has its drudgery. Is dish washing necessarily so distasteful a job, or do we make it so by what we think and say about it?

Training for Home Making.

The girl who is intending to become a teacher or a stenographer never questions the necessity of training to prepare her for the work. It is only the prospective homemaker who thinks she can make a success of her career in her chosen line without especial preparation. According to Miss Mildred Weigley, Director of Home Economics at the University of Minnesota, "The homemaker's job is one of the most complicated and highly skilled occupations in the world. The job requires much longer and more skilled training than the average trade in which either girls or men engage.

In reality she is undertaking either few or many of some 1,300 different kinds of work which constitutes the homemaker's job, as tabulated from some 500 replies to a questionnaire as to work done by homemakers throughout the state of Minnesota.

Every girl should acquire some training for homemaking, either in high school or in college. That does not mean that every girl should specialize in home economics training, but it should be an indispensable part of her training, just as much as mathematics and history. The time is coming when every girl will doubtless have an opportunity to get some kind of professional training in home economics, either in school or through extension courses.
RINGING into the rooms of your home the warm, sunny cheer that plays upon its outer walls is largely a matter of the interior finish you choose. Luxeberry Enamel brings the sunlight into dull corners and brightens the whole interior of the house. It makes every room attractive with the beauty of its pure white, its softening tints, and its velvety lustre. Luxeberry Enamel is smooth and lustrous without having a hard glare. It is easy to apply. It covers well. It is opaque and hides the old surface. Freshens old woodwork; it enhances and preserves the beauty of your new home. Make your rooms bright, cheery, inspiring with Luxeberry Enamel Enamels — Stains DETROIT WALKERVILLE, ONTARIO
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Makers of Snow White Steel Medicine Cabinets
T hasn't been so many years since people generally were quite indifferent on the subject of sewage disposal. If a connection to the city sewer was not available, they proceeded to dispose of waste matter in the most convenient way without giving much further thought to the matter.

But as Boards of Health became more active, as students of sanitation applied themselves more vigorously, and as knowledge has increased, many different solutions to the problem have been offered.

Of these none, perhaps, is better for small installations than the double compartment septic tank system. One of these, if properly constructed, leaves little to be desired, for it first liquefies all sewage and then further reduces it to pure water and harmless gases.

The principle is simple. It is well known that organic matter will disappear under proper conditions. In small quantities it will disappear when placed in soil or in water. This waste material is attacked by bacteria, or very small forms of plants, that grow in great abundance in the soil and in water. They use the organic matter as food, obtaining from it what is needed for their growth, and the energy which is needed for their life processes. Two groups of bacteria aid in the decomposition, the second group using as food the by-products or substances produced by the first. By the continued action of these bacteria, the organic matter is gradually changed to more and more simple forms; finally to water and such substances as carbon dioxide, sulphates, nitrates, and phosphates, which are used by green plants as food.

The first part of the decomposing process is caused by organisms that grow away from the air, while the remainder of the work is done by organisms that demand a large amount of air. It is thus found convenient, under practical conditions, to provide a tank in which the sewage remains for a time away from the air, and then to allow the last step in the process to take place in the soil where there is abundance of air.

With the septic tank system both the liquids and solids from the house flow through a tight line of sewer tile to the first septic compartment, where they are immediately attacked by anaerobic bacteria. The size of the compartment or liquefying tank, as it is usually called.
may be arrived at by figuring an average of forty gallons daily for each person, and it should hold a twenty-four hour supply. This allows sufficient time for the bacteria to completely liquefy all the raw sewage. The tank should not be made in any suggested shape, but should be long and deep in proportion to its width. It is built of a rich concrete mixture. Air and light must be excluded as far as possible, for the bacteria thrive only in the absence of these elements.

As a new supply enters the tank, it replaces an equal amount which overflows into a retaining or syphon tank. This holds an eight hours supply and its contents are automatically discharged at proper intervals by a syphon which is placed in the tank.

The second compartment or syphon tank is merely a storage tank from which the liquid can be applied in intermittent doses so that the soil will not become waterlogged. The baffleboard shown in the section is so placed to prevent scum from the top passing into the second compartment. Communication by means of a pipe extending six or eight inches below the surface of the water would serve the same purpose.

Double and single drainage fields

It is best to have two drainage fields so that the ground will not become soggy, although one will ordinarily do the work quite satisfactorily.

When a grease trap is installed, it is placed between the kitchen sink and the liquefying tank. Boiling water is best to clean the pipes with in this system, for it clears them out and is cool enough not to kill the bacteria when it reaches them.

Every one has noticed that if waste water from the kitchen is thrown on the ground in the same spot from day to day,
the grass will soon die and the soil becomes waterlogged and with unpleasant odor. This is due to the fact that the soil is kept saturated with water and no air is present to favor the growth of bacteria, without which the organic matter can not be completely decomposed.

This is the reason for the second compartment or syphon tank, which controls the discharge of the water, limiting it to periods of from 8 to 24 hours before another quantity is applied, so that the water will have a chance to leach away, and the air be drawn in, giving the bacteria an opportunity to work. The soil will thus remain in such condition that the process can continue in it indefinitely, grass or other vegetation will grow luxuriantly and no objectionable features will be found.

The tank itself may be located close to the house since it is completely enclosed and set well below the surface of the ground. In case it is placed 50 feet or more from the house it is advisable to have the waste from the kitchen pass through a grease trap, to prevent the possibility of grease stopping up the long pipes, especially in cold weather. If the tank is placed near the house the grease trap will not be necessary.

The liquefying process has now been completed but purification is yet to be accomplished. The syphon discharges into a line of sewer tile with tight joints which leads to a drainage field of ordinary drain tile. The entire area is equally supplied and a constant dribbling into the upper end of the drainage system is prevented. The field is laid from one to two feet under the surface of the ground, with just enough fall to allow all parts to receive an equal amount of liquid. Its capacity should at least equal that of the syphon tank. An opening of less than an inch should be left between the joints.

Here in the upper layers of the earth, the liquid is attacked by aerobic bacteria as it escapes through the joints. These thrive best when kept in the presence of air, so it is important that plenty of sand, gravel or cinders be placed around the tile in case the ground does not happen...
How This House Was Heated

Fresh, wholesome air is essential to the successful and healthful heating of any home. The moment your home becomes permeated with air contaminated by fire gases and poisons, that moment does your heating plant cease to serve and begins to destroy.

Any home can be comfortably heated, yet amply supplied with fresh, pure air, gently heated to the proper temperature by the use of the "FARQUAR" SANITARY HEATING SYSTEM

Four Facts which make the FarQuar System Distinctive.

- a one-piece electrically welded steel fire-box which positively prevents the escape of gases or the contamination of the warmed air.
- a storage fire-box with large grate area, insuring slow combustion, hence full efficiency of fuel.
- an automatic control of which the actuating member is the fire-box itself, thus giving accurate regulation and absolute control of fire in all kinds of weather.
- a vent and return system which insures a generous supply of gently warmed, pure, fresh air moving at slow velocity, instead of a hot blast of superheated air.

"The Science of House Heating"—an attractive booklet for home owners, tells many interesting facts about healthful heating and ventilating. Write for a copy.

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804 Farquar Bldg., Wilmington, Ohio.

THE STORY TOLD BY THE OWNER

John B. Sokup, Cincinnati, Ohio.

Here's a letter Mr. Sokup wrote in 1909.

"The FarQuar Steel Self-Regulating Furnace fully meets every requirement. The self-regulating device never fails to operate. My home is comfortable at all times. I fully believe it has saved me many dollars in doctor and coal bills. "The FarQuar' certainly does all that you claim for it."

—then in July, 1921, 12 years later, he wrote this letter.

"The FarQuar Furnace installed fifteen years ago has given entire satisfaction. For the first eight years we used Coal and for the last seven years have used Gas. It is economical with either fuel. We have never found it necessary to make any repairs since the furnace was installed and it is in perfect condition today. It surely is a pleasure to recommend an article that has given such entire satisfaction."

How to Save $250 On Your Home

Choose Stucco—Stucco on Metal Lath, back plastered, omitting wood sheathing. You will thus save about $250 on the average home and use a type of construction recommended by the U. S. Bureau of Standards.

Kno-Burn METAL LATH

"The Steel Heart of Plaster"

not only provides a crack preventing base for exterior stucco and interior plaster but makes your home fire-resisting.

The economy and beauty of this construction will interest you. Let us send you our attractive booklet "Home Building" free of charge.

NORTH WESTERN EXPANDED METAL COMPANY
1265 OLD COLONY BLDG., CHICAGO
Building Against Fire

NOTWITHSTANDING the great lack of housing at this time, yet the buildings which we have continue to go up in smoke at an appalling rate; and why? Because we permit it. As we are discovering about so many things, the cause goes back to the psychology of the thing. Fires will continue so long as we think they are a "necessary evil," and do nothing about it. When once the majority of people,—the mass-thinking, so to speak, realize that one can build against many of the fire hazards, and thereby prevent the majority of such fires, then the American fire loss per capita will fall to the comparatively small rate usual in foreign cities.

While we are congratulating ourselves on the reduction of naval armament people generally do not realize how close a second we have in the unnecessary cost of fire. This fire cost is in three lines: first, the fire wastage itself; second, the budget for fire fighting organization and equipment; and third, the cost of insurance premiums on property where fires do not occur.

No amount of forethought can ever protect us against personal carelessness and mistake. Doubtless that will always be with us. But if a fire, once started by any mischance, could be confined to the place where it started, little damage would be done. This is emphasized by the report showing that in many periods the fire loss in the contents is equal to, or greater than, the loss in the buildings.

If a fire originates inside the house it is likely to start in the basement, or else in the kitchen. If it is communicated from the outside it generally comes either through the windows or the roof. These conditions give the clues for fire safe building.

The Floor.

It seems only reasonable that a certain amount of fire protection be given to the main living rooms of a home by a fire resisting floor between them and the heating plant, and possible fire hazards which may accumulate in the basement of a house. This may be accomplished in varying degrees of efficiency by: 1st, ceiling the under sides of the floor joist with
THEY give strength and permanence with attractiveness. They make tight, comfortable building that saves in painting and insurance. You can't burn AMBLER ASBESTOS BUILDING PRODUCTS because they are composed of "unburnable" materials—long-fibre asbestos and Portland cement—rolled out with pressure of 3,000 lbs. to the square foot into convenient sizes and lengths for both interior and exterior work. Permanent colors made in the body of the material. No warping or cracking. Can be worked with ordinary tools.

Investigate Ambler Linabestos Wallboard for every interior lining use—partitions, wainscoting, hallways, libraries and game rooms, attics, bathrooms, kitchens, etc. Attractive buff color. Made 48x48, and 48x96, to fit standard joists.

For exterior use—half-timbering, paneling, fire-doors, trim—and for interior use where unusual strength is required, call for Ambler Asbestos Building Lumber.

For a snug-fitting, attractive, thoroughly fireproof roof, use Ambler Asbestos Shingles in the American, French, or Honeycomb style.

You may have full information and specimens without obligating yourself.

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metal lath and plastering with cement plaster, which will give a slight protection; 2nd, by covering the top of the floor joist with metal lath and pouring 2 inches of concrete over this, giving a reinforced concrete floor; or 3rd, steel joist may be used for the first floor, with metal lath and concrete over, giving a real fire protection. With the concrete under floor, wood strips are laid in the concrete for nailing the upper floor, as so many people prefer hard wood finished floors. There are, however, composition floors which are laid over concrete, finished and waxed after the manner of hard wood floors, which seem to give excellent satisfaction.

Steel joist must not be confused with the heavier I-beams, used in heavy construction. These light steel sections weigh little, if any more, we are told, than wood joist, and tests show that they are many times stronger. Where the span is wide there are other advantages to be gotten in the use of steel joist in addition to the fire resisting qualities. Seven inch steel joist may take the place of ten inch wood timbers. It is claimed that a floor constructed with steel joist, metal lath and a thin layer of concrete will not add over one per cent to the total cost of a house. According to this, for a house costing $10,000, an additional expense of $100 would build the first floor of steel joist, metal lath and a thin layer of concrete forming the under floor.

Stairs.

Open stairways from basement to roof are another fire hazard, which may be reduced by metal lath and cement plaster on all enclosing walls, and under the run of each flight of stairs.

Roof.

Fire hazard from the outside very often comes through the roof, and there are many fire resisting roofing materials. There are also fire resisting paints which give a certain amount of protection if a wood roof is used. Surrounding conditions must be taken into consideration in deciding on roofing materials.
This illustration shows Home of Beauty No. 102, built by Mr. J. C. Breckon at Denver, Colorado. Mr. Breckon says: "The house has caused much favorable comment. I consider it an extremely artistic little house." The interior is just as distinctive as the exterior.

**Substantial Homes**

More and more home-builders are coming to realize that the Face Brick home gives them the utmost of utility, strength and beauty, at the greatest ultimate economy.

Whether your home is to be large or small you will be interested in the many advantages Face Brick offers you.

Face Brick, with its wide range of color tones and textures, has almost limitless artistic possibilities. Through durability and fire safety, and by reducing repairs, depreciation, insurance rates and fuel costs to a minimum, it gives you, in the long run, the cheapest house you can build.

You will find a full discussion of these matters in "The Story of Brick," an artistic booklet with numerous illustrations and useful building information. Sent free on request.

"Face Brick Bungalow and Small House Plans" are issued in four booklets, showing 3 to 4-room houses, 5-room houses, 6-room houses, and 7 to 8-room houses, in all ninety-two, each reversible with a different exterior design. These designs are unusual and distinctive, combined with convenient interiors and economical construction. The entire set for one dollar. Any one of the booklets, 25 cents, preferably in stamps.

We have the complete working drawings, specifications and masonry quantity estimates at nominal prices. Select from the booklets the designs you like best and order the plans, even if you are not going to build now, for their study will be not only interesting and instructive, but helpful in formulating your future plans.

You may want "The Home of Beauty," fifty designs, mostly two stories, representing a wide variety of architectural styles and floor plans. Sent for 50 cents in stamps. We also distribute complete working drawings, specifications and quantity estimates for these houses at nominal prices. Address, The American Face Brick Association, 1124 Westminster Building, Chicago, Ill.
Vacation Homes in the National Forests

It may not be generally known that leases for the use of 5 acres, or less, of national forest land, for summer homes, or other recreational purposes, may be obtained from the Forest Service. These permits, under usual conditions, run for a period not exceeding thirty years. Certain responsibilities as to the care of the land are laid down, and a fee generally not to exceed $5 per year puts the lease on a business basis.

Here is an opportunity for those who want to spend a vacation in the woods. The coming of the automobile into such general use permits vacation trips without much greater expense than the long rides which the family would take during the warm season if each trip returned to the starting place. Put the mileage of those long trips together, it would be greater than the long trip to the vacation grounds.

Lumber and Romance.

"No brilliant imagination is required to conjure up the romance of building," says one of our progressive Lumber Exchanges. "From the cradle to the grave, every day of man's existence depends almost as much upon lumber in some form or other, as on air or water or food."

"Ask the average person what a lumber yard is, and he will tell you it is a place where they keep boards, and scantling; shingles, and posts and lath; that this lumber business is a very prosaic, matter-of-fact thing, that has no glamour of romance, as some businesses have."

* * * "Look around you, anywhere in civilization, and see how far you can get away from that same dull, plodding lumberman." "He makes possible every shelter that the ingenuity of man has devised. Every angle and phase of life depends directly upon some lumberman."

While this is true of ordinary lumber and dimension timbers, to a much greater extent is it true of the finer grained, harder woods, which must grow through many generations, in some cases, before they are ready for the hand of the craftsman. Every kind of wood has its own life story, often fascinating in detail, plainly written for those who know how to read them, but for the most part we all pass them by with the merest notice; just as the unlettered man passes by the notices which give the information for which he is inquiring. Hence we do not appreciate choice woods in our homes. They have no inner meaning to us, but are only a superficial surface, pleasing or otherwise, as the case may be.
Why MAPLE outwears STONE

Every shoe in the thousands that strike a stone sill, grinds off its toll of fine particles in an unchanging friction. But Maple builds up its own resistance to wear, because each passing foot increases the polish on this hard-fibred, tight-grained wood, making it smoother and smoother.

That is why Maple surpasses all other woods and all other materials for flooring. Because of its individual characteristics, architects specify and users adopt this wood for every home, office, school, church, apartment, public or industrial building.

Wherever wear is essential or beauty desired—floor with Maple. And to be sure of the grade and quality you should have, use flooring produced according to the rigid inspection standards of the Maple Flooring Manufacturers Association.

Thus you get the flooring made from the climate-hardened, slow-growth Maple of Michigan and Wisconsin—the source of the world's finest Maple for floors.

Since Maple is graded primarily by appearance, you can get a serviceable Maple floor which fits any need of present economy as well as long-run saving. Retail lumber dealers can show you the possibilities of beautiful surface finish, offered by Maple and its kindred woods, Beech and Birch. Your architect will verify every fact we have told you.

MAPLE FLOORING MANUFACTURERS ASSOCIATION

1063 Stock Exchange Building, Chicago

The letters MFMA on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing rules which economically conserve every particle of this remarkable wood. This trademark is for your protection. Look for it on the flooring you use.

MFMA

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HAVE charming windows like these in your new home. They not only impart beauty and refinement, but give you conveniences afforded by no other windows.

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 Full Information
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Mahogany is perhaps the most notable example of a fine wood, and what we can do it because we "do not understand"! Any one who really knows mahogany as a wood can not tolerate the crimson stain which, for so long, stood as the material symbol of "mahogany finish." Happily that day is past, but at the same time we are probably committing other sins equally inexcusable. Mahogany is not a red wood. It has, however, a warm glow of color, which grows warmer with age. Knowing the fine old Colonial pieces of mahogany, which had aged to a warm tone, our unknowing craftsmen were permitted, through our own lack of appreciation, to turn our wood-work to the flaming color of autumn foliage.

While it is quite impossible to tabulate possible errors into which we might fall, a little first hand knowledge of the subject is a far better protection against mistakes of such a nature. No one can know fine woods without developing a sense of values relating to them, a greater appreciation of nature, and a joy in such accessories.

No bathroom is complete without a
HESS WHITE STEEL MEDICINE CABINET or LAVATORY MIRROR
Coated inside and out with the best grade of SNOW WHITE baked enamel.

This mark guarantees it everlastingly against cracking, blistering or flaking. Your money back if you are not pleased.

Five sizes — three styles. If your dealer is not yet supplied, write us direct.

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Make Your Houses Frost-Proof
By Insulating Them With
"Cabot's Quilt"

"QUILT" is not like common building papers. It is a matted lining full of dead air spaces and keeps out the cold in the same way that a bird's feathers do. It is forty times warmer (or cooler in summer) than the common cheap papers. It costs very little and will pay for itself over and over again in saving fuel and in protecting you and your family from discomfort and doctor's bills.

Send for free sample and name of nearest agent.
Also Cabot's Creosote Shingle Stains
You know, of course, that you need and want hard wood for the Interior Trim, Doors, Floors and Furniture in your home.

What do you know about hardwoods?

Do you know that some of the so-called “hard” woods are softer than some of the so-called “soft” woods?

Do you know that the U.S. Forest Products Laboratories has proven by test that birch is one of the hardest of hardwoods?

They proved that it required 750 pounds pressure on a steel ball to make a dent one-fifth of an inch deep in birch. birch is beautiful but it is also durable.

Ask us to send you, free, the illustrated birch book showing the beautiful effects you secure with birch and telling you all about this ideal hardwood.

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Don’t Guess find out about
Beautiful birch

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Make sure that the material that goes into your house will give you the greatest possible return in comfort and satisfaction.

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We have prepared “Bishopric For All Time and Clime,” a booklet for you, containing facts and figures and illustrated with photographs of beautiful houses built with Bishopric stucco, plaster and sheathing units. Write for it.

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Build Right

It is what you get in the home that you build, rather than what you pay, that counts as the years go by. The first year of occupancy usually tells the tale as to the satisfaction which the new home is going to bring. Suppose you "saved $500.00" over the bid of the high-priced builder by having a "cheap man" do the work. When the windows begin to stick obstinately, the plumbing gets out of order, the heating plant proves to be so small that in order to get results it must be forced, which takes more coal than necessary, and a leak develops in the roof which spoils all the new decorating, how far will that $500.00 go in correcting these defects and putting the house in good condition? When the repairs are made, you still have the original, unfortunate conditions rooted into the house.

Generally there are three things which demand consideration in building a home. First, the cost, which may loom large at the beginning; then the upkeep; and third, pervading the whole and really giving meaning to the whole—that satisfaction and joy in possession, in actual ownership.

In these days of general enlightenment on economic living conditions, home building is being undertaken in a more logical and thoughtful way than ever before. Current government reports show that 62 per cent of our people are rent payers; also, that the percentage of an average man's income taken for rent is 40 per cent. This, of course, is too high, as economists establish a ratio of 1 to 4, rent to income, as a fair proportion.

The government with other agencies is doing a splendid service to the people in placing before them very clearly stated as well as interesting reports on this most practical side of home life and the minds of the country are wrestling with the home building problem for the people of the United States as never before. It is very much desired that the influence and effect of this educational work show its strongest results in helping the small home builder and to improve the living conditions of the industrial worker. We are all familiar with the many "better homes" movements which have sprung up in all of the ramifications of this big idea. It starts first with the home planning, stress being laid upon the necessity of well developed plans which mean an economic saving and largest return for the dollar invested; it means the assistance in the financing of these home building activities.

With all of this assistance every home builder can build "right" more easily than has ever been possible.
Keith's Magazine
On Home Building

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A Colonial entrance and garden
Homes in Altadena
Lee McCrae

AM impressed by the distinctive architecture of California," said an observant, eye-trained visitor recently. "It is not that it is Spanish or Aztec or any one peculiar type—there is much variety—but it is because each house seems to belong, to fit the landscape, to be a part of it, and to have been there always. In other words, the house and its environment blend inseparably."

The entrance to the southern California ranch, shown below, seems to belong just where it is. It makes a charming part of the landscape, fitted to its use. California is the land of small homes, though there are many large homes which are wonderfully attractive. There are few big houses, like dry-goods boxes standing on hilltops or in rows along the streets aggressively compelling attention. Even where there are many bungalows on a street, each on a small lot, they seem to fit the location with their long lines, wide eaves, and many windows. They are obviously homes.

The pictures of homes shown here would prove the justness of this verdict. Many are the large, imposing residences of Pasadena and Altadena, and very, very,
many the cosy, less expensive bungalows, but the two pictures shown here have been more admired and more often copied than many of the larger homes in this wonderful city of homes.

Both were designed and built in the foothills above Pasadena. Both are located on the higher ground between the "Crown City" and Mt. Lowe and Mt. Wilson. Indeed, so high is their situation that sitting in an easy chair in the center of the living room of either home one may look directly up the steep slopes of Mt. Lowe, with its cog road and trail of arc lights to and above the white observatory and Alpine Tavern, or turn in the chair to overlook Pasadena and Los Angeles and catch the silvery gleam of the Pacific.

"On a clear day we can see the dread naughts in the Los Angeles harbor and the hills of the Catalina Islands," declared our hostess enthusiastically. Then she added half apologetically, glancing about, "once we owned one of the show places of an eastern city, but never have I had such a real home as this one. The freedom is wonderful; everything is so convenient I can do things myself. Save for heavy cleaning, I do all my own work. The house is so perfectly arranged that it is a delight to do it. This has really proved to be my Dream House."

This was great praise; but a close study of the plan warrants it. Every room has the maximum of sunlight and air, and although all the rooms are upon the ground floor, there is as much seclusion for the bedrooms as there would be on an upper floor. The closet space is both ample and conveniently placed. The unroofed verandas, especially good in the land of little rain as a general thing, and none at all the greater part of the year, shelter but do not darken the living room. Over their pergolas deep red roses trail and decorate as though for a perpetual Rose Tournament.

The exterior of both is of plaster, the entire woodwork within of white or ivory enamel, and the roofs of green shingles. Every effort has been made that they
should be satisfactory and beautiful within and without. The plan shown is that of the home with the clipped gables. Neither has "a back yard." A tiny hedge encloses the lawn of this home, separating it from a "shrubbery garden" on one side, a rose garden on the other, and a wonderfully lovely young orchard of fruit trees on the north which has its "fence" of Shasta daisies. Twenty-seven varieties of choice fruit are here, the grounds covering in all one and a third acres.

A point which may be noted on this plan is the very small amount of furniture required to make it home-like, comfortable and artistic. There are no large wall-spaces that demand big pictures and large articles. In the living room a library table and some easy chairs, rugs and draperies are really all that can be placed therein to advantage, as the doors, wide windows and the ample fireplace take virtually all the wall-room. Therein lies its charm.

Likewise in the dining room. Only the necessary table and chairs are accommodated with the built-in buffet and grate. Furnishings, as homemakers know, is an important feature these days—no small item of expense.

The kitchen, although placed toward the street, is not conspicuous. While it might be possible that a passer-by would guess its position by the height of the windows, it would be noted with pleasure that these were the windows which looked out from the woman's workshop. The porch beyond it is secluded from the street, with the shrubbery massed about its steps, yet is convenient for delivery of supplies.

An adjoining neighbor to this is the somewhat larger home, with Mt. Lowe, the Observatory and Alpine Tavern in the background. Probably it has been photographed more often by admiring tourists than any other along the far-famed Foothill Boulevard. It has a Japanese garden in the rear and along one side that charms all comers, and its long roof-stretch makes the house seem to snuggle up against the close curtain of the hills. Wistaria and Dorothy Perkins roses decorate its eaves, but the chief beauty of both places is that nothing is allowed to obstruct the glorious views to be had from every window.

In both houses here shown expense has not been spared, as the builders are men of means who were seeking ideal homes.
for themselves. They had come to California for the sake of climate, ease, scenic beauty, and absolute comfort after strenuous years in the business whirl of eastern manufacturing centers. Consequently these homes may be studied from such a point of view—as the best possible plans for home-life.

These homes offer suggestions, however, to home builders of smaller means, and other conditions. The important points include the airy openness of the living and dining rooms, yet with its protection from too much sunshine, yet with possibilities for an open fire when it is cool; the spaciousness of both, and the communication between them with the reception hall; the well planned service wing; and the airiness and the seclusion given to the sleeping rooms. The plan might, indeed, be reduced to smaller compass without materially altering the architectural design or general effect. For a smaller family the reception hall and maid’s room might be omitted on one side, and the additional chamber, extending beyond the two bedrooms on the other side.

With roses and blossoms of many kinds about the doors, and fruit for the picking, the conditions seem ideal, but the chief beauty of both places is that nothing is allowed to obstruct the glorious views to be had in every direction.

The Barberry Evil

The common barberry (Berberis vulgaris) fosters and spreads black stem rust of wheat. It should be dug up and burned wherever found. That the common barberry, in all its horticultural varieties, including the purple leafed variety, must go, has been decreed in defense of the wheat crop of the country. The common barberry is the bulwark of the dreaded black rust in the wheat; without the barberry the rust can be controlled and eradicated, therefore the barberry must go. All roots should be carefully removed, so that no sprouts will appear. The spot should be carefully watched and all sprouts appearing, and all seedlings found, carefully eradicated.

The Japanese barberry (Berberis thunbergii), which is now commonly used for borders, does not foster rust and is harmless. If you have this kind, keep it.
Windows, Inside and Outside
Dorothea DeMeritte Dunlea

As the eyes have been called the windows of the soul, so windows considered as eyes are the soul of the house in the sense that they give a distinct personality and character to the exterior and interior of the house.

The object of windows being to admit light and air and also give pleasant outlook from within, and a good aspect to the house from without, the style of window to be used is a very important matter in the planning of a house.

The plain two sash window is perhaps the type most commonly used, for it gives good ventilation, is easily opened or closed, is fairly storm-proof, and admits plenty of light if of generous size. Such a window can be varied in treatment by the use of small panes of glass in diamond or square lattice effect, having both the upper and lower half of the window thus treated, or by merely cutting the upper sash of the window, leaving the lower part clear for good vision, and for simplicity's sake.

The grouping of windows is a matter of individual taste, dependent upon the
room and its use. As a general rule the grouping of windows is favored, for it allows larger open spaces of wall for the arrangement of furniture.

A popular grouping of windows is the arrangement of one large window, possibly with a fixed sash in case the smaller windows give all the opening desired, and smaller windows on each side. The smaller windows may open with either double-hung or with casement sash. Windows should be so placed on the outside wall of the room as not to interfere with the placing of the furniture. Either a full sized bed or twin beds may have windows at the head of the bed on either side, giving plenty of air, without having the early light in the eyes in the morning.

Windows, grouped, have a distinctly decorative effect, making the glimpse of outdoors seem like a real picture. This advantage of openness and view outside or vista inside may be well obtained with full length French casement windows or French doors when placed in a pleasing position. The admission of light from these full length windows is none too much for the size of the room and the dividing of the glass is particularly attractive. Horizontal bars should always be so carefully arranged that, sitting or standing, a good view is possible. This is indeed a feature to be considered in using latticed or leaded windows.

The French door is altogether charming where it opens on to a veranda or, better still, on to a strip of greensward or a flower garden. It is the window for full length view.

But in city houses, where the view is not all that may be desired, the leaded design or glass divided in square or diamond panes is often a good substitute for a glimpse of earth and sky, and since it may have a more ornate treatment, may sometimes be made to satisfy, to a degree, the desire for beauty within the room.

Where the view is not the main consideration, the window sill can be placed higher than the usual level and sometimes gives more satisfactory light and allows for a better arrangement of the interior furnishings. In the kitchen and bathroom, windows placed high are favored for these reasons and for the added privacy which the height gives.

For swinging windows, the English casement window, swinging outward, is satisfactory where space is crowded, for the outward swing rides the room of the window while open, and it is more weather-proof.

A style of window which merits consideration is the bay window. The bay or bow window is indeed so adaptable to styles and needs that it is very popular. Being several sided, depending on the number of windows used in the bay, two, three or more, it gives several outlooks and is a good choice for the room that needs extra light. Jutting out from the wall it catches the stray sunbeams and brings them into the house when no other window could do as much.

The bay window is pleasing on a stair landing where it serves to give a little sense of the unexpected in the stairway architecture, especially if the space is small. The bay window also furnishes the place for an attractive seat or may be made a broad ledge for plants, depending upon the size of the window bay. It may even be converted into a practical conservatory. If the windows are placed from two to three feet from the floor, a very comfortable seat can be built in, below the windows.

The draping of windows will change or effect the windows in the room to a surprising extent and in general, the simple draperies are the most artistic. Windows of Elizabethan style, long and narrow and leaded in diamond panes, are not provided with window shades but are hung with simple side curtains of
heavy fabrics which can be drawn over the window as desired. With the popularity of the English cottage and Italian Renaissance style of house, window shades are in many homes, giving place to drapery substitutes.

As there are two sides to the window pane, so are there two sides to the window problem, for looking in from the outside is as important as looking out from the inside! Perhaps the most striking discords to architectural beauty today comes through the use or misuse of windows, considering them as essential parts of the composition in the exterior design of the house.

The type of windows in a house will influence the exterior design, sometimes having the effect of converting the house from one style into another. While French doors may be used with practically any kind of a house, since in its simplicity of treatment it belongs to every style of house, this is not the case with many other types of windows. A severe Colonial design does not combine well with Elizabethan, or with the elaborate grilled windows of the Spanish or Italian Renaissance periods.

While it is possible, with skill and judgment, to use several kinds and styles of windows in a house, as the needs are felt and certain effects desired, at the same time, it is generally a wise and safe choice to keep the windows simple, and of the type that best suits the general character and style of the house.

It is not a difficult matter to choose windows that harmonize with the style of the house for there are many and lovely types from which to select.

The grilled window being more ornate in its treatment must be used with discretion. It requires just the right setting but having that setting it is most charming and beautifies the whole house. In a southern climate where there is an intensity of light, the shutting out of part

A delicate tracery of wrought iron adds a fascinating beauty to these windows.
of the light by the grill-work is not an objection but sometimes an advantage. Wrought iron grill-work in the openings of a certain type of stucco house, such as that shown in the illustration, is wonderfully effective. The simplicity of the wall surface permits the ornate treatment of the relatively small space of the openings, setting each like a jewel, in the broad simple surfaces. The delicate tracery of the wrought iron adds a fascinating beauty to these windows.

The Colonial windows with small panes of glass, with oval windows and more or less elaborate sidelights belong with the Colonial house. The casement window is well suited to the cottage type of home and the bay window with its varied treatment, with Mullioned or plain windows, is always good.

The house that is elaborate in exterior finish looks best with simple windows. The painting of window trim and ledges framing the openings has a decided effect in the appearance of the house, the contrast of color giving an emphasis to windows. With the popularity of light color plaster and stucco finished homes, there are a number of unusual and rather bright trimmings being used, especially in southern California. Such combinations as pink plaster with Venetian blue trimmings, gray with orange, or cream with light green are all favored and, when properly used, are very effective as a decorative feature of the house.

Shutters and awnings give a certain beauty to windows but of course must be chosen rightly to obtain a good effect. The white or light tone of a Colonial house is often greatly softened by the use of green blinds, particularly useful in a southern climate; the Spanish casa of cream or dull tan is relieved by awnings of gay hue.

With careful thought in the design, windows often become the “saving grace” of the house which would otherwise be plain and prosaic in appearance. They must be made to serve first their real purpose, that of furnishing light and air to the inside of the house, but they may do this with grace in proportions and fitness in design.

In Colorado

All of our “castles” are not in Spain, for the “castles in Spain” can not in the nature of things be built in wood and stone, but our castles in Colorado, or in the mountains anywhere, in California, or at the beach, may not be quite so radiant when they are completely materialized, but they are built, over and over again.

Set on a hill, with its open porches facing the finest scenery imaginable, with three bowlder terraces one above the other, and series of stone steps running down to the highway, is the summer home,—which is the real home,—the "castle in the mountains" of a Colorado business woman, the manager of a lumber business. She is a real working lumberman, knowing and handling all kinds of building materials, directing or even doing, herself, much of the work. These pictures show an old place which she bought and remodeled, though she adds that it is much prettier that the pictures show. “We did a great deal of the work ourselves, like foundations, fire-places, stone, in this case, plumbing, heating, cement work, et cetera. I buy everything wholesale, my lumber, doors, etc., in a straight car load. I did most of the
wiring in this house myself. Electricians say that it is the worst wired house they have ever seen and that it will burn down some day, but it is well lighted, any way. Also the only vacation I ever had in my life, I spent helping on the far porch. did all the roofing. Just wanted to get through with it and help was hard to get during the war. We did all of the rock work on the front of the place."

The big house with its many rooms she keeps for herself and the members of her family. She has, however, 14 modern cottages, in addition, which she rents. Starting with $5,000 (three thousand of which was borrowed) she has built up a place for which she was recently offered $75,000 if she would move out and let it go as it stood. But, "nothing doing," she said, "This is a home for five sisters of us, (when we get old), we want to live and die in 'Dixy Land,'—the name of the place." In the meantime it is 45 miles from her business, where she incidentally remarks that she spends 11 hours a day! Nevertheless she "runs up every Saturday evening and stays over Sunday."

An interesting story got into the papers of an exploit of this lumberwoman during one of the floods which devastated Pueblo and the Arkansas Valley. While Miss K. deprecates the newspaper story, she does not deny the main points, which seem to have been fairly close to the facts. Hearing that the floods were wiping out the old family home, all communications by telephone or telegraph being entirely out of the question and conveyances of any kind practically impossible, Miss K. started to walk the forty-five miles, in weather, and over roads which most people would consider quite impossible. Miss K. says, "I thought walking was the only safe way as it was one river most of the distance."

"A few miles out of Pueblo she was overtaken by a Denver newspaperman in an automobile. He gave her a lift along the way until his machine became stalled, when she again began trudging toward her goal. A little farther on she encount-
ered a deputy, sheriff from Colorado Springs, who picked her up in his machine and took her the rest of the way."

Later she is quoted as saying: "I found my folks were O. K., although their place was in the flooded district. Then the question was how to get back. I got a military pass, but they were holding all trucks, as the bridges had gone out again overnight, so I just ducked my head under my arm, climbed in an airplane and came back in thirty minutes. I was back in the office the next morning."

She has made a beautiful place, as the photos show. "It is located where tourists from all over the world pass it every hour of the day," we are told. Set well above the highway, with mountains all about it, the "big house" is terraced down to the highway with three well and attractively laid boulder retaining walls, presenting the effect of garden features. Two sets of stone steps run down to the highway with boulder arches covering the approach. The garages are at the roadway level.

This photograph shows "the far side porch," where the vacation was taken, and a most interesting room it is. The "picture window" is a notable feature both on the inside and the outside of the room. This room would be equally charming on a day that was bright and fine, the windows all open and the view stretching off in the distance, and on another day when there was a fine drizzling rain, or even a beating storm at night, with a glowing fire in the fireplace, and the lights turned on as they were needed, for a story telling light, or for reading.

The fireplace is built in a boulder wall across the entire end of the room, with a
slab over the bowlders for its full length. Navajo rugs are on the floor and are in keeping with the spirit of the room, as are also the wicker furnishings. Quite notable is the bowlder work shown in all of the photographs. One of those "14 modern cottages" is shown in the photo, with a generous big bowlder chimney, showing the setting of pine trees in which they stand.

The Second Story—Where Shall It Be?

If the new house is not to be a bungalow, nor a full two story house, and yet there must be rooms, few or many, finished on the second floor, where shall the second story be placed? That is one of the fundamental questions in the designing of the smaller type of homes. The house must be small and compact as matter of economic—as well as economical construction; the basement, four walls and roof must enclose the maximum of living space, and should at the same time express itself in an interesting and satisfactory exterior.

There are really four ways of treating the second story residence, the first of which, of course, is to frankly design a full two story house, and the second is, with equal frankness to finish the space under the roof of the one story house, when it has sufficient height for the purpose. There remains the special matter of design which shall make provision for the space needed on the second floor and make this an integral part of the design, not a make-shift or expedient. Either the roof must be so constructed as to give the space just where it is desired; or else the second story rooms are again frankly designed and set on the roofs, making an "airplane bungalow" of the Southwest.
The gambrel roof, in the matter of roofs, makes what is perhaps the best provision for rooms on the second floor, often carrying up the wall lines of the first floor for the dormer which is built through the roof, but with the exterior effectiveness of the sweeping roof lines at the gambrel ends.

The gambrel roofed home which is here shown is very compact in its planning, and well arranged. The living room is of good size, with dining room and sun porch opening from it with wide openings. The stairs lead up from the end of the living room, with no space given over to a hall, but with a coat closet beside the entrance. The dining table may be set on the sun porch, or by the opening of the French doors, the table might even be pushed through to the porch when the meal was ready to be served.

The fire-place on the inside wall, near
the dining room opening, is so located that one chimney serves the flues from the fire-place, range and furnace.

The second home is of the so-called "airplane" type; two bedrooms and a bath room are built on the second floor, with walls carried up full two story height, and roofed as for a second story. So light and airy are the rooms, one would suppose that it gives the sense of flying, with the roofs below for the wings of the plane. However that may be, such rooms certainly have the maximum of light and air.

Quite complete in itself is the first floor of this home, with one bedroom and toilet. Living room, den and dining room fill the front of the house. As is customary with California houses, there is a breakfast room which opens on a balcony, as does the dining room.

The exterior of the house is stucco, giving an excellent background of planting and vines.
INCE the early days of the war, attention has been focused to an unusual degree on the economical planning of the small home, until now the tiny home is planned with as much careful study put on it,—vastly more in proportion to its size and cost, than is put on the larger and more extensive building project. Now, a great effort is being made by means of a thorough coordination of the related industries, simplification of methods, elimination of waste, standardization of the building rules, etc., to reduce the whole cost of building, or what is another phase of the same thing, to get a thoroughly well-built house for the cost which it has been necessary to pay for the "house built to sell." We all know the type of house which, as someone has said, "When you step on the front porch, the back door rattles"; resulting from over-economy in the matter of both quality and quantity in both materials and workmanship. Un-
A well planned bungalow home

fortunately, while we rail at the poor construction in such houses, at the same time they have set the standard of cost which people are willing to pay; and so this type of construction is likely to continue.

In various parts of the country architects are working over the problems of a simplified building construction, simplified plumbing, and looking for any possible elimination which would lessen cost without detracting from good and satisfactory results. The next five years will doubtless see many modifications in accepted building forms.

Simplifying the plan is the first step in cost reduction; building only such rooms as the family need, and these arranged to reduce housekeeping labor to a minimum. The two bungalows which are here given are excellent examples of the minimum satisfactory plan.

Each has a good living room, a well planned kitchen, two bedrooms, bathroom and plenty of good closets. One has a dining room and also an alcove off the kitchen, with a seat on two sides. The other home has only a good sized dining alcove opening from the living room and from the kitchen.

Both are attractive from the outside, very livable and homelike. The use of brick for the steps gives a note of color which is very pleasing.
NOT what a house costs, but what you get for your money, is the essential point of economical building. With the more thoughtful consideration of the building problems, which seems to be the coming attitude of the builder, many of the building problems will be attacked from an entirely different angle from that seen from the older point of view. Many new building materials are clamoring for attention, some of which are excellent. Many new methods of construction are coming into use both with the older and with the new materials. With this wider scope in the selection of methods and material comes, in the first place a wider responsibility in studying the problems, and in the second a greater latitude in the possibilities of making a complete and satisfactory solution of the exact problem which is before one. Each problem becomes a more personal one, demanding its own solution.

As a general thing, first cost is the immediate consideration; following that comes the matter of upkeep. Often one can afford a more expensive material if by its use the cost of maintenance is to be reduced. This is one of the points which is being given special attention. Mr. Ernest Flagg, architect of the famous Singer Building, which held the record for a time as New York's highest skyscraper, is now making an experimental study of the most economical methods of building the small house,—possibly as a recreation from his bigger work. He says: "To keep operating costs down, impress upon people that the item of up-

A modern suburban cottage
Mr. Flagg advocates, or at least suggests, building above ground, rather than in the basement or as second story, as far as possible, climatic conditions and the value of land permitting. His designs show very picturesque low rambling buildings, perhaps added to the main larger building. This is especially true in building with stone, such as he finds economical in the locality in which some of his building projects are being carried out. Such low walls, he explains are much less expensive to build than high ones.

"Both speed and economy in building depend on forethought and system, which if properly followed, should greatly reduce the cost of building. If all necessary materials are on hand, as they should be before beginning, the work proceeds with a degree of exactness and speed uncommon in ordinary building. When the parts and methods are uniform in each instance, the workman soon becomes used to them."

With the renewal of building there is considerable attention given to building with brick and stucco. These materials have the advantage of reducing the maintenance. Concrete floors for porches, or even for the whole house are also advocated. The rotting of woodwork about the porch construction is one of the points which has always given considerable annoyance, and which may be obviated by the use of concrete where the construction is likely to be subjected to moisture.

Brick is used in the first of the designs of this group, for the foundation courses, as well as for the chimney, with stucco above the line of the porch floor. In the second design brick is used for the exterior wall up to the heads of the first story windows, and for the porch piers; while the third home of the group is finished entirely with stucco.

The first is a very attractive home and the design is one which has proven very popular. The plan is very well arranged and compact, the rooms opening well together, giving an exposure on three sides for the living and dining rooms.

On the second floor are three bedrooms
and bathroom. Each bedroom has windows on two sides, giving cross ventilation.

Much larger is the second home, with two chambers on the first floor, and also a maid’s room near the kitchen. The living and dining room fill the entire end of the house with the porch opening from both, and fireplaces in both rooms, set back to back on the same wall.

This home is planned on the lines of the bungalow and has space under the roof because the house is large enough to give sufficient height. The essential living rooms for the family are on the first floor. Two chambers and storage rooms are finished under the roof. This home is particularly attractive owing to the beautiful, well kept lawn and planting. The garage is built of brick, in keeping with the house.

The last home shown in this group is
rather unusual in its exterior treatment. The main roof of the house is carried down over sun room in quite an attractive way, and the sleeping porch over it is treated as a dormer. These porches make an important feature of the plan. The window treatment also is quite distinctive.

It is interesting to note the similarity and yet the difference between this plan and that of the first home of this group, and the entire difference which is given by the treatment of the exterior design. The planting about this home adds much to its attractiveness.

The window treatment is unusual and effective.
Decorations and Furnishings
VIRGINIA ROBIE, Editor

Cheerfulness in the Living Room

COLOR and form play so important a part in all decorative schemes that it is needless to emphasize their value in house furnishings. Generally speaking, the most successful living rooms are those which are both restful and cheerful; restful by reason of a reserved color treatment, cheerful from sunshine and a pleasant outlook. An open fire helps immensely in both directions; it is one of the few things both restful and cheerful. No living room can afford to miss this double attraction.

Many fireplaces are never used, and serve little purpose, except to add a certain architectural balance to a room. The architectural importance must not be undervalued. It is a tremendous asset, but a plea might be put forth for a greater use of the opening itself. If the fireplace
is never to be used, it might as well not be built, and the money put into a fine rug or extra books. Fine rugs and books belong to this room, unless there is a library in the house, when the books naturally find a more consistent place there. But beautiful rugs are always an addition, and, if they can be afforded, high class ones. Fine rugs, such as an expert would choose, pay for themselves many times over. And it is well to have assistance in making so important a purchase.

A few exquisitely toned rugs will almost furnish a room, making costly adornments unnecessary. Naturally, they must be in the color scheme. Sometimes Oriental floor coverings do not blend with certain wall treatments as well as the craft type of rug, but these occasions are rare. Oriental rugs are charming with old mahogany, and usually harmonious with old oak. New oak furniture, if on severe or mission lines, and if placed against a rough plastered wall, may call for something less refined than Oriental weaves. Something more vigorous seems to be needed to keep everything in harmony.

The walls of a living room are the first things to consider, for it is the wall treatment of any room which first grips attention. A well-designed wood trim, a side wall of good proportions, windows and doors that fit and balance, a simple fireplace, sunshine and ventilation—these are usually embodied in the modern living room. So much has been done that there is not a great deal left to do. There are many wall preparations which give an even, beautiful tone of velvety texture. Painted walls have their place when treatment of a substantial nature is being discussed. Both wood and plaster paneling add beauty and dignity, and once installed solve the wall problems for many years.
There are interesting papers in plain and two-toned effects, as well as bolder patterns, which are often very desirable.

Oak woodwork is often effective with a plain rough wall. There are many other woods which architects now use in a flat, simple way. Birch, cypress, gumwood and pine, when properly treated, give pleasing results. One delightful living room had a pine trim, walls of neutral plaster, furniture of pine stained to match the trim, book cases well filled and arranged with an idea to the color harmony—all the soft-toned books in greens, browns and grays together, and a small case full of glowing red bindings. All the red books of the house were gathered together and placed here. They had proved over-prominent when arranged here and there, but together in a solid phalanx they were decidedly effective.

The red books gave the mistress of the house an idea. She hunted up chintz in a tone like the wall, enlivened with red cockatoos and great branches of green leaves. At the casement windows went the lively birds, the curtains hung in English cottage style, adding color, but only at night covering the windows. Two long pine settles were cushioned in flat pads of leaf green monk's cloth. There were pillows of the decorative chintz, where pillows seemed necessary. Two or three substantial green willow chairs, upholstered in the same material, were mixed with the more severe pine furniture. The rugs were Oriental ones, which the wear of fifteen years, with yearly washings, had faded to a soft blending of colors not unlike the old book bindings.

The fireplace was used whenever there was the slightest provocation. The andirons were of iron; the simple electric fixtures were also of that metal. There were a few interesting old things—a row of quaint color prints in black frames over the mantel, its sole decoration except a pair of brass candlesticks. Here and there were a few bits of pewter and copper lustre, so placed as to give color and interest. The effect was both cheerful and charming—and richer neighbors often wondered why the room held so much that was attractive when the methods used were plainly so inexpensive.

Another living room of moderate expenditure was in an old-fashioned house looking out on a yard of the size still to be seen in old sections of certain cities. Olive green paint was used here, and a paper of a deep café au lait color, with a lighter ceiling paper. Blue and greens were found in generous quantity here; a big rug of "velvet Wilton" in old blue, and curtains of like color in hand-woven linen—the tone that grows more attractive with age. The plainest of furniture had been painted olive green—modern Windsor chairs bought at a department store, rush furniture, and one home-made settle, all painted, however, by a "professional painter," as smooth, even coats of paint are difficult for amateurs.

Although "velvet Wilton" has an expensive sound, it is not so costly as plain "Wilton," as everybody knows who has looked through piles of these rugs in hopes of finding the right color at a moderate figure. Velvet Wiltons are not so firm nor so heavy. The rug in this case was "buttoned" to the floor, as all large rugs should be if they are not of a thick weave. Inexpensive cretonne in blues and greens and coffee color, used liberally, added unity to the scheme. Square cushions were of this material, and the flat
upholstery cushions of plain green or plain blue. Two large Scandinavian posters in colors that blended well with the room gave a good deal of interest. They were framed in broad, flat bands of wood stained green, and, while they were not purchased with any idea of “matching” the color scheme, they were, by chance, very harmonious with it. A Norwegian fiord in flat blues and greens and grays was shown in one, and a country landscape in greens and browns, with a little orange, in the other. Orange was so effective that flowers of this color were used in the room when possible. Window boxes of nasturtiums were a great addition, and after some experimenting, and one or two failures, were coax ed to grow most of the year. Pink was also found harmonious, but could not be used with orange.

The actual money spent in this room was very little, but the results were admirable, because the color question had been well met, and the arrangement was simple and cheerful. This was a real living room, not a library. A small study and book room combined took all the books except a few current novels and the usual array of new magazines.

Two rooms representing fairly good incomes were built upon more substantial lines. One was furnished in old mahogany, purchased from time to time with
much loving thought and pleasure. The setting was that fine one of Colonial panels, a finely designed mantel, built-in bookcases of the narrowest possible depth, one or two old family portraits in tarnished gold frames, a few rare prints, and an exceedingly effective lighting scheme. Candles were used to a great extent, but the main light came from side fixtures of brass with dangling prisms and ground-glass shades—all new, but old in design.

The second room was oak in finish and furniture, with neutral-toned grass cloth on the walls; many books, reaching in their rather high cases to within fourteen inches of a deep oak cornice. The ceiling was beamed, and the whole construction was vigorous and sturdy. Above the bookcase and against the grass cloth, which was not quite gray nor yet quite brown, were placed the richly colored shields of Oxford University—the shields which travelers sometimes bring back, but seldom in so permanent a form. This was a room full of dignity, of fine sombre tones, brightened by the shields and by beautiful rugs, which were treasured quite as much as the books behind latticed panes.

There was a drawing room in this house in old pinks and dull golds and pearl grays. Here the paper was a reproduction of an old design in shades of gray. The curtains and rugs supplied the rose tones.

The lighting of a living room is quite as important as its furniture or wall treatment. There must be a lighting scheme sufficient for general illumination, and low lights for reading and writing. In choosing a wall treatment it is well to take into account how it will look by artificial light. Many colors attractive by day either flatten out at night or grow dark. Reds and greens are particularly disappointing. Neutral tones hold their own under both conditions. The greens which have a good deal of gray in them, the light browns which are grayed, the light coffee tones, the pure light yellows, the buffs and amber tones, usually hold their own at night.

Where the living room serves the purpose of library, drawing room, and a general family room, it should be simply treated as to furnishings and decorations. And a plea might be made here to keep it as free as possible from the purely useless things. The cluttered mantel, the overloaded tables, the crowded walls, too often make this room a menace to happiness and health. It should embody the three R's—refinement, reserve and repose.

For the Living Room

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.

—Louis Untermeyer.
When the Baby is a Grown-up

and inherits the beautiful garden, the Cypress arbors and trellises and garden seats will be just about as perfect as they are today. She may, tho, have a few nails tightened up, and probably will want to add some new-style ideas in design—and, of course, the new things will be built of Cypress, "the Wood Eternal". Very likely she also will have the house remodeled or enlarged—with Cypress, "the Wood Eternal". But if it is of Cypress now, she will have practically no repairing to do then,—any more than you will between now and then. That's economy that really counts. Ask the lumberman to show you the Cypress trade-mark arrow (shown below) on every board or bundle.

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SOUTHERN CYPRUS MANUFACTURERS' ASSOCIATION

1225 Poydras Building, New Orleans, Louisiana
or 1225 Graham Building, Jacksonville, Florida
Brick and Cobblestone Bungalow

G. L. P., Jr.—Having found your Decorative Service Department so helpful to the prospective builder, I wish to ask a few questions concerning the bungalow I am planning to build.

1st. What do you think of a brick bungalow with rock or cobblestone chimney, hearth, and porch pillars?

2nd. In my living room, which faces northeast, I have planned to have French doors between living and dining room, a single door opening on the east porch, and, of course, the main entrance door. Should these two single doors be glass like the French doors? If not, what would you suggest instead? I had planned to have ivory woodwork in living room, with a soft gray wall tint.

Would you use duplex shades on the glass doors, or net curtains?

I had thought of using rose draperies in this room, with a rose-shaded floor lamp for the necessary color.

Any helpful suggestions will be greatly appreciated.

Ans.—In reply to your questions:

1st. As to exterior, we think a combination of brick and cobblestone, such as you suggest, might be made very effective, if properly handled. Bowlders, especially used for interior work—as a fireplace—may seem clumsy unless well treated, so as to be in keeping with the rest of the room interior.

2nd. As to the doors of living room, only the French door need be of glass. The other doors should be finished like the rest of the woodwork. If this is to be ivory, then the front door could be ivory on the inside, and stained English Brown on the outside, which would be in harmony with the brick and cobblestone. The front door should have a large, single panel, and the other door preferably a single panel also.

You do not use duplex shades on an inside glass door, but only a veiling of net or thin silk.

Your plan of using rose color for the draperies, lamp shades, etc., of the living room is very good indeed, and will be agreeable with the gray walls. We would suggest a two-toned gray rug for the floor, and deep rose, blue and dull green design on a taupe gray background for some pieces of furniture. As your dining room exposure is west and south, we would continue the gray wall tones in there and use old blue for color combination.

A Colonial Interior.

H. C. J.—I have been an interested reader of your magazine for some time, and more so since building our home, of which I am sending a diagram of lower floor plan. We have the following furniture: A brown mahogany living room suite upholstered in tan and black. This I intend to use in library. Would you have it covered in some other color?

For dining room, we have a modern Queen Anne suite, in brown walnut. Had
thought to use yellow or old gold for draperies in this room. Must buy new furniture for living room and hall. What would you suggest?

The woodwork is finished in dull white enamel, and hardwood floors in all rooms. The walls are to be papered. Would like to know what color and kind to use in each room, also, about rugs and draperies.

For kitchen, have blue and white linoleum for the kitchen, entry and breakfast room. What color walls and draperies should I use here?

I have an ivory bedroom suite, but cannot decide as to which room I should use it in, the one directly over living room (guest room) or the one over dining room?

I intend to buy a four-poster Colonial suite in brown walnut for one or other of the two rooms.

Ans.—Since this is a Colonial interior, with the exception of the library, which is determined by the furnishings you wish to use there, we should use gray and soft ecru wall tones throughout, as these are Colonial and harmonious with the white woodwork. In the living room, let the wall be a tapestry, self-toned design in two tones of gray. Then one large rug, either oriental or domestic, with much old blue, soft neutral ground, and walnut furniture upholstered in dull blue colonial tapestry. An odd chair in gobelin blue tapestry, with a bouquet of flowers, in center of back and on seat, would be lovely. Shirr very thin silk or voile in paler blue on the French doors, and at the two front windows have side draperies of gray and blue brocaded stuff with glass curtains of fine, plain white bobbinet, simply hemmed, an inch and half deep. The hall, with its 10 feet of width, has four lovely spaces, just suited for panels of the charming Colonial landscape papers in soft tans and grays. We would use rugs of plain, creamy tan with black in the border, both in the hall and dining room. The glass in the front door and side lights can be veiled either with the plain bobbinet shirred or heavier voile. There should be a console table with colonial mirror hung over it on one side of the French doors and a high backed, walnut frame chair.
upholstered in handsome tapestry on the other. For the dining room wall, use a more dressy paper in soft creamy tan tones, design of baskets of flowers, and instead of old gold curtains let them be of rose silk with, if possible, soft rose velour or tapestry on the chair seats.

The black and tan furniture will work in well for the library by using a tan grass cloth on the wall, and cretonne draperies, with large, purple rose and blue flowers on a black ground. A rod can be run across the top of the French doors and the double window, with the cretonne, lined with cream sateen, run on the ends of the rods so they will not interfere with the doors.

The kitchen should have a light gray wall and blue and white gingham or muslin curtains, the little breakfast room a canary yellow wall and blue and yellow curtains.

We think we would use the ivory furniture in the room over the dining room, with curtains of ruffled rose organdy, an ivory wall and a deep rose colored rug.

A Burlap Dado.

A. M.—I am a subscriber to your magazine and enjoy reading this department of it very much. I would like to purchase a new rug for my living room and would like your advice regarding the color you would recommend. I am enclosing a sample of the color of the walls of this living room and the dining room adjoining has the upper part of this sample color (brown). The lower part of the dining room is green burlap and the woodwork in the dining room is mahogany. The woodwork in the living room is golden oak. The rug in the dining room is green center and with other colors.

I have been looking at a rug with brown predominating with some green in it. Would you advise this or some other kind?

Living room faces north and east.

What kind or rather color of drapes for curtains would you advise for this living room?

Ans.—We think the brown rug with some green is probably very good. The brown wall is very dark, and the matter is still worse in the dining room, where it is the color of the upper wall. We advise you to paint the upper wall and also the burlap, a soft tan, and put at the windows cretonne side hangings showing green leaves and some color on a tan or deep cream ground. This will keep the green rug in countenance, and make a much more cheerful room. Then bring the two rooms together as much as possible with the brown and light green rug in living room with draperies of old gold Sunfast. The ceilings of these two rooms are probably much lighter than the walls.

Room Exposure.

J. J. J.: We are re-decorating an old house—the ceilings are 8 ft. 10 in. The hall living room and library will be papered in rather plain effect—warm gray in tint. Would like to put a decorative paper on dining room. Would you advise a chair rail with blue below, woodwork to be ivory, drapes blue, rug warm tan with touch of blue and mulberry. I had a dining room decorated on this order five years ago and it was a very pretty room. The paper I am considering has light background with mulberry and blue in decoration. Would you consider mulberry portieres between dining room and library which has blue drapes at window or would it be necessary to have blue portieres to match drapes? The dining room has two east windows and one north window.

Ans.: The decorative scheme you are considering for the dining room would be very pretty with a different facing; but we fear it makes rather a chilly room facing, as yours does, north and east. We should advise ignoring the touch of blue in the rug but using the blue window drapes you wish with the tan rug and ivory woodwork; the room would be charming with a wall below a chair rail done in panels between styling of the ivory wood, using an all over decorative paper showing lots of yellow and orange and light green and blues. Then do the wall above in a plain, dull orange or buff.

Could you not face your mulberry portieres on the dining room side with blue to match the window drapes?
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EASONS may come and seasons may go, but the potato is with us forever, if one may be permitted to put it so. It is strange that we do not tire of them.

Probably one of the best reasons why we do not get tired of potatoes is because they best supply a food—carbohydrate—which is absolutely necessary to the body. Should we be deprived of them for any time, as was nearly the case during their period of scarcity in the recent war time, we would find that the mere mention of a potato would make our mouths water quite as much as the mention of strawberry shortcake does in January.

Besides supplying carbohydrate so abundantly, potatoes give needed bulk to the meal. As they are lacking in protein, they are usually used in combination with meat, fish or eggs, as they should be.

Carbohydrate is starch. The human body does not digest starch as starch. It must first be changed to sugar.

If intense heat is applied in the proper manner part of the starch will be changed to dextrin (from which it is changed to sugar) before it is served. This, of course, renders it easier of digestion. This is true particularly of baked potatoes.

New potatoes may be compared to fruit not perfectly ripe. The starch granules have not ripened perfectly and thus the potatoes are not as easily digested as potatoes of the year before. For this reason it is best not to serve new potatoes early in the season to children, invalids or persons with weak digestion.

Since the potato stands pre-eminent among vegetables for its food value, new "potato dishes" are always acceptable.

**Hongroise Potatoes**

Wash, pare and cut potatoes in one-third inch cubes. Parboil five minutes and drain. Add one-third cup butter and cook over a low flame until the potatoes are soft and slightly browned. Melt two tablespoons of butter, add a few drops of onion juice, two tablespoons of flour, and pour on gradually one cup of hot milk. Season with salt and paprika. Add the beaten yolk of one egg. Pour this sauce over the potatoes and sprinkle with finely chopped parsley.

**Potatoes Baked on the Half Shell**

Bake medium sized potatoes until done. Remove from the oven. Cut a slice off the top and scoop out the inside. Mash, add two tablespoons of butter, salt, pepper and three tablespoons of hot milk. Then add the beaten whites of two eggs. Refill the skins and bake until brown in a hot oven. These potatoes may be improved for some by sprinkling grated cheese over the top before returning to the oven.
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O’Brien Potatoes
Fry two cups of potato cubes in hot, deep fat until done, drain on brown paper and sprinkle with salt. Cook one large slice onion in butter until brown and then remove the onion. Add to the butter three canned pimentos cut in small pieces. When thoroughly heated, add the potatoes and stir until well mixed. Turn into a serving dish and sprinkle with chopped parsley.

“My America” Potatoes
Chop two cups of cold, boiled, sliced potatoes until very fine. Melt two level tablespoons of butter and add to it two level tablespoons of flour, one cup of rich milk. Cook slowly, stirring until smooth and creamy. Then add one-fourth pound of American cheese cut into small pieces, salt, pepper and one teaspoonful of chopped parsley. Mix this sauce through the potatoes. Place the mixture in a baking dish and brown in the oven.

Potato Soufflé
Cook and mash enough potatoes to make two cups. Season with butter and salt. Then add six tablespoons of cream and the beaten yolks of two eggs. Fold this mixture into the stiffly beaten egg whites and bake. When a knife comes out clean the soufflé is done. It should be served immediately. If preferred, the potato mixture may be formed into balls and then browned quickly in the oven.

Lyonnaise Potatoes
Fry a part of a small onion in butter until a golden brown. Slice pared and boiled potatoes across the breadth in quarter inch thick pieces. Put them in the frying pan and allow them to simmer and absorb the butter. Sprinkle with salt and pepper and finely chopped parsley. Mix well and serve. The potatoes should not brown.

Scotch Potatoes
Boil two cups of sliced potatoes and two cups of sliced onion in salted water until done. Turn into a baking dish and pour over them a milk gravy seasoned with salt and pepper. Bake slowly about one-half hour.

Toastied Potatoes
Boil potatoes in their jackets until nearly done. Cut in thin slices without peeling. Butter with lard and toast under a gas broiler until brown.

Potato Fritters
Add three tablespoons of cream, salt, cayenne, nutmeg and pepper to two cups of hot riced potatoes. Then add five egg yolks and three egg whites. Place the bowl in a pan of ice water and beat until the mixture is cold. Add one-half cup of flour. Drop by spoonfuls into hot fat, fry until nicely browned, and drain on brown paper.

Potato Apples
Mix together two cups of hot riced potatoes, two tablespoons of butter, one-third cup of grated cheese, one-half teaspoon salt, few grains each of cayenne and nutmeg, two tablespoons of thick cream and the yolks of two eggs. Beat thoroughly. Shape into the form of apples. Roll on flour, egg and bread crumbs and fry in deep fat. Drain on brown paper, insert a clove at both stem and blossom end of each apple.

Potato Omelet
Prepare mashed potatoes. Turn into a hot omelet pan, buttered, and spread evenly. Cook slowly until browned underneath. Turn as an omelet and serve.

Baked Savory Potatoes
Peel potatoes and cut them lengthwise into slices about half an inch thick. Place them in a buttered baking dish. Peel and boil two onions for fifteen minutes in salted water. Add two teaspoonfuls of sage tied in a muslin bag for the last five minutes of boiling. Chop finely the sage and onions and add to them a few tablespoonfuls of bread crumbs, salt and pepper. Spread this mixture over the potatoes and bake until done and brown. If preferred, the potatoes may be parboiled and the baking process need not be so long.

Real Cream Potatoes
Take cold baked potatoes, cut in dice, and place in a pan with enough cream to cover. Add pepper and salt. Cook until the cream thickens and serve.
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Suggestions from the Plumber

The desire of the reliable Master Plumbers to co-operate with the public in the present-day movement to avoid waste, according to a pamphlet issued by the Retail Plumbers' Association of Minneapolis. They recommend that every householder or tenant become acquainted with his plumbing. This knowledge is particularly useful when an emergency arises in connection with the plumbing; also a little familiarity with the subject allows one to order repairs intelligently, thereby saving extra trips to the shop for tools or materials. The following suggestions are given:

The city water service pipe leading from the city water main in the street into your house is your property and must be kept in repair by you.

In front of your house, at either the curb line or at the outside edge of the walk, there is a city water stop box and stop cock. The top of this box should be flush with the curb or walk. It is important that owners of property know the location of these boxes and that they be kept in good condition.

It is a good job that has water shut-off valves for each fixture, thereby overcoming the necessity for cutting off the water supply to the entire house. In case of a break or leaking faucet, it is then possible to shut off the water and prevent damage while waiting for the plumber.

There are two valves in every closet tank, the one that admits the water to the tank and the one that admits the water to the bowl for flushing. Sometimes a plumber finds one valve out of order and repairs that, only to find a few days later that the other valve is causing trouble. It will prove a saving to have both valves tested and repaired whenever there is any trouble at all in the operation of the closet tank.

With individual faucets on the lavatory, you either freeze or scald your hands if you try to wash in running water. A combination faucet overcomes this condition.

A bar of soap may be removed from a closet bowl with an auger; a stoppage in the sink line may be forced out with a steel snake; but a stoppage in the main sewer line outside of the house requires the use of a big, heavy, spring steel rod. The workman cannot carry all of these tools with him, and is liable to bring the wrong ones unless you tell him exactly what has to be done.

Do not pour grease in your plumbing fixtures. It stops up the waste pipes. Ten gallons of boiling hot water run through your sink each week will aid materially in keeping the waste pipe clean.
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ANN WENTWORTH
former Decorative Editor of "The House Beautiful"
461 Fourth Ave. New York City
Lengthening the Life of the Shingle

SHINGLES will probably never lose their popularity for the average farm or country house. This being the case, the extent of their use will in general depend equally upon first cost and durability; for in the majority of cases economy is the first consideration, artistic results, harmony, etc., being clearly secondary.

Strangely enough, in these days of our high cost of everything, the price of shingles is reported to be no higher than it was about ten years ago. Moreover, owing to improved methods and machinery and the increased utilization of entire trees rather than the remnants in their manufacture, shingles are of better quality today than ever before.

Durability is, therefore, the controlling factor in the determination of their value, and in this connection two interesting facts have been discovered: first, that the better grade of shingles do not rot, but are worn out by the action on their exposed surfaces of wind, rain, frost, etc.; second, that the useful life of the average shingle is much longer than that of the average nail.

These discoveries have stimulated further investigations to determine which type of nail now in use, or available, is the most lasting. One professor at a forestry college has been working on the new zinc-clad nail. He says this differs from the ordinary galvanized nail in that zinc coating is the result of immersion in a vat of molten zinc, and not on an electroplating process. However, it appears to be greatly superior in resisting the effects of weathering forces.

While the experiments with certain of the newer materials have not been pursued for a sufficient length of time to afford final, decisive knowledge it appears that the various nails used in shingling may be arranged in the following order, according to their durability, and consequently their economy.

First, the pure copper nail, which however, is by far the most expensive, and for that reason often impracticable. Second, and almost, if not quite, as lasting, the pure zinc nail of which the price is around 50 per cent of the first, and therefore not necessarily prohibitive. Third, the comparatively inexpensive zinc-clad nail which is "far superior to any galvanized nail, or even the old iron cut nail as it is now made." And finally the two sorts last mentioned, the values of which vary with their quality, and that of the material from which they were made.

Allen C. Naude.

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when timber is lacking, or as the second gift, comes brick; and often sun dried brick has proven a good building material. In Southern California now, there is a revival of the use of adobe, the sun dried brick used by the mission builders.

As a general thing brick has not been given a sufficient load allowance in the building codes throughout the country, in the opinion of authorities, yet in the absence of records and tests, no revision of the codes has been undertaken, and a brick house must be built in such a way that the walls will easily carry a much larger load than can ever be put upon them.

The Bureau of Standards of the Department of Commerce is carrying on a series of tests which will give some excellent and substantial data on the subject. These tests will not be completed before July, and it will be several months later before the Bureau of Standards will have their findings in the matter ready for publication. Test panels of brick walls have been constructed at the Pittsburgh Laboratories of the Common Brick Manufacturers’ Association, and the Bureau of Standards are making these tests. Brick panels 9 feet high and 6 feet wide, 48 in number have been built for this purpose. These consist of 8 inch solid wall, 12 inch solid wall, 8 inch rowlock or Ideal wall, and 12 inch rowlock wall, all laid in cement mortar, cement lime mortar, and in lime mortar. A sufficient number of panels are laid from each specification that the load may be applied in different ways.

Common soft mud bricks are being used for the tests, individual samples of which have been tested, in the endeavor to find the ratio between the crushing strength, transverse strength and tensile strength of the individual brick, and the crushing and transverse strength of that same brick when built into a wall. By these tests it is hoped that tables can be prepared by which any brick manufacturer, after having made a few tests of the individual brick, may apply the ratio through the table and determine the exact performance of that brick in actual use.
How to Prevent Cracks in Walls and Ceilings

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Log Cabins and Cottages,—How to Build and Furnish Them:—by William S. Wicks; published by Forest and Stream Publishing Company, New York. Even though man's desire to return to the woods,—for a brief spell,—may be as the anthropologist has said "traces in modern civilization of original barbarism," he cannot live in caves and dens, but must take back to the forest primeval some traces of his civilization, and camp structures are necessary. The location of the camp, the selection of timber for building what is necessary to a comfortable vacation, the finishing and the furnishing, all of these things are treated in practical detail in this little book. Even a wooden latch for the door is shown; how to build a bed or bunk, chairs and table. A section is devoted to temporary structures. More than half of the volume is devoted to pen and ink sketches and plans of log camps and cottages.

Education in Accident Prevention: by E. George Payne, Ph. D., President of the Harris Teachers College, Published by Lyons and Carnahan, is a treatise showing how accident prevention may be made a part of regular school instruction without the addition of another subject to the curriculum. It was prepared at the request and with approval of the National Safety Council, by a member of its committee on education. The economics of accident prevention is first discussed. The fact that two-thirds of all the accidental deaths in the United States occur outside of industry emphasizes the importance of a campaign to promote safety on the streets and in the homes.

Hollow Tile Construction: by J. J. Cosgrove, Published by U. P. C. Book Company, Inc., New York, is a practical explanation of modern methods of designing and building fireproof residences of hollow tile. It is prepared so that builder may use it with chapters on walls, floors, roofs, partitions, framework, roofing, cornices, fireplaces and interior work. Analysis of specifications, and estimating are also covered. Interesting examples of completed houses, shown by photo and plan fill the last 30 pages of the volume. The aim of the author was to present, as simply as possible, the several types of blocks, the various methods of construction, the numerous building details, and rules to help the estimator in calculating the costs. It is a small handy volume.

Hicks' Builders' Guide: by I. P. Hicks and Joshua C. Duncan, Published by U. P. C. Book Company, Inc., New York, is a revised and enlarged edition. Present conditions indicate a wonderful increase in the construction of low and medium cost houses in the near future, and this revised edition of the Builders' Guide is a practical book on modern methods. The arrangement follows that of a specification, starting with the layout of the site, then taking up the excavation, foundations, waterproofing walls and following the work through to completion.

"SEDGWICK'S BEST HOUSE PLANS"

The Most Complete Book I Have Ever Published

CHAS. S. SEDGWICK, 1135K Lumber Exchange, Minneapolis, Minn.
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Building and Housing

The formation of the American Construction Council, which has recently been announced, together with the newly created Division of Building and Housing, under the Department of Commerce, indicates the present trend of thought, and shows the spirit in reconstruction which is emerging through the chaotic conditions of the time.

The American Construction Council is a national building trades organization. Its main purpose is an endeavor to "square the building trades with the public by eliminating all practices inimical to the general welfare." Secretary Hoover is temporary chairman of the council's executive committee. It will be headed by Franklin D. Roosevelt, former secretary of the navy, who will assume that position in the fall. The council will be composed of manufacturers, contractors, architects, representatives of organized labor and representatives of federal, state and city governments.

The building of homes bulk large in the business of the country, and the shortage of more than a million homes has emphasized this importance. Recognition is given this fact in the setting-up of a new division of Building and Housing in the Department of Commerce.

The Building Code Committee, in their preliminary report, has dealt only with construction as applied to home building. It recommends minimum requirements for small house construction and sets forth that a saving up to 10 per cent on the cost of construction may easily be expected through a standardization of building code requirements and at the same time effect increased economy, durability and habitability.

The old building codes have not been developed upon scientific data, but rather on compromises; they are not uniform in principle and, in many instances, involve a larger cost of construction without assuring more useful or durable building. The safe reduction of wall thicknesses and the simplification of plumbing equipment are among the points given consideration in the tentative report. The committee is working in close co-operation with the Bureau of Standards. The bulky appendix gives tables and plates and general data on which the recommendations are based. The work of this committee looks toward the placing of the building industry on a scientific as well as a logical basis, as befits a business so technical, in place of the old rule o' thumb methods and traditional lore of the trades.

Every small saving, when multiplied by the tremendous mass of building which must, and now is going forward, means a large economy, especially when it also brings better building co-operation. We certainly commend the good work being done along these lines and anticipate that when the final recommendations of this "Division" are made and universally adopted throughout the United States, it will result in better building and housing and in a lowering of costs to the home builder.
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This New England home with flower bordered walk makes a well composed picture
ES, my absence has been rather prolonged—far more so than I had at first intended it to be,” remarked the Old Builder, laying aside his napkin and leaning back with a sigh of repletion. “I thought of you children often, as I told you in my letters,” he continued, regarding the bride affectionately, “but,” shaking his finger quizzically at the smiling young husband opposite him, “I remembered also that statement you made about sloping lots as you and I were on our way to the station the day I went away. While I was gone I took some pictures and collected data for you to meditate over.

“Here are the pictures,” reaching into his pocket for an envelope and handing it across the table, “and now listen to a few plain facts.

“Lots below the street grade are frequently regarded askance by prospective home builders who, in a majority of cases, seem to feel that it would be necessary for them to go to the expense of having the property filled in to the street level before a house could properly be built thereon. This is a mistake. “In the first place, the home site which has a more or less decided slope away from the street level is usually to be had at a considerably lower price than those above or even with the grade. This is due to the aforementioned prejudice on the part of the buying public and opens up possibilities for the understanding and discriminating purchaser to acquire what may be made a really desirable resi-
dential property at from one to five hundred dollars below the price asked for locations on the opposite side of the street.

"There is one prime requisite to be watched, which is that the lot has a prompt and thorough drainage. The land which lies in a pocket, surrounded on all sides by higher levels, is to be avoided; but that where the slope continues on to still lower levels affords opportunity for the complete escape of both storm and seepage water.

"Another item to be considered is the fact that excavation for the basement is usually reduced to a minimum—and this basement has the added advantage of daylight illumination, freedom from dampness, and efficient ventilation.

"The typical California bungalow home, shown in the pictures which I just handed to you, reveals how one builder solved his sloped lot problem and his residence now has not only the usual conveniences possessed by the level lot bungalow, but in addition has some unique features of its own.

"Viewed from the front—which faces the east—this home appears as a rather long, one-story bungalow; occupying a corner lot 50 by 125 feet with the chief entrance about central on the longest frontage, which conforms to the level line of the lot.

"The side street on the south side drops away at a steep angle and from this side it is seen that the residence is really a story and a half house with a garage underneath. Who would ever think while viewing this dwelling from the front that it could possibly be as roomy as it now shows itself to be? It is, in a way, two houses in one. Had it been necessary for the owner to excavate a level lot to accommodate this sort of a house the cost
would have reached an almost discouraging amount and, even then, the result would hardly have been the same. Here the basement, with little if any excavation, equals in area the full dimensions of the house and part of the space has obviously been given over to the use of the omnipresent automobile.

"On one point the owner admits a mistake was made and that is in the abrupt pitch of the automobile driveway. When the streets were laid out in this residential tract the surplus soil removed in leveling the street was naturally dumped on the lower side. This has produced a level strip of ground extending about ten feet into the property from the sidewalk line, ending in an acute angled terrace. But the contractor, when the residence was built, instead of grading an even slope from the curb to the building line, merely laid the cement runway across the level strip, ending in an almost thirty degree drop down the face of the terrace to the garage doors. It is not only hard enough to get a car out of this place, but requires a good set of brakes and careful driving to negotiate an entrance.

"The house contains seven rooms exclusive of the basement and the upper story. The attic floor is completely finished but has not been divided into separate rooms. The garage in the basement has not been partitioned off, for to do so would result in eliminating a certain amount of light from the remainder of the area—part of which has been fitted up as a billiard room, while in the far corner is the necessary paraphernalia for the household laundry.

"On entering the house through the front door access is had to a small reception hall from whence a customarily closed door directly opposite opens onto a stairway leading to the floor above. To the right is the living room with its fireplace and book cases and beyond that in the far corner is the entrance to the din-

Planting and flower boxes at garage entrance
ing room, and then the kitchen. The front ell of the house is devoted to the parlor.

"Left from the main entrance a short hall leads into the bed rooms, which, therefore, have an east and south and a south and west frontage, respectively. From the hallway separating these rooms a stairway leads to the basement, to which access may also be had from the kitchen in the rear. The floors are all of the best grade of hardwood, the walls are papered and the interior finish is natural wood in the halls, living room and parlor, and ivory enamel in the kitchen and bed rooms.

"This property is situated in a highly restricted residential park section, and is now about two years old; and it's right good property."

The Old Builder stopped and regarded his coffee cup wistfully but shook his head in negation as the bride reached to refill it.

"No," said he, "much as I would like to, I must not accept; but let someone show me a good buy in a property such as I have just described and see how quicky I will accept the opportunity to enact the role of Prompt Purchaser." And picking out the real estates section of the Sunday paper he retired to his study to absorb it in toto.

A Dozen Garden Do's and Don'ts

Dorothea DeMeritte Dunlea

1. LAN a garden of simple design for a small space, for an elaborate planting scheme will only emphasize the space which you lack.

2. Leave plenty of space between your plants if you want them to grow well and look well.

3. Have your garden harmonize in style with the architecture of your home. Don’t plan a Moorish garden beside a Colonial house.

4. Have your walks and driveways serve a definite purpose or else do not cut up your land with them.

5. Choose your plants because you like them and believe they will look well in your garden—not because they look well in another set of conditions.

6. Select plants of standard and popular favor unless you have some unusual planting scheme; in which case it should be most carefully worked out.

7. Select flowering plants and vines that harmonize in color, or if you are not sure of the colors, intersperse them freely with white, or else keep them separated by good spaces or greenery. Don’t plant flowers against your house that do not harmonize in color with the walls.

8. Use garden architectural effects in the way of garden-vases, urns and statuary—if they really add to the beauty of the place, but don’t over do it. Avoid artificial decoration.

9. Have your summer houses, pergolas and benches located and constructed so they will make delightful resting spots, but don’t have benches or tea houses that are not useful.

10. Vary your planting of shrubs by using some low and some high varieties rather than all of uniform size.

11. Have the planting of your garden scheduled for each season so that at no one time will it look bare and unattractive.

12. Have your garden so planned that you can stay out in it and enjoy it. and make it a welcome spot for your guests.
T has been said that the garden, the door step garden, the planting about the house, is an investment where interest is compounded. The growth of each added year becomes a part of the whole, increasing its intrinsic value. This is a truism which home loving people have long realized, but in the last decade it has become an established fact that the beauty of the house in its environment is a material asset, and this has been set over from the column of sentiment into that of material facts, and is now being used in the real estate world to give the final balance to their accounts. The setting of the house, which makes the background for home life, is being given a value in dollars and cents, making it a desirable thing to the hard headed business man, and giving joy to his family.

Having once established this fact, one may feel assured that it is in a thrifty spirit that one goes to the delightful task of starting the planting about the house. This may be elaborate or simple as the taste or the purse may dictate. The space may be set with well grown guaranteed plants from the florist, or it may be planted in the early spring with perennials, possibly interspersed with quick growing, blossoming plants which will give a return of blossoms the first year, while the perennials will grow and multiply each succeeding year.

For the city house, where the space is small, shrubs which will grow well up under the windows, are perhaps more practicable, as these require less care and give very good returns for the time spent on them. Blossoming flowers will usually grow better when planted a little farther from the house, or in boxes or frames which have been specially prepared, such as the trellised flower box.
A little greenery will suffice to make the house feel at home perhaps, but a wealth of vines and luxuriant blossoms during the season well repays the effort, and makes the house notable in the block.

For the suburban home with wide spreading lawn about it, there is opportunity for developing an architectural effect, or for making a fully developed garden which shall be a constant pleasure for every one who sees it, and which shall give the setting most desired for a home. On the small city lot, however, the desire for beautiful surroundings may be just as great, and the need for the refreshment of growing things about the home may be even greater, in proportion to the difficulty in getting out of the city, even for a short holiday. Here is where the garden clubs which have been established in so many cities can give much assistance, both in the way of advice, and in the selection and procuring of plants and seeds.

Possibly it is difficult to get good earth close up against the house, or in places where the plants will do well. In that case a trellised flower box, which sets above the ground, like that shown in the illustration, may give a solution. Such boxes can be made of any shape or size and may be built as high above the ground as the location requires. Vines may be trained over the trellises, and drop to the ground. Flower boxes set or built on the porch railing give an attractive planting, which may be applied to the upper duplex, or to the home which is on the second story as well as to that on the ground floor.

A seat of some kind which is covered or protected from the sun and heat is a most desirable feature during the summer. In the illustration such a seat is shown before any planting is started to give it protection. This is a swinging seat, dropped from the sturdy overhead beams of the pergola covering. The end supports are trellised and the beams are stripped for carrying vines. Such a seat may be set near an old growth of vines, such as wild grape or the small white flowering clematis, and the vines trained over the trellises. This will give a good shade in the shortest possible time, or flower boxes may be started early with some quick growing vine like the old fashioned morning glory, and these boxes set at each end of the seat with the vines well grown by the time they are set in place against the seat. With a good start
they will soon cover and shade the seat.

Where there is a kitchen garden, it may be set off from the lawn, or from the street by a lattice or a trellis fence of some kind, and make an attractive feature at the same time. Such a trellis along the alley way, or with a little gate beside the garage, such as that seen beyond the seat, oftentimes makes the back of the house quite as attractive as the front or entrance side, as it should be.

A trellised entrance is always an attractive feature of the home, and may be applied to an old house, sometimes even more easily than to the new house, unless it has been made a feature in the designing of the home. Such an entrance, bowered in vines, may add very appreciably the monetary value of the house when it comes to setting a selling price. Here again the flower lover has the approbation of the hard headed business man, thus things of the spirit are making themselves manifest, and beauty has attained a commercial value.

A trellis covered walk, such as that shown, if close covered with vines might seem very shut-in, but with the vines not too heavy or trimmed to an openness it gives an unusual feature. However, the natural growth of the vine is always heavier on the sunny side, where it is most wanted, and more open on the other side.

In the South where the out door season is so large a part of the year one finds some very interesting developments, in the way of building around trees, so as to save their shade and use them in the new built home. A fine old tree or a well grown young tree is too wonderful a thing, and too hard to produce, to be treated lightly. When a tree is the result of growth through many generations it is given especial consideration. The live oaks of California and of the South are used oftentimes in curious ways. In the illustration, a tall water oak, which looks much like a live oak, is enclosed in the picturesque roof of this Florida bungalow. These trees show us the oriental meaning of such terms as roof-tree, which we with our occidental materialism have interpreted to mean simply the timbers in the roof. We have northern trees which give a shade almost as dense and protecting, as these of slow growth.

A water oak is enclosed in the roof of this porch
The line of demarkation between the sleeping room with many windows and the sleeping porch, as the names are ordinarily applied, seems to have almost vanished. Here, however, we are considering the sleeping porch which is essentially a porch, not just a room of the house with the outside walls filled with windows.

When an additional sleeping room is to be added to a house, oftentimes it can most easily be done by adding a porch projection, and finishing this so well, by means of special insulation, that it can be kept comfortable during the coldest weather, at least for sleeping. If the foundations do not extend down so as to become part of the basement, the floors must be very carefully insulated, with beam-filling at the junction of the floor and walls, and the walls insulated as the rest of the house.

There are many charming ways in which the interior of such a room may be treated, of which a trellised treatment is a favorite. On the other hand such a room may be given the simplest possible treatment, filling the entire exposure with windows,—casement windows, which will permit the maximum of air in the room.

When the possibility of sleeping on a porch in order to be out of doors was a new idea, any porch served the purpose, and it was just what the name implied, a sleeping porch; but now sleeping porches are no longer the crude, bare looking places which satisfied us then. Perhaps the cost of building has made people hesitate to build a place that may be "impossible" to use in frigid weather. The inconvenience of not having one's belong-
porch bedroom must not be lost by windows that do not open readily. It must be the easiest thing in the world to "regulate the weather" in the room by opening windows, at any angle, to catch a breeze or to avoid draughts. Shades, and simple draperies which may be easily laundered contribute to comfort, and should give seclusion when desired. Shades that roll up from the bottom are a feature of the first porch illustrated.

Since the windows are the principal feature in making a room into a fresh air sleeping apartment, it is wise to consider carefully their placing, size, and type. For example, in some localities a north exposure might be too windy for comfort. In this case windows should be grouped for fresh air minus gales, on the other exposures of the sleeping porch. In too sunny a locality awnings may be installed for a room thus heated by day, might be unbearable by evening.

Casement windows are shown in one illustration and are deservedly popular, as they open the whole space of the window. Provision must be made, however, for the space they take in opening, and for a construction which will make them weather proof. Out-swinging casements are easier to make tight against the weather, but they must be supplied with some kind of hardware which will hold them in any desired position. There are many kinds of hardware on the market, more or less elaborate, which make this provision; or in the simplest construction a long rod with a hook on the end, attached with a screweye to the window sill, and several eyes on the lower rail of the window, into which the hook may slip, permit the window to be held securely in any of several positions. In such case, screens may be hinged to swing in.

The usual double hung window, with two sliding sash are perhaps used quite as much as anything else because stock windows may be gotten and installed so readily, and while they only open half the space, they are usually the cheapest to install. So important are the windows in the sleeping porch that they should be given precedence over other things, making a sacrifice, when necessary, somewhere else in order to have satisfactory windows.

While a hardwood floor is always good, it is not an essential for a sleeping porch. Linoleum, especially in the plain colors, brown, blue or green, is very good and makes an attractive floor. Tile of any kind seems especially appropriate for a porch floor. A painted floor is also practical especially if used with a linoleum or other kind of rug. If small rugs are used, rag rugs and braided, or hooked rugs are very appropriate. Grass rugs are always good for use on a porch.

The walls of the porch, which formerly were sometimes left like the outside of the house,—that with clapboards, or shingles, brick or stucco left showing as walls of the porch, are now given some special treatment, unless perhaps in the case of brick or stucco walls. Over the siding or shingles some of the wall or plaster boards may easily be placed and either tinted, plastered over, or even papered like a plastered wall, though wallpaper, as such, hardly seems as much in place on a porch as other modes of finish. Wall boards are so easily tacked over a rough exterior finished with wood that it may be done by an amateur, and is especially worth consideration. It may be tinted and covered with the popular trellis treatment, more or less elaborate. Such a treatment is shown in one of the illustrations.

In this sleeping porch, plaque like motifs are inset in the latticed wall to give the suggestion of a flower garden. It is easy to vary this effect. Larger spaces could easily represent a window with flowers peeping in, and such motifs
as hollyhocks or morning glories clambering in would be charming.

This lattice treatment is one of the most interesting effects for semi-outdoor rooms such as sun rooms, patios and terraces, and borrowed for the sleeping porch is equally artistic. Used originally by architects of the French Renaissance as rose frames against a plaster house to fill in the spaces between long French windows, it suggests the garden very pleasingly. In courts where latticed patterns are used to decorate the walls, it might be noted that small places in the cement or wood floor are often provided to set plants so they may grow upward and also add their part in the decoration.

Another useful detail for the sleeping porch bedroom is the electric socket, for this not only provides light for reading and dressing, but the means for cleaning and heating.

Built-in furniture such as beds, bureaus, seats and cupboards are practical for this room. A closet with a mirror inside the door and shelves to use as a bureau substitute are very handy and protect belongings from dust if the windows are open most of the time. But in any case simple furniture, easily kept, should be used.

"Shadow and Sun;
Thus, too, our lives are made,
Yet, think how great the sun,
How small the shade."
The Tardy Gardner
May Belle Brooks

O the garden lover it is a real tragedy to have to move into a new home too late in the season to plant a garden, but if the migration does not take place later than June, there is yet time to do something about it.

Make your soil do its bit by enriching it as much as possible and raking exceedingly fine, for anything grows faster in soil that doesn't require a waste of time and energy in pushing through. Soak the seeds in warm water before planting and use the sprinkler freely while they are germinating. There are many things that may be planted in the summer as well as the spring, although your crop will not be as early as your neighbor's, of course. Consult the seed envelopes to ascertain just what plants should be grown in succession.

There is a new radish on the market that is a good choice for the late gardener, because of its rapidity of growth. It is called the New Perfection Radish and somewhat resembles the old Scarlet Turnip White Tip variety, but having the white predominating over the deep red color. Then there are the old reliable winter radishes of Chinese and Spanish origin, which should be sown in July or August. A European variety of peas called Buttercup is a little earlier in bearing than the usual late kind, and the Telephone Peas are the best for the last planting of the season, although if the weather is too dry and hot, late peas are not very successful. However, to the tardy gardener, it is worth taking a risk. Beans are the "one best bet" in this case, especially the green podded sort. They may be sown at intervals until August. A light top dressing of poultry manure or wood ashes will hasten matters. One should be very careful in the use of poultry droppings, however, as it is about ten times stronger than barnyard manure and will quickly burn up vegetation if applied too freely. It should never come in direct contact with the plants themselves, but merely placing around them so that it gradually feeds the roots by absorption.

Beets, too, are certain of development even if sown the middle of July. A good selection for autumn use is the early Blood Turnip Beet.

Swiss Chard is a worthwhile relative of the Beet family that should be in every garden because of its ease of cultivation and its varied uses. The leaves are cooked like greens and the broad rib is prepared like asparagus. It also makes excellent green food for chickens. The leaves quickly renew themselves after being cut off and in some climates, it lives over the winter. The Giant Lucullus is one of the best varieties. Brussels Sprouts are cultivated the same as cabbage and may be sown for succession up to July. Late cabbage plants should be set out in June or July, although it is useless to plant the seed for such, later than May. The same may be said of the late cauliflower, of which Veitch's Autumn Giant is a fine specimen. The amateur gardener had best depend upon buying his cabbage, cauliflower, pepper and eggplant plants from the growers, rather than try to raise them from seed.

The hardy carrot, though generally sown in May or June, may be sown in July, a long rooted sort, like Danver's
Long Orange, being the best choice for the autumn crop. Cucumbers are dependable, the season for planting the pickling crop being from June to the middle of July. Watch for the yellow striped beetle, however, and, if they appear, spray with a solution of three ounces of Bordeaux Arsenate of Lead to one gallon of water. Another enemy of the late cucumber vine is drought. A simple way to overcome this is to sink a tin can, having a hole bored in the bottom, in the ground near the vine. Keep this filled with water, which supplies the moisture as needed.

Sweet Corn is usually planted for succession up to July the fifteenth. All truck gardeners agree that the Evergreen varieties, notably Stowell's, are best for late planting. The Country Gentleman is also recommended. Garden Cress, or Pepper Grass, is a little known plant so easy to grow that it deserves a place in every yard. It is an ideal substitute for the slow growing parsley, which it closely resembles in appearance. It should always be sown in succession, as it soon runs to seed. The Green Curled Winter Endive is an old standby for winter use and should be sown in June or July. It is not practical to set out eggplant later than June. Kale is very hardy, the leaves being improved by frost, but is seldom sown later than June. It frequently survives the winter. Spinach does very well as a late crop and mustard is another thing that should always be sown for succession. It makes delicious greens, alone or in combination with others.

Kohlrabi responds to a late June sowing and is a vegetable deserving better acquaintance among home gardeners. In flavor it is a cross between the cabbage and the turnip, the edible bulb growing above ground. If allowed to grow too large they become fibrous and pithy. They are excellent cooked like turnips or served raw in salads.

Lettuce may be sown every two weeks until fall, but unless the ground is exceptionally rich and in a location not too sunny, late crops are rarely worth while. Hot weather makes the leaves bitter and it goes to seed rapidly.

Tomato plants of the late varieties will do wonderfully well in a late season, provided they are protected from early frosts by a cover of some sort laid over them each night. It is advisable to force tomatoes by sprinkling nitrate of soda in a ring around each plant just before a rain, or the sprinkling can may be used to wet it down. In fact, this nitrate of soda application is excellent for most vegetables, hastening maturity and increasing the yield. Care must be taken not to allow it to come in contact with the plant itself.

Turnips are the very best of all vegetables suitable for late planting, July being the favored month, although August will do. The Rutabaga variety, however, should be planted earlier, in June or early July, its huge size demanding more time for maturing.
Quality in Building

The building of your home is not for a few months or a year, but for a long period of time. While at the time of building, first cost is apt to loom so large that it overshadows other considerations, as the time goes by, the importance of other things begin to assume their proper proportions, and one wonders how some of these other things could ever have failed to receive careful treatment. True economy in building comes first, in the elimination of waste space in the planning of the home. This comes in the arrangement of rooms so as to require the minimum of space in halls and passageways, with the maximum of "useful space." At the same time the circulation must be easy and direct. The rooms must be of good size and well proportioned. Not only is considerable skill necessary, but training and experience in the actual building so that when the plan is successfully achieved, the exterior shall express the charming features of the interior arrangement, and all shall be done with a minimum of good material, so disposed as to give the maximum of service. All the related parts, the plumbing, the heating, the lighting, the selections of woods and their finish, the kitchen and laundry equipment, the aesthetic and the useful, must all be treated with the same skill and knowledge, that the minimum of expenditure shall produce the maximum of results. All this is no small undertaking; it is the business of the architect. People sometimes think they can plan their own homes, and have them satisfactory. Some women can make their own
dresses, but if the dress is to be her constant apparel for the next ten or twenty-five years, would a woman be satisfied to attempt it, or would she want it done by skilled and experienced hands? How much more is technical skill required in the planning of the home.

In the long run it pays to figure the home building problem in the terms of service and value. It is poor business to skimp and save a few dollars on the initial cost if in the end you have a continual outlay for repairs and upkeep.

As far as the building of the wall is concerned, it costs as much to build space outside the house as to enclose it. For that reason projections give more expensive floor space than that enclosed within a regular form. The oblong house which approximates the square is, other things being equal, an economical house to build. Such a home is shown in this design, planned and constructed in the most simple and straightforward manner, step-saving as to arrangement and pleasing in appearance. The vestibule is projected onto the terrace, giving a good entrance and a coat closet on each side, all under the hood of the entrance.

The living room extends the whole
length of the house, with fireplace on the outside wall, with the furnace and fuel rooms under the living room. The kitchen chimney is on the other side of the house, with flue from the laundry under the kitchen.

On the second floor are two good bed rooms and a bath room, and a third room which is smaller and may be used for a child’s room or sewing room. It is large enough, however, for a sleeping room. The owner’s bed room is fine and roomy, 11 by 17 feet in size, with windows on two sides and a large closet.

The second home, while considerably larger, is also designed on simple lines. The rooms are all ample in size; the living room 14 by 23 feet, with windows on three sides, is cool and airy even during the hot season. The wide central hall connects the living and dining rooms, though French doors permit each to be shut off when desired. Beyond the dining room is the breakfast room with a china cupboard conveniently placed. The rear hall makes an air passage way between the kitchen and the rest of the house, shutting off probability of odors or of heat passing to the rest of the house. The kitchen is larger than we often find in the compactly planned houses. With a kitchen cart or tea wagon of some type, the distance between the kitchen sink and the dining room table does not present the vision of innumerable trips carrying a few dishes at a time as it used to do, for practically a full dinner service of dishes, for a few people, can be wheeled at one time to and from the dining room. Modern conveniences have laid many of the bug-bears of housekeeping, and the house-wife needs to use her ingenuity constantly in finding better and more logical methods for carrying out her work. While some modern conveniences are expensive in first cost, others are not, and as a whole they are economical in the long run, when one takes into account the time saved either to the house-wife herself or to her highly paid helpers. The best is cheapest when all these things are taken into consideration. One thing which has not as yet been considered necessary in the home, even of the larger type is the elevator or lift, which would save the endless trips up and down stairs.
Cost of such equipment has doubtless stood in the way of its use.

On the second floor are good bedrooms with large closets. A dressing room connects with the large front bedroom. A sleeping porch opens from the hall with drop sash filling the outside walls.

The last home shown in this group is a cottage design, with the eaves hanging very low. The roof is raised over the central dormer to give full height for the front bedroom windows on the second floor.

The rooms on the second floor open well together and are attractively placed. Both living room and dining room open to the sun parlor, through which entrance is given to the house.

The exterior treatment of stucco is made attractive with trellises and vines, which are effective over the stucco surface as a background.
HEN a new home is built it calls upon virtually all the industries of the country for its products. There is perhaps no better barometer of general conditions than the building business. As the homes are being built now, they are more carefully planned than they ever have been before, with greater thought put upon both the materials used and the manner of construction. All these things require that the home builder shall know more definitely what is wanted in the new home, and must be able to give the builder a full understanding of the things that are really necessary in order to have that home satisfactory.

Designs for three homes are shown in this group, all of which are very practicable under varying conditions. The first is purely a bungalow, with the wide overhang of the eaves and the porch shading the front of the house, yet without giving too much shade, as may be seen from the luxuriant growth of the vines and planting. The room arrangement is excellent, with the living room taking the full width of the house, dining room and kitchen connecting well together, but without a door opening directly between them. The chambers are connected by the small hall.

The second home is a cottage design
but with good space under the roof. Living room, dining room, and sun room, all open together through wide doors or cased openings throwing the whole lower floor together. The stairs lead up from the living room without loss of space. On the second floor are three chambers.

The exterior finish is of stucco with timber work in the gables, brackets and window trim.

The last home shown is of stucco and brick and also has timber work in the gable over the porch. Brick is used for the foundation courses up to the sills of
A home which is practical and roomy

the windows and for porch and chimney. In plan it is very carefully worked out to give the maximum of living space. The living room is 30 feet long, with stair-way and hall opening from it, as is also the dining room. Two bed rooms and a bath room open from the hall on one side and the kitchen on the other. One of these bed rooms is virtually a sleeping porch, with two sides filled with windows. There are two additional rooms on the second floor. The planting about these homes promises to add increasingly to their beauty, as the time goes by. Flower boxes are used to advantage on the porch railings.
The tea room movement has certainly been in the interests of good cooking, and may be said to have had a marked influence on certain phases of house furnishing.

It is quite true that many tea rooms are extreme and freakish. The blue rabbit, green dragon and purple cow themes have run riot in some cases. Even so, they have not been without benefit. Just as the first Futurist and Cubist pictures made us all gasp a little, and then gave cause for real thinking, so have the bright and daring schemes of the bizarre tea shops set new standards in paint. One can always weed, sort and sift in picking up ideas about house furnishing. It is a wise homemaker who employs this method, taking a hint here and a hint there, adapting to suit the particular need.

For some time I have been noting dif-
ferent tea house schemes with special interest, believing they have much to offer in the way of good suggestions for summer rooms and porches.

These picturesque places are located all over the country. Some are smart New York shops with the newest wrinkles in decoration, as in sandwiches; some are rustic rooms in rural districts where bare boards make a background for hickory furniture, and you sip tea and eat old-fashioned seed-cakes from flowing blue china or willow ware; others are in distinguished old houses where the colonial idea is carried out to the letter. You can buy the tea pot on your tea tray if you wish, copy the chintz curtains, or borrow the scheme of painting fan-back Windsor chairs, pale yellow with lines of Continental blue. Some of these places are north, some south and west.

One well remembered spot on the New England coast makes use of an old boat house, with fish nets and crossed oars as wall decorations. Tea is not brewed here. Coffee is substituted and you can order clams, lobsters and every seasonable thing found in the sea. And it might be added here that "tea room," "shop" and "house" are elastic terms covering many things. Yet the serving of tea was the firm foundation of the original plan and the name survives.

This boat house is vivid as to paint. The floor is yellow, the chairs are sea-green and the tables sea-blue. As the real ocean is just outside the windows the color scheme is extensive. There are no curtains. Awnings of the same vivid green are used when needed.

Thinking of various establishments as they dot the memory, "The Cottage Tea Room" of New Smyrna, Florida, comes to mind, a place of cool colors and—hot, hot tea. I remember the windows were curtained in blue and white checked gingham, that the chairs and tables were painted ivory white with dark blue bands. In a sales room palmetto baskets and fans were for sale, also brilliant birds made from pine cones. The pelicans were very clever, as such toys go.

An old time southern place, reminiscent of other days, is the Plantation Tea House near Charleston, South Carolina. At this particular moment the decorative scheme is less clear in my mind than the hot biscuits, fried chicken and other good things. The delightful ride out from Charleston, across the river, is vividly recalled, also the heavy April downpour which accompanied the return.
Blue seems to be a color particularly favored by the guiding powers of the tea cult. Quite charming is the tone used in Polly-Anna Inn at Nokomis, Florida. This interesting place is more than a tea house, as the name indicates. On Spanish lines and with much architectural charm, the Inn commands a beautiful view of one of the inlets from the Gulf of Mexico.

We enjoyed ice tea on a hot March day, accompanied by cinnamon toast, in a room in which old rose, ivory and black made a pleasing color scheme.

Of more recent memory is "The Afterglow" on Sarasota Bay, a delightful house which should go into a story book. One hardly knows where to begin with the tale; whether to describe the gifted owner, Mrs. Ida Smith Hemingway, or paint the background of semi-tropical foliage, Italian pergolas and green waters of the lovely bay. One enters the grounds under an arch of flowering vines, passes an enchanting garden house covered with the brilliant blossoms of the flame vine, and thence into the main dwelling which is cool on the hottest day. Perhaps you have arrived a little earlier than the appointed hour of luncheon or tea—for in "The Afterglow" everything is arranged by appointment.

You are free to wander over the house. The rooms are filled with beautiful objects picked up all over the world, for Mrs. Hemingway is a great traveler. Fine old mahogany furniture, decorative cretonnes and rare pottery delight the eye, while books and magazines invite close companionship. There is no suggestion of a shop. In fact, it is a charming home opened to the public through one of those turns of fortune not unknown in modern American life.

A cottage tea room
Fascinating as is the interior, the garden leading down to the water tempts investigation. Those who have been in Italy or know, merely through photographs, the coast towns, will instantly think of Amalfi. Something of the spirit of the famous Capucini gardens has been imprisoned here, and the rich color of West Coast Florida helps create an illusion of Italy.

On either side of the door opening into the garden is a pergola of concrete pillars, roofed with the trunks of cedar, over which vines grow luxuriantly. The loose bark of the trees makes an interesting contrast to the architectural columns, which frame the sky and water in delightful panels. Descending the stair case of tile and concrete one notes on the first broad landing a sunken pool filled with lilies, on the second a sundial, while the third and lower landing is bordered by a hedge of arbor-vitae concealing the sea wall.

Over a luncheon, which measured up to the environment, we had ample time to study the decorative scheme of the enclosed porch assigned to our party. Shades of two-toned stripes shut off the mid-day sun without concealing water and garden. Wicker of interesting design, upholstered in as gay and bold a pattern as ever graced a Fifth Avenue shop, made a pleasing harmony with the rough, gray plaster of the walls. On the

house side of the porch was a lattice, stained like the furniture, a walnut brown, over which grew wistaria in palest shades of mauve.

Through a narrow door, opposite the water side of the porch, extended a small patio filled with fan palms and adorned by a statuette in painted plaster, representing "Summer." Originally there were "The Four Seasons." This captivating figure in quaintest costume, and holding on her finger a bird suggested glazed terra cotta, so brilliant were the colors.

As we motored home by Gulf Stream Avenue and later through the tall pines and arching oaks, we agreed that of all our tea house experiences, "The Afterglow" was far and away the most interesting. And putting the theory into practice that much may be learned in decorative matters we planned an enclosed porch for a northern summer home based on the day's outing.
A Simply Finished Home

W. L. We are beginning the construction of a home, and there are several points about which we want your help.

The original plans are for a "Colonial Bungalow," and while the house may eventually be completed in every detail, it is now only a one story house; the half story being left entirely unfinished, except for windows, plumbing pipes and wiring.

The house will be stained brown on the exterior, with cream paint trim, instead of the usual white paint of Colonial.

Every departure from the plans is made to reduce the present cost of building. Without these changes we could not build.

The house consists of living room, dining room, breakfast room, kitchen, kitchen porch, bath room, screened porch, bed rooms, living porch and entrance porch. The walls are everywhere to be finished with rough sand plaster, which has a very agreeable soft, grayish tone, rather neutral; the woodwork is pine and is to have one coat of brown stain and rubbed down. The kitchen and bath room walls to be enameled up to four or five feet. The floors will be of pine boards cut very narrow so as to obtain best results. It is impossible to get fine flooring now and we decided it would be better to lay hardwood floors over all at some future time than have floors of one or two rooms of hardwood now and the rest an inferior wood. Please give suggestions for finish-

ing floors with a view to easy cleaning, to service, and inexpensiveness.

For furniture, we plan to use walnut or brown mahogany with wicker in living room, walnut or brown mahogany in dining room. The soft brown of walnut is beautiful and perhaps easier to keep clean than mahogany. We have a walnut upright piano but everything else to buy. Would like a desk on the colonial order, with deep drawers below a shelf which drops down. A gate leg or single pedestal reading table in walnut, a desk chair and piano chair in walnut, and possibly a davenport and two or three chairs in brown wicker, and built-in book case would complete the living room furniture.

We have a very old French clock with a glass cover over all. Would this not be very well placed on a well braced shelf above the desk or above a small table with drawers. The wood mantel could then be left free for more modern ornaments, and the clock is worth special attention.

For the dining room would like perfectly plain round walnut or mahogany table with four legs with rush bottom chairs and a plain large serving table to use where sideboard will go at some future time. Would mirror with lights on each side be appropriate above serving table? Would it be better to use brown mahogany in dining room with walnut in living room?

We have no pictures but a few small pieces of old brass and some well chosen wedding presents will help.
Ans. Your own ideas are so well considered that we have few criticisms to make. Your general plan is good. The brown-stained pine woodwork should have a coat of wax to protect it and then rubbed down. It will be soft and beautiful with the natural sand finished plaster walls. Your decision about floors is also good, but the pine should be first shellaced, then waxed and rubbed like hard wood. You will, of course, paint the woodwork in bath, white or ivory and preferably in kitchen also.

Walnut furniture by all means, in this setting of stained pine and gray plaster, in dining room as well as living room, especially if rush bottom chairs are used. The style should be simple. For the buffet table you could get it in the unfinished furniture and stain and wax yourself. Have it long and narrow. A long, narrow mirror above between light sconces of burnished brass with candles will be very good indeed. Over the table use an inverted bowl. Burnished brass for the light fixtures will be in best harmony with your woodwork and furniture. We should get one large rug for the living room, 10 by 14 feet in a gray Rego Wilton, with a narrow border of black. This will last you many years and always look well. A good living room rug is economy. Gray brick would be good for the fireplace facings. Get color in some richly colored cretonne for the window drapes and upholstering, a couple of fireside wicker chairs. A piano lamp and a library table lamp will make a most attractive room.

You can get along with a wool fibre rug in the dining room in an old blue and use blue at the windows.

The old clock deserves a place of honor, but we should prefer to hang it on the wall over a sort of console table, rather than placing it on a shelf. As to pictures, do not use them in the dining room unless a Dutch scene in Delft blues on one side the French doors and a Dutch interior on the other. In the living room Japanese prints framed in narrow frames of dark gray wool and some of the lovely photogravure landscape scenes in color, framed in antique gold, would be choice and not expensive.

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Sun Room in Black and Jade Green.

E. D. McK. My house faces south. A tiled porch extends across the front, being covered in the center.

Would you have all the interior woodwork the cream ivory? We had thought of mahogany doors, or should the doors be ivory, too? I will have the sunparlor in wicker. What should I use on the floor? It is hard wood. The living room will be furnished in antique mahogany, upholstered in soft shades of tapestry, with old blue predominating. The dining room is also in mahogany. My chairs are covered with a black brocade velvet showing a tiny bit of gold. Now, how shall I have these rooms papered and what draperies? Shall use taupe rugs in these rooms. The bedrooms will be furnished in mahogany or perhaps walnut.

Ans. Taking up the question of the walls—we suggest for the living room a soft, light gray grasscloth, which will be a good background for the mahogany and old blue tapestry, and is particularly lovely with ivory woodwork. In regard to the doors, the front door should be antique mahogany, also the door opposite into the little hall. The French doors would best be in ivory. It would be attractive to make French doors in place of the double window opening from dining room to porch; the sun parlor best have windows only. One reason for this is that we would have chintz shades at these windows and no curtains. Let them be very gay, preferably on a black ground. Paint the woodwork here a dull, jade green and simply tint the plaster wall a soft gray. Paint the floor black, and lay a narrow, yard wide runner of jade green, wool fibre carpet down the center. Have jade green wicker furniture and upholster in cretonne apple green, corn color, light blue and coral colors on a black ground. The dining room should have one of the lovely Colonial landscape papers in soft grays on an ivory ground, a fine setting for your chairs in black and gold brocade. Side draperies at the double window of black and gold brocade. The taupe rug will be just right.

The little breakfast room should have a flowered wall paper with rose and blue on a cream ground, table and chairs painted gray with decorations in rose and curtains at the window of deep rose organdy, ruffled.

We should use gray, painted furniture with inset panels of cane, in one of the bedrooms, instead of mahogany.

Living-Dining Room Treatment.

R. J. S.—I am enclosing a plan of our home, which is now under construction. Would like your advice concerning the color of the walls and draperies of all the rooms. The woodwork throughout will be ivory unless you advise gray in the kitchen and breakfast room. How shall I furnish my big room? Would you advise selling my dining furniture? If I have linoleum on the kitchen floor, shall I have it also on the floor of the breakfast room? Any suggestions you may offer would be very much appreciated. I love to read your little magazine.

Ans.—As to the color of the walls—you do not say how the house faces, so in regard to the “big room,” we can only say that if it has a north or east exposure, make the wall tone a soft tan or ecru; if a south exposure, tones of gray. If paper is used, a tapestry design in two tones of the gray or ecru is the best choice. As to the furniture, since you have the breakfast room and will use that except with guests, we would not use dining room furniture in your big room. You could have a large circular top made of pine to set over an ordinary table, or have a pretty drop-leaf table with extra leaves. You could use a chest of drawers, a highboy, for your table linen. Yes, the linoleum of kitchen floor should extend over the breakfast room, also. In so small a house, we would run the ivory finish right through. In the kitchen and bath it should have a gloss finish. We would put a gay paper, birds and flowers, on the walls of breakfast room and have table and chairs painted, either gray with flower decorations or blue with green and yellow stripes.
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K M J Y
June Vegetables

Elsie Fjelstad Radder

The fact that green vegetables are used all the year round has done much to keep our people in health. Canned vegetables such as we are now able to have all the year are excellent, nevertheless, we welcome vegetables “fresh from the garden.”

It is said, however, that many people eat just what they like in the vegetable line and do not have enough regard for the food elements which they contain.

Except for beans, peas and lentils, which contain a large amount of protein, vegetables are chiefly valuable for their potash salts. Many contain cellulose which gives needed bulk to food.

Summer vegetables should be cooked as soon after gathering as possible. In case they must be kept, it is best to spread them on the floor of a cool dry cellar or place them in a refrigerator. Lettuce may be kept for days, sometimes even growing whiter and sweeter if wrapped in wet paper and kept on the ice, or by placing it in an airtight pail or jar. Wilted vegetables may be freshened by allowing them to stand in cold water.

Young tender vegetables which are good eaten raw, lettuce, onions and radishes, served separately or combined in salads help to stimulate the appetite. When an oil dressing is used in salads, these afford considerable nutriment.

Lettuce is coming to be one of our standard foods all the year round and is especially valuable in the winter and early spring when other green vegetables are not practicable for most tables. Lettuce contains little nutriment, but is valuable for the large amount of water and the potash salts it contains. Curly lettuce is of less value than the Tennis Ball, but it makes an effective garnish. Lettuce may be prepared for use by removing the leaves from the stalk. These are washed, placed in cold water until crisp, and then drained or dried. Either a wire basket or a mosquito netting bag is convenient to use in drying the lettuce.

Radishes may be obtained throughout the year. There are long and round varieties, the small round ones being considered the best. Radishes are served uncooked merely for a relish. When cooked they are somewhat like turnips. To prepare radishes for the table, remove leaves, stems, and tip end of root, scrape and serve on crushed ice. Radishes may be cut attractively to resemble tulips, when they should not be scraped. To accomplish this, begin at root end and make six incisions through skin, running three-fourths the length of the radish. Pass the knife under sections of the skin and cut down as far as incisions extend. Place in cold water, and the sections of skin will
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Other early vegetables which are served cooked include asparagus, greens and spinach, and carrots.

Small paring knives and a small vegetable brush are useful in preparing vegetables for cooking. Vegetables should be washed in cold water and cooked until soft in boiling salted water. If cooked in an uncovered vessel their color is better kept. Time for cooking the same vegetables varies with freshness and age. When an inserted fork comes out easily the vegetable is sufficiently cooked.

**Asparagus in White Sauce.**

Boil asparagus cut in one-inch pieces, drain and add to a thin white sauce, allowing one cup sauce to each bunch of asparagus. Remove centers from small rolls, fry the shells in deep fat and fill with the creamed asparagus.

**Asparagus a la Hollandaise.**

Make a sauce as follows: Put one-half cup butter in a bowl, cover with cold water and wash with a spoon. Divide into three pieces; put one piece in a saucepan with the yolks of two eggs and one tablespoon of lemon juice. Place saucepan in a larger one containing boiling water and stir constantly with a wire whisk until butter is melted. Add second piece of butter, and, as it thickens, the third piece. Add one-third cup of boiling water and cook one minute. Season with salt and cayenne. Serve this with plain boiled asparagus.

**Spinach Puree**

Wash and pick over one-half peck of spinach. Cook in an uncovered vessel with a large quantity of water to which has been added one-third teaspoon soda, one-half teaspoon sugar, and salt. Drain, chop finely, and rub through a sieve. Reheat. Add three tablespoonfuls of butter, one tablespoon flour and one-half cup of cream. Arrange on a serving dish and garnish with yolk and white of hard boiled egg and fried bread cut in fancy shapes.

**Spinach, French Style.**

Pick over and wash one peck of spinach. Cook in boiling water twenty-five minutes. Drain and chop finely. Reheat in a hot pan with four tablespoons of butter to which has been added two-thirds cup of chicken stock. Season with one teaspoon of powdered sugar, salt, pepper and a few gratings each of nutmeg and lemon rind.

**Carrots, Poulette Sauce.**

Wash, scrape and cut carrots in strips, cubes or fancy shapes. Cover with boiling water and let stand five minutes. Drain and cook in boiling water to which has been added salt and butter. Make a sauce of three tablespoons butter, three tablespoons flour, one cup of chicken stock and one-half cup cream. Season to taste with salt and pepper. Just before serving add the yolks of two eggs and one-half tablespoon of lemon juice. Add the carrots to this sauce.

**Scalloped Onions**

Cut boiled onions in quarters. Put in a buttered baking dish, cover with a thin white sauce, sprinkle with buttered cracker crumbs and allow to brown in the oven.

**Glazed Onions.**

Peel small silver skinned onions and cook in boiling water fifteen minutes. Drain, dry and put in a buttered baking dish. Add slightly seasoned brown stock to cover the bottom of the dish, sprinkle with sugar and bake until soft, basting with stock in the pan.
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Protect your home and the health of your treasures against germ-carrying insects night and day.

PEARL WIRE CLOTH is a health as well as a comfort necessity. Its metallic coating gathers no dirt— keeps it clean— makes it sanitary, beautiful and longer lasting and is, therefore, most economical.

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New York, Georgetown, Conn., Chicago, Kansas City, Mo.

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"It does not take an expert to realize that the house furnace as commonly installed, is a source of foul heat and contaminates the air. The furnace gases pollute the air we breathe, compelling us to open windows to get a breath of fresh air. There is something radically wrong with the accepted methods of house heating. After reading your literature, I believe you have solved this problem better than any other known method of heating."

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The Farquhar Furnace Co.
806 Farquhar Bldg., Wilmington, Ohio
The Trend of Building Costs

The trend of general commodities prices has been upward from 1896 until 1920, and building costs followed the general course. In 1915 began the more rapid rise which reached the peak in 1920, with the downward rush of prices similar to the rise of the preceding period. The general trend of construction costs from 1914 to 1921 is shown in the accompanying chart, by the heavy line, with dotted lines showing the two important parts of which it is composed; cost of materials and labor costs. It will be noted that the cost of materials has led the construction curve up to its peak, while labor costs have followed a much more steady curve. This chart was published in the spring, 1922, in the bulletin of the Chemical National Bank of New York City, mentioning as worthy of note, that there have been no marked changes in material costs or in general construction costs since September, 1921, though there have been slight recessions in labor costs. Also that certain building materials have actually increased in price during the last several months, owing to renewed bidding for materials with the increased building activity of recent months.

The Trend of Building Costs—1914-1921
A Comparison of Material Costs, Labor Costs and Total Construction Costs in the Building Trades (1914 Equals 100)
Actual economy values as well as artistry are deciding factors in selecting side walls and roof materials.

"CREO-DIPT" Stained Shingles have quality the open market does not afford. Only the best grade of shingles are used, cut from sound timber. While market grading permits a large percentage of flat grained shingles, only vertical grained shingles are worthy of the "CREO-DIPT" process; preserving each shingle with creosote stain in color desired that will not wash or fade. The result is a roof and side wall material that can not rot or curl.

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The use of Metal Lath as a foundation for plaster in walls and ceilings in the principal rooms costs but little more, only $200 or less, on a $7,500 home.

The security against cracks and falling plaster and the added value to your home which

Kno-Burn

METAL LATH
"The Steel Heart of Plaster"

provides is many times the slight additional cost of this lath as compared with ordinary lath.

We will gladly send free a very helpful booklet, "Home Building."
## Comparative Costs of Frame, Stucco, Brick Veneer and Solid Brick

### $7,500.00 House, Frame Construction, 28 1/2 Squares

<table>
<thead>
<tr>
<th>Rate Per Sq.</th>
<th>1919</th>
<th>Cost</th>
<th>Cost Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame, sided</td>
<td>$37.00</td>
<td>$1,055.00</td>
<td>$227.00</td>
</tr>
<tr>
<td>Frame, stucco, metal lath</td>
<td>45.00</td>
<td>1,282.00</td>
<td>$227.00</td>
</tr>
<tr>
<td>Frame, face brick, ven.</td>
<td>63.50</td>
<td>1,810.00</td>
<td>755.00</td>
</tr>
<tr>
<td>12&quot; solid brick, faced</td>
<td>83.00</td>
<td>2,365.00</td>
<td>1,310.00</td>
</tr>
</tbody>
</table>

### Comparative Costs in Building Materials

The new home is planned, oftentimes, without taking into special consideration whether the house is to be of wood or stucco, hollow tile or brick. The inside of the house is, in large part, just the same, whatever the exterior walls may be. When the general plan and arrangement has been decided upon, and the matter of how it shall be carried out is under consideration, then a first question is apt to be “how much more will it cost if built of one material or another?” In such a case a table of comparative costs is of interest, even though it does not enable one to estimate the actual cost of the house. It does show, in a general way, the relation of the cost of one type of construction to others, where the figures were all compiled at the same time and under the same conditions. In these tables only the outside wall is taken into consideration, and this is a comparatively small part of the cost of the entire house. Thicker walls require wider jambs for the openings, but in general the outlay for partitions, roof, floors and finish is constant irrespective of the construction of the exterior walls.

It is usual to figure surfaces in squares of ten feet, that is, 100 square feet of surface, at the thickness of the wall to be used. The following tables are based on such a square as a unit, and applied to a house which in frame construction cost $7,500. The exterior walls of this house amounted to 2,850 square feet, 28 1/2 squares. Actual costs per square are given, in which may be substituted local prices. In the first table issued by the National Lumber Manufacturers’ Association, material prices and labor costs used are those current in Chicago, in August, 1919.

## Comparative Costs of Hollow Tile Walls

### Applied to House, Frame Construction, $7,500, 28 1/2 Squares Exterior Walls

<table>
<thead>
<tr>
<th>9&quot; Walls</th>
<th>Rate Per Sq.</th>
<th>1921</th>
<th>Cost</th>
<th>Cost Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot; Loadbearing Hollow Tile and Stucco</td>
<td>$36.00</td>
<td>$1,026.00</td>
<td>$346.00</td>
<td></td>
</tr>
<tr>
<td>4&quot; Loadbearing H. T. and 4&quot; Face Brick, Brick Bonded Every Sixth Course</td>
<td>58.00</td>
<td>1,653.00</td>
<td>$598.00</td>
<td></td>
</tr>
<tr>
<td>8&quot; Double Shell Moisture Stop Tile</td>
<td>52.00</td>
<td>1,482.00</td>
<td>427.00</td>
<td></td>
</tr>
<tr>
<td>9&quot; Common Brick Outside, Selected and Laid with Struck Joints</td>
<td>64.00</td>
<td>1,824.00</td>
<td>769.00</td>
<td></td>
</tr>
<tr>
<td>8&quot; “Fiskelock” Tapestry Brick</td>
<td>66.00</td>
<td>1,881.00</td>
<td>826.00</td>
<td></td>
</tr>
<tr>
<td>4&quot; Face Brick and 4&quot; Common Brick Backing</td>
<td>85.00</td>
<td>2,423.00</td>
<td>1,368.00</td>
<td></td>
</tr>
<tr>
<td>13&quot; Wall 12x12x12 Hollow Tile Finished with Stucco</td>
<td>48.00</td>
<td>1,368.00</td>
<td>313.00</td>
<td></td>
</tr>
<tr>
<td>13&quot; Wall, 4&quot; Face Bricks, 8&quot; Hollow Tile</td>
<td>85.00</td>
<td>2,422.00</td>
<td>1,367.00</td>
<td></td>
</tr>
</tbody>
</table>

The first table gives figures on frame, stucco, brick veneer and solid brick. We are indebted to the National Fireproofing Company for the table of costs of hollow tile walls. These figures have been applied to the same house as the first table but actual cost per square in the two tables can not be compared for the figures for hollow tile construction were tabulated, as noted in the table, in 1921.
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---or merely a shelter

Even though your building plans do not provide for a sun parlor or sleeping porch, any room can be made to include their advantages through the use of Air-Way Multifold Windows.

Air-Way provides for a full opening of any width—the windows fold back out of the way without interference from either screens or draperies. If you expect to build a new home or remodel the old one, write today for a copy of Catalog N-4.

Most reliable hardware and lumber dealers can supply you with R-W hardware. If not, it can be immediately secured from any one of our many branches.

Richards Wilcox Mfg. Co.
Aurora, Illinois, U.S.A.

Hess Welded Steel Furnaces
(NONE BETTER)

The latest improvement in furnaces will shortly appear, for the season of 1922.

This is a check draft arrangement, coupled with the fire door and direct smoke damper, and with a chain attachment for regulation from upstairs.

Its purpose is to prevent escape of smoke and gas into the cellar when the fire door is open.

Opening the fire door automatically closes the check damper, and opens the direct outlet to chimney, making an inward draft at the fire door. Closing the door instantly readjusts the dampers to their original positions.

SIMPLE AND EFFECTIVE
The simplicity of the Hess Furnace, and the impossibility of leakage from its welded seams commend it to home owners who appreciate comfort and a healthful atmosphere.


Hess Warming & Ventilating Co.
1217G Tacoma Building
Chicago
Painting and Finishing

The Amateur Painter

Mixing a can of ready-to-use paint is something of an art, and the amateur home painter often does not know why there are shiny spots here and there on the wall when he has finished the job. When a can of paint is opened the oil has always raised to the top and the paint settled heavily to the bottom of the can. It is manifestly impossible to stir a full can of paint to an even consistency. The oil should be poured off into another receptacle, and then mixed, a little at a time, into the paint which has settled to the bottom of the can; "boxing" the paint from one receptacle to the other and using every precaution to get a uniform and homogeneous mixture of paint and oil.

Color

If color is to be added, or the tint changed by adding a little color, the tinting color should be thinned by adding oil or turpentine. Add a little at a time, bringing it up gradually to the desired color. If this is done a perfect match may be obtained.

To test the color spread a drop of the mixture on a piece of clean glass. The side of the paint film that is in contact with the glass will be perfectly smooth and may therefore be easily compared with another batch of paint by spreading a drop along side the sample from the first. A slight difference between the two will be shown in this way.

Paint is always improved by being allowed to stand a day before using. It should be strained through cheese cloth or a fine sieve shortly before it is used. This eliminates the paint skins as well as any paint lumps or dirt that may have gotten into the mixture. It also adds the final touch to a perfect job of mixing. A good painter will use these methods as a matter of habit. Good mixing is the foundation of any good paint job.

Turpentine

Turpentine is a thinner and evaporates. There should usually be more pigment in a paint film than would be obtained in a workable mixture in which the chief vehicle is the linseed oil. Turpentine serves as a convenient agent since after the paint has been applied the turpentine evaporates out of the mixture, leaving on the surface the desired proportion of pigment and oil. This should be kept in mind when adding turpentine to paint. It does not take the place of oil, which is the vehicle which carried the pigment. Turpentine simply thins the mixture, making it easier to apply, and evaporates, leaving the heavier coating of pigment and oil.

What Is a Drier?

A paint film dries because its oil takes unto itself a definite percentage of oxygen from the air, which action converts it into a solid dry substance. To hasten this process certain chemical compounds known as driers are often added to the paint mixture.

Briefly put, the action of driers is due to their ability to take up oxygen from the air and give it up to the oil in the paint or varnish in which they have been mixed. These driers are chiefly compounds of lead and manganese and linseed oil and have the power to form two sets of compounds, one set containing twice as much oxygen as the other. When in paint they give up half their oxygen to its linseed oil and then, as the paint film is only about one-five-hundreth of an inch thick, absorb a fresh supply of oxygen from the air. This the oil again takes from them.

Thus these compounds act as carriers of oxygen from the air to the oil and are called driers for that reason.
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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204-5 Abbey Bldg., Minneapolis, Minn.
Painting and Finishing

Removing Varnish

Will you give me some suggestions for removing varnishes from the interior woodwork of a dwelling? What will bleach the stain which is in the softer parts of the wood?

Ans.—Purchase a good paint or varnish remover from any reliable dealer; apply as directed. The softer spots in the wood are more open and the varnish or stains strike through deeper where the lumber is smooth. Keep applying the remover, working it into the rough parts with a stiff brush, washing the spots off with fresh water.

Treating Ochre Filled Floors

Will you inform me what to do with pine floors that have been filled with yellow ochre and water and then varnished? The varnish and filler have worn off. I also have trouble with my porch floors. The paint comes off by washing, peels off and walks off.

Ans.—The pine floor which has been filled with ochre and varnished should have the spots sandpapered and washed until they are clean. The spots should then be touched up with additional ochre until they match the other woodwork and the entire floor should then be varnished. Regarding your porch, all loose paint should be scraped off and the spots touched up with paint to match the rest of the work. The entire floor should then be repainted.
In planning your new home, the study of interior treatment both as to architectural detail and decoration is of equal importance to obtaining a good design and a practical, well-planned house. This book illustrates the interiors of many successful homes and contains much valuable and authoritative advice on interior decoration. Printed on enamel coated paper which brings out the beautiful detail of the illustrations. Size 7½x11. 160 pages. Flexible embossed cover in colors.

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- Living Rooms.
- Dining Rooms.
- Sleeping Rooms.
- Sun Rooms.
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The elm is a sociable tree, always reaching out to its fellows, until the far reaching branches meet their neighbors and form a green interlacing canopy of grateful shade. The topmost branches of the Tall Elm near the Hospital tells a sad little tale, of overseas service and of France in springtime.

Across the moonlit lake appear the "golden towers of Camelot," shining like burnished silver, with wonderful reflections gleaming and glistening in the still water. The dryad comes with her message, “Dear mortal, how little your race knows of the shining eyes above, around you, as you come and go among us.” There is also the invasion of the proletariat. “No more is the sweet Heart of the City a walled garden, secluded and still; it is the picnic ground for the great unwashed.”

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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 April, 1922.

(Seal) M. E. HEDLUND.

My commission expires March 18, 1925.

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Wood Preservation: The Creosote (the best wood preservative known) penetrates and preserves the wood.

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<th>Supplier</th>
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<td><strong>Metal Lath.</strong></td>
<td>N. W. Expanded Metal Co., 965 Old Col. Bldg., Chicago.</td>
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<tr>
<td></td>
<td>Associated Metal Lath Mfrs., Chicago, Ill.</td>
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<tr>
<td><strong>Metal Building Corners.</strong></td>
<td>Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.</td>
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<td>National Lead Co., 111 Broadway, New York.</td>
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<tr>
<td><strong>Plumbing Goods.</strong></td>
<td>Hardin Lavin Co., Chicago, Ill.</td>
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<tr>
<td><strong>Refrigerators.</strong></td>
<td>Herrick Refrigerator Co., Waterloo, Ia.</td>
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<tr>
<td></td>
<td>Creo-Dipt Co., Inc., 1022 Oliver St. No., Tonawanda, N. Y.</td>
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<td><strong>Sash Balances.</strong></td>
<td>Caldwell Mfg. Co., 6 Jones St., Rochester, N. Y.</td>
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<td><strong>Screen Cloth.</strong></td>
<td>Gilbert &amp; Bennett Mfg. Co., 277 Broadway, New York City.</td>
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<td><strong>Sewage Disposal.</strong></td>
<td>Kewanee Private Utilities Co., 123 South Franklin Ave., Kewanee, Ill.</td>
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<td><strong>Shades (Porch and Window).</strong></td>
<td>Aeroshade Co., 976 Oakland Ave., Waukesha, Wis.</td>
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<td><strong>Sheathing Board.</strong></td>
<td>Bishopric Mfg. Co., Cincinnati, Ohio.</td>
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<td>Bishopric Mfg. Co., Cincinnati, Ohio.</td>
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<td>Kewanee Private Utilities Co., Kewanee, Ill.</td>
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<td><strong>Varnish.</strong></td>
<td>Berry Bros., Detroit, Mich.</td>
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<td></td>
<td>Lowe Bros., 465 E. 3rd St., Dayton, Ohio.</td>
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<tr>
<td></td>
<td>Johnson &amp; Son, S. C., Racine, Wis.</td>
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<td><strong>Wall Board.</strong></td>
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<td>Upson Co., 151 Upson Point, Lockport, N. Y.</td>
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<td></td>
<td>Philip Carey Co., Cincinnati, Ohio.</td>
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<tr>
<td><strong>Water Supply System.</strong></td>
<td>Kewanee Private Utilities Co., 123 South Franklin Ave., Kewanee, Ill.</td>
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<td><strong>Window Hangers.</strong></td>
<td>Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.</td>
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<td></td>
<td>Whitney Window Corp., 138 E. Lake St., Minneapolis, Minn.</td>
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<td><strong>Wood Stain.</strong></td>
<td>Berry Bros., Detroit, Mich.</td>
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<td>Johnson, S. C., &amp; Son, Racine, Wis.</td>
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</table>
Building Activities

With the advance of the season there is noted an increased activity prevailing in all departments of construction. While there is an unprecedented amount of residential construction, there is also increased activity along other lines, including industrial plans. Building permits are breaking previous records, and the major portion of this building is for homes: largely homes of the smaller type. Building records of this year show apartment houses to be decreasing, with the increase in construction of the single dwellings: a good sign for better citizenship. A block to block survey reported by the Chicago Real Estate Board shows increased building under the Landis award. The report shows that there was under construction on May 1st in Chicago 1,473 single family dwellings and 769 two-family buildings. This report did not include the building going on in the suburban towns.

Such an amount of building, widespread as it is, must soon begin to show an effect on abnormally high rents. As people build their own homes they go out of the "renter" class into that of "home owner." Late statistics show that at the present time 62 per cent of our people are rent payers, and that the average householder is using 40 per cent of his income for this purpose. In the older time 20 to 25 per cent of the income was scheduled by economists as a fair proportion to be devoted to rent. Increase in home building is the greatest factor in determining rent rates, which should be based upon a fair return basis on money invested and not by a shortage of housing.

Taxation is an important element in the matter of home owning. If the self owned home is to be general again in this country, the burden of taxation must rest evenly upon citizenship, relatively to the protection afforded, and the home relieved of more than its rightful share of taxation. New York City, in 1920, abolished all taxes on new residences for a period of 10 years. Permits there for residence buildings in 1921 showed a jump of 300 per cent. Taxes better be increased on land and reduced on home improvements and homesteads.

A new building is a most noticeable symbol of business activity, because in its construction practically every line of industry and trade is brought into action, and when it is completed it has added to the real values of the community. One of the most valuable phases of the present situation lies in the stimulating effect which increased building activities are having on business in general. With the upward trend of building operations comes a true optimistic note, noticed throughout the entire realm of business in all parts of the country, and, as it spreads, gives evidence of returning prosperity for all.
KEITH'S MAGAZINE
ON HOME BUILDING

Contents for July, 1922

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A flower garden is an undertaking that will give the flower lover daily installments of pleasure with bouquets of flowers thrown in as an extra! Of course, this is the case if the garden is a success, as it sure should be if the flower lover follows a few simple rules, at the beginning.

The selection of the site will be the first thing to consider in planning the new garden in new grounds. In choosing “the garden spot,” one should give thought to the natural beauty of the land and if there is a site that commands a particularly charming view, make use of it. Of course, the garden should be in a warm, sunny spot where plants will thrive and blossom. A south or east exposure is perhaps the best choice, for then sunshine will always be plentiful to insure luxuriant blossoming, and garden and walks will dry quickly after rains. Then one can stay out in the garden with comfort and enjoy—

“After showers,
The smell of flowers,
And of the good brown earth.—”

Many landscape gardeners and horticulturists say that people planning a flower garden invariably ask, “What shall I plant?” instead of asking, “What can I plant?” The question of soil is therefore the next one to be decided. If the attractive southeastern site does not have good soil, then one must make good soil, if one has literally to haul it in by the cartload! Grading contractors are quite apt to scrape the good top soil off knolls to fill in hollows and ravines, leaving the poorer under soil for the surface soil. If
any amount of grading is necessary, care should be taken that good top soil should be carefully put to one side until the grading is done, even if earth from somewhere else is brought for filling-in purposes, when the good black top soil should be put back over the surface.

After all grading is done, some time should be allowed before the garden is planted, to allow the earth to settle properly. Frequent watering and rains will, of course, help to settle the ground, and tamping and rolling will also be of great assistance.

Clay soil should have a generous amount of sandy loam or pure sand mixed with it and sandy soil should have good rich brown earth added. All soils require humus and a soil that has become sour should have some alkali, as lime, added to counteract the acid qualities of the soil.

Good drainage is an important part of grading the garden, for low lands that are continuously damp will not be suitable for many plants, especially those that have delicate roots which rot easily and, at the same time, the garden will not be pleasant to stay in if the ground is wet much of the time.

All soil will produce better flowers if it is well dressed, and dressing that is plowed in and then lightly covered with good top soil will put the garden in first-class shape for planting.

Then comes the pleasure of planning what the garden shall contain. If one is doing one's own "landscaping," and the real garden lover nearly always wants to do that, a trip in the country to study a few of Nature's gardens will be most worth while—observing how plants and shrubs are grouped for symmetry and balance, and for proper growth, hardy plants protecting the delicate flowers. One cannot fail to make an artistic garden if one follows out Nature's planting arrangements, adapting and selecting flowers and plants that will fit in the space one has allowed for the garden, also considering the exposure and the kind of soil.
Another item to consider in choosing the flowers, is the length of time necessary for them to grow and blossom. It is always well to plan the garden with reference to the flowers that will show quick results in relation to those requiring longer time. Another part of the garden may be filled with flowers and shrubs that, while slow growing, are going to add permanent beauty to the place. Quick blossoming plants may be interspersed among the perennials the first year, while the perennials are getting into blossom.

The biggest temptation in planting the garden is to fill every square foot with some flower or plant, a plant that one “must have,” regardless of the crowding that will take place if all the plants live and grow! One must allow space and plenty of it if the flowers and the garden as a whole are to look their best. The one exception might be where one wants a tangle of flowers, shrubs and vines—a mass of color and foliage to suggest a riotous growth.

One should choose some flowers that are most attractive in the garden while growing on the plants and then choose also the flowers that one wishes to cut for the house. In this way, the garden will always be filled with blossoms and yet with plenty of flowers for indoor use.

Other things besides plants which will add to the flower garden are good walks, gravelled or flagged, plenty of comfortable seats, benches or settees, that fit in harmoniously with the type of the garden, a small pool for goldfish or lilies, a bird bath, a sun dial or a garden gazing globe. Then, if one has the shade of a tree or two, an arbor or a summer house, one can stay out in the flower garden the livelong day and watch the bees humming among the poppies and mignonette.
Just a stone's throw from the King's highway, on the old Canadian island of Campobello, New Brunswick, and almost hidden in the dense woods, are four unique log cabins, so-called, though they are valued at more than $40,000. They were completed in the early summer of 1920, ready for occupancy on the arrival of their owner and his family from New York City. Their owner is a prominent New York banker who has been coming to Campobello for many years, with wife and young son. They have a fast motor yacht, Eileen, making frequent trips to and from their summer home.

Within a few minutes' walk from these log cabins, as they are called, though they are far different from the cabins of early days, are a number of large summer homes, including that of a former assistant secretary of the navy, and a British army officer and member of Parliament from London.

The island of Campobello is washed on the east shores by the great Bay of Fundy. It is just two miles across Passamaquoddy Bay from Eastport, Maine, Uncle Sam's seaport farthest to the east—long noted as a wonderful summer resort. While Campobello is eleven miles in length, it is from two to four miles wide on the average. It has wonderful coves, remarkable scenery, and is an ancient and historic island.

These four log cabins, illustrated by photos, show in an interesting way the lately developing tendency toward building a group of cottages, each devoted to a specific purpose; as a living cottage, sleeping cottages, et cetera; rather than the larger, more elaborately planned building; where, by the very fact of the large extent, light and air must be shut from some of the rooms in the larger structure.

These cabins are marvels of construction, handsomely finished and strongly

Log cabin containing the family rooms
built of very carefully selected spruce logs, hewed within a few miles of the spot, each having been picked for its exact size and length; being notched, smoothed and oiled similar to the spars of a ship.

The largest cabin, which is 78 feet long, 30 feet wide, with 9-foot walls, contains living and dining quarters. It has a long sloping roof, plenty of window light, excellent ventilation, and is roomy in its arrangement. Near the front entrance, between the dining and sitting rooms, is a monster open fireplace, ten feet wide, eight feet deep, twenty feet high, weighing thirty tons, and built from carefully selected colored rocks that had been gathered up from the many beaches on this Dominion island.

The fire opening is five feet high, three feet wide, and a rough log mantelpiece adds charm and beauty.

In the rear of this building are the kitchen, pantry and laundry, the floors being of beech, partitions of Douglas pine, while long poles extend across the cabins to prevent spreading where there are no partitions.

The doors are Dutch style, double, with glass top and log strips below, each smoothed and oiled, but in harmony with the cabin interiors.

The second cabin is used as the sleeping quarters for the family, and is constructed of logs of the same style and finish as the former. It is 62 feet long, 30 feet wide, 9-foot walls, with hardwood floors and Douglas pine partitions and finish. The ceilings extend to the high roof, allowing excellent ventilation at all times.

Madam's sleeping room is 29 feet long, 21 feet wide, and is equipped with a beautiful bath, toilet, with closets adjoining; the other sleeping rooms are slightly smaller, but also fitted with separate bath, toilet and closets.

The third cabin is used by the several servants who arrive each season. It is 47 feet long, 30 feet wide, 9-foot walls, built after same style and model, and would generally be considered a grand summer home for many a family. A corridor extends the entire length; there are six sleeping rooms, with closets, a toilet and bath.

There is a complete water supply and equipment of hot and cold water. Pipes
run to each of the above cabins carrying hot and cold water. There is a tank a few feet away holding 10,000 gallons of fine spring water, where a 4-horse power engine is in use. The drainage is perfect, as the cabins were built on high ground.

Each cabin is connected by a piazza which extends 139 feet on the front, 100 feet on the sides, and 77 feet on the rear. They are carried by concrete pillars covered with spruce boards; there are cedar railings along the edge, and cedar decorations close to the ground.

From the piazzas one gets a wonderful view of Passamaquoddy Bay, also far up the frontier river St. Croix, and the Cobscook river, where many islands are in view, and numbers of thriving Canadian and Yankee fishing settlements. As Eastport is less than 2 miles away, its entire waterfront, and most of the 4-mile island on the extreme frontier, can be seen from these cabins.

Nearly all the material, including the great collection of logs, cedar, stones, etc., used in constructing these handsome cabins were gathered up on Campobello island, and the workmen were expert natives of this Dominion spot. The master builder was Captain Melville Patch, who, with his crew, worked during the entire winter and spring, and each summer season Captain Patch is in command of the yacht Eileen. They also have a very small craft equipped with gasoline engine, and she is named Sea Serpent, being seen in Eastport harbor frequently from June to October.

The fourth of the unique cabins to be built was close to the shores and known as the Tea-Room—built last year. This is also built of logs, peeled and oiled, and is somewhat smaller than the other buildings. The large veranda is enclosed for some feet on each side, and here the family often entertain summer friends among the visitors to Campobello, as many prominent American families are often represented when all cottages are open for the season.
You can call it "Garage-Bungalow" or "Bungalow-Garage." Either way, it is a mighty useful little building in spite of its hyphenated name, and seems to have a very definite place in the building program of many towns especially in southern California.

It has proved a boon to many persons in moderate circumstances who have only a small sum of money to invest, but were taking steps toward owning a home of their own in the course of time.

For instance, if a man could buy a lot, but was not yet financially able to erect the sort of home he desired, he could construct a little building on the rear or side of his lot in such a way that it could readily be turned into a garage when he was ready to build a real house on the front of the lot. In this way, he was not compelled to make so large an investment in the first place, nor incur so large a debt.

Others have used the garage-bungalow idea as an investment, purchasing a lot, and putting up one of these little dwellings in the rear; occupying it themselves until they could sell the lot for a homesite, to someone, who, in turn, might be glad to have a nook to shelter him while putting up a bigger house at the front. The first owner has no rent to pay while waiting for a buyer, and of course, usually sells at a profit over the initial cost of bungalow and lot. In such cases the yards are kept up, and flowers planted while the first owner waits for a purchaser, thus making the place more attractive and salable.

The garage-bungalows are of every style and shape. Some have no resemblance to a bungalow, being small, square buildings of stucco or other material, and some bear no resemblance whatever
to a garage. The incipient future doors of the garage are often so cleverly designed as to give no hint of a barn-like structure, giving the effect of the picturesque home of tiny dimensions which is often so unpretentious and yet so attractive.

The bungalow-garages range in size from 12x14 on up to those containing three and four rooms. The cost of building may be from $350 to $850, or more, though those costing the more moderate figures are in the majority. The cheapest of this class of buildings, so far discovered, was the one costing some $350. It is 12x14 in size, with a wooden framework covered entirely with a patented wall board, in this case a material made of cloth with wood pulp pressed into the fibre by machinery. Such a construction is, of course, adaptable only to climates where the winters are not severe, though this material keeps out an astonishing amount of cold.

The building may be plain or decorated, costly or inexpensive, as the fancy of the owner dictates. A few have vine-covered pergolas and lattices, and here, in California, nearly all are surrounded by flower beds and grassy lawns.

The interiors are astonishingly neat and homelike when the cement floors (designed for the future garage) are covered with pretty rugs, and there is tasteful and appropriate furniture, whether it be expensive or not. Odd bits of furniture lend themselves to good advantage in these little dwellings, and some appear at their best in rustic furnishings. One of the prettiest of the stucco class has a rug in the one large room whose prevailing colors are pink, gray and green. This contrasts very effectively with the white, plastered walls of the interior. Various tones of ivory, yellow and fawn blend harmoniously in the articles and curtains in the room. Another and more rustic type of building is furnished in rustic furniture with rag rugs over the cement floor.

One of the homiest and best arranged of these dwellings is built of stucco, the furnishings of which have already been described. This has one room, kitchenette and a dressing room. The dimensions are 18x20, being almost square, and the cost of building was $850. The lot was purchased in a town where real estate was very high. The lot cost $1,300.00. The furniture was picked up here and
there, but was good, and made a very attractive little home. The house is well built, and there are two French doors, which, it may be mentioned here, can be utilized in the new house when it is built, as they will not be needed when the present building is turned into a garage. A partition divides the living room from the kitchenette, and dressing room. There is room for laundry tubs in the kitchenette and the latter room will be turned into a laundry when the large room becomes the home of an automobile. It might be noted that the plumbing furnished one of the largest items of cost in these buildings, but this will also work out to advantage, since the stationary tubs will be already installed

when the kitchenette is turned into a laundry. The garage is really a very good place for the laundry.

Bungalow Life in India
“The Punkah” in Hot Weather
George Cecil

The construction of the Indian bungalow and the disposition of the rooms have scarcely changed since the days when the Portuguese and the Dutch, casting envious eyes on India, landed and settled down as traders—long, long ago. Nor, upon the “Honourable East Indian Company” sending its servants, a decade or so later, to trade on behalf of England, did any alteration take place. The bungalow of today, whether inhabited by an opulent Calcutta or Bombay business man or by a raw youth newly “out from Home,” who assists in growing tea or in conducting the operations of an indigo factory, scarcely differs from those built, so to speak, in the year one. And, thanks to the immutability of things, Anglo-Indian, bungalow life is much the same as it has always been.

In Calcutta, Bombay, Madras and in many of the large “up-country” “stations” the bungalow has the flat roof which has been associated with Eastern countries from time immemorial. During the hateful “hot weather,” lasting from early in April until late in October, the heat is so appallingly oppressive that the “sahib” and the “mem-sahib” and the little “master-sahibs” and “miss-sahibs” frequently sleep on the roof, which is enclosed by the necessary parapet, a screen dividing the accommodation into dormitories. Soon after sunrise the family is awakened by the “bearer” (as the colored valet is entitled) visiting the bedside of each male and pulling the sleeper’s big toe, this being the unvarying custom obtaining in Anglo-Indian establishments, while the ladies of the family are aroused in a similar manner by the “ayah,” a dusky domestic, who tends the mistress of the bungalow and occupies the posi-
tion of nurse. Although this al fresco method of recruiting exhausted energy has several advantages, it is not without certain drawbacks. A dust storm, for instance, may send the family flying back to the shelter of the horribly stuffy bedrooms, thus ruining a much-needed night's rest, or a tropical shower, coming on with startling swiftness, will soak the bedding before the poor slumberers are half awake. In India, by the way, "it never rains but it pours."

The other type of bungalow has a deep thatched roof, which, sloping gradually, creates a most picturesque effect. It is not, however, an unmixed blessing, for the thatch harbors snakes, who, attracted by the warmth and immunity from interference by the reptile-loathing "sahib," bring up large numbers of juvenile snakes. Sometimes one of these horrid reptiles drops from the ceiling-cloth and makes its presence known—in the usual manner—to whoever has the misfortune to be in the room at the time.

Wall paper is not a success in India, the climate being against its use. Indeed, in the "hot weather" it simply crackles up, while the "rains" loosen each sheet so effectively that in a month there is scarcely anything left on the wall. Consequently, the bungalow is, almost invariably, distempered, both inside and out, white, cream-color, pale yellow-ochre, pale pink and light slate-color being the shades generally in vogue. Bright yellow, vivid crimson and startling carmine have also found favor with a few impressionistic persons, but the experiment has seldom been repeated. Nor are windows always considered necessary, doors leading out on to the veranda taking their place.

Although in the "cold weather" (which lasts, officially, from the middle of October until the end of March) a room can be kept warm by the simple expedient of closing the door, the "hot weather" atmosphere is indeed a tribulation. From sunrise to sunset the heat is furnace-like, or it resembles that of a Turkish bath, according to the place, while the evening is almost equally detestable. The night is certainly a shade less hateful, but even under the most favorable conditions the exile may be put to considerable discomfort. Every room is therefore furnished with a "punkah," which is kept in motion by a patient, perspiring black, should there be no electric fan, and the sybarite who makes the science of keeping cool the chief business of "the long, long Indian day" causes a screen of dried grass to fill each doorway, a native being employed to deluge it with water every few minutes. The "thermantidote" is also of the greatest benefit to suffering humanity in India. It consists of a large boxlike structure, some five feet high, in which is a broad-bladed paddle-wheel. A colored man turns the handle and the revolving wheel sends a current of air through a grass screen, which is continually kept wet. So effective is this arrangement that the most appalling heat is quickly converted into agreeable coolness.

A certain percentage of white exiles declare that India is an unendurable country and that the most comfortable bungalow in the best "station" cannot compare with a tiny cottage at "Home"—as England is termed. When, however, they "retire" and endeavor to endure life in London or in the country, they lose no opportunity of lamenting their enforced absence from India.
A Community Golf Club

The Country Club and the golf course are coming to be among the prime necessities of the city suburb and of the village; and becomes a part of the new and progressive real estate developments that are meeting with such success. The country club district is apt to be one of the garden spots of the city, as it is being carried out in some parts of the country, especially at Kansas City,—a city already famous for its beautiful homes, where the rustic club house which is shown by plan and elevation in the accompanying sketches, is situated.

The building is of rustic construction, and is placed in the midst of a large grove of oak trees. The porch posts are made from the walnut logs cleared away from some of the adjoining ground, during the construction of the golf course. The building itself is stained a rustic brown to correspond with the walnut posts of the porch.

Three sets of French doors open from the living room to the porch, permitting the space to be thrown together for dancing.

One end of the building overhangs the water of the creek, some twenty feet below, and there is a commanding view from the veranda, across a rustic bridge leading to the golf course.

Since this is a community affair, membership in the club is limited to the owners of the property in the development.
English or Colonial

Interest is pretty equally divided between the English and the Colonial type of house, even though one sees more of the Colonial. This is due in part to the fact that the Colonial is adapted so generally to the conditions which we find in the usual community, and for that reason is likely to fit into the needs of other people in case it is desired to sell the house. The more unique types of house, as a general thing, are not so readily salable, and this seems to be an important point with most home builders. For one's own home, when one is not casting the eye about for a possible sale, an English type is likely to be chosen, with the element of the picturesque in its composition.

The English type of hooded entrance with the half-timber gable, shown in the little photographic detail, makes the design of this home unique. The plan is notable in that three of the five main rooms of the house face to the front of the house, with the view. The attractive corner porch may be screened with wire mesh, or left open; and it may also be secluded from the street by shrubs and vines if such privacy is desired. Dark stained timberwork is used for the porch, and shutters are on the front windows. Where the lot is sufficiently wide to permit a house with wide frontage there are many advantages in this wider exposure, in the possibilities of exterior treatment as well as in plan.

The sleeping apartments fill one side of the house with a communicating hall in which no space is wasted, but which is neither narrow nor crowded. Getting good communication between rooms without sacrificing good space is one of the problems of the architect, which is particularly happy in its solution in this case.

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[Plan of the house]

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A small home with marked individuality

The fireplace in the living room is so placed that the chimney is accessible for the kitchen range as well as for the heating plant in the basement.

The lawn in front of the house is an unbroken sweep of green, the entrance walk being carried across to the driveway, which is of concrete, yet there is a door step garden and planting about the porch.

A Stucco Cottage

It is no more costly to build a house that is attractive, with the helps which are available to the home builder of this present time; the same materials and the same labor go into the commonplace house as into the well designed home. First decide on the general room arrangement which is desired for the plan, and let the external appearance of the house develop under the guidance of your skilled architect, as a matter of course from the interior arrangement and special need of the family.

This stucco cottage has been planned to meet the needs of rather an unusual family, as may be noted from the innovations from the usual plan. First among these, on entering the house is the fireplace in the living room. This is built as an Ingle, recessed from the main lines of the room. Flues from the basement for the heating plant and for the kitchen range, are built in connection with the fireplace.

The stairs connect with the side entrance, and do not obtrude themselves upon the casual visitor, but are easily reached from any part of the house. There is one bedroom on the first floor and a toilet. This is an excellent provision in any plan in case of illness or some special need. This room opens to the side porch, and so is easily adapted to the needs of the man of the house, in case he wishes to use the room as a den or office.

Quite as unusual as the living room, is the dining room-kitchen arrangement.
The dining room is only large enough for the table, and the service is from the kitchen, possibly with a movable screen between, during the preparation and service of the meal.

The home which is shown in this photograph was built from these plans "reversed," and the vestibule is projected beyond the face of the dining room. It was completed in the early spring and the planting had not yet been set when the photo was taken. The dining room-kitchen windows may be seen, with the side entrance beyond.
A Colonial Bungalow

The "porch," in the sense in which we use the term, was unknown in Colonial times, in the New England building at least. The Colonial portico was little more than a beautiful entrance to the house, sometimes semi-circular, sometimes square, but never large enough for the family and guests to gather for a summer evening.

The porch of the Colonial bungalow here shown is only a little larger than the old time portico; yet gives room for a few chairs. With its pediment and broken cornice, it is in keeping with the details of Colonial building and makes an inviting entrance to the home. The floor is paved with brick and an edging of brick is laid around the flower beds on either side of the porch.

Three bedrooms are provided in this design, with living and dining rooms of good size. The breakfast room is so placed as to be available for other purposes if so desired, opening as it does both to the kitchen and to the hall. This home is essentially a bungalow. No provision is made for more than storage space under the roof; nor could be, without changing the design of the house. Ample space for the usual family is provided, and all on one floor.
Planning for the Summer Time

While the summer time is the vacation time, yet as a matter of fact most of the world and his wife stays at home and works at least part of the summer. At no other time is leisure time more desired by the mistress of the house than during the hot season. This is the time, therefore, for household management to be called on the carpet and made to answer some pertinent questions to show whether it is being carried on efficiently or wastefully. If the verdict shows wastefulness, then a little sound thinking will probably show the housekeeper wherein the needed reforms should come; how far they may be remedied easily, how far the difficulties lie deeper than can be effected by small changes, and must go in the list of things to be checked "when we build our own home."

Every added step on a hot day is an added burden. This is the time when the compact plan is appreciated, if at the same time the house has not been crowded in its arrangement or niggardly in its treatment with regard to window.

The home which is shown below is well supplied with windows, having the sun...
Interesting use of boulders in the porch work

room enclosed with casement windows, and the walls of the dining and living room almost as well filled, so that the whole living portion of the house may be converted into open spaces. The bedrooms are also well supplied with windows, each having window openings on two sides giving cross ventilation. The rooms open well together, giving good communication between the rooms. The fireplace and book cases give a cozy center for cool evenings. The bedrooms suite is entirely set off from the rest of the house. The usual central hallway has been omitted, adding the space to the rooms. The front bedroom opens from the living room as well as to the rear hall.

Boulders are used in the porch work and piers of the second home shown in this group. In this house all rooms have windows on two sides, at least, except the dining room. A small central hallway connects all the rooms in this design, so that it is possible to go to one of the bedrooms on entering the house, without going through any other room. This shows an excellent room arrangement even though the rooms are not large.

Whether the rooms are all on one floor, as in the first designs or if the sleeping rooms are finished on the second floor is a matter on which there is great differ-
ence of opinion, but which is finally an entirely personal matter. The cottage or two-story house is, for the same amount of room, smaller on the ground, and of greater height under the roof. Many bungalows are spoiled in design in attempting to get sufficient space on the second floor for one or two additional rooms. The "story and a half house" which is here shown is extremely livable, yet a simple, inexpensive house. The rooms are of good size, well placed, and the window openings give a breeze in any direction, if any is stirring; as of course the stair side of the house would not, in any circumstances, be made that of the prevailing breezes. A plan can always be "reversed" to get the exposure desired. 
A fireplace could easily be built on the center of the living room wall.

The last home shown here is essentially a bungalow, such a bungalow as could not be anything else without being entirely changed in design. A little larger than the other homes in this group, it has three bedrooms. These bedrooms are as completely set apart from the living rooms as though on another floor, by means of the small hallway, which at the same time connects them with the kitchen and bath room. The kitchen projection is rather cleverly arranged to give a pantry, utilizing the space opposite the corner cupboard in the dining room.

The exterior of this bungalow is of stucco, with a paneled effect in the piers and in the wall under the front windows. The porch treatment is also effective. Stucco, as a building material is entirely different from wood, and should be given consideration in the design in which it is to be used. It should not merely be made to replace wood in any design, as an after thought. The successful stucco house should be designed as such, making the most of the salient points of the material to get every advantage which it has to offer. Why should we have ugly mud colored stucco houses when all the soft lovely tones are just as possible? Its texture also gives stucco great possibilities as a background.
Decoration and Furnishing
Virginia Robie, Editor

"Before and After"

This is the plain, unvarnished tale of how we transformed a house into a home and made much out of little. If it were possible, I would show "before" and "after" pictures and point my moral with illustrations, but it was not until the former things had passed away that we realized the lost opportunity in photography. Therefore, the early pictures must be purely mental.

The house was partially furnished when we rented it. Perhaps, this fact will strike a responsive chord in the hearts of those who have, at sometime, tried to live with other people's furniture, pictures, and bric-a-brac. When I say bric-a-brac, I speak feelingly, for, while the owners of the house had never purchased good rugs, they had found it possible to buy many vases and clocks—as expensive
as they were ugly. The house was lavishly provided with clocks that would not go, elaborate bronzes, and quantities of Royal Worcester ornaments.

We liked the locality, which was on the outskirts of a small city, in a district once fashionable, and still respectable, but somewhat run down. The owners were abroad for a period of five years, and the agent made special inducements to permanent tenants. Our family consisted of four people—three adults and a little girl of seven. The number of rooms suited the family needs and the rent suited the family purse. We signed a five years’ lease and guaranteed to make our own repairs.

We were permitted to do what we liked with the interior—so long as we did not change the woodwork—and with this cast-iron condition we set to work. In order to give point to some of the changes, I must linger a little over the house as it was when we took possession. The exterior was not offensive, although it belonged to no period that we could discover. It stood in the center of a generous lawn and was painted two shades of gray, with a moss-green roof. When we took account of stock, we began with the yard: a good picket fence painted dark gray, several fine trees, two syringa bushes, five lilac bushes, a wistaria vine over the front porch, a cucumber vine over the rear porch, and a plot of ground which could be made into a small flower-garden. These were the good points; the bad points in the landscape were a trolley line, a broom factory around the corner, and a dreadful gingerbread house in real molasses shades just across the way.

The hall of our new home was long and narrow, with the stairs rising abruptly at the right. The woodwork here, as in the double parlors, was oak, which had grown quite dark with age. It was a brownish tone, and we realized that here we had reason for rejoicing. But, the paper! It was of the kind that never wears out and nothing short of fire destroys. It was chocolate color, with an elaborate tile pattern in gilt and red. In the semi-darkness the pattern was seen only in fragments, the general effect being almost black. Against this background, a walnut hat-rack and two walnut chairs, upholstered in crimson plush, vainly strove to lighten the gloom.

The front parlor, to atone for the blackness of the hall, was papered in white and gold, the contrast so sudden that it almost blinded one. The paper was weak in design, but of undoubtedly respectability. It looked good for another decade. The nondescript pattern was met by a deep white and gold frieze, touched
Ladder-back Chippendale chair

up with chilly blue. At the windows hung long curtains of Arabian net. The exposures were east and south, and the room in its bald whiteness was painfully garish. Amid these surroundings the dark walnut furniture upholstered in plush and brocatelle looked particularly belligerent. The heavy bronzes and the delicate Worcester vases took up the quarrel, which was continued by pale water-colors and steel engravings in black frames. In the back parlor, the white and gold paper had been replaced by green cartridge paper, the original frieze being retained. There was something about the rooms calculated to set on edge the teeth of the sensitive.

The desirable features, which at first glance were overshadowed by the defects, were: comparatively low ceilings, considering the age of the house, a fireplace of yellow Tennessee marble, not at all bad in design, no arches or grilles, good rectangular openings, hardwood floors, and plenty of sunlight.

The dining-room, twenty by twenty feet, was at once our joy and despair. It was a north room and the walls were covered with a red velvet paper, which had been chosen under the mistaken idea that it would make the room cheerful. The ceiling was coldly white and the large rug was of every shade known to the dyeing world. It was kaleidoscopic in pattern, and of that startling freshness which many ugly things seem to possess. Red damask curtains hung at the two north windows, and fought bravely with the rug. They, too, were of the non-fading variety.

We began with the dining-room, for we cannily figured that, while we could avoid the parlor, this room would claim our presence three times a day. In the upheaval attendant upon paperhangers, we dined in the kitchen. Some time I shall write a story about that kitchen. It was no up-to-date example of domestic science with tiled walls and glass shelves, nor was it one of those small compact kitchens favored by the ultra-progressive. It was wastefully large—woefully, even wickedly so, according to the latest lights on household economics. But, how we reveled in its spaciousness, its sunlight, and its old-fashioned conveniences! We loved the woman who planned it, and almost forgave her the Worcester vases and chenille fringe. I have not mentioned the fringe; it was on every imaginable thing—portières, curtains, and “drapes.” When I say that we began with the dining-room, I forgot the “drapes.” We hid those the first day. On the third floor
was a large room, which we set apart for the overflow. The man of the family said that this extra room made possible our success. We called it the "oubliette," and threw into it all our troubles. Onto shelves and into drawers went "drapes," plush frames, pictures, clocks, vases, and most of the bronzes. Every inch of floor space was filled with discarded chairs and tables. Only those who have lived in apartments and boarding-houses can realize the joy of having a place to tuck away the unsightly.

We weeded with a generous hand, yet retained the articles which harmonized with our own household goods and fitted into the new decorative schemes. We held to the letter of the lease and left the woodwork, but we papered and calcined with a free hand and a light heart.

The hall, when rejuvenated, was brighter and apparently much larger. On the walls we hung a yellow paper in a small conventionalized pattern. We wanted plain yellow, but the papers shown us by a local dealer were either pumpkin or mustard, and we did not like either. The yellow chosen was soft, but bright, and we used it for the upper hall, also. The walnut hat-rack vanished, and in its place appeared an oak settle stained the color of the woodwork, a firm table of oak, similarly treated, and a large oval mirror in a carved walnut frame—the latter borrowed from one of the bedrooms. There was a general rearrangement; the downstairs bric-a-brac went up; upstairs things came down. Had the owners been near at hand, we might have had some qualms, but we thought of the broad Atlantic and our five years' lease. The careful one in the family insisted upon tissue paper wrappings, tar-paper, and other precautions—and the "oubliette," though crowded, was not disorderly.

The hall, with its attractive walls and sensible furniture, was no longer an abode of gloom. We banished a blue and red rug and put down a runner in gray, black and yellow, which had done duty in a town apartment. The one window, high and square, we curtained in yellow madras. Beneath the stairs was a small closet which we equipped with pegs for
family coats and wraps. On the table we placed a brass card tray and a large green jar for flowers, pine boughs, or whatever our garden or purse could afford.

The verdict for yellow in the hall had been unanimous. Of the proper treatment for the parlors there was a division in the ranks. The man of the house suggested that if we dropped the term "front and back parlor" we would be headed in the right direction. So we applied "living-room" to the two—pushed back the folding doors, and held a council as to the correct decorative treatment. One suggestion was to use a charming figured paper, which we had seen in a shop window, in which the softly blended colors were blue, green, and a lovely pomegranate tone; another was, to use a two-toned olive green; a third, a light tan crêpe. After buying a roll of the various papers and trying each by natural and artificial light, we decided upon the tan. We papered the two rooms alike, calcimining the ceiling to match the hall paper, curtained the windows in deep écru net, which we had found satisfactory in a former house, and then turned our attention to the rugs. We had three good Persian rugs, which were our chief treasures, and these we combined with two fairly good rugs, found in the guest-room, one an old-fashioned braided oval, which we laid on the hearth. We installed our bookcases of stained oak, our few pictures, and several plaster casts. We found the rooms exceedingly comfortable and friends considered it a marked success.

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White Shades.

C. P. G.: I am enclosing a floor plan of our bungalow that is now under construction and would be grateful for suggestions in decorating and furnishing.

I have planned white walls with ivory woodwork in all the rooms. Would it be better to have different colors in living rooms and have the same color in the hall as in living room? What color would be suitable in dining room with ivory woodwork? Shall I have ivory for doors and trim also? Please give suggestions as to the furniture, as I have no furniture. Also what color of shades to use. I have planned white. Also give suggestions for bed rooms.

Ans.: We do not think white walls, white shades and ivory woodwork would be advisable for the living and dining rooms, though a bedroom so treated could be made very charming.

We advise you to have a soft grayish tan tint on the walls of living room and hall. It is more livable, is very pleasing with ivory woodwork and harmonious with any furnishings. Tint the ceilings white. The white shades will then be all right. We would suggest for this cottage bungalow, wicker furniture stained gray and upholstered in cretonne showing rich, rather dark coloring, for the living room; and painted gray furniture for the dining room. Only we should want to put a wall paper on this one room, preferably landscape paper, and have curtains of rose colored muslin. You will have such a charming little dining room with the ivory woodwork. We advise oak treads for the stairs in hall and front door of oak or walnut. We would let the other doors be ivory.

A white bedroom with mahogany furniture is attractive and practical. The small bedroom on second floor could have walls tinted a soft primrose yellow, white furniture and curtains of chintz with small yellow roses and bright green leaves.

An Unusual Library Treatment

H. W. M. Our home will not be ready for the decorator for about six weeks yet and I have not yet made any definite decision in regard to the interior woodwork, doors, walls and ceilings. I should very much like your suggestions as to whether ivory woodwork would be all right in a stucco bungalow and if finished in ivory how the doors should be finished—ivory or mahogany stain—also buffet, and the color of walls and ceiling. I want a light, airy home but I also want to finish it right. The wood trim is gum, doors and built-in features birch, floors white oak and walls fine sand finish.

Ans. In regard to the use of the ivory woodwork—it is entirely appropriate with the plaster exterior. Your plan for the finish of the several rooms is very good; but we would like to make an exception in the treatment of the library and offer some suggestions for that room which you may think rather radical, and which are rather unusual, but if you will...
carry them out we feel sure you will be immensely pleased. Our idea is to introduce a different note into this room, more in keeping with the stronger atmosphere of a library and obtaining a desirable relief from any feeling of monotony. The walls of the house in sand finished plaster generally can be tinted the warm gray you suggest, almost the color of wheat kernels, and will be lovely with deep ivory woodwork and walnut or mahogany furniture. We would carry this tint through the rooms, except, of course, painting the kitchen walls, say a primrose yellow or a clear buff and the bathroom walls ivory.

In the library we would paint the woodwork French gray, use a gray rug with a black border on the floor, furnish in black Chinese teakwood and use on the walls a gray grass cloth. At the windows have Chintz shades and no other curtains, and these shades must have gay birds and flowers on a black ground. They must have deep rose, apple green, lilac, blue—all lovely color: without the shades the whole scheme falls to the ground.

We should use cream colored shades at all the other windows and in living room, curtains of ivory casement cloth. This room has no direct light except from the front windows and they are shaded by the porch. The French doors and the buffet (if built-in) must have the same finish as the other woodwork, but the front door be stained brown mahogany. The fireplace mantel should have the ivory finish, but the facings and hearth will be very good in a dark, smooth, red brick with cream mortar. A pressed gray brick with white joints would also be very pretty. In the dining room have a deep rose rug and rose sunfast for curtains, with preferably walnut furniture. We would prefer a handsome walnut sideboard, placed in the recess intended for buffet, to the built-in feature in the ivory. It would give more character to the room. Mahogany furniture (brown mahogany) in living room and a taupe rug, the shade that carries a suggestion of mauve.

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Three Rooms

F. S. I am enclosing a small sketch of the lower floor of our new home now being built in St. Petersburg, Florida, and would so appreciate all the suggestions that you will give me concerning color schemes and draperies.

Should the walls of the living room, sun room and dining room be finished the same? We have planned to have all interior woodwork, including doors and window sash, painted a light ivory.

The floors are fine and we shall leave those natural.

We have no furniture or rugs yet, but we have in mind one or two over-stuffed pieces and some lighter mahogany pieces to go with it. We also plan to have the dining room furnished in mahogany. What general color scheme would you suggest for rugs and draperies for the three rooms? Should the sun room and living room carry out the same color in walls, etc.

The house faces south with the dining room to the northeast. There are forty-one windows in the house so we will have plenty of light and sunshine. You can see by the sketch that the lower floor can be thrown together by opening the French doors.

Ans. The wall color in the three rooms need not necessarily be the same, though there should be harmony and not contrast. Supposing the walls are to be tinted, we would use a soft warm gray in living and dining rooms and a dull but not dark jade green tint in the southwest sun room. Then use rose color for the rug and curtains of the northwest dining room and old blue in the living room. Make the sun-room a dream of coolness with wicker furniture upholstered in blue and cretonne and with one of the new Fibre rugs in dull green tones on the floor. In your climate we would not purchase over-stuffed furniture; also we should prefer the walnut to mahogany. Walnut frames with seats and backs of antique cane in a lighter shade of brown would be very lovely with your ivory woodwork. You could have loose cushions on the davenport of old blue, whatever material you prefer; there are light weight Colonial worsteds in a small diamond, self-toned design, that would be a good choice both for wearing qualities and suitability. We would have a couple of wing fireside chairs, either in the antique cane or light brown wicker, and upholster them in a striped linen, green and blue and rose wreathe on a deep ivory ground; a floor lamp and a table lamp, with shades of blue silk; a rug in mauve gray, plain, or if you prefer figured, with blue predominating; curtains of thin, sheer voile, hemstitched, with side hangings of soft blue Sunfast. You will thus have three very harmonious rooms not too much alike and with color tones adapted to their differing exposures.

Tinting White Enamel

Will you kindly tell me how to use oil colors in white enamel or eggshell finish to produce certain shades without destroying the enamel finish?

Ans.—You can change white enamel or eggshell finishes with colors ground in oil to such shades as ivory, cream or any light color and secure practical results. If, however, you wish to make a positive color such as deep green or a dark brown, the method of using oil colors in white enamels for the purpose would not be practical.

Refinishing Waxed Floor

How would you suggest doing over waxed floors which have become badly worn?

Ans.—For refinishing an old floor, which has been waxed but is badly worn, a weak solution of oxalic acid should be applied to the dark worn spots where the bare wood is exposed. This will bleach the dark spots to their natural color. After the acid solution has become perfectly dry, the spots should be sand-papered and then a thin coat of shellac should be applied to the entire floor. The surface may then be waxed and polished.
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Seasonable Vegetable Dishes

Elsie Fjelstad Radder

The vegetable market in July should be especially attractive to the housewife who is fortunate enough to be able to put her basket over her arm and go forth to choose her fresh things and be just sure that they are what she wants.

So early in the summer season is it that folks are not yet tired of lettuce, radishes, onions, and greens, the early summer vegetables and as July days bustle in and pass we have peas, corn and asparagus, and squash. Surely, with all these good things to choose from no housewife need have difficulty in getting the variety which we all crave in the summer.

Peas contain, next to beans, the largest percentage of protein of any of the vegetables. When they are young they are very easy to digest. Peas which have been grown in Florida or California are on the city market as early as April but being so long in reaching the market they are not like the vegetable fresh from a local garden. Native peas are on the market from the middle of June until early September. McLean peas are small ones in flat pods. They are considered the best. Champion peas are large and the pods are well filled but they lack sweetness. Marrowfat peas are the largest obtainable and are usually sweet. Peas, cooked as a vegetable, or combined with other things for salad, are much preferred to meat, for the summer dietary, by some people. Like other vegetables, peas should be washed in cold water and cooked until tender in boiling water, which may be salted as the vegetable gets tender.

Corn is found on the market from the first of June until the first of October. Native corn is obtainable from July on. It is most abundant and cheapest in August. Crosby, Evergreen and Country Gentleman are considered good varieties. The Golden Bantam, though small and yellow like field corn, is unusually fine in flavor. Corn contains a large percentage of carbohydrate, which is the chief constituent of potatoes.

Asparagus, large, and small green stalks, is both an early and late summer vegetable as it is in season from the middle of June to the first of August. It is cheapest about July first. Asparagus, also, contains a high percentage of carbohydrate but it contains some protein in addition. Hothouse asparagus and Oyster Bay (white stalks) may be purchased canned during the summer or winter months but it commands such a high price that it is not considered wholly satisfactory.

Summer squash is a favorite vegetable for many people. The common varieties, which are on the market during summer months, are the white, round, and yellow
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crook-neck. They should be young, tender and thin skinned. Often winter squashes may be purchased by the middle of August. Most common among them are Turban, Hubbard and Marrow. Turban and Hubbard are usually drier than Marrow. Marrow and Turban have thin shells which may be pared off before cooking. Hubbard squash has a very hard shell and must be split in order to separate in pieces. Winter squashes should be heavy in proportion to their size.

Pea Timbales.
Shell, cook in salted water until tender and drain enough peas to make one cup of pulp when rubbed through a sieve. Add two beaten eggs, two tablespoons melted butter, two-thirds teaspoon salt, pepper, cayenne, and onion juice. Turn into buttered molds, set in a pan of hot water, cover with oiled paper and bake until firm. Serve with one cup of white sauce to which has been added one-third cup of peas.

Corn and Potato Loaf.
To one pint of hot mashed potatoes add two cups of cooked corn, one tablespoon of drippings, salt, pepper and a little onion juice or nutmeg. Beat one egg until light, reserve one tablespoonful to brush over the top of the loaf and mix all together lightly. Place in a buttered baking dish, smooth the top over with butter and bake in a moderate oven thirty minutes or until nicely browned.

Green Asparagus Salad.
Cook small green stalks of asparagus in salted boiling water until tender. Cut rings from a red pepper one-third inch wide. Place three or four stalks in each ring. Arrange on lettuce leaves and serve with French dressing to which has been added one tablespoonful of tomato catsup.

Boiled Summer Squash.
Wash squash and cut in thick slices or quarters. Cook twenty minutes, or until tender, in boiling salted water. Turn into a cheese cloth bag placed over a colander, drain and wring in cheese cloth. Mash, season with salt, pepper and butter, and serve.

Fried Summer Squash.
Pare the squash and cut in very thin slices. Sprinkle slices with salt and pile on a plate. Cover with a weight to extract as much juice as possible and let stand one and one half hours. Dredge with flour and saute slowly in butter until crisp and brown. Squash may be fried in less time by simply washing, cutting in one-half inch slices, sprinkling with salt and pepper, dipping in crumbs, egg and crumbs again and frying in deep fat like doughnuts.

Pea Salad.
To peas, which have been boiled in salted water until tender and then chilled, add an equal quantity of cream cheese, cut in very small cubes. Moisten with a good boiled salad dressing and serve. This is an excellent dish to serve in the place of meat in hot weather. Salads are always refreshing and this one contains foods which are necessary if meat is not served. Peas may be added successfully to any salad calling for vegetables.

Corn Salad.
Season corn, which has been boiled and chilled, with mustard and onion juice. Marinate with French dressing, allowing it to stand for an hour. Arrange on a bed of lettuce and serve.

Corn Oysters.
Grate raw corn from the cobs. To one cup of pulp add one well beaten egg, one-fourth cup flour and season highly with salt and pepper. Drop by spoonfuls on a hot, well greased griddle like tiny griddle cakes or fry in deep fat. They should be made about the size of large oysters.

Shrimp and Pea Salad.
Put one small green pepper and one-fourth cup of green olives through a food chopper. Cut one head of celery into dices. Mix together one can shrimps, three-fourths cup peas, pepper, olives and celery. Moisten with mayonnaise and serve.

Succotash.
Cut hot boiled corn from the cob and add an equal quantity of hot boiled shelled beans. Season with butter, salt and pepper. Serve hot as a vegetable.
In planning your new home, the study of interior treatment both as to architectural detail and decoration is of equal importance to obtaining a good design and a practical, well-planned house. This book illustrates the interiors of many successful homes and contains much valuable and authoritative advice on Interior Decoration. Printed on enamel coated paper which brings out the beautiful detail of the illustrations. Size 7½x11. 160 pages. Flexible embossed cover in colors.

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Keeping Cool in July

In this country we have learned to keep the house comfortable in winter, no difference how low the thermometer may range. Americans, spending a winter in England or in Italy complain bitterly of the cold. The next problem before us in this country is to plan our living so as to be equally comfortable in the summer time,—and the problem is not nearly so difficult as those of the winter season. In a few years, in order to be "modern" a house will probably be expected to have a cooling plant as well as a heating plant; some simple device connected to an electric socket, probably, which will "refrigerate the ice box" and at the same time, connect with registers in the rooms, probably with thermostatic control. Cooling plants are already in use in large buildings,—and in the cold storage plant keeps a very low temperature.

The house which is well insulated when it is built does not permit the air inside to change temperature readily through the walls. In such a house, if doors and windows are kept closed during the heat of the day, a certain measure of comfort can be maintained within.

**The Electric Fan on Duty**

An electric fan, which keeps the air in motion, adds much to the comfort during the hot season, if one likes the feeling of a breeze. No office equipment is complete without at least one electric fan, and the business man does not feel that it is an extravagance. The kitchen needs an electric fan quite as much as any office, or other workshop. In fact the small kitchen, with perhaps only one window, and a fire going in the preparation of the food, would seem to be in much greater need of breeze from a fan than the big office in a down town building. Ask the business woman who has tried both, in which place she would rather be. In the kitchen the fan has yet another use. Set to blow over the range to a window, it will carry away the odors and steam so that little or any will reach the rest of the house. An exhaust fan is often set in a vent for this purpose.

The light, movable fan may follow the homekeeper from room to room in turn, from the kitchen to the living room and then to the bedroom. A wet towel, hung in front of a fan will really lower the temperature of the atmosphere in the room.

**Appliances**

Electricity is doing much to ameliorate household conditions, and is especially appreciated during the summer season. Even the furniture may be wired electrically; two plugs may be set under the edge of the table, with the wire coming up from a floor connection, so that the housewife may have a toaster on one side of her at the breakfast table and a percolater or a grill or both on the other
Here the entire breakfast may be prepared. The tea wagon may be wired in the same way, with a connection which may be attached to any wall plug. The breakfast might even be prepared at the bedside in the morning,—that luxury of breakfast in bed; the lunch prepared and served on the porch at noon, and tea, any place, in the afternoon.

The convenience of the breakfast prepared at the table is appreciated by the newlyweds, but perhaps quite as much also by father and mother when the newlyweds have gone; and the silver wedding anniversary is also past. The coffee percolated at the table, the omelet on the grill, or the eggs soft boiled, bacon, or possibly chops on the radiant grill, and toast, hot and golden brown; even the kitchenette seems almost superfluous with all these appliances.

With a dishwasher, the dishes may be prepared and set in the washer after breakfast, but they need be washed but once a day.

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COMPARATIVE COST FOR THE SMALL HOUSE

shall the new home be of frame construction or of hollow tile, shall it be veneered with brick or shall it be stuccoed? What is the average difference in cost of the different types of construction?

Some exceedingly interesting data has been issued by the American Face Brick Association on the cost of several types of house as figured in Chicago, in the spring of this year. Selecting the working drawings for a brick house in their service they got bids, in February and March, 1922, from five reputable contractors in different parts of Chicago. Each of these contractors was furnished with full working drawings, and specifications, with quantity surveys for the five different types of wall construction as shown by the sections in the diagram on page 44. With five bids averaged, personal errors and differences in estimating should be well nigh eliminated and we are getting at real values. These five contractors represent work in all sections of the city, and thus in their bids fairly cover the range of conditions that may effect costs. These contractors were unknown to one another, and the bids, including commissions, were independent estimates made by each in his own way. The figures represent the total cost of the completed house, with rough grading done and everything, except shades and decorating, ready for the owner to move in and take possession. These outside costs are the

TABLE I

<table>
<thead>
<tr>
<th>Chicago Contractors</th>
<th>Frame Construction</th>
<th>Veneer Construction</th>
<th>Eight-Inch Masonry Wall With Face Brick</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type I With Siding</td>
<td>Type II* With Stucco</td>
<td>Type III* On Sheathed Studs</td>
</tr>
<tr>
<td>Contractor No. 1</td>
<td>$8,784.82</td>
<td>$8,890.28</td>
<td>$9,440.89</td>
</tr>
<tr>
<td>Contractor No. 2</td>
<td>9,047.00</td>
<td>9,156.00</td>
<td>9,308.00</td>
</tr>
<tr>
<td>Contractor No. 3</td>
<td>8,326.00</td>
<td>8,185.30</td>
<td>8,624.00</td>
</tr>
<tr>
<td>Contractor No. 4</td>
<td>7,593.30</td>
<td>7,453.00</td>
<td>7,841.50</td>
</tr>
<tr>
<td>Contractor No. 5</td>
<td>9,492.00</td>
<td>9,466.00</td>
<td>10,015.00</td>
</tr>
<tr>
<td>Average Total Cost</td>
<td>8,648.66</td>
<td>8,630.16</td>
<td>9,055.88</td>
</tr>
<tr>
<td>Average Cost Cu. Ft.</td>
<td>34.76</td>
<td>34.68</td>
<td>36.39</td>
</tr>
</tbody>
</table>

To meet the Chicago ordinance for a 13-inch wall in first story, 6,000 more common brick would be required. Hence 6 x $30.00 or $180.00 + $9,168.26 = $9,348.26, the cost in Chicago or 8.1 per-cent over frame.

*Percentage difference from Type I, taken as 100 per cent.
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"The Manor"
One of the Eleven Models
THE TYPES OF WALL CONSTRUCTION UPON WHICH THE FIGURES WERE BASED

### Table I

<table>
<thead>
<tr>
<th>Wall Type I</th>
<th>Wall Type II</th>
<th>Wall Type III</th>
<th>Wall Type IV</th>
<th>Wall Type V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wall Type I</strong></td>
<td><strong>Wall Type II</strong></td>
<td><strong>Wall Type III</strong></td>
<td><strong>Wall Type IV</strong></td>
<td><strong>Wall Type V</strong></td>
</tr>
<tr>
<td>Frame (Siding)</td>
<td>Frame (Stucco)</td>
<td>Face Brick Veneer</td>
<td>Face Brick and Tile</td>
<td>Face and Common Brick</td>
</tr>
<tr>
<td>Beveled 6&quot; siding, 4½&quot; to the weather.</td>
<td>Stucco finish, 3 coats on metal lath.</td>
<td>One tier of face brick.</td>
<td>One tier of face brick.</td>
<td>One tier of face brick.</td>
</tr>
<tr>
<td>Building paper.</td>
<td>Furring strips 10&quot; c-c, and building paper.</td>
<td>Furring strips 10&quot; c-c, and building paper.</td>
<td>Furring strips 10&quot; c-c, and building paper.</td>
<td>Furring strips 10&quot; c-c, and building paper.</td>
</tr>
<tr>
<td>Wood lath and plaster.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thickness 6&quot;</strong></td>
<td><strong>Thickness 7&quot;</strong></td>
<td><strong>Thickness 10&quot;</strong></td>
<td><strong>Thickness 10&quot;</strong></td>
<td><strong>Thickness 10&quot;</strong></td>
</tr>
</tbody>
</table>

---

same irrespective of the type of construction which may account for the rather high figure per cubic foot, as compared with other figures, especially for frame construction which cover only the building itself. The 12-inch foundation wall, which is built of hard burned common brick on a concrete footing and laid in cement-lime mortar, is common to all. A 10-inch concrete wall might have been used at a saving of approximately one per cent of the cost of the house. The fire resistive roof is also common to all.

In comparing wood or stucco wall with solid brick or tile walls, the poorly built frame construction should not be used, as they are not in the same class of construction in the different results they give. These figures, as we understand, are on good construction throughout.

Table I shows the figures from the five contractors in compact form. Table II gives the average cost of each trade, in the different types of construction.

It is interesting to note that in every type of construction, even in the house with solid brick walls, the carpenter work is by far the largest total cost. At the same time the percentage of difference between the different types is comparatively small.

### Unit Prices of Material and Labor

- **Rough lumber** (average price), $40.00 per M.
- **Siding** (average price), $75.00 per M.
- **Face brick**, $30.00 per M, $60.00 laid in wall.
- **Common brick**, $12.00 per M, $30.00 laid in wall.
- **Hollow tile**, $44.00 per M, $70.50 laid in wall.

### Table II

<table>
<thead>
<tr>
<th>Type I</th>
<th>Type II</th>
<th>Type III</th>
<th>Type IV</th>
<th>Type V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Masonry</strong></td>
<td>$1,781.93</td>
<td>20.6%</td>
<td>$1,781.93</td>
<td>20.6%</td>
</tr>
<tr>
<td><strong>Carpentry</strong></td>
<td>4,169.91</td>
<td>48.2%</td>
<td>3,833.75</td>
<td>44.6%</td>
</tr>
<tr>
<td><strong>Plastering</strong></td>
<td>596.92</td>
<td>6.9%</td>
<td>1,094.57</td>
<td>12.7%</td>
</tr>
<tr>
<td><strong>Painting</strong></td>
<td>691.60</td>
<td>8.0%</td>
<td>491.60</td>
<td>5.8%</td>
</tr>
<tr>
<td><strong>Sheet Metal</strong></td>
<td>222.80</td>
<td>2.6%</td>
<td>222.80</td>
<td>2.6%</td>
</tr>
<tr>
<td><strong>Electric</strong></td>
<td>166.20</td>
<td>1.9%</td>
<td>166.20</td>
<td>1.9%</td>
</tr>
<tr>
<td><strong>Plumbing</strong></td>
<td>787.31</td>
<td>9.1%</td>
<td>787.31</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>Heating</strong></td>
<td>232.00</td>
<td>2.7%</td>
<td>232.00</td>
<td>2.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$8,648.67</td>
<td>100.0%</td>
<td>$8,630.16</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Percentages of total cost.

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24 W. Kinzie St., Chicago 525 Market St., San Francisco
Tree Planting and Reforestation

HERE is an old story of “Apple-Seed John,” who as he went up and down the country, made a practice of planting apple seeds along the way he went. The story brings a picture of long, dusty highways, dotted with apple trees along the right of way, bursting into blossom in the spring to cheer the weary traveler with beauty and perfume, and bearing a load of fruit in the fall,—providing, of course, that the aforesaid traveler left either blossoms or fruit to mature. A pretty story it is, nevertheless, and a story that seems to be slowly coming into the vision of community dwellers. Planting trees along the highway as a memorial to the originator of their park system, has been adopted in one big city of the middle west. This idea seems particularly happy as a memorial of a well loved citizen, and carries on into the future one of the dreams of this public-spirited citizen, who has been especially identified with the park system, and the preservation of trees and the natural beauty of the country, in the midst of city life.

Pennsylvania has, according to reports, on one occasion at least, celebrated Arbor day by planting trees along the country roads. To make provision for future conditions these trees were set within a foot of the right-of-way line, giving shade and beauty, without a possible crowding of the highway. Among shade trees, sugar maple and red oak were advised, though the recommendation was for fruit trees in preference to shade trees. The tree preferred was given as ox-heart cherry, on the ground that this tree is both ornamental and fruit bearing and will grow to large size. The second choice was apple, in case it could be given proper care.

Now comes the story of Snooks Corner,—somewhere in New York state, where the boys and girls of the rural school were excused from their studies to assist in planting two thousand white pine trees, across the road from the schoolhouse. The purposes of the planting are thus set forth: (1) To provide a permanent windbreak for the school; (2) To do away eventually with the enormous snow drifts which accumulate nearly every year in the road and the yard by the school; (3) To add potential value to the district; (4) To set an example of reforestation and to place before other communities the desirability of such local betterments.

As the natural woodlands disappear in
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this country, the planting of community forests will be appreciated as a necessity, and the example of Snooks Corner may well be followed all over the country. Our boys came back from overseas telling of the vital part played by the community forests among the old world peoples, and how they were kept in condition, constantly growing and being renewed by the natural process, under the supervision of the community. Even in the stress of wartime conditions, the forests were cut with reference to the needs of the community and the people who looked to them for their livelihood.

Community forests are a prime necessity in any country, and they become an especial asset in those places where there are great stretches of waste land which is now unprofitable, but which would be practicable for reforestation, as is the case in so many of our states.

In some parts of this country quite remarkable results have already been accomplished. Nebraska has a fine record, and Massachusetts has some very interesting projects under way. In the town of Carver, where this latter state owns a tract of eight thousand acres, suitable for woodland, it is proposed to plant the enormous number of eight million pine trees. This is to be called the Miles Standish Reservation.

Not only is the planting of forests a matter of vast importance to this country in the next generation, but every tree that is planted should add its quota to the general livableness. Not only on the country roadways but in the city and near the city streets are we in need not of the shade and the vitality of tree life.
WHERE TO OBTAIN BUILDING MATERIAL AND NEW HOME EQUIPMENT

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Associated Metal Lath Mfrs., Chicago, Ill.

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Shingle Stain.
Berry Bros., Detroit, Mich.
Creo-Dipt Co., Inc., No. Tonawanda, N. Y.

Stucco Board.

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Johnson & Son, S. C., Racine, Wis.

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Zoning—It’s Effect On the Home Builder

Zoning is the application of common-sense and fair rulings to the public governing the use of private real estate. It is a thoroughly studied and honest effort to provide each district or neighborhood, as nearly as practicable, with just such protection and just such liberty as are sensible in that particular district, but without any attempt to apply the same program to differing districts.

Zoning gives everyone who lives or does business in a community a chance for a reasonable enjoyment of property rights.

Many American cities allow stores to crowd in at random among private dwellings, and factories and public garages to come elbowing in among neat retail stores or well-kept apartment houses. Cities do no better when they allow office buildings so tall and bulky and so closely crowded that the lower floors not only become too dark and unsatisfactory for human use but for that very reason fail to earn a fair cash return to the investors.

We must remember that while zoning is a very important part of city planning, it should go hand in hand with planning streets and providing for parks and playgrounds, and other essential features of a well-equipped city. Alone it is no universal panacea for all municipal ills, but as part of a larger program it pays the city and the citizens a quicker return than any other form of civic improvement.

If a town is zoned, property values become more stable, mortgage companies are more ready to lend money, and more houses can be built.

In cities where zoning regulations do not prevail, there is a constant disturbance among property owners because of proposed encroachment of undesirable and, in truth, unsuitable buildings in residential sections. Petitions are gotten up and pleas made to councilmen to deny building permits because of a threatened blight by the injection of a store, garage or factory where only homes should be built. Sometimes most unscrupulous means are employed to over-ride the objections of home owners and their appeal for reasonable protection proves in vain. “Zoning” prevents such parties from securing special privileges.

We trust all prospective home owners will show a real interest in this question. Make the first move by getting some local official body to initiate the work of zoning. They must secure specific authority from the state legislature.
KEITH'S MAGAZINE
ON HOME BUILDING

Contents for August, 1922

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Entered as second-class matter January 1st, 1899, at the Post-Office at Minneapolis, Minn., under the Act of March 3, 1879.
Copyright, 1922 by M. L. Keith.
A fine example of English brickwork with brick paneling in the timber work
The Porch for Summer
Charles Alma Byers

The porch is, of course, principally intended to serve as a sort of outdoor or semi-outdoor living room. Because it ordinarily can be enjoyed only during a part of the year, it is frequently neglected to such an extent that it is but partially enjoyable at any time. Or, to state the premise in other words, often the possibilities it affords in this direction are but indifferently realized. It deserves to receive the attention that will make it one of the most enjoyable parts of the house. To those who see its possibilities, the fixing of the porch into a real living place for the summer is always a very pleasurable occupation, even if it must be more or less re-performed each year.

Toward its being made into a truly inviting and enjoyable summer living room, the porch naturally offers many quite delightful possibilities. First of all is the furnishings, with a large and often fascinating choice. Then the matter of adding to its attractiveness through the use of living greenery invites attention. There is also the consideration of awnings and shades, and perhaps glass by way of protection against uncomfortable breeziness or too much sunlight. And, further, there is, of course, the question of rugs or floor covering and of such other details.

In giving thought to this matter of making the porch a real open-air living room, it is probable that the accompanying illustrations will present suggestions that will prove more or less interesting and helpful. The porches they show, it should be noted at the outset, are by no means elaborate affairs—neither costly in furnishings nor showily appointed in any other respect. Instead, they are just homely little porches such as anyone may

An outdoor living room
possess, with little work and at small expense, and surely they are genuinely and quite irresistibly alluring.

The chief requisite of the porch that is to be truly inviting and enjoyable is, of course, comfortable chairs or other restful seats. These ought to include Rockers, and may also well include either a swing seat or a settee of some kind, or both. A little table or two, likewise comprise an appreciable addition, and are ready at hand for holding magazines and books, or for use, on occasion, in serving refreshments.

As to the kind of furniture to be used on an open porch, hickory is especially suitable, particularly because it is lasting and durable and will readily withstand being left out in all kinds of weather. The so called wicker furnishings—grass, reed, and so forth—are also highly satisfactory, and doubtless are the more commonly used. Such furniture adds to the attractiveness of the porch, and the chairs and other seats of such make should always be selected for their comfortable as well as sightly qualities. Furthermore, any of the wicker kinds may be quite delightfully transferred to use indoors when not required for the porch, thus giving service both winter and summer.

Cushions for chairs and other seats used on the porch also help to increase the attractiveness of such retreats, just as they contribute toward enhancing interior appearances. Cushions and pillows likewise add a charming touch; and, if non-fading or of sufficiently inexpensive quality to permit discarding and replacing when one tires of them, may be of gay colors rather than somber tone. They should never be characterless. The fabrics used on the porch should be so selected as to add a delightful touch of color.

Any form of covering for the porch floor is quite optional, although a rug or two will doubtless assist toward producing a more pleasing effect. The porch is

One end of the porch is glazed against the prevailing cold breezes
Wicker furnishings are highly satisfactory for the porch

often floored with cement or tile, which makes an excellent background for the rugs which are so comforting under the foot. Fiber or inexpensive grass rugs are excellent for porch use. In fact almost any kind of rug may be used.

The porch is a sort of meeting and blending point between the indoors and the outdoors. Hence, it seems exceptionally appropriate that it should not only be furnished somewhat after the fashion of a living room but also be quite liberally embellished or decorated with growing things. Hanging baskets from the beams or pots or standing baskets of ferns and other plants, therefore, have a very legitimate place in and about the porch that is to be a real summer living room. The porches illustrated herewith have especially attractive treatment in this respect. Ferns lend particular charm to retreats of this kind, but almost all other indoor-growing plants and flowers may also be employed for the purpose.

The porch should naturally afford at least a degree of seclusion and privacy. Sometimes its location alone satisfactorily solves the matter. If it does not, however, some very pleasing way of screening the place from too public view is usually possible. And by some similar method can it also be suitably protected against uncomfortableness from glaring sunlight and strong breezes. The use of vines, either climbing rose-bushes, ivy or something else, always constitutes one very delightful way of handling either of these problems. Awnings, curtains or some kind of rolling blinds present another solution. Furthermore, as has been done in the case of one of the porches here illustrated, the glassing in of an end has admirable possibilities, especially as a means of protection against wind.

Porches are far too commonly neglected—either scarcely used at all or regarded but very indifferently. Yet, if one will but try to make it so, the porch is capable of furnishing greater enjoyment
and a more healthful atmosphere in summer than any other feature or division of the home. With so much to offer for such a goodly part of the year, surely one ought to find it well worth while, as well as a quite pleasurable task, to make it attractive and inviting to the family and to their guests.

Spearmint and Peppermint in Your Garden
E. M. W.

Spearmint and Peppermint love water. For some time we did not know how to provide this, until we discovered that the drip from our refrigerator could be directed out to a corner of the house and there we planted spearmint. If you want spearmint or peppermint we would suggest this; but a bigger bed of mints (including other garden herbs such as sage and thyme) will thrive planted right in the troughs where there is eaves drip or where drainage often takes place, close up to the house. The spot near the conductor pipe outlet is splendid and sometimes, if the place is a country home, a place near the well or cistern can be reserved particularly for mints and herbs.

Mosquitoes and bugs love the damp, and spearmint and peppermint love the damp, but bugs and mosquitoes do not love spear and peppermint, so the conclusion is that these garden herbs planted where there is a damp spot, wherever it may be, will serve several purposes.

Incidentally, a very good drink is made by pouring boiling tea over the leaves of either herb. Have the tea medium weak and when the leaves have become 'limp' remove them. Chill the tea or serve it hot with or without sugar (no milk is necessary), and with fresh mint sprigs to decorate.
Home Decoration—What Is It?

The first requisite of a house is physical comfort. Not only is this true of each article of furniture, but it is true also of the placing of each piece as it relates to the other pieces,” says Frank Alva Parsons, one of our first authorities on Interior Decoration, and President of the New York School of Fine and Applied Art, in an article on The Art of Home Furnishing and Decoration, from which we quote further: “Mental comfort is even more important to man in his home than physical comfort. He must, or should, find in his home an intellectual stimulus and a refining influence to complement the activities and struggles of his life outside, to calm and rest the tired nerves and to relieve the material or commercial stress which threatens entirely to destroy his power to see or know anything else.

“There must be an expenditure of thought and skill in furnishing a home if it is to play its rightful part in the scheme of life. * * * Good things are not all costly nor are all cheap things equally bad. One might also add that frequently very costly things incline to be bad; at any rate, there is far greater danger of their being so because of the greater opportunity they afford for the expression of bad taste.”

Effective treatment for a paneled wall

“Intelligent selection—the art of buying the most appropriate furnishings and decorations for the home—leads logically to intelligent decoration, the art of arranging the furnishings and decorations so as to make possible a thoroughly attractive home and keenly enjoyable living for the family.”

Much of the restlessness of the American interior comes from over-decoration, lacking the restfulness of the well proportioned, well toned plain wall spaces. A paneled wall surface does not permit
the wall spaces to be broken other than by the pattern set by the panelling. If a mirror or even a picture is wanted, it must be proportioned to the panel if it is to be acceptable. Many things masquerade under the name of decoration. Hanging wall coverings or even pictures on a wall is by no means synonymous with wall decoration. Quoting Mr. Parsons further: There are established principles which control decoration, and decoration is possible only when it conforms to these principles. More than that—in order to be decorative there must be something that requires decoration; that is, which is incomplete in itself. As soon as material is added after a thing is complete, the result becomes an agglomeration, not a decoration. Many houses come into this class because the owner refuses to stop when he is done. Or he may have erred through having no place to decorate, his background being of such a kind that, struggle as it might, no one thing could successfully compete for attention, and therefore become decorative by contrast. Simplicity in backgrounds is the foundation of decorative possibilities.

The word "art" has been terribly overworked. Much has been loaded onto the term which one refuses entirely to acknowledge as art. Quoting Mr. Parsons again: "In the first place art is creation. It is the personal expression of the individual in any material or combination that completely conveys the conception of what he is trying to project." "An object which does not do honestly and truthfully and sensibly what it purports to do cannot be artistic, no matter how it looks." "If the prin-
principles of harmony are understood and applied, beauty will result."

"These elements, fitness to use, and beauty, which when combined make what is called the art of quality, must be made comprehensible by facts and truths which can be expressed in a language form that all may understand, or learn to understand. This art language is made up of color, form, line, and texture, and depends for its efficiency on a knowledge of the principles which govern it and upon an appreciation for the niceties in its use. Any one may learn the principles and grow in appreciation as he makes a right use of what he knows."

"One of the first premises of decoration is the assumption that there is a definite form or shape upon which a decoration is to be applied. The direction of the bounding lines of this form determines the direction of the principal lines of the decorative matter which is to be applied on it."

The principle of consistently related shapes and sizes is the next consideration, following Mr. Parsons' outline. Who has not wondered what to do with a round clock or a chair of wholly curved lines, when all the other objects were straight? "Oval and curved objects must be repeated by others similar in form in other positions in the room if they are to become in any sense part of the design."

The second part of this principle—consistent sizes—is even more important and far-reaching. Every interior, as well as every exterior architectural feature must be thought of in its relation to every other feature in the matter of size.

"A third principle of form is known as balance. This is the principle of arrangement whereby attractions are equalized and through this equalization a restful feeling is obtained; that is, a feeling of equilibrium or safety."

"There are two types of balance to consider. The first one known as bi-symmetric balance, is the equalization of attractions on either side of a vertical center by using objects the same size, shape, color, or texture. This is formal, dignified, and safe, but lacks in some ways the delicacy and subtlety resulting from an attempt to get a less formal placing." "The second kind of balance is known as occult balance. This term is used to signify that the balance is rather felt or sensed than exactly determined."

To explain briefly the primary laws of balance, these rules are given: "Equal attractions balance each other at equal distances from the center." And conversely: "Unequal attractions balance each other at unequal distances from the center." A third rule, and one which is more exactly stated, follows: "Unequal attractions balance each other at distances from the center which are in inverse ratio to their powers of attraction," which, translated, means that the objects with the strongest attractions seem to gravitate toward the center, while less attractive ones seem to draw away from the visual center.

"The application of the rules of balance not only to objects on the wall, but to the furniture when seen against the wall or against the floor, is essential to room composition. It is also essential that the floor, in its general appearance, should bear a balanced relation to the walls and to the hangings."

The relations between the three bounding surfaces of a room are clearly stated. "The ceiling should be unobtrusive, but keyed in color to the rest of the room. A perfectly white ceiling, except in a white room, or an over-ornamented ceiling anywhere, is an annoyance to him who would see his friends or his furnishings. A too aggressive wall paper or other wall covering makes a bid for at-
attention quite out of proportion to its rights as a background, while aggressive and over-assertive floors or rugs are in bad taste, particularly when they assume the prerogatives of the hostess in their attempt at attraction. The ceilings should be about as much lighter and less attractive than the walls, as the walls are lighter and less attractive than the floors. This is a balanced arrangement of ceilings, walls, and floors.

The final principle of form is unity. “A unit is that to which nothing can be added and from which nothing can be taken without interfering materially with the idea itself.”

“Good taste, which is the final criterion in all art, is cultivated or improved in most people by a constant study and application of the principles which control artistic expression.”

“Let us again remember that a man is exactly what he lives in, for environment is the strongest possible factor in man’s development. Let us not forget that what man really is, is what his mind is, and this must be expressed in all he does.”

**Building in California**

May Belle Brooks

WING to her felicitous climate, California does many things the rest of the world may not do; but her activities are replete with suggestions that might profitably be adapted to other and less favored climes.

One thing which has impressed the tourist is the way these western builders manage to inject the artistic flavor into even the cheapest little “shacks,” which, as everywhere else in these expensive days, are going up by the hundreds. It may be because it is so easy to get things to grow in this virgin soil and

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*In California they build the porches above the roof in the “airplane” bungalow*
mellow sunshine (plus lots of water, we must admit!), that soon the humblest garage or "bungalet,"—a term given to a tiny house of one room, a bath, kitchenette and screened porch,—is covered with vines and it instantly becomes, not an eyesore to spoil the landscape, but a place that makes the passer-by exclaim at its charm. A rose ladder seems as important as a roof; or it may be a tiny latticed entrance or a pergola porch to carry the vines.

Always there is paint, or light colored stucco,—and nowhere else does paint seem to speak so well for itself as here under the bright sun. Then pretty soon one sees winding paths (and let it be noticed that walks generally curve gracefully to their destination instead of being angular and straight to the point) bordered by flowers that suggest a seed catalogue in their perfection of color and size. Then fruit trees and shrubbery are soon added in newly plowed ground and a lawn started. By the way, the native Californian fails to realize the importance of a patch of green around his premises. Because it is not common, a beautiful lawn is to Eastern eyes the most attractive feature about a California home. As everything dries up after the rainy season, a good lawn means eternal watering, and so one often sees fine homes surrounded by lovely blooming plants in a patch of sand. But the newcomers who are flocking here appear to think a green lawn is worth all the work it entails.

So all this landscaping is done long before the real house itself begins to grow on the front of the lot, because this is the work that takes little money but much time and attention, and the doing of that which lifts the little place out of the shack class into something that suggests rather an artist's retreat.

A little lattice work artfully applied where it would soften the crude lines, a shutter at the window and a flower box, a gay awning perhaps, tiny paneled windows in place of the uninteresting sheet of glass, something definite about the entrance door; as a hood and a pair of benches with some flowers or evergreens around it, stepping stones leading up to it, if obtainable, or some sort of attractive path—all little things but none expensive and none that could not be utilized later in the house-to-be. What a difference the small things make! A small porch across the front, fitted up with gaily painted things and lots of
flowers, gives a little house a gracious charm, and in the winter, evergreens brought from the woods may be put in the pots or window boxes to relieve a barren aspect.

Another thing noticeable about the western home-builder is the avidity with which he seizes upon unusual materials for his purposes. A sleeping porch made entirely of old-fashioned green shutters was the achievement of one householder.

Seemingly nothing that may be made into a habitation goes to waste, not even the adobe mud, of which many really fine homes are being built. There is much adobe soil throughout Southern California and one real estate firm is featuring complete modern houses built of this native material as one solution of the high cost of building. Manufacturers of these large adobe blocks are springing up everywhere. Blocks are made by wetting the soil, mixing it with straw, pressing it into a mold and then leaving it to bake in the sun. Mexicans, whose own homes have long been fashioned of this adobe, are expert mixers. One often wonders if it might not be possible to utilize some of our eastern clay soils in similar manner.

Another thing noticed is the simplicity of the house plan. As Californians live so much in the open, only the bare essentials are necessary, halls, dens, even dining rooms being conspicuous by their absence. There is usually a large living room, one end of which, perhaps, serves as dining room, with a breakfast alcove to supplement it, and sometimes one large sleeping porch instead of several bedrooms.

A very admirable feature, common to both large and small houses, is the screened laundry porch occupying an angle of the house next the kitchen. Here are the built-in tubs. It is an idea that should appeal to the eastern housekeeper as well, for few women really enjoy doing their laundry work in the basement. This little porch takes up small room, is convenient to both kitchen and yard, and saves lugging heavy bas-
kets up the basement steps. In the winter the screens may be replaced with windows.

With the exception of these service and sleeping porches, which really are substitutes for rooms, porches in general are being eliminated from many of the newest homes, as a roof over one’s head is not necessary in this land of little rain. It is better to let the sun enter the house to warm it and to have an open-air living room in the garden, than to shadow the house with porches. Even in our colder climates there is a growing feeling that we make too much of our porches. Our attention is being called to the need of letting more sunlight and air into our rooms and it is better sometimes to place our porches, which are in use only during the warmer months, a little removed from the house, connected perhaps by a passage or putting one in the garden by itself, in the form of a summer house.

Instead of having a living room, sun room and porch as usual, it is better to combine the three by adding as many windows and French doors to the living room as the construction will permit. Where it is possible to have such a room open onto a garden, with seats and tables, it will be delightful place, summer and winter.

With the same object in view, that of coaxing the sun into the rooms, many of the latest bungalows are modelled after our New England houses, with little or no eaves, which is a distinct innovation to many of us who cannot conceive of any bungalow without its exaggerated roof line.

**Under the Hedges—And Elsewhere**

Evelyn M. Watson

OODS flowers may be made a part of the home garden easily. Right under the hedge is a place violets will grow. Low under the bushes blue bells will blow. Trilliums are not afraid of the soft garden shade, nor will anemones spoil in rich garden soil. Plant these flowers early, in the spring of the year, and tend to them well 'til their blossoms appear; then let them rest, for resting is best, until the leaves, that in fall, fall down on us all, can cover them well. During winter's long spell, they'll sleep, soft and deep, and when spring comes around, they'll rise from the ground. They take little space and add bounteous grace—they grow with great ease and are certain to please. Their wants are so few, a corner will do, a spot in the shade, that's wet with the dew, or right under bushes they'll comfortably grow, or all 'long the space where you've placed the hedge row. They take but a moment to plant near your place; they're so fair in their colors, have such delicate grace—and their beauty is this: that between you and me—no matter our lives nor what our fortunes may be—these offerings are—for all of us, free. So hie to the woods, just fly with your basket, and take up the roots, the tendrils and shoots, and pause not to ask it: of course they are free, of this "land of the free"; these plants were just grown for that garden of thine; like everything free, the rain and the shine, so rich and so rare, they're just made to share, a gift from the Father Divine. It is only a part of the infinite plan that these blossoms, too, should be offered to man: Though each of us, all of us have more than we deserve, these flowers add their joys for us, thus will they serve.
The Charm of the Small House

In any period the architecture of a country reflects the civilization. Egypt left tombs, the remains of Greece are temples, Rome left roads and aqueducts. The spirit of our period is individualistic, and in the small home is sometimes found all the charm which many a larger structure can offer. Even the tiny cottage, dotted here and there along our thoroughfares, may so express the individuality of the owner that one wishes to stop and add such a personality to the list of one's friends.

Some people wish their porches thrust out toward the street, in order to get all that is going on about them, and to see every one who passes, while others prefer this open part of the house where it can be secluded from passers-by, and kept entirely for the family and guests, as in the cottage illustrated.

Very compact is the plan, giving five rooms with the dimensions shown, the porch projecting at the side. While the rooms are not large, they have the luxury of good closets. Even the bathroom has a good closet. Sometimes such details...
add more to the comfort of living than a large house. The entrance is merely a stoop, but could be glassed very attractively in conditions where such a vestibule is desired.

The second home is a cottage with three chambers on the second floor, giving an unusual number of sleeping rooms in so small a house. In fact, one of the rooms, since it opens from both kitchen and living room, might be used as a dining room in case the family so wished it.

The entrance is through a small sun room into the living room, at the end of which French doors open to a room which may be used as a den or even an office for the man of the house. The fireplace on the central wall of the living room is so placed that the chimney serves the kitchen also and the heating plant in the basement as well. The kitchen entrance is at the grade level, leading on to the basement.

The exterior is of stucco with wood trim at the windows and timber work in the gables.

The exterior of the cottage is of siding, and with the trim all painted white. The brick edging of the steps, together with the outside chimney of brick, gives a good touch of color, and makes a fine background for the generous planting which screens the porch and makes a doorstep garden.
The House that Can Be Made Larger

T is always well to look to the future, especially in building a home. If more room is likely to be needed later, it is the part of wisdom to plan for all the space which one would like, and then build the necessary part now, leaving it so that there will be no wastage in making the later additions. A home which is so planned is shown in the accompanying photo and plan. The first unit contains living room, kitchen, bedroom,—which later can be turned into a dining room, bath room, and a well placed little dining alcove which is lighted by the attractive high windows above the flower box.

The basement is so planned as to provide for laundry and heating plant, and the latter may be large enough to heat
This gray and white bungalow shows a strain of the cottage in the cornice treatment

the house after the second unit has been added, without adding very materially to the cost of the plant. With everything provided for in the first place, the addition may be made to the greatest advantage.

Oftentimes, in the case of “ready made” plans, alternate sheets of drawings show somewhat different arrangement, from which the owner may choose which way he wishes to build his home, as is the case in this instance. Alternate drawings show the living room extended to the line of the breakfast room, forming an open side porch; and with pergola beams extending out over the driveway, from the side of the front porch.

This is a gray and white bungalow, yet with a touch of the cottage, and of the Colonial, indicated in the cornice. The low effect of the roof is obtained by the use of a flat deck on the main roof. The exterior of the walls is surfaced with narrow siding. The porch floors are cemented. There is a full basement under the rear part of the house up to the line of the living room.

Flower boxes and potted plants have been used very effectively about the terrace and even on the ledges of the chimney. An attractive trellis may be seen at the sunny end of the terrace.
Well Built Homes

EVER before has there been as much consideration put upon the question of the materials which shall be used in the building of the small house as at the present time. Not only is this true of the individual builder and owner, but it is even more notable in the systematic study which is being given to the whole structure of the building industry by the committees working under Secretary Hoover in the Department of Commerce.

For the first time in the history of the building industry, a thorough study of the fundamental principles of house building is now in progress, and this is being done under the direction of those best able to bring forth practical results from the investigation. In most communities the building codes have, like Topsy, just grown, usually under the fostering care of the city alderman, until a large and weighty volume has accumulated. Since the building code virtually fixes the restrictions under which the builder must work, it is largely influential in the specifications for the building. In most communities the building codes have, like Topsy, just grown, usually under the fostering care of the city alderman, until a large and weighty volume has accumulated. Since the building code virtually fixes the restrictions under which the builder must work, it is largely influential in the specifications for the building. In such a committee, architects and engineers of national reputation, coming from all sections of the country, are working out a set of basic building rules which shall be applicable or may be adjusted to the conditions found in all parts of the country. Good practical construction, honestly applied, and carried out without unnecessary expense, is the object toward which this committee is working. Reports are being published by the manufacturers of various products, both as to cost and as to construction, which throw much light on building processes, which often are such a mystery to the uninitiated, and even to the home builder. Comparative costs of different constructions have been carefully gathered and published widely. Emphasis is placed on the relations of first cost, and endurance in the structure after it is completed.
One of the points which prospective builders are stressing is the fact that they want to avoid repairs and additional work caused by defective or cheap work or materials. "Build me a house which will not need repairs" is the injunction of the home owner to his builder. Nor does this mean a masonry building, as some people seem to think. Well built frame structures may stand for a hundred years, as is witnessed by the fine old Colonial houses which one sees occasionally in the East. The chief thing is that the house shall be well built, whatever type of construction may be chosen.

A house which can be built on a narrow lot is also one of the requirements which many prospective builders seek. The first home shown in this group fills this condition admirably. Living and dining rooms, kitchen, bathroom and two bedrooms are shown with a total width of 24 feet. It is planned on simple lines and is economical to build.

While the arrangement of the plan will generally be considered before much thought is given to the exterior, yet the two must be considered together; especially is this the case if some preconceived effect is desired for the outside of the house. The natural process is to decide on the interior arrangement, and allow the exterior to develop, following the interior requirements. Then the points of special interest, such as the front entrance, or the windows affording the outlook from the living rooms, are emphasized in some way which shall call the eye to those points. This is the office of decoration, giving importance to the notable features of the house.

The entrance porch not only serves this purpose of giving importance to the entrance, but it is usually made to serve also as an attractive stopping place just outside the door. Often it is made large enough for an outside living room. This porch has been a point of difficulty in the modern Colonial house, for people of this time want a porch. The people of
Colonial times, it would seem, worked out of doors so much that when they came to the house they wanted to go inside, and the entrance portico was only a beautiful entrance.

Built with a wide exposure across the front is the next home shown. It is a cottage with the bedrooms on the second floor, and a large living room across the front of the house. The porch extends beyond the house so as to get a breeze from any direction. This porch is large enough to make a real summer living room. It is screened and furnished.

One end of the living room is fitted with cases for books, and suggests the charm of the long winter evenings around an open fire, or of the rainy day with one's choice of books. The kitchen is roomy and well arranged and the stairs...
Much living space in small compass

are particularly well placed, with a rear entry at the grade level. The second floor is reached from the kitchen without going through the living room.

The last home which is shown could also be built on a narrow lot. It is very practical and compact in its arrangement. This is a summer house, as shown, to be built where a heating plant in the basement is not required; though, of course, it might easily be built with an enclosed porch and cellar stairs, and as much basement as desired.

It has a good fireplace and bookcases. As built it is finished throughout with Georgia pine, including floors.

The projecting trellis around the porch is unusual, and, when the vines have grown so that they reach it, will be a very attractive feature of the house.
Decoration and Furnishing
Virginia Robie, Editor

Cretonnes for the City Apartment

Not only for country houses and summer cottages, but for town homes occupied during the hot months, are the English, French and American cretonnes a great boon. Perhaps the city apartment gains more than any other place by a generous use of this material, for apartments are seldom decorated and furnished with an eye to summer. They are made "cozy" at the expense, oftentimes, of light, air, and freshness. Coziness can be attained quite as well with wicker furniture and cotton fabrics as with upholstered furniture and velveteen hangings, and made far more interesting and twice as economical.

A small apartment, not of the newest planning and unattractive in its woodwork, was quite made over by a liberal use of cretonne. Its winter treatment was of the most conventional type as it had been built at a time when the taste of landlords had not progressed beyond golden oak and overmantels. The paper of the living room was a strong green, never a good color for golden oak, and too dark for the average room. It was not a bad paper in itself, but had gravitated to the wrong place. The rugs were expensive oriental ones in deep reds, and the furniture was modern mahogany highly polished and upholstered in a mixed satin damask of reds and greens.

One summer the apartment was rented to a young woman whose ideas were not conventional. The rugs were taken up and placed in the store room. Over the floor went a big fiber rug in soft green, nine by twelve, costing eight dollars.
A French design of much charm in pale yellow, soft blue, orange, green and tan

Wicker furniture, stained light brown, almost the color of the oak, was next purchased. It was not the finest wicker, by any means, and incidentally the young woman learned many distinctions between rattan, reed, rush, etc., also their varying prices. With cushions added these pieces were all relatively expensive, particularly when hair was used as a filling. Small and apparently unimportant points, but in reality having much to do with comfort, were details regarding the height of seats, the depth of cushions, whether real cushions, that is to say, "box cushions," or "cushion pads," were best with certain chairs and whether these necessary accessories should be "buttoned." "Buttons," it seemed, added to the cost, and box cushions requiring more time and skill were double the price of pads.

This canny amateur decorator decided on pieces of wicker which were high enough in themselves to make box cushions unnecessary. This scheme required less material and consequently made it possible to buy a better grade of cretonne. From the first, one particular pattern took her fancy as being far and away the best thing for the room. It had green, not too much, but enough to make it hang together, so to speak, with the paper. It had a great deal of a charming old blue and an equal amount of light brown, a color which was almost identical with the brown stain of the wicker furniture and consequently very friendly with the oak woodwork. The big crex rug covered most of the floor, its green harmonizing surprisingly well with the wall paper. A box cushion an inch and a half high, filled with moss, was made for the rather low large arm chair. For two other chairs a trifle higher and for a sofa, pads filled with hair were made; for the sofa there was also a pad for the back, this quite as much for the decorative effect as for comfort. The pads were tied on with tapes made from...
the cretonne, and showed little. Two of the
best mahogany chairs were covered
with loose slips to match. The rest of
the furniture joined the rugs in the store-
room.

The exposure of this room was north,
with one large window in the shape of a
shallow bay. The eastern and western
sun found its way to the side panes; the
center pane faced due north and the light
here was steady all day. The broad
sill of this window was one of the
problems. It was too high by six or
seven inches for a seat, yet its broad
expanse, fully twelve inches deep in the
center of the bay, made an uninteresting
feature. It also added painfully to the
amount of polished woodwork. The rest
of the window presented a good opportu-
nity for effective treatment, once the
heavy lace curtains and silk over-drapes
were removed. Against the window the
young woman hung net curtains of a light
ecru in the thinnest, most transparent
mesh which a week's hunting could un-
earth. The room was at once improved
by the removal of the cold white curtains,
for there was not a bit of white elsewhere
in the room. Had there been a white ceil-
ing, the lace curtains would have been
more in harmony, although a clear white
ceiling would have been extremely ugly
with the oak woodwork.

The net curtains were the shade of the
ceiling and this fact also helped out the
scheme. This amateur wanted to treat
this big window in English cottage style,
using a deep valance of the lovely cre-
tonne across the cornice of the bay, but
not an atom of breeze must be lost, nor
must anything be done to take away from
simplicity and a certain "bareness," which
was an objective point. When the win-
dow was complete it proved highly deco-
rative. The valance and side curtains
helped the proportions wonderfully. The
window filled almost the entire north
side of the room, and was much too high.
The valance concealed the ugly cornice,
and gave to the window a lower, broader
appearance. Not a bit of light was lost,
as the lower edge of the valance just
covered the edge of the upper frames of
the windows. The side curtains, also, in-
terfered not a whit with the light and
air. They, too, hung against woodwork
instead of glass. The net curtains reached
the broad sill; the side curtains ended at
the baseboard. Much decorative feeling
seemed gained by the arrangement. The
boldness of the pattern—birds and big
flowers—balanced well the plain spaces of
the wall, while the strong blue and the
fine brown with just a hint of green,
toned down the paper to such an extent
that it did not seem the same thing. With
the new order it looked much more sub-
dued in tone. The room now contained
the rug, the furniture with its attractive
cretone coverings and the window, also

A copy of an old trellis pattern cotton print in
brilliant colors
the mantel. Plain blue in some form suggested itself as a necessity. The broad window sill also demanded something. Plain blue linen taffeta, of a color to match the blue in the cretonne, was cut to fit the long wide sill and lined with plain green, so it could be reversed if fancy dictated. Down it went with the blue side showing. A generous oak table was covered with the same blue taffeta to which had been added an eight inch border of the cretonne. Several late magazines, a few new books, a Grueby lamp with a Japanese shade in blue and green and soft gold, were placed here. Five pots of geraniums with pink, not red blossoms, were strung along in Dutch fashion on the window sill. A big copper jar did duty for a waste basket; another filled with the long sprays of "white clover"—that convenient summer plant, which grows so cheerfully in vacant lots—provided a continual fresh note of green. Copper looked very well with the color scheme; better than brass, in fact.

With the blue and green scheme the oak woodwork became less conspicuous, and the light brown wicker, repeating the brown of the cretonne, fitted perfectly into the harmony. The mantel still remained, but stripped of everything except a copper jar filled with cool looking spruce boughs, which almost covered the mirror, and with another oval large jar resting on the hearth filled with branches of greater length concealing the ugly metal screen of the gas grate, it was almost forgotten. The cretonne had really made the room over and had given it more of a country atmosphere than is found in many country houses.

William Morris once advised English housewives to go to South Kensington Museum and study the textiles of the sixteenth and seventeenth centuries in order to develop a better standard of taste. It is gratifying to see how great the improvement is in all departments of household art, particularly in fabrics. The designs of many periods and countries may be traced in the summer cretonnes and chintzes. American makers are producing some of the most interesting patterns of the season's output.
In Texas.

S. B. R. I have derived so much benefit from your magazine that I am writing for advice and suggestions for a cottage my parents intend building very soon. They have lived in a large home so long that they have planned a very large cottage. They have so much furniture that they feel they must use that it is difficult to decide what new pieces would be necessary and what rugs and draperies would be best suited for the rooms. The house is to be built in a very large lot facing east and having a splendid view of western hills from the rear. I am enclosing a very rough sketch of the first floor plan with size of rooms and exposures. The windows are all to have shutters and screens and the sleeping porch is to be screened but not glassed in. You will notice that nearly every room has a fireplace. These are Colonial, of light painted wood with tiles or brick to match color of rooms. Please give advice as to this and what brick would be best for exterior of cottage. The roof is a sloping bungalow style with dormers at front and rear. The front dormer is over front porch and windows open onto this roof. The porch has plain Doric Columns at front and has open terraces on sides with steps leading to the lawn. There is to be a low brick rail here on the terraces. The covered part is to have a wood railing of Colonial style and a brick floor and steps. The stair landing in the main hall has two large windows that light the hall. The attic story has a storage room, two bedrooms and bath which they do not intend finishing at present. All floors downstairs are to be of oak and the walls of plaster. Should the walls be tinted or papered? Would the walls look well tinted buff with ivory or white woodwork and mantels? In the two living rooms and dining room the ceilings have wide cornices. There are French glass doors between living room, den, and hall. My mother has several small Oriental rugs. What room would be best for these? They have a good deal of dark red and tan in them. What kind of color of rugs would be best in the living room and den? As to the furniture, it is a mixture of oak, mahogany, and a few chairs in walnut. They have a Louis XVI set of parlor furniture in mahogany that might be recovered and used in living room with some extra pieces of furniture. Their own bedroom has heavy mahogany beds, a dresser and chiffonier, sewing table, desk and chairs. Mother prefers blue walls in this room if possible. My brother's room has an old-fashioned set of walnut furniture and has a dark green rug for floor. This is a west room. My idea was to use the buff walls and white or ivory woodwork all over the house and use different colored rugs, hangings, and lamp shades in the rooms.

Ans. You have a very interesting study before you in harmonizing the materials and furniture you have, and wish to use with your new and handsome cottage, a cottage in name only. There are many rooms of generous proportions. We
like your general plan of ivory woodwork and buff (a grayish buff) for the main rooms, the north rooms and the halls. We like also blue, as the complementary color for your mother’s room, but we should not use it as a solid color on the wall. We approve of the painted walls in the main for a cottage-idea home, but in one or two rooms we would suggest paper, your mother’s for one, so that the wall could carry some blue but not be so hard as a flat tone. The modern way is not to use a mass of pronounced color on the wall. Another room we would suggest paper for is the dining room. With these exceptions, we think you can safely specify painted walls (flat, egg-shell finish of course, except in bath, pantry and kitchen, where it should be enamel). Your idea of ivory mantels to match woodwork is correct. We would use tile rather than brick for hearths. In your climate hot water heat is hardly a necessity. We are recommending a good hot air heating plant. With all your fireplaces, we think you will find this quite sufficient. As to brick for exterior trimmings, the rough-surface tapestry brick in dull reds and brown tones is very harmonious with white, cream or gray. You could use plain dark red Colonial brick for the floor and steps. The tapestry brick would be good for the den fireplace, with a plain red-brick hearth. We would have a walnut stair rail, with oak treads stained to match the walnut, and the woodwork in son’s room finished with a walnut stain instead of ivory. It need not be hard wood. Pine or other soft wood takes a very good stain. Your plan for enamel paint for bath and kitchen wainscot is good.

For a New Home.

D. S. We are just beginning to build a new home according to enclosed sketch. I have been reading your magazine with great interest and now would appreciate it very much if you could give me a little personal help. This is a frame building, shingle roof, brick foundation. What do you think of yellow with white trim, black screens, red brick and gray, green, or brown roof? I have mahogany piano for living room and thought to have all wood-
work everywhere but kitchen and pantry in an old ivory. Three double French doors and single French door in living room, wood mahogany. Dining room furniture is oak. I wanted reed for breakfast porch and sun parlor—what color should I get? Floors are edge grain pine finished and waxed natural color.

Ans. If there are trees around the house, the yellow and white trim will be very pretty, but the brown roof will be better than green, except for the country. We suggest a gray tone for living room walls. We would use the blue tone on the girl’s room on account of its southern and western exposure. It would not be suitable for a boy’s room. Soft gray for the walls with the color in the draperies and furnishings is much more satisfactory. The parents’ room has very little light, and a light shade of gray has been chosen. The living room, too, has little direct light, and old gold draperies would be good with the gray wall, with rose in the dining room. Reed furniture, painted rather a strong blue with tiny green and yellow stripes, would be fine in the sun parlor and breakfast nook, or you can have the furniture painted a French gray, with green and yellow stripes, and use very gay cretonne showing bright blue, green and yellow, and touch of red, on a black ground. Upholster the seats with the same cretonne. The doors between living and dining room can be veiled with plain net; the single doors into sun room need no veiling. The French doors should be the same as the other woodwork. We like the plan of old ivory.

The Sun Room.

M. S. Am a subscriber to Keith’s Magazine and as we are building a new home am greatly interested in interior decorating. The living room and sun room are the two rooms on which I wish you to give me advice. The living room is 14x27, has three windows to the north and two on either side of the fireplace to the west and two to the south. Woodwork is ivory. The furniture is mahogany. Will make pongee curtains, but am at a loss to know what kind of over-drapes or what color, also what color and kind of portiere as there is an open doorway to the hall. The sun room is above the garage, entered from the stair landing. It is 12½ x 19½ with French windows to the south, east, and west,—eleven windows in all. Woodwork is ivory with wicker furniture in ivory. Have not decided on the rug, but think there ought to be a relief in color. Think of making pongee curtains which I can draw shut at night.

Ans. Replying to your request for advice as to the treatment of your living and sun rooms, the following suggestions are offered: You say nothing about the furniture coverings or the wall treatment. but if, as we infer, the walls are neutral in tone, you should have some color in the window draperies. If there is color enough in the rug and furniture, the over-draperies could be of ivory casement cloth, not pongee, which is off tone, being on the tans, not heavy enough for over-drapes in a handsome room, but too heavy for glass curtains. Make these latter of plain, fine-meshed net with just an inch and a half hem, for finish. What we should like would be draperies of rose and gold Sunfast brocade, lined with ivory satin and tied back with heavy silk cords and tassels, deep ivory or gold. Then use for portieres, rose velour or velvet, lined with the ivory satin on dining room side and curtains at windows in dining room of old gold Sunfast, no other curtains. In the sunroom, we think you need to give it more character. Have those two extra tables and the chairs painted blue and green, with orange stripes on the legs and backs of the chairs. Make the tops of the tables green and the legs blue, with stripes on the legs. Then get cretonne, a black ground with large lavender passion flowers and rose-red hibiscus blossoms, and brilliant blue birds among the dull green foliage. Use this on the ivory wicker, and for the draw-curtains. The walls should be gray and there should be a runner, dull green, on the floor. You will have a distinctive sunroom.
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1042 Ashland Block, Chicago, Ill.
Vegetables On the August Market

Elsie Fjelstad Radder

NE hot dish is enough for any menu on a sultry August day.

There are several good reasons for this. Watch the persons ordering their meals in restaurants. Notice how quickly the salads, ices and light cooling desserts disappear, and how very few persons choose hot meat, potatoes and vegetables. This manner of choosing food is evidence of human nature—hot foods partly lose their appeal on warm summer days. The hot biscuits and honey which taste and sound so good in the winter are simply not relished when the thermometer soars.

It is not good, however, to eat cool foods entirely. For this reason it is considered best by authorities that one hot dish be served each day, even in the hottest of weather. Very fittingly this can be a vegetable dish. For, while we can have a hot dish of meat, potatoes or hot breads all the year around, we may have cooked green vegetables only when they are in season.

**Tomatoes.**

Hothouse tomatoes are on the market throughout the year, but not all of us can afford to pay the price they sometimes command. Southern tomatoes may be purchased after May first. The home-grown tomatoes are cheapest and best in August and September. Tomatoes contain over ninety-four per cent of water, with protein, fat, carbohydrate and mineral matter all present in small quantities.

**Beets.**

Beets contain over eighty-seven per cent of water. They also contain nine and one-half per cent of carbohydrate, with the other elements present in very small amounts. Beets are on the market most all the year around, but old beets will never be so tender, no matter how long they are cooked, so beets are at their best when new, in August and September.

**Beans.**

String beans that are on the market in the winter come from California. Native beans are on the market from the last of June to the last of September, being cheapest and best in July and August. There are two varieties of string beans, the green and the yellow or butter bean. Of the shell beans, both the common lima and the improved lima are in season in July and August. Dried lima beans are on the market all year. Five quarts of beans in the pod make one quart shelled. Lima beans contain sixty-eight per cent of water, twenty-two per cent of carbohydrate and seven per cent of protein. Green string beans contain eighty-seven per cent of water, nine per cent of carbohydrate and two per cent of protein. Because of their large protein content, beans are substituted for meat in many families.
"A Kitchen-Cabinet, a la Son"

When that boy, who has been so secretive the last few weeks (in collusion with his Dad) finally invites you into the Room of Mystery and exhibits a fine Cypress Kitchen Cabinet, home-made from the working drawings and specifications in Vol. 36 of the world-famous Cypress Pocket Library—well, what will you say? You will be so fond and so proud that you can hardly pick the words to tell it. And your affectionate appreciation, at just that moment, will go far toward making that boy a good man. Never mind if his part of the "job" was not quite perfect—just be proud that you have that kind of a boy. Nobody will ever know whether it was he or Father that sent for the Cypress Plan Book, Vol. 36, and of course nobody will ever tell who actually paid for the genuine Cypress boards that were used. But you will remember always that it's "the wood eternal" and that it does not rot nor shrink nor swell nor warp and that is why Cypress is the standard wood in hospitals and other places where they are very particular.

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Insist on TRADE-MARKED CYPRESS at your local lumber dealer's. If he hasn't it please advise us promptly and we will see that you are supplied.
Cucumbers.

Cucumbers may be obtained throughout the year. Native cucumbers appear the latter part of the summer. Small pickled cucumbers are called gherkins. Cucumbers are usually served raw. They contain over ninety-six per cent of water, with small amounts of other elements present.

Sliced Cucumbers.

Remove thick slices from both ends and cut off a thick paring, as cucumbers contain a bitter element, a large quantity of which lies near the skin and stem ends. Cut in thin slices and keep in salt water until ready to serve. Drain, season with salt, pepper, paprika, and diluted vinegar. Cover with crushed ice before serving.

Cucumber Salad.

Slice twelve large cucumbers and six large onions, sprinkle with a handful of salt and let stand over night. Drain. Let come to the boiling point one pint of vinegar, one cup of water, one cup of sugar, one-half teaspoon of black pepper and one teaspoon of celery seed. Add the cucumbers and onions and allow the mixture to reach the boiling point again. This mixture may be canned for subsequent use, or the recipe may be reduced to fit smaller needs.

Fried Cucumbers.

Pare cucumbers and cut lengthwise in one-third inch slices. Dry between towels, sprinkle with salt and pepper, dip in crumbs, egg and crumbs again, fry in deep fat and drain.

Tomatoes in Cream.

Wipe, peel and slice three tomatoes. Sprinkle with salt and pepper, dredge with flour and saute in butter. Place on a hot platter and pour over them one cup of white sauce or gravy.

Devilled Tomatoes.

Wipe, peel and cut three tomatoes in slices. Sprinkle with salt and pepper, dredge in flour and saute in butter. Place on a hot platter and pour over a dressing made by creaming four tablespoons of butter, adding two teaspoons of confectioner's sugar, one teaspoon mustard, one-fourth teaspoon salt, cayenne, yolk of one hard boiled egg which has been rubbed to a paste, one egg slightly beaten and two tablespoons vinegar. Cook over hot water, stirring constantly until it thickens.

Stuffed Tomatoes.

Wipe, and remove thin slices from the stem ends of six medium sized tomatoes. Take out the seeds and pulp of the tomato, sprinkle inside with salt, invert and allow to stand. Cook five minutes two tablespoons of butter with one-half tablespoon finely chopped onion. Add one-half cup of diced cold cooked chicken or veal, one-half cup of softened bread crumbs, tomato pulp and seasoning to taste. Cook five minutes longer, add one egg slightly beaten, cook one minute and refill the tomatoes with mixture. Place in a buttered pan, cover with cracker crumbs and bake twenty minutes in a hot oven.

Sugared Beets.

Cook four beets until tender, skin and cut in one-fourth inch slices. Add three tablespoonfuls of butter, two tablespoonfuls of sugar and one-half teaspoon of salt. Reheat for serving.

Beets in Sour Sauce.

Wash beets and cook in boiling salted water until soft. Remove skins and cut in cubes, slices or any desired shapes. Make the sour sauce by melting two tablespoons of butter, adding two tablespoons of flour and one-half of the water in which the beets were cooked. Add one-fourth cup each of vinegar and cream, one teaspoon of sugar, one-half teaspoon of salt and a few grains of pepper. Reheat for serving.

Shell Beans.

Wash and cook in boiling water until beans are tender and dry. Season with butter and salt and serve.

String Bean Salad.

Rub three hard boiled egg yolks to a paste, add salt and one-fourth cup of lemon juice. Stir this mixture through one quart of cooked string beans and let stand one-half hour. Just before serving, add one-third cup of minced Bermuda onions, one cup of chopped celery and one cup of chopped nuts. Add salad dressing.
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Relief from Summer Pests—Ants

CREENS make a barrier against the common house fly, and will generally give protection against mosquitoes, but to get a sure riddance from any of the several common varieties of ants, once they have struck the trail to the syrup can, or some other sweet which takes their fancy, seems difficult to find. The Farmers' Bulletin No. 740 is devoted to the house ant, its kinds and methods of control, but even the entomologist is not very optimistic. The first step advised, which is more logical than easy when children visit the pantry periodically, is the removal of all substances which are enticing to them.

Whether these little pests are house ants, or as is, perhaps, more often the case in the summer, the little black ants from the garden or lawn; the destruction of the nests seems the only way to get rid of them, and when very numerous this is a large undertaking. Drenching nests with boiling water or injecting a small quantity of kerosene should be effective. Another means of destroying such ants in lawns of small extent is to spray the lawn with kerosene emulsion (see Farmers' Bulletin No. 127) or with a very strong soap wash, prepared by dissolving any common laundry soap in water, half pound to a pound of soap for the gallon of water. An effective method of control for larger ant colonies is to inject into the nest a quantity of disulphid of carbon, a chemical which can be purchased at any drug store, and immediately closing the opening of the nest with the foot. This substance can be injected into the nest with an oil can or small syringe, half an ounce for a small nest to 2 or 3 ounces or more. This is made more effective by covering with a wet blanket or heavy cloth. Keep this away from fire, as the fumes are inflammable.

The collection and destruction of ants by means of an alluring bait is sometimes recommended, and may give some temporary alleviation to the housekeeper, unless indeed it only brings a wider exploitation of a good forage ground. Sponges may be moistened with a little sweetened water and dropped into boiling water when swarming with ants. It is claimed that borax and sugar dissolved in boiling water in which the sponges are moistened, is destructive to ants. A poison is more effective, but since it can not be used where there are children or animals, its usefulness is limited. How-
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ever, here is the formula given in the Farmers Bulletin: One pound of sugar dissolved in a quart of water, to which should be added 125 grains of arsenate of soda. The mixture should be boiled and strained, and on cooling used in the sponges. The greatest precautions must be taken, as this is poison.

The House Fly and the Mosquito

It has been practically demonstrated that the common house fly can be controlled by the elimination of breeding places, and that this, to be effectual, must be done before the beginning of their season. The passing of the horse from our cities eliminates that most prolific breeding place for the fly in the passing of the "stable next door," and gives promise of getting rid of them.

The mosquito presents a more difficult problem as its breeding places lie, not only in every empty tin can and puddle, to say nothing of the rain water barrel of the past, but in every marsh or stretch of low, wet ground. Nevertheless, much remedial work has been done by the public health service and, considering what has been done in the tropics, we know that it is possible to go just as far toward eliminating the mosquito as the public spirit of a community wishes to carry the matter.
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Things the Home Builder Should Know

The homebuilder has never been accustomed to depend upon published books to any great extent for the information which he needs in building a home because, as a general thing, by the time a piece of general and timely information got into printed form it was apt to be superseded by later methods. So much study has been put on the smaller type of house in the past few years, however, that such information comes into print now in a very timely way. Several books have come to us in the last few weeks which give much information which the family about to build a home should know in order to handle the contracts in an intelligent way. Publication notices of these books are given under Book Notes in another column, but we have gathered here a few paragraphs which have direct reference to building materials. The householder, and especially the homebuilder, should have a general information about the lines of work covered by the various specifications before he lets the contracts. Knowing the limitations and difficulties under which a mediocre workman must work, gives a basis for improving that work, or for getting a man who will find a way to accomplish the things desired.

Knowing Your Own Home

"To know all is to forgive all, says the old French proverb, and while the jerry-builder or the unscrupulous plumber do not deserve to be forgiven, it will help you to overlook some of the shortcomings of your home if you understand the limitations within which the builder had to do his job." "How many house-owners really know their own homes? How many can tell of what wood it is built, whether the water pipes are of galvanized iron, black iron or brass, how much load it is safe to put on any particular electric circuit, how much paint will be required to cover outside trim? How many bought the house because they knew it was well built of good materials, and how many because they liked the location; or because the big closets pleased their wives; or (alas, in how many cases, in these days) because it was the only one available at a possible price, and a man must have somewhere to live?" "To own a home should be a joyous thing." Quoted from The Owner's House Book (Reviewed).

Prizes Offered for Photos of Long-Life Material

As a part of a nation-wide campaign designed to foster the use of more permanent materials in building, the Copper and Brass Research Association has announced a contest for school children and others, offering cash prizes for the best photographs showing the relative durability of materials which go into the construction of American homes.
Three men never needed for an (EVERlasting) Ambler Asbestos Shingle roof

EVERLasting! And a joy forEVER!

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Four permanent colors—Newport Gray, Natural Slate, Red and Moss Green—in three styles—American, French, and Honeycomb—give architects and builders an opportunity to work out a great variety of unusual roof effects.

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Some idea of the cost to this country of the practice of building for speculative profit rather than for use is evidenced by the result of a statistical study just completed by the Copper and Brass Association. The fire loss on the 21,000,000 American homes, insured as they are for a total of $91,700,000,000, is about $35,000,000 a year, based on figures for 1918 to 1920, inclusive. The rust bill, covering the renewal of sheet metal work, principally leaders and gutters, plumbing pipe, hardware, etc., is annually twenty times that sum.

The effort to show the public the wastefulness of the use of materials which need early and frequent replacement, is a part of this program.

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Modern Plumbing Illustrated, by R. M. Starbuck, author of "Questions and Answers on the Practice and Theory of Sanitary Plumbing," "Standard Practical Plumbing," et cetera. Published by The Norman Henley Publishing Company, New York. Price, $5.00. Modern plumbing is no longer a mystery. Full page diagrams showing all the details of each part of the plumbing in common use are given in this volume, seventy in number, and are very illuminating to the person who wants to know where the pipes go after they vanish from sight into the wall. The pages are plentifully sprinkled through with sizes and dimensions. The standard sizes of all kinds of fixtures are given, lavatories and sinks, also the different weights per foot of the "standard" and "extra heavy" pipe. In fact, there is so much information such as every one who is intending to have a job of plumbing installed wants to know, that we can even enumerate the most important points. The householder has seldom attempted to know anything about plumbing, even enough that he can do the simplest things for himself; while there are really many things, such as a leaky faucet, or a valve that is not acting right, which the householder or the housekeeper could adjust for himself quite as well as paying the plumber for his time to and from the job in addition to the work itself. In addition to the fixtures themselves, there is a discussion of water systems, and sewage disposal, where a city water system is not available. There is also a report of an investigation made by the English government concerning sewer and drain air and the chemistry of such air, summed up with the statement that "Human beings deliberately exposed to the effects of sewer air do not appear to be affected in health."


Quite appropriately, in the very first chapter, the authors tackle the all-important question, where is the money coming from to build the house?

Having provided the finances, the authors next proceed to give the sort of information and advice one should have in order to build properly and without waste. The relative value of building materials is explained—does one prefer wood, brick, hollow tile, or stucco? What roofing—asbestos, asphalt, copper, wood—which is best? How shall the house be heated—hot air, steam, hot water, vapor, vapor-vacuum, gas steam? What ventilation and water supply? What paints—which will be the best color scheme?

The book also advises on the care and conduct of the home—how to handle tools and do odd jobs around the house in carpentry, plumbing, and painting; how to run the heater economically; how to build a concrete path or a garage; how to avoid fires or save lives if fires occur; what to do in accidents from gas or electricity; how to do repairing; how to build an iceless icebox; how to abolish the garbage can. And so on.

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Changes In Building Costs

Essays taught from experience are supposed to be deep-seated and lasting, but seemingly not so with labor. It was made perfectly clear to every one after the war that a personal responsibility must be recognized by every individual in meeting the abnormal conditions which developed, if we were to have industrial peace and recover from the terrific upheaval into which our whole industrial organization had been thrown. It was a simple requirement and one we all understood—but what happened? What did labor do in fulfilling its share of responsibility? Just this: it promised to do its part and made a start, then just as soon as it saw the light begin to shine through the foreboding clouds, up went its cry, "We must have more, more, and ever more. Let capital fight this battle of recovery to normal. We want none of it. Stand for the rights of labor and insist that they (capital) pay labor well." Yes, pay labor well; and if not paid well, strike and ruin the fruits of development. So, where are we at today? Development of industry and re-establishment of the production forces of the country just getting under way, and bang!—labor throws down the lever, puts out the fire, and with menace in its attitude, defies the powers of government and again cries more, give us more or we will not work or let others. Progress halted, production and transportation lessened when it should be increasing, and so up go costs. And building, what of it? Here is a concrete example. It takes a ton of coal to make ten barrels of cement. Coal costs today from $1.00 to $1.50 a ton more than before labor quit. This increase is passed on to the selling price of cement. Shipments by the railroads are all either retarded or held up. Stocks of lumber and building materials are running low, and on the "scare" of shortage, prices go up. With such conditions, coupled with a general antagonistic, resentful frame of mind on the part of labor instead of co-operation and pull-together, changes in building costs are the result, and they are ruling higher than in the spring. This condition will react on labor, which will later suffer for steady employment and again meet a forced reduction of earning power. With the strikes out of the way, and especially with lower fuel and transportation costs, the outlook for fall business would be very good. Next month other changes which influence building costs will be discussed.
KEITH'S MAGAZINE
ON HOME BUILDING

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A delightful composition of gabled balcony, sturdy chimney,
and rich toned wall surface
HILE to all outward appearances it is just an ordinary residence, the little house illustrated herewith is, in reality, especially planned to provide entirely separate and complete living quarters for two families. It is, in other words, a very charming and practical representation of the double bungalow idea, which the post-war housing problem has been bringing into such pronounced popularity.

A point which endows this little house with particular interest, as a two-family affair, is the seeming single front entrance. Despite this appearance, however, there is actually an individual or separate front entrance to each side or each apartment, this result being accomplished, as will be discerned, through a sort of two-in-one arrangement. There is, in short, a small entrance vestibule, access to which is provided through an open doorway, and from which a separate door opens to each apartment.

The design of this entrance, and of the building as a whole, has been exceedingly well done. The entrance has, as will be seen, a touch of the Spanish ornateness in the treatment, contrasting well with the plain wall surfaces, giving a very artistic and pleasing result.

The wall of the vestibule, common to the two houses, has a very attractive embellishment in a treatment not unlike a wall fountain on the wall opposite the
entrance, which is seen through the open door of the vestibule. As this door stands open much of the time, it is a very attractive feature as seen from the outside. The inside doors, giving individual entrances to the two apartments, are located in the side walls of the vestibule.

The ornate frame of the doorway is in dull green and rich cream tints, giving a background for the high light touches of the latter. The walls of the interior of the vestibule are decorated in the same style, and the doors are of mahogany. The entrance stoop, as well as the vestibule, is floored with cement.

The interior is finished in quite inexpensive style, but nevertheless very attractively. The woodwork is of pine throughout, treated alike in the two apartments. In living room, dining room, hall and bedroom it is finished in old ivory, and in the bathroom and kitchen it is done in white enamel. All walls are plastered, and those of the living room, dining room, hall and bedroom are papered. In the matter of the paper, however, the apartments quite naturally have their own distinctive color schemes. The walls of the kitchen and bath room are finished with a smooth, hard plaster surface and enameled like the woodwork. Hardwood floors prevail throughout, except in the bathrooms, where the floors are of tile.

The living room, in each instance, is provided with an especially attractive gas-grate fireplace. The mantels of these fireplaces are of cast composition, similar in appearance to travertin, and the hearths are of dull-toned brown tile.

Referring to the accompanying floor plan, it will be seen that the interior is divided by a front-to-rear partition into two equal parts, of exactly identical arrangement. The front doors opening from the entrance vestibule give direct access to the living rooms, and a broad cased opening, in each apartment, joins the living room and dining room, while a hall leading from a rear corner of the latter forms direct connection with the kitchen, bathroom and bedroom. Off the outside end of the dining room there is a little cement-floored terrace, the intervening wall being almost completely filled with French doors and windows. Off the kitchen is the screened porch.
Each apartment is provided with only one bedroom. One of the closets, however, is equipped with a folding bed which rolls to concealment when not used, and may be placed where desired, using one of the other rooms as a sleeping room. This bed may be very easily rolled through the cased opening between the two rooms and used in the living room, if so desired. The dining room is equipped with a built-in buffet, which has a middle compartment of shelves and drawers and china cupboards at the ends. In the way of built-in features, the kitchen contains a cabinet ironing board, draft cooler closets, excellent cupboards, the usual sink, and, most delightful of all, a well-planned little breakfast nook, furnished with the customary built-in seats and table. The connecting hall has a commodious cabinet of shelves and drawers for linen, and the bathroom possesses both a shelf and drawer cabinet and the usual wall medicine case, while the screened porch is provided with a stationary laundry tray and a closet for brooms. The closet of the bedroom is particularly commodious.

The house has no basement or cellar, but the rooms of the two apartments are equipped with built-in gas radiators for supplying warmth, which are operated on the unit plan.

In the general design of the house the openings are accented by their rather...
elaborate decoration after the manner of the Spanish, with a very pleasing result. In much of the later building in California, this ornate treatment of the openings set in wide, undecorated wall surfaces, has brought a new note into the later building. The front windows are here grouped on either side of the entrance and are especially attractive. They constitute a sort of triple arrangement, with their sills but a few inches above the floor of the room within, and with their tops attractively arched. The dividing pilasters are designed and tinted to match the ornate frame of the entrance, and their woodwork is finished to correspond with the doors that lead off from the vestibule.

The outside walls of the house are of cement-stucco over metal lath and frame construction, the stucco being tinted greenish gray—with clouded or mottled effect. The roof, which is of the flat kind and is hidden by the higher-reaching walls, consists of a good grade of roofing composition, and the foundation is of concrete.

This little two-family house is built in Los Angeles, and was designed by Rex D. Weston, architect. As a representation of the double-house idea, the floor plan is particularly deserving of study. This idea of two houses in one, yet without the objectionable features of the double house, has quite engaging possibilities, especially at this time, from the viewpoint of economy. Naturally it may be utilized either for providing both a home for oneself and an apartment for renting, or for creating the improvements of property that is to be used for income purposes solely.

View in the kitchen showing the breakfast nook
The hall was greatly improved by turning the stairs with a landing.

A "Cinderella" House
Beatrice W. Hutten

HE drab, unhappy house of the small snapshot, with its bleak porches and gingerbread woodwork, was a cottage typical of the nineties; an era which might be termed the Garfield period, and reminded one hopelessly of Cinderella before she met the fairy godmother. Hardly an inducement was there for the prospective tenant or buyer. But since some one with imagination and foresight did see something worth the trouble of remodeling, the old house became the graceful cottage which is shown in the next photograph.

The old cottage had been built in one of those unfortunate periods of American building, which we should like to forget, or cover with a worthier exterior. In the best residence districts the same unfortunate conditions prevailed. The "summer cottage" was hopeless, even then, and this cottage had not improved.
It had belonged to the time when magazine covers were considered sufficient adornment for the unsealed walls of the summer cottage; and when the "divan," as the couch was called, was covered with anything available that was not good enough for the city house. Only the very rich had really comfortable and beautiful summer homes.

This old style cottage of the Garfield period was not only torn up from its roots, but was made over inside and outside.

Even the site of the old cottage was unpleasant, so its fairy godmother, having had the courage to buy it, had it moved to a worthier location. Here it began to thrive.

The dingy clapboard exterior was covered with gray stucco. The dull shingled roof was transformed by red tile. Broad, low porches with white columns, and floors of flag stone set in black cement, made a happy change from the old, bleak porches. The windows were broadened, and French doors leading to the porches gave it a different aspect.

A wing was added that gave room inside for a kitchen on the first floor, and bath room space above. Several baths were added. Hardwood floors and electric lights were installed. The fixtures were planned with much thought as to the proper placing of base receptacles, and side lights, so that there would be lamps in just the right places. The wall fixtures were carefully placed in regard to the panelling, and to the furniture planned for the rooms. The wall between the narrow hall and living room was knocked out, making a large and attractive living hall. The staircase became greatly improved by turning the stairs at the bottom, which made an interesting landing, and also had a door leading to the kitchen. The impractical, ugly fireplaces in living room and dining room were torn out and replaced by larger, well proportioned ones. A view of the living room fireplace with its inviting fireside bench is shown in the photograph. Throughout the house the wood work was painted cream. In the living room the walls were painted deep cream. Panels were made by the use of wood moulding; these were papered in wall paper of Chinese design of brown, orange and blue, on a cream ground, and were glazed to give the effect of painted panels. The furniture was painted peacock blue, lined in putty color. Chintz
of yellow, orange, brown and blue made charming curtains, and a slip cover for wing chair was made of the same material. A tan rug with Chinese blue border was used. Lamp shades and cushions contributed their bright notes of blue and yellow to the scheme.

In the dining room the walls were painted deep cream, the peasant furniture blue and yellow, and a Chinese rug in its soft colorings, was thoroughly satisfactory with yellow lamp shades and
curtains. A far cry, this gay room, from the old sober one whose only claim to color had been its red table cloth. There was difficulty in finding an over mantle decoration for this room; as the owner did not care to put money into an expensive mirror or picture—and the cheap ones were so ugly. The decorator used a square of printed linen, in a large design, bound and hung like a tapestry. This repeated the colors in the room most effectively. These down stairs rooms opened into each other and were well schemed in different combinations of the same colorings so that they were keyed together without being monotonous.

For the bedrooms, fresh, simple, schemes were assembled by first choosing the chintzes to be used; and then having the inexpensive furniture painted from the lovely chintz colorings. One of the south rooms had walls papered in gray and furniture with yellow and violet lines. Not being quite satisfied with the results in this room, the decorator felt a need for more yellow and supplied it by painting, with yellow dye, the white flowers in the chintz, which was used as curtains, and for slip covers, which disguised some ugly chairs. Gray wool rugs were used on the floor. These rugs deserve a word, as they were used successfully in all the bed rooms. They wear well; are comparatively inexpensive; can be made up in any size and color, and do not kick up the way rag rugs have a habit of doing. Another bedroom which had chintz curtains and chair coverings, had its walls papered in a violet, and furniture painted cream, with bouquets of blue and violet. A blue rug was used. The third bedroom had turquoise blue in the walls and curtains of blue and cream striped silk. Bed and chair covers were of chintz in these colors. The furniture was mahogany, and the rug tan color.
Pleasant small rooms for the maids, and a bath, replaced the old attic space. Ruffled curtains of dotted swiss and plain white furniture was used in their rooms.

Wicker furniture, wide awnings, plants and soft cushions turned the porches into comfortable living rooms, and with the aid of green lawn and shrubbery this rejuvenated cottage is now something very much more than a shelter from the elements.

The Cupboard Cooler and the Solar Heater
Carol Marion Wheaton

Two interesting contrivances working for the convenience and economy of the California housewife are the cupboard cooler and the solar heater. The cooler has been used for many years in California and answers very satisfactorily the purpose of a refrigerator in that land of scarce and high-priced ice. The dryness and purity of the air seems in itself to have a sweetening and preserving quality, and this is made good use of in these cupboards.

The most common cool-cupboard is the size and shape of a chimney and usually built against an outside wall, preferably on the north side of the house. This is fitted with shelves of strong, coarse wire
netting, flush with the front side, which is formed by the door opening into it. Next the floor at one side is a screened aperture opening directly to the outer air. At the top or to one side of the top is another screened outside opening. It will thus be seen that a circulation of air is always maintained up through the openwork shelves and around whatever food is kept upon them. Milk, eggs, butter, cream, meats can be kept here, sweet and cool as in a refrigerator.

When the weather is very warm the California housewife puts a wet towel or even wet newspaper around her bottle of cream in the cooler, and the evaporation from the wet covering tends to reduce the temperature. Butter may be kept in better condition in the same way.

Larger cupboards or ordinary pantries are also kept very cool by the simple device of an outside screened opening near the floor and another near the ceiling. Strangers in California are often puzzled by the numerous small screened openings spattered over the outside walls of apartment buildings. The riddle is solved when one knows that each apartment has its cupboard cooler.

There seems no reason why this device could not be used in other parts of the country, at least for a part of the year. The openings would, of course, have to be fitted with windows to be closed in very cold weather; and in hot, muggy weather an ice box or cellar would have to be resorted to. But the necessity for ice could, at least, be put off for a greater proportion of the year.

The solar heater is a later device and makes use of California sunshine to heat water to be used in bathrooms and kitchens. Roofs of bungalows and also of more pretentious houses are made quite flat in this country of little rain, so it is an easy matter to install directly over the bathroom a coil of pipe, preferably copper, connected with the water system. This coil of pipe is boarded in at the sides, covered with glass and insulated in such a way as to prevent as much as possible the radiation of heat. It is possible to prevent radiation to such an extent as to preclude the loss of more than four degrees of heat during an intervening cloudy day.

In Southern California particularly, where the sun shines practically all the year around, and with a fervent intensity at that, the water in this exposed coil becomes very hot, and a circulation is set up. Often on opening a hot water faucet, the water will be found to be steaming hot, too hot to be used for bathing purposes without the addition of cold water. These heaters are sometimes built on the south side of a house, with a slanting glass roof to catch the sun's rays.

As water tanks in California houses are usually heated by gas or electricity, turned on when the occasion demands, willing old Sol effects quite a saving when hot water is needed for laundering or any other household purpose.

It would seem that this device also might be made use of in the more eastern states which have long, hot summers; such states, for instance, as Iowa, Minnesota, Kansas, Missouri, Ohio, and others. A handy man of the house or a modern high school boy could easily install it at a comparatively small cost.
Homes Painted White

NOTHING seems to be more attractive, and certainly there is nothing more popular just now than the comparatively small house painted white. At the same time the white painted house is apt to be essentially Colonial in its type. Colonial details are the development from white painted wood, the delicacy of the curves in the mouldings catching and reflecting the shadows as well as the light from the white painted woodwork. In fact, many of the typically Colonial mouldings were designed with reference to their reflected shadows, and the lights they catch in the bed mouldings under a projecting soffit. It is in many such mouldings that one gets the greatest beauty of the Colonial. Put some crude white mouldings up beside the subtle curves of a Colonial cornice.
The green blinds are effective against the white of the house

and the difference will be felt quite as much, perhaps, as it is seen.

The first home of this group is not unusual in type. It has a standard arrangement of six rooms all opening off the central interior hall. Everything has been carefully studied and the essentials placed in their proper relations. The refrigerator and broom closet are in the rear entry. The cool cupboards are beside the kitchen door. The dish cupboard is at the left of the sink, which is the side approved by household economic authorities.

The front portico is attractive with its seats on either side the entrance, and the eye is carried on by the flower boxes and the trellises at either end of the house.

Considerably larger is the next home shown in these photographs, with porches on either side, giving entrance to all of the main living rooms, and to one bedroom; a very livable arrangement.

Alternate plans have been provided, one with a basement, basement stairs and a heating plant, and the other plan is shown as the house was built in California, where basements are not so necessary as in colder climates.

In general the two plans are similar; each has stairs to the attic, and in fact
it would seem that the two plans could be used in any locality in case one chose to have the den instead of another bedroom, or with the larger bedroom between the kitchen and the hall. The breakfast room looks very inviting as it is glimpsed beyond the porch in the photo.

The house is very attractive with the spreading porches on either side, and the gable filled with windows lighting the attic rooms. The porch posts with the trellises between add an unusual bit of detail to the porches. Also one notes the wide, single paneled door with its narrow sidelights, the Colonial knocker and hardware and the green shutters.

Stucco in Home Building

TUCCO for the house and for the garden accessories is particularly effective when it is intended to carry out a complete landscape or garden scheme in connection with the house. It may not be possible to do the landscape work and planting the same year that the house is built. In that case there are two possible lines of procedure which is in common practice. If the lot is owned for a year before the house is built, and especially if it is in easy access of the prospective home builder, instead of building first, the planting may be done and the grounds laid out so that the shrubs and young trees and even the grass may be growing while the time is passing before, and while the house is being built. In this way the planting close about the house may be set as soon as the building is completed, and that desolatingly new look so often seen in a newly completed house is entirely avoided. The house seems at home immediately.

Much of the work may be done by the family with wholesome satisfaction, and improved health, possibly. The local conditions must be carefully studied if one is to plan his own home grounds successfully. The type and character of the house must be taken into consideration in connection with the locally available hardy plants, shrubs and trees, for these things will grow better than something not native to the locality or acclimated to it. The character of the subsoil must often

![House Plan Diagram]
be taken into account. The surface soil may be made much what it should be, other conditions being right.

The design of the house shows Italian influence, and is quite unusual in character with its simple outline and tiled roofs.

The exterior woodwork stained a dark cypress, a treatment frequently used in Italian homes where the woodwork is left in its natural color and allowed to weather into a beautiful grayish brown tone.

The structure is hollow tile, with the exterior stuccoed. The roof is of red tile over the cream color of the stucco, and brick is used for the base course of the house and for the window sills, giving an attractive touch of color. An unusual treatment is given to the chimney, expressing the unusual in the exterior as the fireplace alcove is an unusual interior treatment.

The dimensions of this house are 38 feet wide by 45 feet deep. For a house of this size the living room is unusually large. It is reached through a front entry containing a generous coat closet. Outstanding features of the living room are noted in its unusual inglenook with bookcases, and also its easy access to the garden through full length French doors opening onto the garden porch.

The bedroom portion of the house is secluded from the living rooms. The bedrooms are reached through a private hall which opens directly to the bathroom as well as to both bedrooms. The kitchen is small, but planned for convenience. A
storage pantry is provided, and ice box.

The next illustration shows a stucco house of the larger type. We have seen so much of the tiny rooms, especially those of us who have resorted to small apartments for our living quarters, that when it is possible, there is sure to be a reaction against the very small size of rooms, and the home builder will insist on good sized rooms for his home.

There is a certain luxury in the wide central hall with good sized rooms opening on each side. In this design the stairs are set well back in the hall so that the second floor can be reached without being conspicuous from the front rooms. The breakfast alcove opening from the kitchen is perhaps larger than is necessary for the three or four places for which they are usually planned.

On the second floor are two good bedrooms, with a sewing room opening from one of the front chambers, which could, when desired, be used as a dressing room. There is a smaller bedroom beside the bathroom, and a sleeping porch, well proportioned for accommodating several beds.

The exterior of this house is of stucco over metal lath and frame construction. It has a hooded entrance, and eaves projecting to give a protection to the front windows.

Perennials

As winter comes on cover perennials with coarse straw that is alternated with some reliable fertilizer, or lark refuse. Leave plenty of "breathing space," particularly for canterbury bells and never let fresh fertilizer come directly in contact with plant roots, but let them feed up from the ground what they wish. For many of the ingredients of even good fertilizing agents are not "food" until they are "prepared" for the plants.
The treatment of the roof gives character to the house, and often is the deciding element in the type of house to which it really belongs. There is a certain dignity in the long unbroken sweep of the roof, if it is well proportioned and makes a fitting part in the composition. The roof with dormers and gables tends to the picturesque or to its own peculiar style, of which perhaps it is the symbol, as the gambrel roof and straight dormers are the outstanding feature of the Dutch Colonial, or the timbered gables bespeak an English treatment.

The roof which is typical of the bungalow is low pitched and generally without dormers, as there is no second story in the true bungalow. The attic space may not even be used for storage, though it should provide for a circulation of air under the roof in order to keep the rooms cool during the warm season. We are coming to realize that it is the circulation of the air which is more important to comfortable living than its temperature. With constantly moving air between the roof and the ceilings of the rooms, the house will cool as soon as the evening breeze springs up, as it usually does after a hot day.

The first home of this group is a white bungalow, with a long unbroken roof, relieved by the boulder or rough brick chimney. The same material is used for the porch work, and in its dark color contrasts with the white of the exterior walls. The house is built with a frame construction, sheathed and shingled. The floor plan shows a popular arrangement for a five room house, with the living room across the entire front and the dining room opening from it with only pillars between. Both are good sized rooms giving a window filled exposure in three directions, which should make it cool even on the warmest days.

The kitchen is well arranged and equipped. The refrigerator is placed in the rear entry. The two bedrooms are
A low pitched roof is typical of the bungalow

conveniently placed, and supplied with closets. The linen closet is placed in the bathroom. There is a convenient coat closet opening from the living room.

The gables are fitted with louvres which, with their overlapping slats, permit a thorough circulation of the air under the roof and yet give a protection from rain. Louvres should be covered with a heavy screen wire mesh to prevent anything getting into the attic. It may also be fitted with doors of solid wood, to close back of the louvre opening. In a cold climate this is a desirable precaution if the house is to be kept warm during a season of severely cold weather. The roofs of summer cottages are often fitted with louvres, and registers placed in the ceilings of the rooms. These registers are opened on hot days, and the warm air at the ceilings escapes, and are closed when the furnace is started, in order to keep the warm air inside.

The second home shown in this group is a cottage, with the three sleeping rooms built under the roof. The gables at the side and the dormers front and rear give light and air to these rooms, and the steeper roof gives height ample for a second story.

The plan is unusually attractive in the arrangement of the rooms, with the ingle and book cases about the fireplace, and the bay in the dining room.

The entrance is through the porch to the living room. The stairs are in one end of the living room, three steps leading to a landing, and a window on the landing. The attractive nook, fireplace and book cases fill most of the other end of the room. The basement stairs are under the main stairs with an entrance at the grade level. There is a door between the kitchen and living room, so that the mistress may reach the front door from the kitchen without going around through the dining room and pantry.

On the second floor the rooms are
finished under the roof, with full ceiling height for the two rooms with windows in the dormers. The third room has the ceiling somewhat dropped as it extends under the roof, with closet under the roof.

The last home shown is unusually attractive, built as it is of brick and stucco. The brick work is carried to the sill course of the windows all about the house, with the chimney and the porch piers built of brick their entire height. Dark stained timber work frames the windows.

With entrance from the stoop, through a vestibule, with coat closet at one side, the central hall is 10 feet wide, large openings leading to the living room on one
Built of brick and stucco

side and dining room on the other. The whole space of the front of the house is thus thrown together. Both rooms are very attractive.

Beyond the dining room is a Pullman alcove with table and seats, in one end of the kitchen, which is quite complete in its arrangement. The stairs are set well back in the hall, with basement stairs and a grade entrance under. A toilet connects directly with the first floor bedroom, while the bath room is on the second floor. Three sleeping rooms are finished under the roof.

A notable feature in the planning of this home is the garage, placed under the extending dining room, and projecting to the front and roofed, as may be seen in illustration, to get sufficient length for the car. The house is set high, on a terrace so that the grades are excellent for such an arrangement.
HERE is a widespread delusion to the effect that the art of house furnishing can be taught by means of recipe directions to fit in with all circumstances," says Mr. Shaw Sparrow. "Tell me how to furnish my bedroom," says one person. "What decoration is suitable for a study?" another asks. "What is the best covering for chairs?" has long been a favorite question. Recipes are not of the slightest good in art. Every room needs a treatment of its own, determined by its light, size and shape, its purpose, the hobbies and tastes of those who live in it, and—more important still—the amount of money to be spent on its furniture and decoration. Every room in a house, again, should be in harmony with the others, yet unlike them. Most of us fall into error either by making all the rooms too much the same, or by giving too much contrast between their styles or between their color schemes.

These factors differ, more or less, in all households. One is concerned with architectural, the other with decorative matters; and then Mr. Sparrow gives excellent rules in household grammar as applied to bedrooms.

What are the main necessaries? he asks. There are three:

1. Thorough ventilation at all hours of the day and night.

2. Fitments to do away with wardrobes and chests of drawers, so that room-space and air-space may not be wasted.

3. A good position for the bed, not only away from the draught passing between window, door, and fireplace, but free from the early morning light. The foot of a bed should not face a window.

In a small room there is often a window almost as wide as the outer wall; the door faces it, and the fireplace has a position very well fitted to make another keen draught. The bed, wherever it is put, stands in a current of air, so the window is blocked up at night with heavy curtains.

Good architects have said that bedroom planning is often harmed by false notions of symmetry. Let us think more of convenience and less of symmetry, they advise. When bedrooms are small and square, why put a very large window in the center of a small outer wall? If we divide that wall into halves, the half on our right hand could be reserved for a window, while that on the left could be given to the bed, which might occupy either of two positions: first, with its head to the outer wall, or, second, with its head to the left-hand wall and its foot to a fireplace. As to the best position for a door, architects choose the lower corner of the right-hand wall, because the
door, when opened, acts as a screen both to the fireplace and to the bed, while preventing—as much as possible—a direct draught with the window.

On the other hand, when the window has a central position, the following plan may be chosen:

(a) Let the bed stand near the middle of the right-hand wall, with its head to the wall.

(b) Put the fireplace opposite, in the center of the left hand wall.

(c) Below the fireplace, at the bottom end of that wall, build the door, taking care to let it open from right to left, so that it may screen the bed.

Again, it is convenient to make two central windows close together: then the dressing-table may be placed between them. These are English suggestions, but full of good advice for the American householder.

Mrs. Wharton favors the French scheme of planning, and while her suggestions would not be practical in the average American house, they are decidedly interesting and well worth consideration by those who are building large houses.

Of the various ways in which a bedroom may be planned, she says, none is so desirable as the French method of subdividing it into a suite composed of two or more small rooms. Where space is not restricted there should in fact be four rooms, preceded by an antechamber separating the suite from the main corridor of the house. The small sitting-room or boudoir opens into this antechamber; and next comes the bedroom, beyond which are the dressing and bath rooms. In French suites of this kind, there are usually but two means of entrance from the main corridor: one for the use of the occupant, leading into the antechamber, the other opening into the bathroom, to give access to the servants. This arrangement, besides giving greater privacy, preserves much valuable wall-space, which would be sacrificed in America to the supposed necessity of making every room in a house open upon one of the main passageways.

The plan of the bedroom suite can, of course, be carried out only in large houses; but even where there is no lack of space, such an arrangement is seldom adopted by American architects, and most of the more important houses recently built contain immense bedrooms, instead of a series of suites. To enumerate the practical advantages of the suite over the single large room hardly comes within the scope of my suggestions, but as the uses to which a bedroom is put, fall into certain natural subdivisions, it will be more convenient to consider it as a suite.

Since bedrooms are no longer used as salons, there is no reason for decorating them in an elaborate manner; and, however magnificent the other apartments,
it is evident that in this part of the house simplicity is most fitting. Now that people have been taught the unhealthiness of sleeping in a room with stuff hangings, heavy window-draperies and tufted furniture, the old fashion of painted walls and bare floors naturally commends itself; and as the bedroom suite is but the subdivision of one large room, it is obvi-

ously better that the same style of decoration should be used throughout. For this reason, plain walls and chintz or cotton hangings are more appropriate to the boudoir than silk and gilding. If the walls are without pattern, a figured chintz may be chosen for curtains and furniture. It is a good plan to cover all the chairs and sofas in the bedroom suite with slips matching the window-curtains; but where this is done, the furniture should, if possible, be designed for the purpose, since the lines of modern upholstered chairs are not suited to slips. The habit of designing furniture for slip covers originated in the Middle Ages. At a time when the necessity for transporting furniture was added to the other difficulties of travel, it was usual to have common carpenter-built benches and tables, that might be left behind without risk, and to cover these with richly embroidered slips. The custom persisted long after furniture had ceased to be a part of luggage, and the benches and tabourets now seen in many European palaces are covered merely with embroidered slips. Even when a set of furniture was upholstered with silk, it was usual, in the eighteenth century, to provide embroidered cotton covers for use in summer, while curtains of the same stuff were substituted for the heavier hangings used in winter. Old inventories frequently mention these tenures d'ete, which are well adapted to our hot summer climate.

The boudoir should contain a writing-table, a lounge or lit de repos, and one or two comfortable armchairs, while in a bedroom forming part of a suite only the bedstead and its accessories should be placed.

The pieces of furniture needed in a well-appointed dressing-room are the toilet-table, washstand, clothes-press and cheval-glass, with the addition, if space permits, of one or two chiffoniers. If a bathroom is included in the suite, the washstand is superfluous unless it so happens that the bathroom is used by other members of the family.

When it comes to the decorating and furnishing of the bedrooms, the architect.
who may have held sway elsewhere throughout the house, says a well-known designer, usually yields to circumstances and gives up the struggle to do things in his own way. Bedrooms, therefore, express the knowledge and taste of the mistress, or of the individual occupants, rather than that of the architect, and may, therefore, be very, very bad, or very good.

Bedroom walls are too frequently papered with paper tinted in too strong colors, with wall coverings strangely striped or figured. Rooms for girls are papered with great bunches of pink roses and metallic green leaves, the pattern whirling and dancing before the eyes—tolerable, perhaps, to young persons of robust health, but tending to aggravate a case of fever or sick headache.

Sir Andrew Wilson, the celebrated physician, in visiting a sick friend in London, ordered a high screen of neutral tints to be placed around the bed, stating that the wall-paper was enough to give the patient brain fever. A gray paper, printed in a small pattern, is very soothing and many other tones could be mentioned. Figured papers undoubtedly have their place as well as plain ones; all depends upon the room, its location, light, surroundings, also the taste and temperamental equipment of the owner.

One of the perplexing questions of house-furnishing is the arrangement of the furniture; how to place the various pieces in order to obtain the best results. If the room is a sleeping-apartment, how dispose the furniture so that light, air, and privacy are secured?

Oftentimes, when the library, living-room, and dining-room are well arranged, the bedrooms of the house are lacking in any plan or forethought in the arrangement of the furniture. The bed faces a window, making sleep impossible after sunrise, or the dressing-table is in a dark corner, where little light is obtained. Something is lacking in the general scheme. Guest-rooms are usually the greatest offenders against comfort, for they are seldom occupied by the members of the family, and thus their various shortcomings are unnoticed. Where a room is so cut up by doors and windows that the only place for the bed is opposite a window the architect is largely to blame. If the exposure be eastern, the annoyance is deep-seated. Heavy shades are seldom sufficient to shut out the early morning sun. Again, in shutting out the sun the direct means of air may also be cut off.

Another fault, common to many bedrooms, lies in the placing of the fixtures. Possibly the room is lighted by a small chandelier with four burners. In addition, there are doubtless side-lights. It is in the latter that comfort is usually disregarded. Two lights are the common appropriation, and these usually decorate the side wall which is least broken by openings. The sole purpose of these lights is, presumably, to give illumination for comfortable dressing. The dressing-table is placed so as to give best light by day. The fixtures are as far as possible from this point. A little forethought might have located the two together.

The bedroom, in which, exclusive of sleep, a good portion of one's life has necessarily to be spent, ought not to be wanting, any more than so called reception-rooms, in attractiveness to the eye. The paramount considerations are hygiene and practical utility.
Red Gum Woodwork.

J. S. G.—We are building a new house and would like your suggestions in regard to window and wall decorations and the finish of the woodwork, which is to be red gum on the lower floor. The dining-room has black walnut panels with red gum trimmings to a height of a little less than three feet from floor. Oak floors throughout the lower floor.

The second floor is to be finished in old ivory with doors of red gum stained walnut or mahogany.

The house faces northeast, and the long side of the living-room has a northwest frontage with a large plate glass window in the middle and a small one on each side. The southwest end of the living-room has a fireplace in center with French window on each side, looking out on a covered porch.

On the first floor, the picture moulding extends around room at the top of door and window casings. At top of the wall is heavy cove moulding. It has been suggested that in the living-room an ornamental plaster design or stencil be used on space between picture moulding and cove. We had thought of painting the walls for the present rather than papering them immediately.

The house is a brick veneer of a southern colonial style of architecture.

We would also like your opinion in regard to painting the radiators.

Ans. — You should have a delightful house. All the arrangement is good. If the birch or gum trim of living room is stained mahogany, let it have the brownish tone. The hall will, of course, be the same. We should let the walnut panels of the dining-room wainscot determine the remainder of the finish, viz., the doors and casings, etc. We would use walnut furniture. If the wall is painted, a very pale shade of old blue would set off the walnut, using deeper tones for window draperies and rug. Chairs seated in old blue tapestry would be excellent.

In regard to the living-room walls, a soft pale ecru is the best selection in a painted wall, with deep ivory ceiling. The space between picture moulding and coved moulding should be painted the same as the main wall. We should not care for any stenciled decoration there, but a plaster modeling in slight relief would be decorative and help the plainness of the wall. This should be either the same color as the wall or very slightly lighter in tone.

The staining of the doors on the second floor, whether walnut or mahogany, will, of course, be determined by the furniture to be used. We are ourselves very partial to the use of walnut with old ivory; but the red gum takes either stain well.

In regard to the radiators, their location would have some bearing. They are sometimes treated as part of the furniture, or painted the color of the wall. Where the wall is a neutral tone, as gray or ecru or brown, this is a good solution of a vexing question. Gilding them is not so good, though sometimes in chambers it looks well. Deep ivory is a good color to paint them if there is an ivory or ecru wall.
Brown Woodwork

A. P. M. We have already received much help from reading your magazine and now beg your assistance in harmonizing our woodwork to the furniture.

The woodwork in the living room and dining room is oak, stained a reddish brown and shellacked, while the furniture in both rooms is fumed oak and brown wicker, that in the dining room being some darker than the living room. What can be done with the woodwork? Also, what color of brick shall we use in the fireplace we are about to put in?

The walls of the living room are tan and the rugs are hand-woven, tan with rose and blue in the border. The draperies are deep rose, blue and a little tan.

Our dining room rug is gray and blue Wilton. Am going to have plain blue draperies and tapestry paper.

Ans. Replying to your inquiry, there are two things can be done with the woodwork. It can be changed by sandpapering off the shellac and a part at least of the old reddish stain. The only other thing you can do is to paint it. You do not say what the wood is. If it is Oregon pine and not oak, why not paint it deep ivory? Not white, you understand, but the sort of grayish tone of old ivory. It would freshen up your house more than anything else you could do to it. You could then have fireplace facings of soft, warm gray brick, which is lovely with old ivory. In case you keep the brown woodwork, then we advise facings of tapestry brick in the rough surface, but it will be a hard job to try to change the brown stain and not very satisfactory when you have done your best.

Your furnishings as you describe them will go very well with the old ivory and your ideas about the dining room are good.

Draperies.

C. L.—I have been a reader of your magazine for several months and would appreciate your advice about the following for our new home: My dining room rug will be blue and gray and have walnut furniture. What kind of draperies would be pretty and how shall I arrange

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for a triple window? Also my guest room furniture is walnut with old ivory woodwork, cream papering. I plan to have the cream filet curtains but can't decide on the overdrapes. Also would small blue rag rugs be better to use than a large rug?

Have my living room all planned and fitted with the exception of the small windows on each side of the fireplace. There will be window seats under them. Plan to have the two small windows on each side and I thought to shirr the cream filet on small rods on the windows would be best so the curtains would not be in the way when the windows were opened. But can't decide how to fix the draperies.

Ans.—Side curtains of plain blue material would be best for the dining room. Let these hang on the outer sides only of the group, and run across the entire top as a valance. Valances and lambrequins are being very much used again now.

In the guest room, instead of filet lace, make your inside curtains of fine, plain bobbinet lace, simply hemmed an inch and a half deep. If you plan to use blue rugs, then get blue and white flowered Canton crepe for over curtains. The blue rag rugs will be very good with the walnut furniture. We would not have more than two pretty good size rugs in so small a room—one before the dresser and one beside the bed. Do not have two sets of curtains on the small windows over the seats. Have only what you use for overcurtains at the large windows.
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Too much emphasis can not be laid on the importance of removing a stain while it is fresh, or before it dries at all. Even ink may be taken out, if immediately immersed in water and washed out, while if it is permitted even to begin to dry this may be impossible.

Nature of the Stain.

The nature of a stain should be known, if possible, before its removal is attempted, since this determines the treatment to be adopted, as otherwise it may be "set" so that its removal becomes difficult, or even impossible. For example, hot or boiling water easily removes fresh fruit stains; but if applied to stains containing protein, such as milk, blood, eggs, or meat juice, it coagulates the albumin in the fibres of the cloth and makes it extremely difficult to remove. Soap, which aids in removing grease spots, sets many fruit stains.

In cases where the nature of the stain is not known, it should be attacked first by sponging with cold water, in case the fabric is not injured by water. If the stain is not removed by warm or cold water, chemicals should then be tried. Often the behavior of a stain, when treated with cold water, will give some indication of its nature; for example, a grease spot will not absorb water. Hot water should be avoided in treating unknown stains, until after other substances have been tried, since hot water will set many stains.

Home Treatment.

Only the simplest home treatment of the most usual stains is given here, as it is often better to take a bad stain to the cleaners, who will often be able to save a garment which might be ruined by home treatment, if one is inexperienced in such treatment. A bulletin from the department of agriculture, "Removal of Stains from Clothing and Other Textiles," goes into the subject very fully. This bulletin may be obtained by writing to the Department of Agriculture, asking for Farmer's Bulletin 861. This bulletin was reprinted in 1921.

Fresh Fruit—Berries.

Fresh fruit and berries, when crushed on table linen or white fabrics, may be removed easily by pouring boiling water through the spot while it is fresh. Soap will set such a stain.

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If taken when fresh, coffee, tea, and even chocolate may be washed from most washable fabrics, and be completely removed when laundered. If allowed to become old stains, these are all very dif-
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Beautiful Colors: The colors are deep, rich and velvety, and bring out the beauty of the wood-grain. Wood Preservation: The Creosote (the best wood preservative known), penetrates and preserves the wood. Low Cost: They cost less than half as much as paint, and the labor cost of applying them is also less than half.

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

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141 Milk Street, Boston, Mass.
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No bathroom is complete without a
HESS WHITE STEEL MEDICINE CABINET or LAVATORY MIRROR
Coated inside and out with the best grade of SNOW WHITE baked enamel.

This mark guarantees it everlastingly against cracking, blistering or flaking. Your money back if you are not pleased.

Five sizes — three styles. If your dealer is not yet supplied, write us direct.

Hess Warming & Ventilating Co.
1217 Tacoma Bldg., Chicago
Makers of HESS WELDED STEEL FURNACES

Difficult to remove. Cream in these sometimes necessitates the use of grease solvents.

Milk and Cream.
In removing milk stains, cold or lukewarm water should be used first, in order to remove the protein, which hot water coagulates and sets. Cold or lukewarm water followed by hot water and soap will usually remove these stains from washable fabrics.

Grass Stain.
Soak the stained portion in cold or lukewarm water, rubbing the stain with a neutral soap, after which it may be laundered in the usual way. If the material is not easily laundered, sponge the spots with grain or wood alcohol.

Scorch.
A slight scorch on cotton or linen can usually be taken out of materials which are not especially delicate, by rubbing with a bread crust. A slight scorch will be taken out the next time the article is laundered, or it may be taken out by wetting the spot with water (or soap and water) and exposing to the sun for a day, or longer if necessary.

Mud.
Allow mud stains to dry and brush carefully before any other treatment is used. Nothing else may be necessary. The spot may be sponged with alcohol in case one does not wish to wash the garment, or fabric. For mud spots on black silk of firm weave; after brushing, rub the spot with cut raw potato. This leaves a thin film of starch on the surface of the cloth, which may be brushed off when dry. This treatment is rather harsh for any but smooth, firm material, and leaves a spot on a material which is not black.

Paraffin—Candle Wax.
Melted paraffin or wax, dropped on a fabric, hardens in the fibre when cool. Much of this can usually be scraped away. To remove the part which has penetrated the fibre, lay blotting paper over and under the spots and press with a warm iron. Repeat until the wax is removed. Absorbent powders may be used in the same way. The spot may then be sponged with alcohol to take out any remaining stain or color.
Just the Home You Want!

The charm and beauty that you seek in a home is admirably portrayed in stucco—stucco on Metal Lath.

And the simple artistic beauty of stucco lasts indefinitely when applied on

Kno-Burn
METAL LATH
"The Steel Heart of Plaster"

Your home is thus actually enveloped by a web of steel covered with an incombustible coating of cement stucco—fire-resistant, permanent and beautiful always. All this—yet stucco is most economical!

Home builders insist upon Kno-Burn because of its better fire-resistant qualities. It is ideally suited for exterior stucco, interior plaster, rat proofing and fireproofing. An attractive booklet, "Home Building," is yours without charge, upon request.

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1265 OLD COLONY BLDG., CHICAGO

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You can now have the convenience and comfort that come with electric light and running water in your country home no matter where you are located. One complete, compact system furnishes them both.

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save money on the first cost, last longer, require fewer repairs than any other installation, and never fail to give absolute satisfaction year in and year out. There is a Kewanee System to fit every need.

An abundant supply of running water under strong pressure is always ready for use. Electric light and power for every purpose is yours at the turn of a switch.

Write for bulletins on Running Water, Electric Light and Sewage Disposal.

Kewanee Private Utilities Co.
(Formerly Kewanee Water Supply Co.)
403 S. Franklin St.
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"King" Mantels, Tiles and Fireplace Fixtures represent true craftsmanship and artistry in reproducing period and modern designs. Made to fit standard sizes, thus avoiding unnecessary cost.

Our descriptive catalog will delight the home lover with its attractive showing of Mantels and Fireplace equipment, will be sent free, if you mention the kind of house you are building.

KING MANTEL AND FURNITURE CO.
306 Gay Street, Knoxville, Tennessee
Buying Homes On Installment

N commenting before a meeting of Canadian Realtors on this subject, Mr. S. G. Read is reported as saying that not a home owner has lost his property through his firm in contracts running into many hundreds of thousands of dollars. He says:

"We have been about 51 years in the real estate business in Brantford, and have large experience with selling on the installment plan. Prior to the war, when houses were a great deal less in value, our plan was to accept 10 per cent down and 1 per cent a month, and we have always been successful in our work.

"Since the war, conditions have changed so much in real estate, houses have become so much greater in value, because of the increased prices in building materials and labor, that instead of taking 10 per cent down, we take 20 per cent or 25 per cent down and 1½ per cent a month. So far it has worked well. Of course, in dealing on this plan we see that the properties are not beyond a reasonable increase in value.

"Secondly, in the matter of vacant lots and building houses we insist always that a man shall own his own lot free of encumbrance and afterwards we build the house for him upon the terms stated.

Housing Commission Plan Unsuccessful.

"I do not think housing commissions are successful as a rule because they have not taken this plan. They have purchased the lots themselves and allowed the people to make payments on the lot and the house afterwards without any good cash payment down, and their plan of principal and interest with long-term payments is not successful in this country. We compute the interest quarterly, and deduct the interest from the installments and credit the balance to principal account. One can see that this is reducing their liability."

Mr. Read speaks a good word for housing corporations. He says:

"As to corporations assisting their employees, that would be a very good plan, and I think that corporations should have sufficient interest in their employees to build houses for them if they can possibly do it. It is quite true that most of them need all their money in their own industries, and in such cases the firm should recommend their employees to a good agency or to a corporation that is doing the business of loaning money, and also aid them in securing the money to build a home."

LUMBER PRODUCTION

The National Lumber Manufacturers Association's weekly summary of the country's lumber movement, compiled from advices from all the softwood regional lumber manufacturing associations, shows a slight decline in shipments and a somewhat larger falling off in production and orders as compared with the preceding week. The general volume of business—considering orders, production
HAPPY is the home owner who installs Air-Way Multifold Window Hardware. It throws his home wide open to the benefits of sunshine and fresh air. Air-Way makes a sun room or sleeping porch of almost any room.

Air-Way provides sliding-folding windows which may be opened and closed from the inside without interfering with either screens or draperies. Although easy to operate, the windows fit the opening snugly and are absolutely weather-tight when closed. Write today for Catalog N-4.

Arch. Edward B. Caldwell, Jr., Bridgeport, Conn., used variegated colors of "CREO-DIPT" Stained Shingles on roof and side walls, for Dr. George W. Hawley, Bridgeport, Conn.

White—Gray—Green—and Black

Such daring use of colors on side walls and roof would not be possible with any other building material. "CREO-DIPT" Stained Shingles, because of their soft tones that blend, give results that are distinctive and pleasing. The side-wall shingles are laid with wide exposure, which means a decided economy of material. The roof has the same colors in 16-inch shingles with the addition of reds and yellows. The whole effect is softened by a gray stain which gives soft, velvety surfaces.

Many variegated color effects have been secured by the foremost architects in their use of "CREO-DIPT" Stained Shingles. If you are going to build or remodel, send 6 cents to cover postage for Portfolio of Fifty Photographs of Homes by prominent architects as well as color samples. Ask about 24 inch "Dixie White" Side Walls for the true Colonial White Effect.
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, 4¢.

Published by

M. L. KEITH

204-5 Abbey Bldg., Minneapolis, Minn.

and shipments—is about 50 per cent greater than for the corresponding week in 1921.

**SEASONED TIMBER**

Experiments made by the United States Forest Service have demonstrated that thoroughly air-dried timber has about double the strength of green timber. Moreover, in order effectively to apply preservative agents to timber, it must be first seasoned, because it is very difficult to inject antiseptics into green wood. The loss of weight by seasoned timber is quite surprising. Western pine loses half its weight after three to five months' seasoning.

**Why a House of Wood?**

"We have in America a long and romantic heritage in wood-built houses. Starting with the log hut which our forefathers called home, going on to the crude shelter of squared timbers and its successor, the framed house, with its covering of hand-wrought boards held in place by hand-wrought nails, and this in turn followed by the manufacture of lumber in quantities and the establishment of the carpenter's trade—in short, from the settling of the Colonies to the present day—wood had played the leading part in home building. The methods of construction differed in various localities owing to the conditioning factors of climate and personal tastes, and from these variations have come the diversified styles of our American architecture."

"Unlike stone, brick, stucco, or tile, wood is more nearly a non-conductor than any other building material. It does not, to the same extent at least, take in and hold the heat or the cold, making it cooler in summer and warmer in winter. And in humid or rainy weather, unlike many other building materials, when used as an outside covering in house construction, it does not absorb, when painted or stained, but rather does it repel moisture, thus making it dryer. With the proper application of modern insulating materials, it is today easily and economically possible to build a wood house that will insure the maximum of warmth in winter, of coolness in summer, and of dryness throughout all seasons of the year." Quoted from Good Houses (Reviewed).
Of Vital Importance When You Build

The choice you make of your hardwood finish is vital not only from the standpoint of your satisfaction in the finished job and its appearance but also because your choice has a definite bearing on the investment value of your property.

You don't build a home in order to sell it, of course, but if you ever do want to sell you will find that your investment has been fully protected if you have chosen 

When you use 

It pays to use 

THE BIRCH MANUFACTURERS
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Oshkosh, Wis.

Find out about birch

Patterning, sliding childish feet—roller skates and kiddie kars—boisterous pups with muddy paws—they are the despair of tidy housewives.

But the floor need not be harmed by their play. Liquid Granite protects it with a smooth, elastic, waterproof surface—a surface that can be easily wiped clean—a surface that enhances the natural beauty of the wood and preserves it unblemished by the roughest daily wear.

Children demand an atmosphere of joyous activity. And you need never curb their innocent joy in important childish affairs after you have made your floor hurt-proof with

Let them play to their Hearts' Content
—they can't hurt THIS floor

Manufactured by
the makers of Luxeberry Enamel

Save the receptor and
you save all—drastic!
The Air We Breathe—Its Relation to the Heating Plant

Health officials and visiting nurses are everywhere emphasizing the importance of fresh air in the home. Not only in the poorer districts, where the housing, admittedly, is not all it should be, comes the menace of lack of fresh air, or perhaps one might better say—lack of freshness in the air we breathe. “It is possible for a man to live thirty days without food, three days without water, and only three minutes without air”; so we are told. Yet we do not give sufficient attention to the quality of the air we breathe. “Ventilation” is the term we give to our efforts to insure a proper quantity and quality of air in a building. So closely is the ventilation of the house connected with the heating that the conditioning of the air must be taken into consideration in connection with the heating plant.

The Heating Plant.

Frequently in the selection of the heating plant a man does not realize that the furnishing of a certain amount of heat units is only one of a number of things affecting his comfort and welfare, which must be supplied by the heating plant. The air delivered to the rooms is the air to be breathed, and should be entirely free from any gasses developed in the heating process, which are held responsible for some of our nervous disorders.

The air should be kept at a moderately uniform temperature, night and day, without noticeable variation, and with but periodical attention to the heater; as irregular temperatures are not conducive to good health; and frequent firing not only means additional labor, but waste of fuel. This even heat, and fuel economy are obtained by an automatic draft control, which prevents the burning of more fuel than is necessary to maintain the desired temperature. The air should be moderately heated, as superheated air has much the same depressing effect as stagnant air. A large volume of mildly heated air is better than a small quantity of superheated air. There should be no great difference in temperature between floor and ceiling, and there should not be noticeable draughts upon the floor.

Humidity.

It has long been realized that a proper humidity in the air is, perhaps, quite as necessary to comfort and health as a proper temperature. Many of the manufacturers of heating plants have taken this matter under consideration and are making provision for getting some moisture into the air in connection with the ventilation and the heating of the house. This is a matter which will, however, be given proper consideration only in response to the demand of the home owner or householder; and is necessary if he is to supply for his family the same quality in the air they breathe as in the food he provides for the table.

Good Health.

Civilization has long shown the proof that many of the most prevalent diseases are what are sometimes called house-bred diseases. Life in the open air is considered the prevention and the cure for tuberculosis, pneumonia and kindred maladies, showing that the breeding place for these dread diseases is indoors. This alone accounts for nearly half the distress and mortality. Other diseases affecting the digestion, nerves, heart and kidneys yield also to the proper open-air treatment.

Such experiences as the following show that our air needs watching more
FLEXIBILITY

Those extra cold days when it seems impossible to get warm and comfortable. That’s what we mean by “flexibility.”

A FRONT RANK will keep your home comfortable in the severest weather without extraordinary effort or strain as well as at times when a few old papers or a couple of sticks of kindling will take the chill and damp out of the house. Heat, when you want it, and where you want it. If you are planning for a furnace let us help you, without obligation. Plans free.

Write

HAYNES LANGENBERG MFG. CO.
4062 Forest Park Blvd.,
St. Louis, Mo.
Your Heating Plant Will Furnish Your HOT WATER At the Lowest Possible Cost

HEATING NOTES, Con't.

than our food and drink.

Living the open-air life, we can eat "almost anything" without harm. This indicates that the trouble is not in the food and drink, so much as in the air. Breathing good air, we can digest poor food, but breathing bad air so taints the system as to spoil our digestion of good food.

We subsist on air more than on food and drink, and need a continuous supply. We can live for a short time without food, but we can not exist without good air.

The substance of the air keeps infusing itself through the pores and cells of the human system. Drugged air drugs the body.

In the sick-room physicians demand fresh outside air because the house air is so seldom fit. They have learned that the quality and condition of the air is often more important than medicine.

What Is Wrong With Ordinary House Air?

In a general way two things are wrong with the indoor air: First, what it lacks; second, what it contains; in other words, what makes it poor, and what makes it bad.

It may be poor in oxygen, but the main thing it lacks is the "vitalizing principle" or property possessed by the open air. The renewing as well as the starting of the "life principle" or "life impulse" is something science has not explained, but it is well known that natural fresh air increases the tide of life, and that house air, confined contrary to nature, permits it to ebb.

Ozone.

Some authorities claim that the production and use of ozone will cure many of the bad qualities in the air of the house. This has been used and tested with very satisfactory results in schools and larger buildings. Ozone generators are now on the market in small units, for use in the sick-room or bedroom.

The heating and ventilating of the home is no small matter. Money buys nothing of more far-reaching importance. The householder must study his own conditions and his own requirements.
In planning your new home, the study of interior treatment both as to architectural detail and decoration is of equal importance to obtaining a good design and a practical, well-planned house. This book illustrates the interiors of many successful homes and contains much valuable and authoritative advice on Interior Decoration. Printed on enamel coated paper which brings out the beautiful detail of the illustrations. Size 7½x11. 160 pages. Flexible embossed cover in colors.

**CONTENTS:**

- Interior Decoration, taking up Color
- Schemes, Treatment of Woodwork,
- Walls, Ceilings, etc.
- Entrances.
- Halls and Stairways.
- Living Rooms.
- Dining Rooms.
- Sleeping Rooms.
- Sun Rooms.
- Fireplaces.
- Breakfast Rooms.
- Outdoor Living Rooms.

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Collaborated and published by

M. L. KEITH, Abbay Bldg., Minneapolis, Minn.
TO KNOW MORE ABOUT CEMENT

Laboratories are being established, and research work is being carried on with reference to the composition and the behavior of many of our building materials, which will, as the work is developed further, throw much light on these subjects.

In order to acquire all possible knowledge about cement, so that the consumer may know how to use it most intelligently and economically, the Portland Cement Association carries on exhaustive research work. Its purpose is to increase the efficient use of its product. To that end, it co-operated financially and otherwise in establishing the Structural Materials Research Laboratory at Lewis Institute, an engineering college in Chicago.

The operation of this laboratory is a striking example of co-operation between an engineering science and an industry.

Individual companies have had skilled chemists and engineers, engaged in research intended to develop improvements in manufacturing processes and the quality of cement itself; but little had been done to develop the making of concrete as an exact science. Now, not only the Lewis Institute Laboratory, jointly operated, but individual companies, are spending large sums on problems of use as well as of manufacture.

So thorough and final is this research that five years elapsed before the first laboratory bulletin was issued.

As a result of this first report, some beliefs previously held regarding the effect of water in concrete were completely revolutionized.

These investigations made possible the attainment of a substantial increase in strength of concrete without increasing the amount of cement used.

The investigations are being carried out by a staff of engineers, chemists and assistants who give their full time to this work.

The laboratory's reports embody results of thousands of the most exacting tests, covering long periods of time. Tests are made to establish facts—not to prove theories.

All findings of the laboratory are made available to everyone without charge in the form of papers before engineering and technical societies and in circulars and bulletins issued by the Laboratory and the Portland Cement Association.

The aim of the Laboratory is to assist the purchaser of cement in the proper use of the material so that it may serve most usefully and economically.

CONCRETE ROOFING TILE.

While concrete roofing tile makes an attractive appeal to the eye of the prospective owner, he can also see the economy of a permanent and fire-safe roof as well.

Concrete tile roofs are made in the natural gray or may be secured in green or red. When the tile is made, color is floated onto the tile in a plastic state and the tile are then carried away on a conveyor, and from this they are taken by hand and placed in racks for curing.

One of the early obstacles encountered in the manufacture of concrete roofing tile was the difficulty of obtaining non-fading colors. Good red, green, and terra cotta colors are now available and, through experience, the industry has learned how to use them correctly. Gray tile can be obtained without the use of color pigments just by using Portland cement, with well-selected aggregates. This color is highly recommended.

CO-OPERATION AND SUCCESS

Said a wise old bee at the close of day, "This colony business doesn't pay. I put my honey in that hive that others may eat and live and thrive and I do more work in a day, by gee, than some fellows do in three. I toil and worry and save, and hoard, and all I get is my room and board. It's me for a hive I can run myself, and
Hess Welded Steel Furnaces
Are Long of Life, and Every Day's Use
Develops Economy and Efficiency

There was a time when the durability of steel in furnace construction was under suspicion, but "those days are over." We have demonstrated in the past thirty years that steel is inexpensive to maintain and costs less for repairs in the long run than cast iron.

The advantages of steel, in quick radiation of heat, promptness and ease of regulation, and absolute freedom from leakage confirm our judgment in the use of this metal for furnaces.

WE GUARANTEE
that our welded seams will never leak as long as the furnace shall stand. What maker of cast iron furnaces could guarantee that?

We guarantee also, that the steel will not rust nor burn through for five years after installation. Our guarantee is good. Ask any banker.

HESS WARMING & VENTILATING CO.
1217 K Tacoma Building
Chicago

Our Booklet (1922 Edition) tells you a lot more. Ask for one!
me for the sweets of my hard-earned pelt.” So the old bee flew to a meadow lone and started a business of his own. He gave no thought to the buzzing clan, but all intent on his selfish plan, he lived the life of a hermit free—“Ah, this is great,” said the wise old bee. But the summer waned and the days grew clear, and the lone bee wailed as he dropped a tear; for the varmints gobbled his little store, and his wax played out and his heart was sore; so he winged his way to the old home band, and took his meals at the Helping Hand. Alone, our work is of little worth; together we are the lords of earth; so it’s all for each and it’s each for all—united stand, or divided fall.—

The Prairie Lumberman.

CHIMNEYS LEAN TOWARD EAST
Between the wagon builder, alternate-

ly wetting and drying a board to bend it to the desired shape, and the house chimney, grotesquely leaning toward the east brick masons say there is similarity. Chimneys lean toward the east. A little observation anywhere will prove this. Even the best-built affair of brick and mortar, acquiring age, often begins to lean. Various theories are advanced, but the explanation of alternate wetting and drying seems the best. Chimney walls collect more or less moisture during the night on all sides. Now if the broad side of the chimney is toward the east, and if the sun strikes that part of the chimney first, as it will, that side dries out much quicker.

This general condition has the effect of pulling the chimney toward the east.

To Make a Happy Fireside

Many years ago, Robert Burns, the beloved Scottish poet, sang the praises of the fireside. Today, as then, “to make a happy fireside” requires a worthy fireplace.

Consider how we can help “to make a happy fireside”. The attractiveness, the coziness, the invitingness, and the comfort of any home are all increased by Hornet Mantels.

By design Hornet Mantels are an added charm to any room. In construction they are excellently fabricated of good materials. The result is long life and continued pleasing appearance.

Write for our complete catalog of mantels and fireplace furnishings. A postal card request will do.

HORNET MANTEL COMPANY
1127 Market Str. St. Louis, Mo.

“SEDGWICK’S BEST HOUSE PLANS”

LATEST TWELFTH EDITION

12

The Most Complete Book I Have Ever Published
200 TWO HUNDRED DESIGNS

PRICE $1.50

CHAS. S. SEDGWICK, 1135K Lumber Exchange, Minneapolis, Minn.
This book gives complete instructions for finishing all wood—hard or soft, old or new. Tells how inexpensive soft wood may be finished so it is as beautiful and artistic as hardwood. Explains just what materials to use and how to apply them. Includes color card—gives covering capacities, etc. Use this coupon.

S. C. JOHNSON & SON, Racine, Wis.
Dept. KE 10, (Canadian Factory-Brantford).
Please send me free and postpaid your Instruction Book on Wood Finishing and Home Beautifying.

One of the Best Painters here is.
His Address is.
My Name.
My Address.
City and State.

BUILDING?
If you are building you will find our book particularly interesting and useful. It will tell you how to do the work yourself and enable you to talk intelligently on this subject to your architect or contractor.

Our Individual Advice Department will give a prompt and expert answer to all questions on interior wood finishing—without cost or obligation. Do not hesitate to bring your wood finishing problems to us.

S. C. JOHNSON & SON, Dept. KE 10, Racine, Wis.
"The Wood Finishing Authorities"

Your New Dream Home

Residence of Dr. I. J. Silverman, 300 Stockholm St., Syracuse, N. Y.
Architect, Jaros Krauss, 200 Fifth Ave., N. Y.
Bishopric Base used on all exteriors and interiors.

For a long time you have probably been planning that dream home that will be for you and yours. You have considered the outside appearance—the style of architecture—the inside scheme of decoration. But have you given a thought to the construction of the inner and outer walls? Upon this construction depends your ultimate happiness. Real living comfort winter and summer, minimum fuel bills, resistance against fire, vermin and decay,—insulation against change of temperature and dampness—all depend absolutely upon the wall construction of your home. BISHOPRIC Stucco over BISHOPRIC Base in construction and in use offers the possibilities of this insurance.

Let us tell how beautiful houses are built of Bishopric Stucco Walls, and of the wallcurtain of asphalt mastic that eliminates dampness and noise—the dovetail lock that holds the stucco in a vise grip for generations—all at a saving of original building, and future upkeep cost.

Write for "Bishopric for All Time and Clime". We will gladly send this beautifully illustrated booklet to you upon request.

The Bishopric Mfg. Co.
612Este Avenue Cincinnati, O.
Factories: Cincinnati, O., and Ottawa, Canada.
Fall Conditions

Is building going on? It certainly is, and, in spite of last month's setback, a quick recovery shows the strength of investment demand in new buildings. Every one, even the leaders of labor, is feeling at least fifty per cent better than in August because the trouble clouds of industry are clearing for fair. May this optimistic feeling be lasting.

Building costs are not going down, why should they under present conditions? Take brick for example: The brick industry is producing a more nearly normal amount of brick than for two years past, and yet the shipments from the yards were greater during the month than the brick produced.

"There has been some complaint of a shortage of skilled building tradesmen. Figures just compiled by the Federation of Construction Industries from the last census show that in many of the trades there has been a startlingly large decrease in the actual number of journeymen since 1910; in two cases, the decrease amounting to 23 per cent and 19 per cent respectively."

That such a condition exists in the huge construction industry is a matter of the gravest national concern. Everybody knows how badly we are in need of houses and other buildings, and everybody knows how scarcity of accommodations breeds high rents and scarcity of men discourages building. This is another reason why building costs will remain steady to higher.

But that is not all. It is a common complaint that workmanship on a building is not what it used to be, and this observation is not confined to any particular trade. The fact is, there never has been much attempt to train an adequate number of men to replace those who normally drop out every year, to say nothing of caring for the expansion of industry. A large proportion of the skilled artisans now available received their training in Europe. With immigration shut off, the situation will become more serious year by year unless definite steps are taken to train our young men, and to train them so thoroughly that there will be a continuance of the supply of really first-class mechanics. Is not the most logical place in which to begin to interest our own youth, the public schools? A boy's interest in a trade can be aroused in the most vivid way by teaching him some of the simpler processes and letting him actually handle the tools and materials. Until some such source of replenishment of the ranks of skilled labor is available we must expect a continuance of high labor costs in the building industry.
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A Home Which Has Charm and Distinction
Charles Alma Byers

FULLY representative of English influence is the two-story house shown by the accompanying reproduction of the photographs and floor plans. It is a decidedly attractive, well-planned home. Its well-balanced structural lines, its low-reaching sweeps of roof, its effectively designed and placed windows, and its simple but enhancing color scheme, together with its style, finish and detailing in general, all combine to give it an exterior that is characterful and pleasing. As will be seen from the floor plans, it also possesses an exceptionally charming, convenient and practical interior, in arrangement, finish and decorative treatment.

The house occupies a corner lot, with the grounds landscaped to give it an appropriate and attractive setting from every point of view. The front entrance is simple and effective; an uncovered stoop paved with red brick and a panelled door of antique oak set in a gray caenstone doorway. The automobile driveway, curving in from the side street on a half circle, leads to an arched porte-cochere, which provides protected ingress and egress to or from the living room at the rear, as well as direct communication with a rear terrace and indirect connection with the dining room. This terrace, commanding a charming outlook upon the beautiful walled garden in the rear, makes a particularly delightful feature of the plan. It is paved with cement, with an
View of the house from the street

edging of red brick, and covered with a roof-like awning, which may be easily raised whenever desired. It is attractively and comfortably furnished, and comprises a most inviting outdoor living room. French doors open from it to both the living room and dining room.

The outside walls of the house are of deep cream cement-stucco over metal lath and frame construction, and the wood trimming, confined almost exclusively to the windows, is done in dull green. The roof, which is rather steeply pitched, is of wood shingles, painted bright green, and the chimney, which breaks through the roof at its highest point, is of red brick, like the paving of the entrance.

The wall enclosing the rear garden, set back on the side several feet from the street, is naturally of stucco finish to correspond with the house walls. The various sizes and shapes of the windows, many of which are of the casement type, and all of which are characterized by small panes, deserve to be quite especially noted, for they help very materially in giving both attractiveness to the exterior and charm to the interior.

The general arrangement of the interior will be discerned from the accompanying floor plans. The front door opens to a small reception and staircase hall, from which a broad arched opening gives immediate access to the living room and a
pair of French doors open to the dining room. Between the dining room and kitchen intervenes an excellent pantry, with a breakfast nook in one end, and off the kitchen, in the rear, is the customary screened porch. On this floor also are maid’s room and maid’s bath. The second floor provides two bed rooms, sewing room, two bath rooms, and a little dressing room, besides excellent closets, a large storage room and other delightful features. A very enjoyable balcony, affording a charming outlook upon the rear garden, is accessible from one of the bed rooms.

The closets and built-in conveniences are particularly worthy of note. On the first floor, for instance, are found both a closet in the back extension of the entrance hall and in the maid’s room, a draft cooler-cabinet, excellent cupboard room and the other usual equipment in the kitchen, besides a built-in ice-box. In the pantry is additional cupboard room, while the breakfast nook, which has casement windows in the outside wall, is furnished with the usual stationary seats and table. In the upstairs hall there is a commodious cabinet of shelves and drawers for linen, and each of the second floor bath rooms contains both a medicine-case and a locker cabinet, while each of the bed rooms, as well as the sewing room, has a good closet. The closet of one of these bed rooms is also equipped with a locker cabinet, and a feature of the same kind, in addition to the built-in dresser and wardrobe, is likewise included in the little dressing room. The large storage room is accessible from the other bed room, and off one end of this storage is built a special cedar closet. And, lastly, the sewing room, besides its closet, has a special cabinet for concealing the sewing machine when not in use, together with cupboard or cabinet space for sewing odds and ends, and all of the things which the seamstress may need, or the house wife wishes to put away.
This sewing room, incidentally, being ten by twelve feet in floor dimensions, is naturally capable of being used as an extra bed room, if desired; which is often a great convenience.

The interior woodwork is of pine throughout. In the reception hall, living room and dining room it is given a brown stain and finished like antique oak; in the maid's room, upstairs hall and two second floor bed rooms, including the closets, it is in old ivory, and in the bath rooms, kitchen and pantry it is in white enamel, while in the sewing room the finish is in light French gray. The plastered walls of the reception hall, living room, dining room, upstairs hall and main bed room are finished in oil paint, those of the bed room being decorated with neat hand-painted border and paneling effects. All bath rooms have tile floors and tile wainscoted walls, and in the kitchen the walls are surfaced with a smooth, hard plaster coat which is enameled like the woodwork.

The remaining rooms are papered. Hardwood flooring is used throughout both floors, except in the kitchen, screened porch and bath rooms.

Both the living room and the family bed room have a good fireplace, with gray caen-stone mantels, and tile hearths. The drainboards and the kitchen sink are in one piece, and a shower is a feature of one of the second floor bath rooms. There is a small basement, walled and floored with concrete, which is reached by a stairway descending from the hall off the pantry, and the equipment includes furnace heat and all the modern conveniences. The house is built in Los Angeles, and was designed by J. A. Larralde, architect.

Unusually pleasing in design and construction, charmingly environed as to grounds, convenient and attractive in interior planning and finish, and delightfully equipped in respect to built-in features, and so forth, the house is a most satisfactory home in every respect. By
no means less interesting and deserving of commendation is the manner in which it is furnished. The scheme realized in the furnishing is appropriate and enhancing in effect throughout; but in the reception hall, living room and dining room it is particularly worthy of note, for to them has been brought a most interesting collection of prized antiques,—not only in the way of the essential pieces of furniture, but in lighting fixtures, mirrors for wall decoration, and other articles prized of the connoisseur, which have been well placed, to make a charming home.

A corner of the living room

The Builder's Fame

The builder's fame outlives that of the warrior. The fame of the builder of Babylon has outlived the warrior's feats. Babylon is dust and cities of Eden's plains are heaps of dust. With these cities, to oblivion went a long line of illustrious kings, mighty warriors who left inscriptions of tribal wars, which they fondly fancied had shaken the dome of heaven. But the only Babylonian king whose fame grows brighter with the lapse of centuries is Nebuchadnezzar, whose claim to glory rests not upon prowess in international brawls, but upon marshalling and directing the greatest, most practical building force that his time knew.

Noble Foster Hoggson
The Spell of Spain

Esther Matson

VER the seas lies Spain" runs an old adage, but today watching the new house building on the Pacific Coast we have to confess that much of the old glamor and romance of this same Spanish influence lies just across the continent in our own home-land.

The spell is potent on three house features in particular—the doorway, the window, and the out-of-door living-room or "patio."

We are considering here only the first of these features—the doorway. In Old Spain, and also in Spanish Mexico, note first that the doorway had certain distinct characteristics. First of all it was the most elaborate part of the house-front. Sometimes indeed it was the only ornamental detail in an otherwise plain facade. Whereas the Hebrews held the door to be figuratively the "mouthpiece" of a house the Spaniards made it very literally the decorative mouthpiece. Sometimes this feature consisted of a simple arched opening in the house-wall with either a deep reveal or a real recess to give grateful shade in a land of intense sunlight. Sometimes it was designed with an elaborate framework enriched with carving and color, and perhaps made stately with columns or pilasters. As for the door itself, that was sometimes a solid...
The arched door at San Gabriel Mission

affair of heavy wood panelling, sometimes it was enlivened with latticed glass, and sometimes it was adorned with a captivating wrought-iron grill. There is no place where wrought-iron gives such a magic touch as in an opening, or with a background of stucco.

In New Spain, or, in other words, on our Pacific Coast, there are few doorways dating back to old Spanish days to be found. The few which may still be seen in the ancient Missions are therefore so much the more to be treasured. They are almost always of the simpler type. One of the happiest, that at the Mission of San Gabriel, shows an extremely simple but lovely arch cut in a severely plain wall surface. There is nothing to detract from, and everything to enhance a felicitous play of sunlight and shadow, and the result of strongly contrasting lights and darks makes an unforgettable and wonderfully satisfying impression.

Many and varied are the new doors that hint at Spanish influence or that frankly proclaim their subjection to the old spell. In the famous Mission Inn at Riverside, where Spain is suggested at every turn, there are two or three especially fine examples. One, a vine-wreathed, nail-studded doorway with latticed panes is under the Carmel Tower. Another which the visitor sees only after entering the great Forecourt is embellished with an alluring wrought iron grill that seems to belong in one of the Arabian Nights Tales, if not in some fanciful “Castle in Spain.”

But most interesting is the effect of this influence on the doorways of the private houses, whether large or small. Some of these, like the little girl with the
curl are very, very good; and some, be it confessed, are extraordinarily bad. Some are in the Grand Manner and some in Bungalow style. Many of the great, richly appointed houses which are in reality palaces, hark back for their entrances to the Plateresque or Silversmith Period of architecture (not, by the way, the happiest period), and achieve a veritable stateliness. Others merely attain an extreme of formality. Far more intriguing, however, to most of us, are the small bungalows and the more commodious but not imposing homes that we have begun to designate as the "lesser houses."

On these, too, the new-old influence is seen at work. And when attention has been given to the principles of proportion and propriety there is none so hardy as to carp at the fascinating tang of romance which it imparts.

We are thinking, for an instance, of one "wee bit hame" in Pasadena. Cleverly adapted both to modern use and to livability on a moderate income, it gives in a detail here, a detail there, and especially in its doorway, happy hints of Spanish inspiration. Quite delicious is this arched doorway with the roomy recess behind, and the bit of decorative color framing it.

One is reminded instantly of Moorish tiles in the color work about the door, but as a matter of fact, the effect is arrived at by the simplest and most inexpensive of means, and, what is more to the point, there is no real deception or attempt to actually imitate tilework: for on a second glance one recognizes that the decoration is merely a happy pattern playfully worked out by a deft tromelling and coloring of the plaster which forms the house covering. The pattern is appropriately slight and the coloring "glad," but not so vivid as to distract or glare at us. The device helps to emphasize, just enough, the front door.

Among lesser town-houses, one in Los Angeles, which gives us pleasure, was designed by Mr. Charles Hewitt, architect. Its exterior proclaims it as very completely under the spell of Spain. It gives us an object-lesson if we will take it, in the value of plain spaces, an appreciation of
Mr. Charles Hewitt, Architect
Doorway of a lesser town house in Los Angeles

which indeed is one of the most worthy services that the Spanish vogue can offer us! For these broad, softly tinted sur-
faces of plain stucco are perfectly free of ornamentation and permit the strong California sunshine, so like the sunshine of Spain, to have its will with them.

One notes admiringly the restraint with which this exterior has been treated as a whole. Then one pays attention to certain of the details. The door itself is of plain solidly panelled wood, while the doorway, although so simple, seems welcoming by virtue of its very contour. True, there are certain minor accessories where the fancy has been indulged. There is a grated window. Beside the door is a wrought lighting fixture. Below that on a quaintly hooded column against which a vine is trained, a mail-box is fixed, and the four figures which make the house number are plainly set—so plainly that whoso runs, or rather motors by, may easily read! Each one of the details may be counted interesting in itself, but the beauty of the thing is that they are not too insistent. They do not interfere with the composition as a whole, and at the same time they stress the logical importance of the doorway. One feels the beauty of simplicity.

Prayer for a Little Home

God send us a little home,
To come back to, when we roam.

Low walls, and fluted tiles,
Wide windows, a view for miles.

Red firelight and deep chairs,
Small white beds upstairs.

Great talk in little nooks,
Dim colors, rows of books.

One picture on each wall,
Not many things at all.

God send us a little ground,
Tall trees standing round,

Homely flowers in brown sod,
Overhead, thy stars, O God,

God bless, when winds blow,
Our home and all we know.

Florence Bone
How Will You Build Your Home

EFFICIENCY IN BUILDING: A truly livable home is one of the first needs for good citizenship. It costs no more to build right than otherwise, providing one starts right. Planning a new home seems a very simple matter to many a householder, until he has later come to grief because he had no expert knowledge of the inter-related parts. "Extras" made necessary on account of details not properly planned for, or things important to comfort which had been entirely omitted, quickly consume—if they do not far over-run—the small savings effected by careful self-denial.

On the following pages we illustrate some attractive and at the same time efficiently planned homes. Assistance in building homes like these, or other well planned houses, is available to Keith's readers by personal conference or through correspondence, and we hope that the readers of this magazine will avail themselves of this opportunity, through the cooperation of the architectural contributing staff, of securing expert guidance.

In the "New Homes Section" which follows will be found a group of homes, shown in portfolio form, without description or comment other than that relating to type and construction. To any one who can "read a plan" the room arrangement, the closets and cupboards, the built-in features, much of the details, and even the construction is plainly shown on the black-and-white etching of the floor plans. The photograph shows the exterior as built from the plan. Each page gives a home, complete. Most of these homes have already been built, once at least. Working drawings and specifications have already been made and are ready-to-use after the manner of ready-to-wear clothes. If one of these fits your conditions it is ready for use; if "alterations" are necessary, supplementary sheets may be prepared to cover such changes.

Various types and sizes of houses are shown, from the little four-room bungalow to the full two-story and eight-room house; from the attractive house, less than 26 feet in width, fitted to have light and air about it, even on a narrow city lot, to the broad frontage of a gambrel-roofed Colonial; the hollow tile house with parapet walls and flat roof, and the usual frame construction with wood or stucco exterior, are all represented in these pages.
A Colonial Bungalow

A dainty little bungalow with the simplicity of the colonial, and all the convenience of modern planning. The recessed porch at the entrance and the well placed pullman alcove make the plan unique. Frame construction, insulated, wide siding, brick base course, shingle roof. There is opportunity for a climbing rose over the porch trellis.
The Charm of the Dutch Colonial

No type of design makes a more charming home than the Colonial with a gambrel roof. It might perhaps be called "typically American," in the sense of home which it imparts. It may be fitted to any landscape setting, and planned along any lines desired.

This Dutch colonial home is charming and practical; typically Colonial in plan with its central hall and main living rooms on either side, it has, in addition, a fair sized breakfast alcove between the dining room and kitchen, and all the built-in conveniences. On the second floor are three bedrooms with a sleeping porch connecting with the owner's room.
The visitor in California and Arizona is often fascinated with the simplicity of style, both in design and construction, of the house with parapet walls and flat roof construction. Built of hollow tile, or of the lately developing hollow wall of brick, it gives a masonry construction of the greatest simplicity, together with the charm of the unbroken wall surface which makes a background for well proportioned openings—with or without decoration—for a tracery of vines on its surface, and for planting of all kinds.

This plan shows an 8-inch wall of hollow tile or brick. The flat roof is raised above the ceilings, with a ventilated attic space. A substantial and economical construction.

A Type from the Southwest

E. W. Stillwell, Architect
Stucco and Brick

With one end of the house filled with glass, the sun parlor so formed gives a maximum of light and air to the house, connecting as it does with the living and dining room. Brick is carried to the sills of the window openings, and for the porch floor and steps. The upper wall and gable ends are covered with stucco, and the face of the dormer is of stucco. The plan shows good sized rooms, well arranged, with wide frontage on the lot.
A full two-story house, with basement courses, porch work and chimney of brick, often gives the simplest solution of the problem of the house plan—a substantial and economical construction. Such a home will of necessity have a large proportion of space for the ground area covered. This home is popular, in plan and construction.
A Home On a Narrow Lot

The house which can be built on a narrow lot, and still have light and air all around, is one of the requirements which meets the home builder in so many of our cities, where the narrow lot prevails. While regretting the "narrow lot" and the conditions which it brings, such conditions must be met in the best way possible.

Here is a home which is planned for a narrow lot. It is attractive; it gives good accommodation to the usual family, with good living and dining rooms; three bed rooms on the second floor, and maid's room beside the kitchen. It is 26 feet in width.
A Six-Room Cottage

Six rooms seems to be accepted as the "average size" for the small house, which will accommodate the usual small family. This is a home which will fit the general conditions, breakfast alcove off the kitchen, icebox and broom closet in the rear entry, coat closet opening from the hall, a well equipped kitchen, sleeping room on the first floor.
Decoration and Furnishing

Virginia Robie, Editor

Samplers In Decorations

Samplers from the collector's standpoint have long been of importance, but the significance of these old faded bits of embroidery from the decorator's point of view needs a wider heralding.

Full of color, charm, as well as quaintness, are many samplers, and, while certain types are expensive, specimens of the 1820 period may be found at times, of very moderate price.

Like all forms of needlework, the sampler has an ancient and honorable history. In 1498, the English poet Skelton mentions "the sampler to sewe on and the laces to embroide" and later in an inventory of Edward VI is recorded, "Item: Sampler of set of patterns worked on Normandy canvas, with green and black silks."

The original sampler was not the handiwork of infant prodigies, but of women skilled with the needle. Upon bands of fine linen were worked the various stitches needed for reference in the making of the intricate embroideries of the fifteenth and sixteenth centuries.

The early samplers served the purpose of pattern books and were dearly prized by their owners. In shape, they were of unusual length, the looms of the period producing only narrow breadths. All the stitches known to the sixteenth century world of needlecraft found their way to the pattern bands. Some of the samplers were worked in the convents and were ecclesiastical in character; others were wrought by royal ladies and displayed the fashionable stitches of the court. There were lace samplers, delicate as cobwebs; cut or drawn samplers in...
which the tracery surpassed the finest drawn-work of modern Mexico. The double cut-work, the Italian punto tagliato, was introduced into France by Catherine de Medici, who found time between royal plotting to execute many pieces of embroidery. Mary Stuart, while an exile at the French court, learned the art of punto tagliato and later carried many beautiful specimens into England. Mary Stuart's love for embroidery was not shared by Queen Elizabeth, who cared little for the needle. A later Elizabeth, the daughter of Charles I, was a skilled lace-maker, and it is a tradition that her lace patterns are in existence.

The sampler, as a mere record of stitches, had little decorative value. The different patterns were worked at random, without regard to color or arrangement, and, while beautiful in themselves, produced little effect when scattered haphazard over the canvas. It was not until the early part of the seventeenth century that the sampler displayed any unity. At that period the marking of the household linen became general, and this practice indirectly had an artistic influence on the pattern bands. The name to be embroidered on the linen was first worked on the sampler. When ornamental alphabets and numerals were added, a more orderly arrangement naturally followed. The various stitches and devices were grouped in rows, and a greater harmony of color prevailed. The sampler was ceasing to be a mere pattern book and was becoming a distinct piece of needlework. By 1650, it had grown to be a thing of beauty, to which the owner was proud to affix a signature and a date.

Viewed from the standpoint of historical ornament, the seventeenth century sampler presents a fascinating study. The designs of many lands were worked in cross-stitch, satin-stitch, chain-stitch, bird's-eye stitch, back stitch, and the many other stitches of which the needlewomen of the day were masters. According to one old writer the designs were:

"Collected with much praise and industrie
From scorching Spain and freezing Muscovie,
From fertile France and pleasant Italie,
From Poland, Sweden, Denmark, Germanie,
And some of these rare patterns have been set
Beyond the bounds of faithless Mahomet.
From spacious China and those kingdoms East,
And from great Mexico, the Indies West,
Thus are there works far-fetch't and dearly bought
And consequently good for ladies' thought."
A glance at the embroidery of the period reveals the fact that the Orient rather than “scorching Spain” or “freezing Muscovie” was the source of design. Back to the days of the Crusades date the Eastern patterns which were introduced into Christendom by the Crusaders. When Richard the Lion-hearted returned from the Holy Land, he brought with him “tapestry carpets”—the oriental rugs of the twelfth century—and hung them on the walls of Windsor Castle. The Persian pink and the Arabian rose, which were woven into these hangings, bloomed again in the English samplers. The rose had a double significance, and was the favorite flower in the sampler garden.

Strange and wonderful flowers grew under the sampler-needle. Birds of remarkable plumage, animals of fierce and terrible mien, castles with flying buttresses—all these and many more—were the sampler decorations of the early eighteenth century. Not less remarkable are the birds and flowers, done in the beadwork sampler by Jane Mills in the early nineteenth century. The sampler made by Sarah Young about 1750 portrays people, as well.

As the eighteenth century progressed, the sampler ceased to be the work of trained needlewomen, and became the exponent of youthful industry and skill. Mr. Huish, in speaking of the evolution of the sampler, says: ‘Finally it is adopted as an educational task in the Dame’s school, as a specimen of phenomenal achievement at an early age, and as a means whereby moral precept might be prominently advertised to both young and old.’

Sometimes the schoolmistress is mentioned on the sampler. One old canvas reads:

“Hannah Canting is my name
And with my Nadel I wrote the same
And Judith Hayle is my Dame.”

Passages from the Scripture and original verses setting forth the shortness of life and the evil of worldly living were part of the sampler task. In marked contrast to the gay birds and flowers were these somber sentiments. One stanza reads:

“And now my soul another year
Of my short life is past,
I cannot long continue here
And this may be my last.”

Seven years old was the little maid who stitched that, and nine the maker of the sampler bearing this:

“Gay dainty flowers go simply to decay
Poor wretched life’s short portion flies away.
We eat, we drink, we sleep, but lo anon
Old age steals on us never thought upon.”

In 1720, Margaret Burnell worked on her canvas:
"Our life is nothing but a winter's day
Some only breake their fast and so away;
Others stay dinner and depart full fed
The deeper age but sups and goes to bed,
Hee's most in debt, that lingers out the day,
Who dies betimes, has less and less to pay."

Many of the inscriptions are so absurd that it is hard to realize that they were worked in seriousness.

Elizabeth Matron, in 1718, stitched the following rhymed fantasy into her sampler:

"You ask me why I love, go ask the glorious son, why it threw the world doeth run, ask time and fate the reason why it flow, ask damask rose, why so full they blow—By this you see what care my parents took of me. Elizabeth Matron is my name and with my needle I fought the saine, and if my judgment had been better I would have mended every letter. And she that is wise in her time will prize, she that will eat her breakfast in her bed and spend all the morning in dressing of her head; and eat at dinner like a maiden bride. God in his mercy may do much to save her, but what a case is he in, that must have her. Elizabeth Matron. The sun set, the shadows fly, the good consume and the man he dies."

Poor little Elizabeth! Many a time her needle must have faltered over the sermon in cross-stitch, and she must have longed to emulate the young woman whom she held up in such awful warning.

A more cheerful note is struck by Ann Young, who made an acrostic out of her name to add to her sampler.

"A virgin that's Industrious, Merits Praise
Nature she Imitates in Various Ways.
Now forms the Pink, now gives the Rose its blaze,
Young Buds she folds in Tender Leaves of green
Omits to shade to beautify her Scene.
Upon the Canvas, see the Letters rise
Neatly they shine with intermingled Dies
Glide into Words and strike us with surprise."

The architecture of sampler land cannot be taken seriously. When everything else is worked with a fairly firm hand, the houses are extremely crude and suggest the drawings that children make on their slates. Not that all the dwellings are alike, but all show the same checker-board effect of doors and windows, and the same remarkable chimneys. Next to the borders the strongest similarity between England and American samplers is shown in the houses. The costumes differ widely, the alphabets show a greater variety than would seem possible on first thought, the canvases are not alike, but the queer attempts at house-making are one and the same.

Betsey Adams worked an imposing structure into her canvas, but it has the same outlines of many an English sampler house. The large birds resting on
small trees have an English look, but the general arrangement of the other decorations is quite American. The border is very attractive, and exhibits a bold treatment of the tree of life inclosed by a narrow Greek fret. A point worthy of note about this sampler is, that the main border extends on three sides of the sampler only. A special and more primitive border is worked across the bottom. The tree of life is embroidered with true oriental feeling, the Persian scheme of color emphasizing the effect.

"Time has Wings and swiftly flies
Youth and Beauty fade away
Virtue is the only Prize
Whose sacred Joys shall neer Decay."

Below is her name "Wrought by Betsey Adams in the ninth year of her age." Patient little Betsey! A year of your young life is represented in this quaint thing! A stirring year it was, too, in American history—1773—and perhaps the little sampler worker, who was John Adams' cousin, and lived in the same town, heard many a heated discussion as she carefully stitched the green birds and the fine blue house.

The time has passed when every New England parlor boasted its framed bit of variegated needlework. The green alphabets, the orange birds, and the impossible houses were of the stuff of which both moth and rust do corrupt. The moral maxims, wrought by Eliza, aged eight, or Abigail, aged nine, have in many families became merely a tradition. Other specimens of infant piety, escaping the ravages of time, have been relegated to the attic, together with hair trunks and antiquated bandboxes.

Preserve them if possible, and place them where they have light, but not bright sunshine, and note the decorative value.
Six-room Bungalow No. 625

Designed for the Service Department, American Face Brick Association

This beautiful six-room bungalow is one of the ninety-six distinctive homes shown in our "Face Brick Bungalow and Small House Plans." Note the splendid arrangement of windows, the inviting porch, the pleasing roof lines, and the compact, convenient interior arrangements.

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NOT HOW CHEAP—BUT HOW GOOD
TO CHANGE GOLDEN OAK.

W. G.—I have had much pleasure and help from reading your magazine and now want to ask your help with a very special problem. We have recently bought a home and I want to know what to do to with the highly varnished golden oak woodwork which does not harmonize with my mahogany furniture. The house faces west and the living room across the entire front is a sort of combination entrance hall and living room. The stairs are at one side of the entrance part and the lower part of stairs and columns partly divide the main living room from entrance part. The columns used are very large and I am hoping to have these replaced with smaller ones. Since it is not at all Colonial in effect, I hesitate about using ivory enamel, which I think is particularly good with mahogany furniture. Would the gray weathered stain be suitable for this woodwork and what stain is used to secure this effect? What treatment must I give the walls? They are rough plaster and at present are stained or painted tan, which is not agreeable with a western exposure. The floors are of oak, finished very light. What could or should be done with these? At present I must use rugs with somewhat brownish tones but with a good deal of black and some old rose in them. Would you continue the same treatment of woodwork and walls in the adjoining dining room?

Ans.—If you wish to use a gray stain on the oak, it will be necessary for the painter to take off all the old finish with varnish remover, down to the bare wood, if possible. This will be troublesome and expensive, and unsatisfactory, because the old stain will change the tone of the gray stain, and it will not be what you want. Our advice is, if you object to ivory enamel, to use a light gray paint, either enamel or flat finish, the enamel being far easier to keep clean. In Colonial houses the wood trim was quite frequently a light gray, and this looks well with mahogany furniture. In this case the walls should surely be pale gray and not tan. Your rugs would combine better with old ivory. By all means remove the heavy, old style columns of the opening, and have a plain cased opening.

The golden oak finish could be removed from the stairway, and the stairs restained mahogany brown, as a good job could be made with the dark stain. As to the floors, all the old finish must be removed in order to darken them.
Yes, we would carry the same treatment of walls and woodwork into the dining room. If ivory is decided on, make the walls ivory too, or a very pale tan.

**THE BOY'S ROOM.**

E. D. J.—We are to build your Design No. 1991, from the May issue, but it will be about five feet longer than the plan shows, making a larger bedroom and a living room; 14x28 feet outside measurement. The plan will also be reversed. Will have a northeast front.

The kitchen and dining alcove will be done in blue and white, blue walls, white woodwork and blue and white linoleum; bath room all white.

The rear chamber—which is for a sixteen year old boy—will have brass bed, a severely plain oak dresser, chifforobe and desk. I have a two tone green rug. How shall I treat walls and wood-work?

The front chamber will be blue and white—I had thought of a walnut four-poster, a dressing table and dresser; drapes of white with bluebird and tiny pink roses, center curtains of plain white; waxed floor with small rag rugs of white with blue and pink stripes. Would you advise wood-work of the pale blue enamel, also should I stain floor light oak or finish natural? Floors will be 3 inch edge grain pine.

For the living room I must use some furniture I have, for a while at least. I have a taupe Wilton rug, 9 x 12, with small design in black, rose and blue with some brown. I have beautiful draperies of blue-black and brown, wicker chair with some tones in tapestry. My piano is burl walnut. How would it do to have a davenport-table, davenport, a rocker and arm chair in walnut, or is the room too narrow for table and davenport to be placed before fireplace? My buffet and

---

*What a trained architect can do for a house—*

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dining table are very dark oak and are not out of harmony with the piano. I do not feel able to get new ones. I thought of getting a 6 x 9 rug matching the one I have and putting it—with buffet and table—at the west end of the living room. I have seen several homes arranged this way. We will use the dining alcove a great deal but occasionally one has more guests than it will accommodate. The floor register will be about 13 feet from one end and 15 from the other—hence the use of two rugs.

What would you advise for walls and wood-work? Please advise about mantel, also. Could one use gray walls and have rose cushions and reading lamp for color?

Ans. Replying to your letter asking advice as to interior of your pretty bungalow—we offer the following suggestions. The proposed addition of five feet will add much to your comfort, giving you a fine living room, ample for the double use you plan to make of it, and a most comfortable sleeping room.

In regard to the woodwork, you do not say what wood you expect to use, but in a bungalow in your climate (Texas), we infer that you will not use hard wood. Of course, a deep ivory finish, is almost the universal choice nowadays, and this would be lovely with the furnishings you describe, both those you have and those you propose buying. Nor will it conflict with the oak pieces in the dining end of the living room, which will be perfectly all right to use. As this living room will have north and east facing, the deep ivory finish is all the more desirable. We would have the wall rather warmer in tone than gray, at least a very warm gray. We saw a bungalow similar to this recently, where the woodwork was ivory and the walls a soft gray foliage paper on a creamy ground. There was a fireplace of smooth, pinkish-red brick, with mantel shelf of the ivory wood, The whole thing was very charming. Such brick would tone in well with your rose accessories. We think your plan about use of the rugs excellent. We approve of the davenport and davenport table, and think there will be quite ample space in front of the fire. If, however, it should seem crowded, place these pieces toward the front end of the room. As the draperies are figured, we would upholster the davenport in a plain taupe velour, with end pillows and center round bolster done in the same taupe figured in rose, lavender and blue flowers. Use the figured velour on the new easy chair.

We cannot improve upon your plans for kitchen and bath, and the front bedroom. The blue enamel woodwork would be unusual and charming. The floor should have a little brown stain put in the filler, and then two coats of wax.

The sixteen-year old boy's room should have the woodwork lightly stained a brownish tone and waxed, a dull finish. The walls, grasscloth in a putty gray having dashes of green. Curtains of cretonne in blue and green, rich coloring, not babyish, and with a dash of black preferred. There should be a table, for his books and work, with a top of this same cretonne under glass. Do not have a white spread for the bed, but one of putty-colored cotton taffetas, the general tone of the wall. The windows can have plain white muslin curtains with three little ruffles across the bottom, if he will stand for them. This will be an attractive room yet suited to a boy.
A Floor of Captive Sunlight

What can you find more appropriate for a sun parlor than a flooring which holds in itself the airy, golden spirit of sunlight? Maple, varnished, gives you such color. For cheerful lightness, it is ideal, whether used in a home, hotel, apartment, or luxuriously appointed club house.

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Add the ruddy tinge of sunset to Maple's sunlit color, and you have the richer tone of Beech and Birch. Besides their natural beauty, these floorings will also take and retain a variety of stains, and meet any need of color harmony or service.

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"Color Harmony in Floors"—is the title of a book, just off the press, which will open delightful new decorative possibilities to you. Ask your lumber dealer for a copy, or let us send you one with our compliments.

Maple Flooring Manufacturers Assn.
1063 Stock Exchange Building, Chicago

The letters MFMA on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture, and adhere to manufacturing and grading rules which economically conserve every particle of these remarkable woods. This trademark is for your protection. Look for it on the flooring you use.

Floor with Maple

Beech or Birch
CHILD is not a miniature adult. Mothers and those who have the welfare of a child at heart should keep this constantly in mind.

Children need chiefly food for growth. They need protein to give nitrogen and the acids, which the body requires; mineral matter, necessary to supply bone and teeth; and water, and vitamins because they are necessary for all body processes. Milk is the one food that contains all of these nutrients. Very naturally, then, milk is the principal food for the baby, until such a time as the body requires more iron and other nutrients than milk can supply.

Most authorities say that when a baby reaches the age of three months it should have additional iron and vitamin and laxative food. This is supplied by the juice of orange. A little later the child should have toast, zwieback or something hard and crisp for the benefit of the teeth that are appearing. Cereals, which contain a large amount of carbohydrate, besides some protein, are next added to the diet because they are energy foods.

According to Dr. Scham, of the University of Minnesota, a child of two years may have an adult diet with three exceptions: First, no fried foods; second, no cabbage, cucumbers or strong foods as spiced fish and hard cheese; third, no beverages.

This does not mean, however, that the child can sit at the table and eat just what adults would choose. Certain foods are better for them than others, just the same as in the case of the adult. The difference is that the adult chooses his own food and is influenced strongly by what he likes. This is exactly what the child should not be permitted to do. He should be so guided that the foods which he likes are quite properly the foods which he should have.

Eating Between Meals

Much is said pro and con eating between meals. A prominent physician not long ago made the statement that since a child has a small stomach he can not be expected to take enough at one time to last for five or six hours. He advised a little lunch, such as an apple, an ice cream cone or a slice of bread and butter. This seems to be the attitude, also, of the school authorities who provide for the mid-morning and mid-afternoon lunch of graham crackers and milk.

Much might be said, it seems, as to the same course for adults. If we are a nation of over-eaters, it is because we permit ourselves to get too hungry, and when a big meal is served, eat too fast and too much. A larger number of small meals is a very different matter, however, from eating irregularly, or "piecing" as a matter of entertainment or amusement, when
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one does not know what else to do. Food which is not needed is a burden to the digestive organs and becomes a menace to health.

On the other hand many doctors say that lunching between meals only spoils the appetite for the meal to come.

A typical menu for the child two to three years old would be like the following:

**Breakfast:** Orange, toast, milk, cereal—cooked.
**Dinner:** Baked potato, mashed string beans, one cup milk, one slice crisp toast, junket.
**Supper:** Milk toast, egg poached in the milk, stewed peaches or pulp of prunes, toast, milk.

Milk is a complete food, as it contains protein, mineral matter and Vitamines, as does cheese, also, though cheese is better food for the adult than for the child. Eggs contain protein and vitamines. Spinach, lettuce, tomatoes, cabbage, and grapefruit contain both mineral matter and vitamines.

A child three to four years old may eat stewed fruit, well-cooked cereal, toast or dry bread, milk, soup, soft cooked eggs; green vegetables as peas, beans, asparagus, spinach; custard, junket, jello, or cereal pudding and, of course, plenty of milk.

Children from five to seven years of age may have butter, cream, bacon, bread, plain puddings, milk toast, sponge cake and plain cookies in addition to what is allowed a child of four years.

Children from eight to ten years of age, in addition to what is allowed a child of seven, may have mild fresh fruit, cocoa, lamb, chicken, fish or bacon, most vegetables, bread and rice pudding, plain cakes, figs, raisins, dates and apples.

Meals for the boy or girl from fourteen to sixteen years of age might include: breakfast—fruit, cereal, bread, butter and milk; lunch—macaroni and cheese, or hot roast beef sandwich, or cream soup with crackers, bread and butter and baked custard, or rice pudding or baked apple; dinner—meat loaf with potatoes, or scalloped eggs with potatoes or macaroni or rice or baked banana, green vegetable cooked, fresh vegetable or fruit salad, bread and butter and ice cream or tapioca pudding or chocolate pudding and milk.

As people come to realize the relations between food and health, there is a tendency toward the use of simpler foods for the adult as well as for the child, for without doubt all persons would do well to guide themselves, as well as the children, past the tempting rich pastries and elaborate foods, and partake more freely of vegetables and fruit. Rich foods which increase the already sufficiently high cost of living are very apt to increase the doctor's bill as well.

**Simple Desserts**

Since the doctor has championed the child, classing ice cream with the foods which may be given freely to the child or adult or even to the convalescing invalid, the matter of the child's dessert has been much simplified for the mother; for with the newer appliances, ice cream is not a difficult dessert to prepare. Here are some other desserts which are good for child or adult.

**Pineapple Delight**
One-half can shredded pineapple.
One-half pound marshmallows, diced with scissors.
One-half pint of thick cream, whipped.
Soak marshmallows in pineapple juice until softened, drain and mix with the pineapple and whipped cream. Put in a mould and chill.

**Another Marshmallow Dessert**
One-half pound marshmallows, diced with scissors.
One-half pint of thick cream, whipped.
One-half cup of blanched almonds, chopped.
Candied cherries.
Mix the marshmallow, almond, and whipped cream. Scatter halved candied cherries over the bottom of the mould, fill with the mixture, and put a few more pieces of candied cherries over the top. Let it stand in the ice box for half a day. Serve like ice cream.

**Charlotte**
Add gelatin to whipped cream, with candied fruit, nuts, or dates, or any combination of these. Serve with wafers or cake.

**Ice Cream Tart**
Serve slices of vanilla, or other ice cream, between half-inch layers of a simple sponge cake, and on top. The tart may be decorated with fruit, nuts, or whipped cream.
In planning your new home, the study of interior treatment both as to architectural detail and decoration is of equal importance to obtaining a good design and a practical, well-planned house. This book illustrates the interiors of many successful homes and contains much valuable and authoritative advice on Interior Decoration. Printed on enamel coated paper which brings out the beautiful detail of the illustrations. Size 7½x11. 160 pages. Flexible embossed cover in colors.

**CONTENTS:**

Interior Decoration, taking up Color Schemes, Treatment of Woodwork. Walls, Ceilings, etc. Entrances. Halls and Stairways. Living Rooms.


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M. L. KEITH, Abbay Bldg., Minneapolis, Minn.
Thirty Slaves to a Household

In ancient times most of the work which is now performed by machinery was done by slave labor. If all the mechanical power, produced at the present time and converted into work such as slave labor used to perform, be computed in the terms of man-power, we have working for us the equivalent of 30 billions of slaves, according to the report of the statistician. Modern use of electricity, steam, and machinery of all kinds, according to a recent bulletin of the Smithsonian Institution, has so simplified labor in general that this power, if divided per capita, would give to every person in the United States labor that would require thirty individuals to perform by hand. Thirty slaves in a household, with food in terms of kilowat hours, or slightly increased coal bills, quietly reposing in the wires and tubes in our walls, springing into use with the push of a button, dropping out of cognizance in the same way, with no confusion, and with no slacking on the job; such are the modern slaves. The difficulty comes with our generalship, for with such a retinue, the management and upkeep of the forces makes them efficient servants, and the lack of it loses much of their usefulness. In the past, woman has been the servant, as well as the mother of the race. She has been the drudge, in the primitive state, and in the more modern houses she has still been a wrestler with pots and pans, a servant without recompense, with an afternoon off, but seldom a full day of leisure. So accustomed has she become to this drudgery, she does not realize that a score of slaves can be wired to come at her bidding; and that with proper management and control of these, she can be freed from much time absorbing labor. "Ask and ye shall receive" is an old promise which has never been taken very seriously. We are coming to realize that until we ask, we can not receive; until we know what we want and reach out for it, there is no place for it in our scheme of things. Nothing can be "given" to us until we are prepared to use it. The housewife must realize the slaves which are at her call, and accept their service. Also, she must realize that her part in the home life is of such importance to the family that the expenditure is justifiable, for labor saving machinery, like farm machinery—is expensive. The power of habit is strong. We have seen the housewife who did not take the trouble to use a washing machine and ironing machine installed in the laundry of the house she had rented. She had not arrived at labor saving machinery in her process of development.

The Machine a Tool.

One of the problems of the age—one might even say The Problem of the age—is that of learning to use the machine as a tool in our hands, rather than permit
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This combination is much cheaper than paint, in both material and labor, and it has so much more character and so much finer texture that the artistic effect is beyond comparison.

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SAMUEL CABOT, Inc., Mfg. Chemists
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the machine to tower over the intelligence which operates it. To the woman in the household is given the task, if she will take it, of making her labor saving machines not only her slaves, her helpers, but also her friends. Did you ever notice how a piece of delicate machinery takes on the qualities of the operator? The man who is friendly with his automobile and calls it by affectionate names, is often comparatively free from engine troubles, to take a familiar example. He is sensitive to the small signals of the engine, and gives it relief, unconsciously sometimes, before it reaches the breaking point. This is equally true of the woman with her sewing machine.

Every piece of delicate mechanism must be handled with a thoughtful care if it is to do its best work. If it is pulled and jerked about, a delicate adjustment may be put out of true and the response from the machinery will not be quite right. A woman who appreciates her helpers will get much better service from them. At the same time she can get the service from them which she requires that they give her. When she puts her clothes through the ironing machine she may have them as beautifully done as though ironed by hand, if she requires such service from the machine,—and prepares and adjusts the pieces so they will come out true and smooth; or if no attention is paid, the pieces may come out with the edges turned under and folded awry as "flat work" from the laundry sometimes comes.

Outlets

The place for the generalship of the housewife to begin is in the electric installation. The "Circuit of Service" as the electric current is coming to be called, "should have plentiful outlets, so that the flock of servants can get out. Locked up within the wires they are but potential slaves." In practically every room a wall outlet should be provided for a service plug, so that appliances may be used without disturbing the lights. If the housekeeper must climb on a chair, detach a lamp and attach the cord of the vacuum sweeper to a ceiling or wall light, it may detract from the efficiency of the sweeper as well as from the convenience of the housekeeper. There is scarcely a room in the modern house where some electrical equipment is not used.

As the housekeeper comes into more and more friendly relations with her helpers she will, each year, find a new servant which can relieve her of some part of her duties, performing them better than she could do alone, releasing a little more of her time, and giving her a greater administrative efficiency in her home. It is only the story of Cinderella, over again; the household drudge becomes a reigning princess with slaves at her call. Or she is Aladdin,—and the Genie springs to her service at the touch of the lamp.
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Making the Fireplace Efficient

S ordinarily constructed, fireplaces are not efficient nor are they economical; and the tighter we build our houses in order to conserve heat, the less efficient does the fireplace become, if constructed along traditional lines. According to Farmer's Bulletin 1230, a very illuminating pamphlet on Chimneys and Fireplaces, and How to Build Them: "The only warming effect is produced by the heat given off by radiation from the back, sides and hearth of the fireplace. Practically no heating effect is produced by convection; that is by air currents. The air passes through the fire, is heated, and passes up the chimney, carrying with it the heat required to raise its temperature from that at which it entered; and at the same time drawing into the room outside air of a lower temperature. The effect of the cold air thus brought into the room is particularly noticeable in parts of the room farthest from the fire."

Patents

A number of patents have been issued which have for their object the construction of a fireplace with increased heating efficiency. One of these patents has a double interest. It seems that the patent issued to one, Joseph Parsons, of Connecticut, was assigned by him to the United States Government, and thus a method by means of which much greater efficiency may be obtained in fireplace heating has become the property of the government, and is described in this bulletin.

In the first place we must remember that a fire, in order to burn, must be supplied with oxygen. If it were possible to have a fireplace in an air-tight room, a fire would go out as soon as the oxygen in that room was consumed, unless a down draft in the chimney supplied the air needed. Since our fireplace fires do not go out, the air is supplied. Where does it come from? The cold outside air is drawn into the room through every crack and crevice, and even through the wall itself. No wonder there is always a draught. The heated air goes up the chimney, in its natural action, since the hotter air must rise, and the tendency to vacuum which remains pulls the air into the room in order to establish its equilibrium. The harder the fire burns and the bigger the blaze, the more outside air is drawn into the room, so that the colder it is outside, the harder to heat the room, as any one knows from experience, who has tried to heat a summer home with a fireplace, on a sharply cold day of spring or fall.

If our room could be so tight that insufficient oxygen would be supplied, the fire would smoke; remove a pane of glass from the window, and it would burn up brightly. This patent provides an opening from the outside directly into the fireplace opening, either above or below the floor. A sheet metal form is provided which fits easily inside the fireplace, with a space between it and the brickwork. The fire is built in the usual way. Air from the outside strikes the back of the metal lining and is heated before it comes into the room around the firebox. It immediately rises, gives up part of its heat and eventually comes back into the fire. By another form, the metal lining is fitted tightly, and the space is connected with a warm air duct under the floor which delivers the warmed air into the room through a floor register, in the same way as from a warm air furnace. This in-
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creases the efficiency of the fireplace many times, and brings fresh, warm air in the room.

There are several patented fireplaces on the market which increase the efficiency, or which deliver heat directly to the same or another room. The cuts given below show the operation of one of these patented fireplaces which corrects two difficulties in the older fireplace construction. First, a draught of air, controlled by a damper, is brought into the fire from below, through the opening to the ash pit, instead of being drawn from the room, so that the oxygen of the room is not burned. Second, a fireplace lining of rolled steel is inserted in the firebox and air, heated by circulating between this lining and the brick work, is delivered to the upper part of the room, or to another room, through a warm air duct and register. Instead of being brought in from the outside, as in the first case described, air is brought to this air chamber by a cold air duct to a register in the floor of the room near an outside window; taking the fresh colder air from the room, heating it and delivering it to the room again. The construction is such that a vacuum is created which tends to control the air circulation so that the oxygen laden air of the room is not drawn into the fire and burned.

**Coal from the Dakotas**

Dakota lignite has all the constituents of good coal, according to the Northwestern National Bank Review. In the light of the present coal situation this fact may prove of vital importance to the northwest. North Dakota has enough coal, if properly used, says Dr. E. J. Babcock, Dean of the North Dakota School of Mines, to supply her needs for many generations. "Roughly speaking, a ton of average lignite as mined is equal in fuel value to about one-half to two-thirds of a ton of eastern bituminous or anthracite coal. It is largely due to a lack of familiarity with the character of lignite coal and to a lack of knowledge of the best methods of burning it, that this coal has not been more generally used. This use is being extended, however, as more perfect methods of burning appear."

The Dakota lignite contains nearly 30 per cent moisture, however, and about the same amount of volatile matter. The problem has therefore been how to reduce the raw material to a concentrate that will be a good fuel, and economical and safe for transportation. A briquetted coal for domestic use is being produced, though not commercially as yet, that compares favorably with anthracite, and is yielding valuable by-products. It has also been demonstrated that lignite can be very successfully used, under proper conditions, in gas producers as well as in steam plants for the production of cheap power and electricity.
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Pure, fresh, vitalizing air, gently warmed, is carried upward into the rooms through large pipes which provide the necessary volume for a comfortable temperature and a healthful atmosphere. The Farquhar Vent and Return System prevents atmospheric stagnation and removes the contamination of personal exhalation and exudation. Annoying drafts along the floor are also eliminated.

These facts, plus the Farquhar Automatic Control, insure a uniform temperature of pure, fresh air at a surprisingly low fuel cost.


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Gypsum and Cement Stucco

Discovery has lately been made in the use of gypsum plaster with cement which promises some interesting developments. Experiments have been carried on, but little publicity given to the matter until it had been tested by the different seasons.

It was discovered in the spring of 1910 that if gypsum plaster be applied on a wall and this coat followed with an application of cement mortar before the plaster had set, the bond between the two mortars was perfect. This discovery was made in Canada. For years it has been the ambition of northern builders to find an economical material which would stand the severe climate of the north and prove permanent. Tests were made following this discovery, and several houses were built according to this system, but the chief test given the new construction was that of time and the weather and no publicity was given the work or further tests made until after the first winter and spring had passed. On close examination of the building the following spring it was found that the bond between the cement mortar and hardwall plaster was permanent and perfect and the bond between the hardwall plaster and plaster board was also perfect. There were no cracks in the wall, which had proved to be waterproof and was in good condition.

This new type of construction for exterior walls was, naturally, regarded as a very important discovery inasmuch as it promised to allow the builder of moderate means to secure a dwelling which is fire-proof, warmer in winter and cooler in summer, and also permitted a variety of finishes by the use of stucco.

The most important item of all the building to construct is the exterior walls. These could be constructed at a very moderate cost, cheaper than brick or tile, it is claimed, and no more costly than the usual frame construction.

Fire Test

A four room bungalow was built, complete in every detail, using this construction. The fire chief, architects, and other interested persons were invited to come and try to burn it down, with the result that the building was practically undamaged. The interior walls were covered with smoke, and the plaster cracked in one or two places, but little other damage was done.

Steel and Gypsum Construction

Steel lumber was used with this type of construction in a Toronto house. This was built to demonstrate that a house could be constructed of steel and gypsum at a reasonable price; that such a house would be ideal to live in on account of the insulating qualities of the gypsum; that it would be fire proof, and without some of the disadvantages of the older types of construction.

Steel studs were used for the outside walls and for partitions. Gypsum boards were applied on both sides of the steel studding, a heavy coat of this exterior
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.
stucco put on the outside and hard wall plaster on the inside.

The method of applying waterproof cement and magnesite stucco to gypsum board or gypsum blocks over exterior walls, as used, is protected by the patent held by Mr. Robert E. Haire. It is described as follows:

First, apply a coat of gypsum mortar, which everyone knows will bond perfectly to either gypsum board or gypsum block. Then before the gypsum mortar has set apply a coat of waterproofing cement of magnesite stucco. Then after this coat of cement or stucco is thoroughly hardened, apply finishing coat in any manner desired. By this method both a chemical and mechanical bond is secured. There are several practical demonstrations in Canada, where this stucco has gone through three Canadian winters without any signs of deterioration, according to the report.

The floors were constructed of gypsum board laid down on top of the steel; wood strips were put on and plaster put in between the wood. The finish will be hardwood flooring nailed to the wood strips.

The roof was built up of gypsum board on top of the steel, heavy poultry netting on top of the gypsum board, and then 1½ inches of hard wall plaster put on in two coats, troweled smooth, and asphalt plate shingles laid on top of this.

Another innovation in this house was the elimination of lime mortar for finish. A gypsum finishing plaster was used with fine results. The house can be decorated immediately.


A residence-vehicle recently reported from Paris has a traveling height of 9½ feet, but with two floors when full height. The house is 8 feet wide and 15 feet high, but by means of sliding walls the roof may be lowered like a telescope. On the lower floor is the living room and the kitchen, divided by a curtain. On the upper floor is a bedroom and library. A staircase in the central part of the car connects the two floors. With such a motorhouse, people can stop when and where they like, and for as long a time, irrespective of the over-crowded hotels and extravagant prices. Ground rent for the space of a car is never a serious matter. “The birds solved the problem centuries ago when they began to migrate north and south,” argues one writer. “Now many families are taking a tip from our feathered friends and are not only migrating with the seasons, but moving their homes with them.”

Honest Trade Names.

The movement for the use of honest trade names in business promises to eliminate many of the misleading names under which we buy many things. It is sponsored by “better business” and “better homes” organizations. In its application to furniture each piece shall be called by the names of the woods of which it is made. The buyer is especially interested in the movement to bring about reform in the practice of masquerading the different species of woods under names which do not tell what it really is. There are many kinds of wood which are really beautiful under their own name, much more so than if stained to represent something else. An honest name is always an advantage. We shall value our woods more highly when we know them better and give each the advantage of its own best points, rather than trying to dress them up as something else.

The Hollow Brick Wall

From the Republic of South China comes word that the Ideal wall has been used in that semi-tropical climate for hundreds of years; and dwelling houses upwards of fifty years old with Ideal walls in the cold country of Sweden are considered ideal to live in by their occupants.
The Hess Welded Steel Furnace

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"I have a letter from L. S. Tracy of , Idaho, regarding a heater for his house. Having used one of yours several years, I have written him that I am very much pleased with the results. I think you can sell him without any trouble. 'The Hess Furnace delivers the goods.'"

J. R. HANSEN, (Idaho).

"I had a steel heater in use which gave me good service for 17 years. Put in a cast iron two years ago and it burned out." (Now he buys another steel furnace.)

JOHN AUKERMAN, (Ohio).

April 4, 1922.

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Dr. Wilder ordered another Hess Furnace June 19, 1922.

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SPLINTER AND SHAVINGS

O DO the right thing at the right time, in the right way; to do some things better than they were ever done before; to eliminate errors; to know both sides of the question; to be courteous; to work for love of the work; to anticipate requirements; to develop resources; to recognize no impediments; to master circumstances; to act from reason rather than rule; to be satisfied with nothing short of perfection; this is the goal toward which we would work.

Use Lawn Clippings

Lawn clippings are entirely too useful to be burned or thrown away, as are the fallen leaves in autumn. The gardener and the backyard poultryman can find many uses for them, rendering their conservation well worth while.

For the gardener the lawn clippings offer many possibilities. As a mulch for bush fruits, or strawberries, they are unsurpassed. They add humus to the surface soil, conserve the moisture supply of the soil, so necessary in all fruits, and keep down the weeds.

Placed in an out-of-the-way corner of the garden, they can be used in making a compact heap, thereby supplying the most desirable and the richest soil for garden flowers. The clippings can either be mixed with garden soil, about equal parts, as placed, or they can be piled separately. Sprinkle with water frequently and turn now and then to hasten uniform decomposition. By the following spring they should be ready for use, at which time they are mixed with garden soil. Recognizing the ease with which "leaf mold" or forest soil, so highly prized by all flower gardeners, can be produced, one will never burn or throw away lawn clippings or burn over the lawn in the fall.

New Building Estimators' Handbook


"New books are like sharpened tools" and particularly is this the case with such books as a building handbook. It is not only a sharpened tool, but a labor saving device, for the person who is estimating building costs. It has been the aim of the author and publishers to keep the Handbook abreast of modern conditions, to record progressive developments, and make it a recognized standard on builder's cost and time data. In the chapter heads, with "Measurements of building work," "Quantity system of measuring," we find "Speed and how affected by climate," "Hand vs. machine labor," etc., also many tables and useful memoranda.

Beautiful Homes of Moderate Cost

A selection of modern, artistic, practical designs by well known architects. Published by Building Age and Builders' Journal, gives much material of interest to the home builder both in the way of illustration and subject matter.


This collection presents illustration of some of the most beautiful of the newer homes of the country, many of which are large and elaborate. At the same time much, even of the larger houses, is rather simple in detail and construction, so that it gives food for study for those who are planning small houses and cottages. Many beautiful doorways and entrances are shown. Many of the interior views shown are of particular interest. The page size is 9 by 12 inches and there is much full-page illustration. A large number of the homes are shown by plan as well as photograph.
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Economical

There is Joy, Pride and Security In Owning a Home of Your Own
—Especially if it is constructed throughout of

BISHOPRIC

Residence Farrington Road, E. Cleveland, Ohio. Owners and Builders: The Joseph Larung Co. Architects: Jos. L. Weinberg. Bishorpic used on the interior and exterior.

No one can realize the value of a home of his own, until he actually owns it and lives in it.

STUCCO is smartest in style and is unquestionably the most satisfactory type of house to build today.
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615 Este Avenue Cincinnati, O.
Factories: Cincinnati, O., and Ottawa, Canada.
October is "Better Homes" month this year. A call went out to American communities to devote one week of October to a demonstration of the advantages of building "Better Homes." The echo of this call has resounded to all parts of the country. It has been sponsored and featured by some of the prominent women's publications, has had the co-operation of the governors of 24 states, and an advisory committee, including Secretary Hoover and many members of the Cabinet Family.

Cities, towns, and villages from one end of the country to the other are responding. Many have had, or will have, houses fully equipped and open to the public, showing the better standards along the many lines which conduct toward better homes. Note is made of such a demonstration in Richmond, Virginia, which attracted some 27,000 people. St. Louis is planning a Better Homes Exposition for November, providing for 75,000 to 90,000 visitors. The Home-Electrical has been built in a number of cities and fully equipped; practically all lines of business are focusing attention to, and arousing an interest in, or making some contact with this "Better Homes" movement.

No other slogan arouses more general and widespread interest than that of "Better Homes in America," and this stands for the smaller home.

Exclusive furniture dealers who have hitherto handled only high priced and exclusive lines, have their "Small home" sections where they have displayed moderately priced furniture, that is well designed and well made, and which they can recommend as adding a permanent value to the smaller home.

Now that the big strikes are settled, the business of living can take its rightful place again, and the needs of the home-builder be given its due before the coming of winter. Through all this time, though largely unheralded, homebuilding has been going quietly on. Building permits show a steady increase. The Dodge reports give a large percentage of increase. This is true in Canada as well as in the United States. The Metropolitan Insurance Company is authorizing housing loans to the amount of millions of dollars. The productive capacity which is annually wasted in the United States is, according to Secretary Hoover, sufficient to raise in large measure the housing conditions of our people to the level that only a smaller portion of them now enjoy. The wastes in the building industry itself, if constructively applied, would go a long way toward supplying these better homes.

What is needed is an organized and intelligent direction, where all building interests are concerned, hacked intelligently by the home builder who knows what he wants, and has a definite idea how it should be obtained. Good home planning is the foundation for "Better Homes," and is the aim and function of this magazine.
KEITH'S MAGAZINE
ON HOME BUILDING

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Entered as second-class matter January 1st, 1899, at the Post Office at Minneapolis, Minn., under the Act of March 3, 1879.
COPYRIGHT, 1922 by M. L. Keith.
A fine sweep of brick work showing its varied beauty and strength
Hedges for the Home
Marion Brownfield

The hedge is both practical and charming, for it can be used for privacy, which includes shutting off unsightly views, while it adds at the same time, a certain coziness or dignity according to its planting.

Hedges are probably seen at their best in Europe, as both in England and Italy, they are extensively employed in elaborately landscaped gardens. Indeed a very prominent feature of the wonderful gardens of the Italian Renaissance, which are being copied so much in the United States, today, is the cypress hedge, which forms such an effective background for garden architecture, statuary and balustraded terraces. Pliny's Tuscany villa garden was famous for its box hedging. The English hedge of various evergreens is frequently eight to ten feet high and
rather formal and prim, as worthy of gardens having the traditions of generations to maintain. Yew, also, is an English favorite. Trimming the hedge in fanciful shapes was said to have been introduced into England when the Dutch monarchs, William and Mary came from Holland to reign on the British throne. The box hedge was much used during colonial times in this country by the Dutch colonists, who settled in and about New York, as well as by the English around Philadelphia. One of the best examples of a garden in this country, with the old-time formal box hedge, is at George Washington’s home at Mount Vernon.

But box, while it gains ever increasing beauty with age, is more of an edging for garden walks than a real hedge. As a green wall, which shall give either seclusion or architectural effect, evergreens that can be grown as tall as thirty feet or clipped shorter are recommended. Arbor vitae is a general favorite and hemlock is good for a north hedge as it does well in shade in contrast to other evergreens that become filled with cobwebs, or pest-denuded without sunshine. Norway spruce and Monterey cypress are two other greens worthy of mention.

Privet is considered a good hedge for the beginner to use as it will take frequent trimmings during the warm season and a mistake is easily remedied by quick new growth! Yet privet is not much care and its white flowers also make it attractive. The California privet is a quick growing hedge. Any kind of privet can be propagated by the clippings. To do this, plant the cuttings with two eyes in the ground and two out, using hardy shoots. They should be transplanted in the spring. A light loam and plenty of moisture helps privet to grow its best, but three year old plants set out in two alternate rows, fourteen inches apart, and eight or ten inches apart in the rows themselves, will obtain first class results. Privet bears transplanting very well too.

It can be used very effectively around a lawn or garden. Both privet and evergreen combine well with gates and fence
A hedge enclosing the terrace

posts. The green hedge with a picket fence, perhaps with a bit of roof, bird house or mail box, making a feature of the gateway, gives cozy charm to a cottage style of dwelling. The contrast of a white gate against the green of the hedge, is also effective with the colonial type of architecture.

For a vivid glossy green, coprosma, though susceptible to frost, is pleasing for “railing in” a porch as in one of the illustrations. Using a hedge to secure a certain amount of seclusion on the porch, is a fashion that is growing in popularity. An open terraced effect is easily achieved at any time by just clipping the hedge to a desired height. A one or two foot hedge of privet or the yellow and green variegated “Euonymus Golden” is frequently employed as a miniature hedge to set off the terraced porch of a bungalow.

The low hedge used as a formal edging of walks is shown in these photographs. The trimming, rather than the plant itself, keeps these edgings in harmony with the architecture that forms the background. In the first illustration, is also a suggestion of blending hedges of various heights. The charming stucco home shows how effectively evergreens contrast with a background which is light in color.

Any tall dark green hedge makes a very attractive background for flowers; and evergreens, especially, can be grown tall enough to afford effective contrast to tall spikes like lilies, foxglove, hollyhocks, and flowering shrubs like snowballs, flowering almond, broom, oleander, bridal wreath, weigelia and lilacs.

Hedges that have the added attraction of their own blossoms, include hawthorn, buckthorn, spirea, Japanese privet, California cherry and pittisporum, not to mention roses.

Climate, as well as soil, must determine the choice of the variety of hedge to be planted; but once it is planted, it should not be neglected. Hoe it frequently to keep clean and fresh looking and shear spring and fall to keep shapely.
A Sleeping Porch for Every Bedroom
Hans K. Hoerlein

O include an outdoor sleeping room or sleeping porch, so-called, should be one of the important phases of home planning, if a strictly modern home, possessing every degree of comfort, is the desired end. Consider the hygienic necessity of sleeping with windows open, and then realize the discomfort of dressing in a cold room on a winter morning. The single bedroom, with windows fully open all night, is not any more comfortable for dressing in the morning, as far as temperature is concerned, than was the cave of cave-man days. Man has improved on the cave in all respects save that of having to dress in the outdoor temperature in which he sleeps, if he sleeps with the windows open, as he should. Is it not logical to reason that bedrooms should be planned in such a way that one can sleep in outdoor air, and yet have a comfortable dressing room.

The conservation of the coal supply is another matter to be given special consideration in these days. The whole sleeping portion of the house may remain at an equable temperature during the night, when there are separate sleeping rooms which may be shut off from the rest of the house, while the windows are open.

In place of the usual single room, there should be two rooms—one just large enough for the bed, with sufficient space to get around it for cleaning, and the other room for dressing. Bedrooms can be arranged in this manner if the house is planned with this end in view. Judicious planning is necessary, however, in order to get harmonious arrangements. Such details as placing the sleeping rooms to avoid one adjoining the other, utilizing space to best advantage, insuring access of sunlight, or avoiding the side of the house most exposed to the weather, should all be considered.

There are several types of windows now available which open a room completely, whether the
windows are casement, or sliding sash. These may be fitted with hardware which holds the sash in any position, and which are easily handled. A favored type is of the casement style of sash, which is so hinged and operating on a track as to permit of folding the windows to each side, procuring a large, airy opening, which gives that intimate touch with the outdoors that a sleeping porch conveys. In inclement weather, these windows may be closed to any degree desired.

A glass door should be hung between the two rooms. This provides more light for the dressing room; may, perhaps, supply the chief ingress of sunshine, and conveys a pleasing sense of coziness at the same time that it serves a utility. It also links up the two rooms more intimately and adds a touch of spaciousness that the two rooms, completely
Sleeping porch just large enough for beds and a chair or two

separated, might not provide of themselves. The glimpse through the glass door is always attractive, and gives a pleasing sense of openness.

The outstanding feature of this arrangement is that one may sleep in a well ventilated room and also enjoy the comfort of dressing in a room that has not been exposed to the outdoor temperature all night long. During the day the glass door may be kept open and the sleeping room windows closed, thus permitting the sleeping room to warm thoroughly.

Though some people may feel that the old way of a single sleeping room is good enough and less expensive, it is nevertheless quite logical that, if a strictly modern home is desired, all comfort-producing features should be included. Additional expense offers no more hesitation than does a heating system, bathroom fixtures, kitchen conveniences, etc. The times are indicative of an approaching era in which, if homes are to be maintained as a center of family life, modern conveniences of all degrees, with reorganized systems of routine, must supplant largely the custom of domestic services. One of the problems to contend with in the home is the provision for warmth and comfort in the morning on arising. Detached bedrooms with adjoining dressing rooms, that can be kept from the chilling influence of open bedroom windows, will meet this problem.
Keeping the Automobile
Ralph D. Count

"Oh, Pat Kept the Pig in the Parlor, and That Was Irish, Too!"

SINGING under his breath the words of the rollicking old tune, which had been a favorite when he was a college student in days now long past, the Old Builder, with a twitch of the lever that shot the gears into neutral, shut off the engine and brought the car to a smooth and silent stop close to the curb.

Swinging around to face the bride and her husband, who occupied the tonneau seat behind him, he said with a laugh:

"Somehow or other, the words of that old refrain pop into my head every time I see a group of these new style city homes with their automobile compartment built in under the front part of the house—a place that in former days was considered sacred to the parlor, or 'best room.'

"Of course we recognize and countenance it as being a case of Art and Beauty sacrificed to Necessity and one of the hardest problems of our present day architects is to make Necessity appear in as pleasing a guise as may be possible. Sometimes they are more or less successful, occasionally they achieve a dismal failure, but the fault is not wholly theirs for several reasons, the principal one being that the growth of the automobile in public popularity has outstripped Architecture in providing suitable housing designs.

"The suburban resident seldom finds the problem as acute as does the city dweller, but not every one can be a suburban resident. The urbanite must make the best of what frontage he has—and city lots are notoriously narrow. To take from that available building frontage an amount necessary to make an open auto driveway to a garage on the rear of the lot would be ridiculous and so—unless his lot abuts on an alley—the prospective buyer or builder is forced into the expedient which you see exemplified in the row of houses across the street. In other words, he must 'keep his pig in the parlor.'

"To attain this end, various schemes have been used. The one which I dislike the most is something like this."

An unusual placing of the garage. Ornamental gates open to house entrance
Reaching into the inner pocket of his coat he produced therefrom an envelope containing a number of kodak prints from which he selected several, saying:

"Now here is the one to which I referred. As an example of what not to do, it seems to me superb. You will observe that its design is that of the famous California Mission or Spanish type and at first you might think this a view of the rear part of the house—but it is all the front of the house there is; the part that is set to the street. Look again. The ornamental gates open into a garden of flowers, shut off from the view of by-passers by the high, tile-topped stucco wall. At the terminus of the cement walk can be seen the windows of the living room and to the left, the tile-roofed entrance porch. The garage occupies the remainder of the front building line with the exception of space for a cement path leading to the service entrance on the far side of the building. This garage houses two cars and connects by an inner door with the living rooms. The only reason for designing the house in this manner is that the rooms on the opposite side command a fine view of the ocean."

"But," ventured the bride, "I think that is a good reason for putting the garage back on the street. I should want to bank planting against the wall and run vines over the stucco. The glimpse into the court is charming."

"Now here is another picture," said the Old Builder, "showing a tile and stucco bungalow in the next block, on the same side of the street and overlooking the same view.

"Note the unobtrusive manner in which the garage problem has been solved in this instance. Here the cement driveway has been carried back on a level with the rest of the lot until the building line was reached, then a slight pitch carries it down to a basement entrance, where it is subordinated to its proper place in the general architectural..."
scheme. The lines of this home are well designed and pleasing, made more so by the entrance portal and windows enframed in their classic columns." "Yes, I suppose so," sighed the bride, "but the gate and court make one want to go inside." The Old Builder frowned, but continued: "As has been previously mentioned, city lots are usually narrow and these next two pictures show the answer to the garage question as presented by a thirty foot lot.

"In so far as the automobile is concerned the designs of the two houses are practically the same. Each has a full basement underneath, plastered and cemented over its entire area as required by municipal regulations. The small door at the side of the auto entrance is the service doorway and opens to an enclosed passage leading to the kitchen at the rear of the dwelling—thereby excluding trades-people and delivery boys from the basement and the garage.

"The main difference in the two designs, it will be seen, is had in the arrangement of the front entrance. In the house with the Tudor motif a recessed door gives direct access to a vestibule from which a stairway rises to the floor above; while in its companion—the one with the ornamental balcony—an exterior stairway is used leading to a tiled porch from which entrance is had to the house by a door at the left side.

"Now, this picture of that two-story home of brick and stucco shows that the architect here used the same idea in his answer.
to the garage problem. The lot in this instance is a three-cornered one, due to the fact that the street at this point makes a sweeping S curve. This makes the front building line decidedly longer than the other two and, as there was no rear or side area available for the auto, it must go underneath. But his solution has been a very pleasing one, for the driveway, while giving directly to the street, has still been placed at the most distant point from the front entrance and is further secluded by means of shrubbery."

As the Old Builder began to replace the pictures in their envelope, he said, thoughtfully:

"Taken as a whole, I must admit that this method of housing the garage on city property of restricted frontage appears to be the only practicable solution so far evolved. The basic idea is capable of considerable modification, as has been shown, and the problem at present is not so much where to put the odor from the car will penetrate the remainder of the house provided the driver will use discretion in running the engine idle when the car is in the garage.

"Now suppose we roll along, for I want to take you children out to see some bungalows. I overheard you discussing doorway designs a few days ago and I want to show you something interesting."

So saying, he flipped over the contact switch, and the big car glided easily away from its stopping place toward the outlying residential parks.
How Will You Build Your Home?
A Trim Colonial Home

The first story walls and trim are solid white; walls are of stucco; gable ends and the roof are shingled. While the house is not large, it has covered porte cochere, sun room, toilet on the first floor, breakfast room, and all service conveniences.
A Well Planned Stucco Home

Spanish tile roof; frame construction, with stucco exterior; full basement. This home was designed with the special intention of saving steps for the housekeeper in her daily routine. It was also planned so that it could be built on a fifty-foot lot. The plan has been reversed as it was built in this instance.
A White Bungalow

A seven-room home, all on one floor; walls of white cement stucco and white trim; shingled roof, on low simple lines. The side porch gives outside entrance to the three rooms adjoining it. This porch has no roof, but roller shades, or awnings are used for protection, when desired, from the sun.
A Bungalow in Brick and Stucco

A six-room bungalow, with large living room and solarium. The solarium is of brick to the heads of the windows, and the walls are of brick to the line of the window sills, except for the dining room and chamber extension, where it is used only for the basement course. The service portion is well equipped, with breakfast alcove opening off kitchen.
A Six-Room, Two-Story Home

A full two-story house, frame construction, stucco exterior; roof hipped, without dormers. There is a fireplace in the living room. In the dining room are projecting bays for the buffet and for a seat. Kitchen is well equipped. On the second floor are two chambers, a sewing room, bath room, and a large storage closet for linen and bedding, and a cabinet from the hall.
A Two-Story Home, Seven Rooms

Built of brick to the sills of the second story windows, with stucco frieze above for the second story window course. This frieze is a smooth surfaced coating of cement, over metal lath. The living rooms open well together; stairs from both living room and kitchen, with door on the landing; fireplace in the living room; a projecting bay in the dining room, carried only one story.
Decoration and Furnishing
Virginia Robie, Editor

Late Fall Furnishing Notes

VERY room," says an eminent Scotch authority, "should express an idea. A good idea in decoration is like a plot to a story." American homes are apt to express too many ideas, and here is where much of the trouble begins. Too many different effects are aimed at, with the result that the room produces no effect. This condition arises oftentimes from making a room serve many purposes, a necessity in a city house, where space is limited. All the more important if one room is to be library, living room and reception room, that it should be simple. Don't fill it with books to make it a library, and then fill it with bric-à-brac to make it a reception-room. If it must do duty for three rooms make it as restful as possible, and let the living-room idea be paramount. Hold to the Scotchman's idea, only be sure that it is a good one.

Many of the new papers and wall fabrics are of charming grayish-browns and brownish-grays, harmonizing with the popular wood stains of the day. Others are based on autumnal color schemes and show a wide range of warm browns, luminous greens, and soft, rich tones which suggest ripe fruit—pomegranate and apricot shades, and soft, tender purples.

Owing to the marked improvement in the treatment of woodwork, it is possible to use many colors in our houses which would not have been permissible a few years ago. Wood staining is so varied, and there are so many beautiful browns, grays and greens, that it is easy with a little care to obtain a fine harmony between walls, trim, and furniture. Beautiful shades of gray, just tinged with brown, combine with the many neutral wall hangings which are found in greater numbers than ever this season. Brilliant touches of color may then be used with telling effect.

Many people say that we should have nothing in our house which is not of use. The useful thing may be made as beautiful as possible, but its purpose must be apparent. If we apply this standard consistently, what must we do with the vases that will not hold a flower without tipping over or without having all the leaves stripped from the stems? What shall we do with the lamp that is decorative by day and useless by night, the book whose binding must have a paper cover over it before we dare read it, or those relics of a past generation, the upholstered chairs, whose upholstery was never seen because of the linen shroud which kept it from air and sun? Thanks be to the Goddess Hygeia, we are beginning to welcome the sunlight. We are beginning to understand that a window is to let in light and air, not to exhibit
four sets of curtains and two shades.

In a short story recently published, Kipling hit a decorative nail fairly on the head. Describing an empty Georgian house in rural England, the American wife exclaimed, "How marvelous! The drawing-room seems furnished, with nothing in it." To this her husband replied, "It's the proportions. I've noticed it." The entire first chapter of decoration is contained in this scrap of conversation. A delicate compliment has been paid, whether intentionally or not, to the education of American women in artistic matters. The room was empty of everything that the feminine mind is supposed

most to admire in house decoration. There were no pretty effects and no bric-à-brac; nothing but the well-proportioned dimensions of the room, the symmetrical spacing of openings and wall surfaces. Only the mantel and the details of the architectural finish remained to produce dignity, restfulness and charm.

This was a characteristic Georgian room, but the general principle might be applied to all rooms in whatever style. It is not necessary to go into a technical description of the delicate problem of proportion. That is the result of the education of architect and decorator. To give a furnished room proportion and

Where wood paneling makes a dignified and permanent wall treatment
character, not only the mathematical relations of size and mass are important, but the architectural features must have a logical and decorative treatment. Structural forms and lines, the detail of ornament, the amount of light, the quantity and quality of color, and the proper subordination of such accessories as furniture and pictures, must be considered. There must be the proper relation of individual parts to the completed whole. The room should be planned with as much care as an artist would take in composing and painting a picture, in order to harmonize its component parts and prevent the furnishings from becoming more important than the architectural framework. This is the aim of rational decoration.

"In most modern houses the hall, in spite of its studied resemblance to a living-room," says Edith Wharton, whose novels are not one whit more fascinating than what she has written about house decoration and furnishing, "soon reverts to its original use as a passageway; and this fact should indicate the treatment best suited to it. In rooms where people sit, and where they are consequently at leisure to look about them, delicacy of treatment and refinement of detail are suitable; but in an anteroom or a staircase only the first impression counts, and forcible simple lines, with a vigorous massing of light and shade, are essential.

"Where the walls of a hall are hung with pictures, these should be few in number, and decorative in composition and coloring. No subject requiring thought and study is suitable in such a position. The mythological or architectural compositions of the Italian and French schools of the last two centuries, with their superficial graces of color and design, are for this reason well suited to the walls of halls and ante-chambers.

"The same may be said of prints. These should not be used in a large high-studded hall; but they look well in a small entrance-way, if hung on plain-tinted walls. Here again such architectural compositions as Piranesi's, with their bold contrasts of light and shade, Marcolan's classic designs, or some frieze-like procession, such as Mantegna's 'Triumph of Julius Caesar,' are especially appropriate."

Wall papers did not come into common use in Europe until the end of the eighteenth century, when machinery enabling paper to be made in long strips was invented. Before that, wall paper was printed on small squares of hand-made paper, difficult to hang and very costly. Consequently, wall papers were slow to supersede the older modes of mural dec-
oration, such as wood paneling, painting, tapestry, stamped leather, and printed cloth. A little work by Jackson of Battersea, printed in London in 1744, throws some light on papers used at that time. He gives reduced copies of his designs, mostly taken from Italian pictures or antique sculpture during his residence in Venice. The designs are all pictures—landscapes, architectural scenes, or statues—treated as panels, with plain paper or painting between. They are all printed in oil with wooden blocks worked with a rolling press, apparently an invention of his own.

The great development of the European manufacture of wall papers at the beginning of the nineteenth century put an end to the importation from China. The English imitations of these highly decorated Chinese papers became known on the Continent as papiers anglais. The French soon rivaled the English in their manufacture and use. Wall papers of expensive styles and artistic variety were brought to America as early as 1735. Before that time and after, clay paint was used by thrifty housewives to freshen and clean the sooty walls and ceilings, soon blackened by the big open fireplaces. This was prepared by mixing with water the yellow-gray clay from the nearest clay bank.

In Philadelphia, walls were white-washed until about 1745, when we find one Charles Hargrave advertising wall paper, and a little later Peter Fleeson manufacturing paper-hangings and papier-maché moldings at the corner of Fourth and Chestnut streets.

Those who could not afford to import papers painted their walls, either in one color or stenciled in a simple pattern, or paneled, in imitation of French papers;
but none so early as that on the large north parlor—the room in which Dorothy Quincy and John Hancock were to have been married in 1775. It was imported from Paris, and figures of Venus and Cupid made it appropriate to the occasion.

One of the best early papers depicted the story of Cupid and Psyche and is shown in the illustration. This is one of twelve panels illustrating the story of Cupid and Psyche, after designs made by the artist David, on commission from Napoleon.

The modern living-room of the average American house is the largest room of the ground floor. Not infrequently it is twice the size of the dining-room, and is designed on big, broad lines. If there is to be a wainscot in the house, it usually finds a place here, and the woodwork is treated in a frank, broad way. With such a trim, the fireplace must be equally frank. A chimneypiece of delicate or impoverished design would be decidedly out of place, not only lacking in proportion, but in harmony as well.

Good taste is not always considered in these matters, but both architects and owners have a better grasp than formerly of both circumstance and opportunity. The English and American conditions are not the same, and clever handling comes in, in order to reconcile the English idea and the American requirement.

English gardening has had a marked effect on outdoor conditions, and it is a hopeful sign that many of our interiors show an English influence. Our treatment of side walls naturally differs from that in older countries. Our use of wood outside, and paper inside, creates a different situation from the use of a brick or stone exterior and a timbered interior. But now that our forests are rapidly disappearing, we are turning to other materials than wood for exteriors, using more timber in the interior finish. Let us give special attention to a better use of wood in our rooms.

"A satisfactory wall enrichment for the dining-room is wood paneling, extending to the ceiling and entirely around the room," says Guildford Blake. The flat-
ter the panels the more subdued will the wall be, and the larger the effect of the room. If the wainscot be not carried clear to the ceiling it is desirable that it should stop at the same height as the tops of the windows and doors. And here we may speak a word of caution, not to make too free a use of the wainscot cap as a place to set ornaments. Nothing, for example, can be more distracting than an array of dishes on edge extending around the room. If a low wainscot be adopted, a careful architect will see to it that it coincides with the window-sills, for he well knows that continuous lines spell repose.

A dining-room in white is required by the Georgian, Colonial, and Adam styles. In order to save expense the wainscot alone is usually made of wood and the paneling above of plaster; but of course it is preferable to continue the woodwork throughout, if the owner is prepared to purchase only the best workmanship and materials. Anything inferior to these has for inevitable result the cracking and warping of the panels, making for general disfigurement. And cracked woodwork is far more difficult to repair than cracked plaster. Differing but slightly from the white treatment is that of the French styles, to suit which the walls are usually colored a light gray. These styles are extremely formal in effect and require equally formal hangings and furniture.

Dining-rooms in whatever style should not have excessive variety of color. Two, or at most three, carefully selected shades dominating the entire room prove more satisfactory than pied wall paper, sharply contrasting curtains, blatant bric-à-brac, or vivid floor covering. To test the color scheme place on the bare table a bowl of flowers. If, on entering the room, the eye is naturally led at once to them, the artistic success of the room with table spread and surrounded by guests, is assured. Ceilings are bad when crossed by ungainly diagonals. The elaboration of this part of the room should be inconspicuous, for there is no occasion to draw people's eyes upward to it. The lighting is most satisfactory when it is so arranged that the plane of light is low. If any one doubts this, let him compare a room whose every corner is lighted, with a room where the light of candelabra or of a low-hanging lamp falls only upon the table. In a word, there should be no dispute with repose, no misfits, no awkwardnesses, no fault calling for correction to the recurring eye, no ornament demanding constant admiration. Of these the dining-room should be free, if it is to fulfill its function of ministering to bodies when minds should be at ease.
WALNUT AND IVORY

B. E. F.—Am enclosing a very rough floor plan of the new home we are building and am looking for some suggestions and help in planning. I have been a subscriber and reader of your magazine for a good many years and know you have much to offer.

We are building a colonial, two-story house, fronting west. The woodwork is to be in ivory, with oak floors. Would you finish the hand rail and stair treads in natural oak or walnut?

We plan to paper the living room, dining room and sun parlor and tint the walls of kitchen and breakfast room. Will you suggest what colors to use? I have a rug for the living room, an oriental, mixed colors with old rose predominating, also draperies of old rose that I plan to use. What suggestions would you make regarding furniture, shades, etc.? What color scheme for sun parlor? French doors open from living room to dining room; how do you veil them and on which side? Also the French doors to the sun parlors?

I have old blue drapes I plan to use in the dining room. What color facing would you suggest for the fireplace of brick?

Ans.—We are very happy to be of service to an old friend and subscriber.

As to finish of stair treads and hand rail, our preference would be for the walnut stain. Walnut is delightful in combination with ivory. It is quite proper with oak floors, especially if the floors are slightly darkened, before waxing. The living room, with its west and south exposure, would better have wall paper of cool gray tones. We saw today a delightful living room paper in tapestry style, all shades of gray. With so much rose in the rug and the rose draperies, we would make gray predominate in the furniture coverings. If the furniture is to be bought, our preference is for walnut rather than mahogany, especially if the stairs show from the living room. Walnut is charming upholstered in gray velour or worsted. We suggest either gray brick or tile for fireplace facings and a big reed or wicker fireside chair finished in Oxford gray and cushioned in cretonne—big blue, lavender and some rose flowers on a black ground. We suggest brown mahogany for the dining room in
Heppelwhite design, and chair seats in blue leather. The French doors can be veiled with the same material you use for thin curtains next the glass of the windows. We like very much the ivory plain bobbinet, with simple hems. It is shirred on small brass rods that are placed on the sash of the doors, at top and bottom. For the dining room wall we have seen a new paper in tapestry effect, with softly blended tones, introducing hints of blue and rose. This would be lovely with the ivory brown mahogany and blue chair seats. Your blue drapes would just work in nicely. If paper is used on the sun parlor walls, we advise a heavy effect tile paper in a light gray, and painting the woodwork pale green, using leaf green shades at the windows, no curtains, and the wicker furniture painted gray and upholstered in striped linen or duck, green, orange and dull red. The kitchen and breakfast room walls best be painted (not tinted) a primrose yellow, with white woodwork, and gray and white linoleum on the floor. Have curtains of blue and orange crepe or gingham, and table and chairs in the breakfast room painted bright blue with green and yellow trim.

A BRICK BUNGALOW.

A. M. S. being a subscriber of your magazine in which you offer so many useful suggestions, I take the liberty of sending you floor sketch of reddish-brown brick bungalow which we now have under construction and would be pleased to have your suggestions with reference to certain matters pertaining thereto.

This dwelling is to be a bungalow, constructed of hollow tile, and a two-tone mixture of reddish brown face brick, laid in dark chocolate mortar, with slate color shingles. Trim inside to be
red oak throughout except kitchen and bath room in yellow pine. Entry and sun porch floor of 6x6 red tile, and bath in white tile. Entry walls constructed of smooth brick inside to height of 50 inches.

The living room has fireplace mantel full length of window as shown, with bookcase on each side of grate opening, opening to have radiator in place of grate.

We had planned living room in dark oak finish, mulberry drapes, taupe davenport and chairs, rug a mixture of mulberry and taupe.

For dining-room we have Queen Ann set in brown walnut, and trim finished in dark oak.

Rear bed-room furniture is of medium dark walnut. Other chamber, brass bed with bird's eye maple furniture. All walls to be fairly smooth sand finish. All ceilings nine feet.

Reed furniture in ivory for sun parlor.

Would be pleased to have you suggest color of paint for walls in various rooms, best finish for woodwork in chambers, and color of shades throughout, and any other suggestions as well as criticisms you may have to offer.

Also color of drapes and curtains for dining room and color of trim for outside.

Ans.—You have a handsome and well arranged dwelling, which it is a pleasure to consider. In regard to the exterior trim, the ordinary treatment would be to paint or stain it brown, but we think a grayish olive green would be interesting, with the rich coloring of the brick and the grayish shingle. We would carry this into the inside of the entry or vestibule, where it will be very interesting above the brick wainscot and red tile floor. The inside of the entry door will of course match the other woodwork of the living room. The window sash we would paint white, on the outside.

Do not make the oak woodwork too dark. There is an English brown, much used both for woodwork and furniture, which we recommend. We like your plans for furnishing, except that the mulberry should not be too dark, and we do not care for the mixture of mulberry in the rug. We suggest a plain taupe gray rug or one in a design carried in a lighter shade of the taupe, and on the two easy chairs a large design in rich colors of deep rose, olive green, lavender and blue, on a taupe ground, using plain taupe to upholster the backs and sides of the chairs like the covering of the davenport and having pillows of the rich figured material of the plain davenport. Rose colored drapes and wall tints soft gray. On the windows by the mantel use only the rose drapes, and no other curtains. We would make the dining-room wall the same and use blue in combination. The chamber with only north windows should receive the maple and brass furniture and the wall be tinted deep cream or buff. If you can get the right shade in a tint, we would like the other chamber in wisteria shades, which are lovely with walnut furniture.

The sun-room, facing north and east, should have a warm ivory wall, woodwork painted a warm olive green, and the ivory wicker upholstered in cretonne with rich, gay coloring on a black ground.

The window shades should be olive green on the outside and match the wall colors on the inside.
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**Apple Stuffing.**

Put one tablespoonful of drippings and two tablespoonfuls of chopped onion into a frying pan, cook a few minutes and add one quart of finely chopped apples. Cover four cups of stale bread crumbs with water and let stand a few minutes, remove and press out the water. Put into a pan and season with salt, pepper, nutmeg, paprika and parsley. Add one beaten egg. Add the apples, mix well and bake.

**Apple Fritters.**

Mix and sift together one cup flour, one and one-half teaspoonfuls of baking powder, three tablespoonfuls of confectioner’s sugar and one-fourth teaspoonful of salt. Add gradually, one-third cupful of milk and one beaten egg. Pare and core two sour apples. Cut into eighths and then into slices. Stir into the batter. Drop the mixture by spoonfuls into hot fat and fry. Drain on brown paper and sprinkle with confectioner’s sugar. Many people serve fritters with maple syrup.

**Candied Apples.**

Make a syrup of sugar and water and boil down until thick. Add enough red cinnamon candies to give the mixture a good color and taste. Select large, perfect, red apples. Immerse them in the syrup with a fork. The syrup should be nearly cold. Allow the syrup to harden on the apples. Candied apples please the children and are fine to make ahead for holiday times.

**Apple Ginger.**

Wipe, pare, quarter and core sour apples. Chop enough to make two and one-half pounds. Put in a stew pan and add one and one-half pounds of brown sugar, juice and rind of one and one-half lemons, one-half ounce of ginger root, a few grains of salt and enough water to keep apples from burning. Cover and cook slowly for three hours. It may be necessary to add more apples. Prepared this way, apples will keep for several weeks.

**Apple Taffy.**

Melt one cupful of butter in a sauce pan and add three cupfuls of sugar, one-half cupful of cream, one-half cupful of apple jelly and two teaspoonfuls of cocoa. Cook about twenty-five minutes or until a soft ball is formed in cold water. Pour into a buttered tin, mark into squares. When cold, break into pieces and wrap in waxed paper.
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Apple Meringue.
Wipe and core sour apples. Put in a baking dish and fill the cavities with a mixture of sugar and spice. Allow one-half cupful of sugar and one-fourth teaspoonful of nutmeg or cinnamon to eight apples. A little lemon juice may be added. Cover the bottom of the pan with water and bake in a hot oven until soft. Beat the whites of two eggs, which have been thoroughly chilled, until stiff; add two tablespoonfuls of confectioner's sugar and continue beating. Then add lemon juice to flavor. Pile lightly on top of the baked apples, bake fifteen minutes in a slow oven and serve with boiled custard.

Waldorf Salad.
Mix together equal quantities of diced apples and celery, and moisten with a good boiled salad dressing. Chopped nut meats may be added if desired. An attractive way to serve this salad is to select large, red apples, scoop out the insides, leaving enough of the apple meat to allow the apple skin to stand. Fill the apple with the salad and serve on lettuce leaves.

Apple Gelatin Salad.
Mix a pint of gelatin and flavor it with lemon. Chop one cupful of tart apples, one cupful of nut meats, one cupful of celery and season with salt. Pour the gelatin over these ingredients in individual molds. Serve with mayonnaise or French dressing.

Apple Sauce Cake.
Cream together one cupful of sugar and one-half cupful of butter. Add one and one-half cupfuls of spiced apple sauce, with two level teaspoonfuls of soda dissolved in it. Add two cups of flour and one cup of raisins. Add spices as desired. Bake in a slow oven.

Dainty Apple Dessert
Select apples of about the same size, wipe and core. Immerse in a syrup made of one cupful of water and one cupful of sugar. Cook until soft enough that an inserted fork comes out easily. Remove from the syrup. Force one marshmallow and one teaspoonful of chopped walnuts into the cavity of the apple. Put aside until the following day. Remove the skins and serve chilled with whipped cream.

Apple Filling for Cake.
Boil together one cupful of sugar and one-third cupful of cold water without stirring. Have ready the stiffly beaten white of one egg and when the syrup spins a thread from the spoon, add it to the eggs, slowly, beating all the while. Stir in one-half cupful of chopped tart apples and spread between layers of cake.

Another Apple Filling.
Press three baked apples through a sieve. Beat one egg white until stiff, add one-half cupful of confectioner's sugar and beat well. Add the apple and one-half cupful more of sugar, gradually. Beat until very light. Two tablespoonfuls of tart apple jelly, beaten with the apple, improves it.

Escaloped Apples and Rasins.
Grease a baking dish with butter. Put in one-half cupful of raisins and two cupfuls of apples, which have been wiped, pared, cored and quartered. Dust with salt. Add one more cupful of raisins and two more cups of apples. Cover with one-fourth cupful of brown sugar, one-fourth cupful of water, little pieces of butter and one-half cupful of dry crumbs. Cover and bake one-half hour. Remove the cover and allow to brown for fifteen minutes. This is best served cold.

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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"
461 Fourth Ave. New York City
Lighting the Home

"IGHT, first of all created things, still remains one of the most essential to man's spirit and well being, for we, the lights, are really the symbol of home": so the pretty little shaded lamp is paraphrased as saying to the assembled furniture, speaking for the lights in the home. "Chosen with care, from the merest trifle of charm for desk or dresser, to the tall lamp which stands on the floor, we make pretty spots of color and grace during the day, and soft shaded glow at evening, by which Our Family may dress, or write, or play, with the realization that we help, and do not irritate or over-stimulate. We are kind to the faces around the dinner table, and we help the bridge game."

The satisfactory lighting of the home, in the way of artificial illumination, is as yet one of the unsolved problems, if all the phases of the subject be taken into account. As to a source of light, itself, nothing more need be asked, it would seem than can be supplied by electricity, or that may be developed. Whether an intense light or a soft glow is desired, light concentrated on a given point, or diffused over a wide area, a strong high-powered light, or one which may be dimmed almost to the vanishing point, electricity seems to be equal to any requirement which is put upon it. All of these points have been taken up scientifically and commercially, and carried to satisfactory solutions, for the time being, at least; but the matter of design in the use of this wonderful light has not kept pace with the scientific development. Until the psychology of an artificial lighting system can be adjusted, design has neither inspiration nor opportunity for the scope its work must undertake.

The source of artificial illumination, from the beginning of time until the advent of electricity, has been that of a lighted taper,—some kind of a wick saturated with oil or wax to give a tiny ray of light, and these tapers multiplied in number or increased in size to meet the need. So strongly has this fact held the mind that we have been slow to find a means of expressing a glow of light which illuminates, as does electricity, and have confined this wonderful glow in candles, great and small, and still measure it by "candle power." Indirect lighting, by which the illumination was entirely by reflected light, first succeeded in breaking the psychology of the candle.

When "indirect lighting" with the light hidden behind reflectors was, on its introduction, hailed as the solution of the problem, the first drawback was psycho-
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logical. While people admitted that they could see better than in direct light, yet they were not satisfied because they could not see the source of the light, and the metal bowl filled with reflectors has been largely superseded by the transparent bowl. Following these lines have come many types of luminous bowls, suspended well above the eye, which give illumination to the room in a very satisfactory way, without unnecessary glare.

The manufacturers of lighting fixtures have not yet recovered from the direct effects of the war. Glass factories were taken over for munition plants at that time, and it was not possible to get the glass which must play so large a part in the design of shades and bowls. As a result has come the vogue of the "ball lamp," originally of metal, to which small shades are being added.

The luminous bowl, which both reflects and transmits the light directly, has been carried to a fine state of development. While very thin, it is built up of three layers of glass, of which the inner one is a highly reflecting surface without hindering the passage of light. The middle layer gives the body color, and the outer surface the superficial design.

Much is now possible in the way of color effects in the lighting by which, as if by magic one may be able to cater to one's moods with a warm rosy light or a cool restful effect. Supplanting a general effect, one may use light merely for an ornament, to provide a colorful spot on a mantel, or to give life as well as light to a choice bit.

**Twilight Lighting**

Some time ago one of Keith's contributors told of a home where there is installed a soft lighting system or "twilight" as his host calls it. This room is described as having two systems of illumination controlled by separate switches. The bright lights were shut off, and with another click of switch "the room was alight with a soft, dim glow proceeding from stained glass lanterns 12 by 6 inches with a 3-inch 'V' drop, set into the beams of the ceiling at each corner of the room, and also in the two pillars at the entrance to the fireplace alcove." Since this mention elicited inquiries from our readers we are giving a description of this soft lighting effect and how it is obtained, through the courtesy of Mr. R. D. Count, with sketches showing how it is installed.

This lighting effect is obtained, it seems, by making a suitable opening in the bottom face of the "beam"; this opening to be about 12 inches long and of a width slightly less than the bottom face of the beam. Two sheets of stained or colored glass are fastened in the opening in such a manner as to make a broad V; V-shaped pieces of glass closing the ends. The central edge where the two sheets of glass come together should be about 3 inches below the face of the beam. In a similar way light bulbs were set in the vertical box posts of the fireplace with sheets of glass in the sides.

While this installation was made in the false beams on the ceiling,—a constructive, or rather a decorative effect, not so much used now; such an installation could be made in other ways. Such a panel might be set in the ceiling with the light bulbs set up between the ceiling beams.

A soft glow in a room, with side lights and reading lamps where the lights are wanted, give a pleasing and satisfactory lighting in a room.
To many families, home building means years of planning that they may build wisely.

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Winter Building

Here is still a certain amount of prejudice against building in cold weather. If the cold months must be cut from the building season, this makes building one of the most "seasonal" of the big industries, when in reality only a few of these lines are at all dependent on the season, except as people all flock to the paperhanger or the painter at a preconceived time. It is only the exterior shell of the building that is under dominion of the weather. When a building is once enclosed, winter is an even better time than summer to do the work. This seasonal nature of the work adds excessively and unnecessarily to the costs, in the industry.

Under proper conditions all kinds of building can be satisfactorily done at any season, however. Old builders tell tales of the difficulty found in tearing down buildings which they remember, or records show were built during winters, memorable as unusually cold seasons. One builder recalls the brick walls of a warehouse in a Canadian city, being taken down with very great difficulty, which had been built during a particularly hard winter when the brick were laid with the temperature hovering in the neighborhood of 30 degrees below zero.

Six to Eight Months' Work

The great bulk of the work done by general contractors, it is stated, is accomplished between May and October, inclusive, a period of six months. If this time is extended to include April and November, it still leaves a slack period, which is very expensive to the industry, for it is an obvious fact that the time thus lost must be paid for by the public. A more equitable distribution of work through the year would operate toward more satisfactory conditions for every one concerned. It is the annual income which must supply a living wage, and every day of enforced idleness increases the wages which are required for the days of work. It is the intermittent work, where regular wages can not be expected at the end of the week or month which makes much of our seething unrest.

Economic Advantages

While most people prefer to begin building in the spring, there are advantages in starting the job early enough in the fall that the masonry work can be done before cold weather begins, and special protection is necessary; thus getting the building enclosed so that the workmen can complete it without hurry or worry during the cold season, when there is generally nothing rushing the work and it can be properly done.

Fire Test of Building Materials

An interesting fire test has just been made, which covered primarily concrete products, but which, incidentally, shows some interesting things. A small building was constructed of concrete blocks, stuccoed on the outside. Old footings were used in part, and some of the new footings
There’s cause for Thanksgiving—

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Instead of ordinary lath insist upon

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were carried only to the grade, since this is only a temporary structure. Ceilings were of a patented cement plaster over metal lath, applied to the under side of wood beams. The roof was hipped, with the usual construction, 2 by 4 rafters, and covered with cement asbestos shingles. The soffit of the eaves was plastered with cement plaster over metal lath, carried to the shingles. Inside the structure, in the walls of which, openings had been made for ventilation and draft, was built a fire of great intensity. The great pile of kindlings and heavy timbers were saturated with inflammable material and set fire. The fire companies of the city were assembled and, when the fire was at its hottest, water was turned into the building.

The concrete blocks sustained the test very well. The chief cracks were found over the footings carried only to the grade, where the water had carried away the earth, allowing the wall to settle at the same time that the heat was applied. The cement plaster of the ceiling, which was freshly laid, scaled the surface coat, but did not expose the metal lath. The fire did not go through, and the roof was left in perfect condition.

The outstanding results may be summed: Look to your footings. Cement plaster will give a certain amount of protection to a ceiling. Concrete blocks scarcely cracked where stone would have been splintered.

**School for Apprentice Plumbers**

The Industrial Association and the Master Plumbers' Association of San Francisco have established a school for the training of apprentice plumbers. There are now some 60 of these boys who are working efficiently for master plumbers, and who return regularly, after each four weeks on the job, for further instruction in the school. They attend school for two weeks out of every six. They are taught how to read plans, how to take measurements, how to caulk joints, how to ream and cut pipes, and the names and uses of all the different materials and tools connected with the plumbing industry. To supplement this practical instruction, arrangements have been made with the public school department whereby these students attend evening classes and are taught mechanical drawing, mathematics, hydraulics and sanitation.

When the students go out to actual jobs, they remain under the supervision of an apprenticeship committee appointed by the Master Plumbers' association, and are handled on a merit system. In other words, it rests with the boy himself as to the progress he makes. The committee offers him the opportunity of taking an examination for advancement as often as he believes himself entitled thereto.

"As to concrete results," said Mr. William P. Goss, president of the Master Plumbers' Association, "a group of fourteen students from the school were taken by me and put to work installing the plumbing in two new houses in the residential district of San Francisco. Under my supervision they installed all the plumbing in these two houses in three days. This included the running of soil pipe, the installation of vent pipes, water pipes, and gas pipes, together with the caulking of joints and the threading and cutting of pipes necessary to be used. Besides being done in this brief period of time the job was done perfectly."

---

**HOW WOULD THIS MANTEL LOOK IN YOUR HOME?**

Just think how much this handsome Colonial design mantel would enhance the beauty of any of your rooms. Why not plan to put in a HORNET MANTEL in your living room? It will make it cozy and warm in winter and attractive all year round.

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This Breakfast Set does not require any special setting. It can be used in breakfast alcove, kitchen on porch or lawn.

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8 Lake St., Crystal Lake, Ill.
Manufacturers of High Class Garden Furniture, Pergolas, Arbors, Trellises, Lattice Fences, Seats, etc. Free Literature
The Age of Liquid Fire

The age of liquid fuel has arrived, according to William T. Dean in the Heating and Ventilating Magazine. Our navies and merchant marine have adopted oil fuel extensively, and our railway systems are rapidly changing to the use of oil, or electricity. Our tremendous automotive development is directly the result of the advent of the Age of Oil.

The great future for fuel-oil lies in its use in heating homes and other buildings where for health and esthetic reasons it is desirable to eliminate the long train of evils incident to burning coal in an isolated plant.

After adding to the producing cost, the heavy tolls of transportation, distribution and the profits of a chain of jobbers and retailers, the cost of a ton of anthracite coal in the bins of a household reaches an almost prohibitive figure.

But the householder’s troubles do not end here. He must clean his heater several times each year and proceed to shovel the costly mess into a hungry maw two to four times a day and then dig out a goodly percentage in the form of ashes and laboriously and expensively dispose of same. If he is fortunate enough to employ a janitor, houseman or chauffeur, he must pay directly or indirectly, for eight months for the privilege. How different is the home with the automatic janitor!

A tank is buried in the yard, walled into or below the basement floor, with no loss of space whatever. A tank truck drives up, connects a flexible hose to the fill line and in ten minutes the supply is in without noise, dust, odor or stain of dirt.

By fuel-oil is meant the residue, the by-product, after the removal of the expensive distillate, such as gas-oil, distillate, kerosene, etc. Many very good oil burners are confined to these lighter distillates.

With the coming of the cooler days of fall one need not dread starting the furnace, or letting the fire go out when the warm spring days come, nor worry over the wastage of fuel in these processes. It is only necessary to light the gas pilot flame in the fall, and keep the fuel tank filled, and thereafter the thermostat will start and stop the fire, maintaining the house temperature at the desired point and with no waste of fuel. And does the tired business man, beset by thoughts of the price of wheat or the income tax, hurry into the basement mornings before shaving to feed a modern dragon and cart away its excreta? He does not. He sleeps a half hour longer and gets up to find his home warm, his wife good humored, and all the children happy and well.

What Does It Cost?

"Less than an automobile to buy," is the answer given, "and in most cases less than coal to operate."

"What is the oil equivalent of coal?"

"For the same amount of heat delivered
USEFUL
as well as ornamental this
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We guarantee satisfaction, or your money refunded. The adjustment feature places our phones on a par with the world's greatest makes. Our sales plan eliminates dealer's profits and losses from bad accounts, hence the low price. Better phones cannot be made. Immediate deliveries. Double 3000 Ohm sets, $5.98; 1500 Ohm single set, $2.50. Circular free.
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A simple device which completely controls the drafts, doors, and dampers, even if left wide open, successfully preventing overheat and its consequent dangers, independent of human aid, electric batteries or auxiliary power; insures uniform temperature with utmost economy of fuel; makes one firing every twenty-four hours sufficient.

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Our new booklet, "The Science of Healthful House Heating," sheds a new and interesting light on this vitally important subject. Write today for a copy and learn "Why" the difference.

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to the home, 100 gallons of fuel-oil is equal to a ton of good coal, but remember that with the automatic janitor there is a limitless reservoir of heat waiting to flow into the home, hence when a sudden cold snap comes, the gate opens and the house remains at the chosen temperature. With coal, however, unless extra attention is given, the house chills and fuel is saved at the expense of comfort (and colds). Because the automatic janitor stands ready to supply every demand, the actual equivalent to coal is from 110 to 125 gallons per ton."

An Oil-burning Installation

A word of explanation should be given to those who, owing to the possible coal shortage, and all the inconvenience, discomfort and worry, financial or otherwise, which the winter may bring, are installing oil-burning apparatus. The prospective user of oil should not think that a change from the use of coal to that of fuel-oil means nothing more than a change of grates and burners. It is true that as a rule, coal burning furnaces may be readily adapted to the burning of oil. But the owner needs to inform himself fully on the changes to be made in the furnace itself, as well as the other necessary equipment, such as pumping units, burners, controls, and oil storage requirements, in order to adapt the entire equipment to the especial type of apparatus installed. Unless the manufacturer's specification be carefully carried out, a successful installation can hardly be expected. The prospective user should understand, among other things, that burning oil is an intermittent process, while coal burning is a continuous process, and that carrying the heat product of either process is a matter of regulation. With oil, this control is effected through the motor; with coal, by the draft dampers. Therein lies the cardinal difference between the two systems.
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SPLINTERS AND SHAVINGS

Protect Your Home

What answer do you give to these questions? If you go over them conscientiously, you can vividly see your opportunity to more adequately protect your home.

1. Have you accumulated old paper or rubbish in the cellar?
2. How about the attic; old clothing, broken furniture, etc.?
3. Are all closets and spaces under stairs kept clean?
4. Any dirt-collecting sheds or any rubbish in the back-corners of the house?
5. Do you use wooden ash boxes or barrels?
6. When were the chimneys last cleaned?
7. Are stove pipes protected where they pass through partitions, closets, or attics?
8. Are all walls behind stoves, and floors beneath, protected with metal?
9. Do you know whether your electric wiring will continue to safely carry your electric appliances?
10. Do you have an approved stand for the electric iron?
11. Are the "dustless mops" and oily floor cloths kept in tin cans or are they in the closet or table drawer?
12. Do you use safety matches, and are they out of the children's reach?
13. How do you dispose of rubbish? Do you use a metal incinerator?
14. Do you have at least one good fire extinguisher in the house, preferably one on each floor?
15. Is your home adequately insured at replacement value?
16. Is the furniture, silverware, household equipment and clothing of the family properly insured?
17. Do you keep a list of your household effects, preferably some place other than in the house?
18. Do you know where the nearest fire alarm box is; do you have the number of the fire department posted by your telephone?

Common Causes of Fire

Spontaneous combustion from oily rags, waste and rubbish.

Thoughtless handling of matches, cigarettes and cigar stumps, chemicals, and electricity.

Are we as careful as we should be? Are you? Am I?

"Build a Home" Movie

"Model homes" have been built in various parts of the country and for various reasons, including both altruistic and advertising. Irrespective of the motive which has been back of such building, these houses have, generally, without exception, excited a keen and widespread interest in the community. The interest, in the nature of the case has been local in extent. Such a building project has been, or is being filmed, according to advices which have reached us. It is located at a beautiful spot in Glen Ellyn, Illinois. The scenario is built around a human story; heart gripping and dramatic, we are told; "the kind of story that makes you cry one minute and laugh the next." The scenario has been written and the film directed by those recognized in the film world. Through the story runs the thread of the romance of building one's own home. Incidentally, yet skillfully woven through the story the important phases of building appear; the problem of the investment, selecting the lot, the architect, the contractor, the choice of building materials, and the selection of furnishings. It is intended to carry one through the personal experience of building a home. Since most people build but once, if they can obtain even a small personal contact with this big problem, it may help to solve some of the building problems later. More than that, a certain familiarity with a subject, under good conditions takes the fearsomeness out of it, and gives one courage to attempt such a project.

If this film corrects some of the popular misconceptions of building, and places in the back of the mind of the homebuilder-to-be a consistent program, it will be a distinct achievement for the country in improving the home to be built. The film holds the excited interest, we are told, from the beginning to the end.
WHERE TO OBTAIN BUILDING MATERIAL AND NEW HOME EQUIPMENT

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Associated Metal Lath Mfgs., Chicago, Ill.

Metal Building Corners.
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Ready Cut Houses.

Refrigerators.
Herrick Refrigerator Co., Waterloo, Ia.

Roofing Material.
Credo-Dipt Co., Inc., 1022 Oliver St. No., Tonawanda, N. Y.

Sash Balances.
Caldwell Mfg. Co., 6 Jones St., Rochester, N. Y.

Screen Cloth.

Sewage Disposal.
Kewanee Private Utilities Co., 123 South Franklin Ave., Kewanee, Ill.

Shades (Porch and Window).
Aeroshade Co., 976 Oakland Ave., Waukesha, Wis.

Sheathing Board.

Shingle Stain.
Berry Bros., Detroit, Mich.
Credo-Dipt Co., Inc., No. Tonawanda, N. Y.

Stucco Board.

Vacuum Cleaners.
Kewanee Private Utilities Co., Kewanee, Ill.

Varnish.
Berry Bros., Detroit, Mich.
Low Bros., 465 E. 3d St., Dayton, Ohio.
Johnson & Son, S. C., Racine, Wis.

Wall Board.
Beaver Board Co., 653 Beaver Rd., Buffalo, N. Y.
Upson Co., 181 Upson Point, Lockport, N. Y.

Waterproofing Compound.
Philip Carey Co., Cincinnati, Ohio.

Water Supply System.
Kewanee Private Utilities Co., 123 South Franklin Ave., Kewanee, Ill.

Window Hangers.
Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.
Whitney Window Corp., 133 E. Lake St., Minneapolis, Minn.

Wood Stain.
Berry Bros., Detroit, Mich.
Johnson, S. C., & Son, Racine, Wis.

MISCELLANEOUS.

Ash Receivers.
Sharp Rotary Ash Receiver Co., Binghamton, N. Y.

Ironing Devices.
American Ironing Machine Co., Chicago, Ill.

Medicine Cabinets.
Hess Warm. & V. Co., 1217 Tacoma Bldg., Chicago.

Weather Strips.
Chamberlin Metal Weather Strip Co., Detroit, Mich.
The year which is just passing has been one of unprecedented building activity, especially in homes. This, despite strikes and all the disadvantageous conditions. A nation-wide survey for the first nine months shows that the building construction throughout the United States has reached the total of 3,000 millions of dollars. More than that, according to the S. W. Straus & Co. survey, a wave of home building has swept the entire country. These statistics show some rather unusual things, three of which are of particular interest.

More Americans became home owners during this year than in any other year of history. About a billion dollars has been spent this year on homes alone.

New buildings in the United States this year represent the expenditure of about twice as much money as in any previous similar period in the history of the country except 1920 and when the October reports are in, that record year will be surpassed by a billion dollars. During the month of October $300,000,000 was added to the building total, bringing the ten months building operations up to the tremendous sum of $3,300,000,000. This record for October was made, notwithstanding car shortages, freight embargoes and congestion of transportation, which especially marked that month, a truly wonderful performance.

These facts are among the best proofs that America is economically "on its feet." It is worthy of note that building activities exert a stimulating influence on nearly every line of business.

The tendency of general building costs during October has been toward higher levels and reports from all parts of the country show that we have been going through a period of steady, continuous advancement in construction. Wages generally have been advancing in the building trades, but relations between employer and employees are better with fewer disturbances than for some time past. The upward trend has been in keeping with the general tendencies in evidence in nearly all lines of industry since midsummer.

May we repeat, that it is accepted as a fact that home owners make the most stable and responsible citizens. In many ways—more, indeed, than the casual observer would suppose—home building goes hand in hand with citizen building. It is this phase of American life that assures security and makes one feel that this country has a firm, economically and spiritually, when its homes are multiplying at such an encouraging rate. While the building of 1922 has done much toward easing the housing situation, there is yet a vast amount of home building to be done. Let the good work go forward.
Arches opening to the terrace. The window hangings add a colorful note.
Spanish Influence
Margaret Craig

DOMINATING element in the growing popularity of Spanish architecture is the appeal which it so often makes to that sense of the noble and the enduring; especially is this true in domestic architecture. The charm of its broad wall spaces, agreeably broken by arches, and well proportioned openings; its wrought iron grills and other details that recall the days of mystery; its colorful window hangings that enrich the ensemble, all make their contribution.

A residence which peculiarly embodies these points of value is shown in the accompanying group of photos. It is built in the charmed circle of Pasadena, and was designed by the architect Reginald Johnson, who has, over and over again, proven his artistry in many of the beautiful homes of Southern California.

Located on the outskirts of the city, it has an outlook of mountains and meadow lands that are broken by the picturesque eucalyptus and stately live-oak trees. It is placed quite far back on the lot and its grayish white plaster walls are agreeably set off by the broad space of clover lawn.
which is bordered by masses of southern shrubs.

A flag-paved walk leads at an angle from the broad automobile drive, to the front entrance, and thus does not break into the restful expanse of the lawn.

The front entrance has a feeling of serenity, composed, as it is, of the stately arched doorway and heavily paneled door. This is flanked on either side by the deep green of French box trees,—their mountain fragrance contributing to the country atmosphere of the home. The window and other door openings are deeply set in the walls and cast pleasant shadows on the white surface. Richly colored canvas hangings are used at the sleeping porch openings on the left of the facade. In several inconspicuous places, small decorative penetrations occur that add to the interest and to the Spanish effect of the whole.

The automobile drive is bordered with pansies and flowering shrubs and it leads straight into the service court. The wooden gateway is of a simple design and is in keeping with the tall, enclosing...
white walls that are softened by trailing rose vines. Cocoanut palms are planted at regular intervals along the side of the walls and become a decidedly important feature in the landscape gardening.

Exceptional in its tasteful structure and general appearance is the doorway to the kitchen. The door is set in and further accented by a simply constructed overhang. This feature, in addition to the casement windows of the children's sleep-
Near the walls are the hollyhocks and rose bushes. Pink blossoming camellias and snapdragons are interspersed with the plants on both sides of the terrace.

The front entrance of the house, simple and dignified, leads into the front hall, which is so arranged by reason of its central location and slight elevation as to furnish very delightful vistas into the different sections of the home.

At the left of the entrance is the spacious living-room. A few steps below the house level on the south is the long garden court, below the terrace steps, in which is seen the blue green pool and the oak beyond. At the right is the dining-room, on the same level as the hall. The glass doors opening to the terrace are bordered with a wrought-iron design pierced in conventional shapes; mediaeval knights, ships and castles. They form a frame for the lovely garden beyond.

In consequence of the two sets of brocaded curtains and as a result of its lower elevation, the living-room gains a sense of remoteness. It is also a restful room, because it is furnished with the utmost simplicity, with due regard to the elimination of unnecessary details.

The fireplace which forms the principal feature of the room is outlined with a simple border of cement having a conventional floral design. The space above the mantel has been treated individually, by placing a Wachtel landscape over a golden brocade.

Mulberry velvet covered couches, one on either side of the fireplace, render a center of cosiness. The mullioned windows with wooden blinds are in the corner wall spaces, and built-in cupboards are beneath them, above the side couches. A second comfortable group is formed by the grand piano and the carved music chest, while a third group is secured by the arrangement of the desk, near the French doors to the terrace, together with a reading table and recessed bookcases.

The dining-room at the right end of the hall is very satisfying. Two hand
carved handsome buffets are opposite the hall opening, and are symmetrically decorated by two pairs of tall silver candlesticks holding white candles. The dining table, hand carved, is long and narrow.

The buff walls and vaulted ceiling are set off by the handsome flame colored hangings and gold gauze casement curtains. Very tall candle sconces are used as side lights.

From the central hall of the house the stairs lead to the upper floor. The three window openings on the stairway light the stairs very happily. It might be well to add that the situation of the servants’ quarters, with dining room, bedrooms and bath on the first floor next to the kitchen, necessitates but one stairway.

At the head of the stairs are two bedrooms, and at the end of the upper hall is the very important nursery,—a room made most attractive by color, plenty of light and space, and an abundance of toys. The walls are buff and the woodwork is a Dutch blue, a cheerful color scheme.

In the center of the room is a glass topped table to be used for games and for the children’s supper. At the left is a tall toy cabinet and at the right is a children’s victrola. The windows, opening out upon the garden court, are draped with cretonne that has a design of flowers and fruit in blues, golds and lavenders. Below the windows are softly cushioned window seats, that hold toys and games. Between them is a child’s desk.

Two easy wicker chairs and a chaise longue, so convenient for children to rest on, are covered with cretonne similar to that used at the windows. A soft mouse colored rug covers the floor and deadens the sound of running feet. This playroom is only part of the children’s section. It opens into an outdoor sleeping porch, a bath-room and a lovely outdoor balcony overlooking the orange trees.

Out of doors is the children’s playground, reached through a path beside the garage. It is supplied with a merry-go-round, teeters and sand box.
HAT is Colonial architecture? What is understood when someone says that he is building a Colonial house? That the house will be painted white, or will have white trimmings? Does the term tell one anything else? Nothing seems to be more generally popular than Colonial building. Perhaps this popular favor is in large part due to the very vagueness of the idea, for certainly the term "a Colonial house" covers a very wide range.

Let us see what "Colonial" really means. In order to get the mental background for the Colonial home which we are building, or may want to build, let us go back to pre-Revolutionary days, on the Atlantic seaboard, and see what building was being done when New England, New Amsterdam (or New York), Pennsylvania, and the Virginias were colonies of Great Britain.

In the later Colonial days, just preceding that fateful day in July of 1776 which we celebrate as the birthday of American liberty, thirteen worried but fairly prosperous colonies had grown up along the fringes of the Atlantic. The wilderness had been subdued in a measure, and a land of plenty was appearing. "The old country" was still "home" in name, and it was to England and Paris that the people still looked as the source of education, of the larger civilization, and the added beauty and luxury of living, and especially for the furnishings of the home.

The Georgian Period of architecture was reigning in England, under the influence of Sir Christopher Wren. It was a Classical renaissance, where the old Greek Orders of architecture superseded the waning influence of the Gothic, and St. Paul's Cathedral in London, under the skillful hand of Sir Christopher Wren, followed the Renaissance with its Orders, and horizontal lines, rather than the Gothic of the older English cathedrals. Many beautiful Georgian houses were built in England, with furniture designed and made by the Adam brothers, Chippendale, Sheraton, Hepplewhite, and many others, as time progressed.

When a fine home was built in the Colonies, the furniture came from Eng-
land, probably, and the mirrors, wall paper, and ornaments from Paris. Much fine furniture was brought over to this country, which American builders, Colonial builders, studied, and copied in its simpler parts until, a generation later, there grew up a group of American builders with trained eyes and with the skillful fingers of the master craftsman, who had also fine ideals in craftsmanship and design.

Boston has always been the important city of New England, and was especially influential in Colonial days, but Salem, a little to the north, with its harbor for ocean-going vessels, was rich and progressive. The wealth of the Indies was poured into her ports by her shrewd old sea captains.

In Salem many fine homes were built during this prosperous period. To Samuel McIntire, a local builder, most of the best work throughout New England is ascribed. Many of these houses are along similar lines, but each of the old colonial worthies evidently wanted his home to be finer than any built before, and the builder profited by his past experiences. While many of the best houses in this vicinity were built by McIntire, the furnishings were largely imported,—as we should say. They came either from the East or the West; they were brought by the sea captains from China and the Orient, or they were ordered from the “old country,” from England or France.

A surprising number of the fine old houses, with their furnishings, were still standing and in good condition when the revival of interest in early American building began. Salem immediately became the Mecca of architects and architectural students, measuring and studying these houses, photographing them, and reproducing all the details accurately in measured drawings. Some houses which were falling into such disrepair that they were to be taken down were first photographed, measured drawings of the details were made, and then the fine old wood work was all carefully taken out, to be used in new houses under construction.

The public spirit of Salem gave all possible cooperation to these students and architects. Perhaps no individual has done more in preserving the record of this work than Mr. Frank Cousins, who has photographed, probably, every scrap of fine woodwork that is still standing, and before any was taken down he preserved it on a photographic plate. He

One of the finest Colonial entrances, built 1816, Corinthian order.
holds the records in his files, and it is through his courtesy that we were able to obtain these fine photos.

One of the best of these houses—still in fine condition—is the Pierce-Nichols house, the entrance of which is shown. This was the home of a Salem sea captain, whose ships, coming from the Indies, docked at his own counting house at the foot of the garden, where the river at that time brought them. Fascinating stories of the old days were told to the students as they made the measured drawings of its beautiful details. The house itself was built soon after the revolution, but the "new part," as it was still called, was not completed until about 1800, when McIntire finished the rooms at the right of the entrance, upstairs and down, to welcome a bride to the house. The mirror over the mantel in the parlor was ordered from Paris, built to fit the place, and the wall paper also came from Paris. These rooms, the parlor and the bedroom over it, have remained among the finest work of the period. The whole house was very good. At the rear a paved court was surrounded on two sides by the carriage houses, one and two story buildings for the housing of the various family equipages used at the time, arched openings to each giving the effect of a colonnade. Beyond this was the arched entrance to the garden, which in the early days led down to the river and the counting house.

The English Georgian building centered around the classical Greek orders, which were distinguished, to the initiated at least, by their distinctive columns and capitals; the Doric, very simple; the Ionic, with its two scroll-like flutes; and the more elaborate Corinthian. The Greek orders were developed in stone and marble, and used in monumental buildings. The American building was largely of wood, and was essentially domestic in type.

The glory of the Colonial building is the deft and beautiful way in which the scale of the Greek orders is worked down to the lighter material in the use of wood, and full advantage taken, in the subtle moundings and curves, of its easy working qualities.

The Colonial entrance was the chef-d'oeuvre—the focal point as well as the masterpiece of this early building. Here the builder had opportunity for all his art in design and for his finest craftsmanship, and each reacted on the other. The lines of the house itself were usually simple and dignified, often even plain, but the entrance was made as beautiful as the opportunity permitted.

The Whipple doorway, in Salem, built in 1804.
The details of the entrance were of wood, even though the house might be of brick. The entablature and columns or pilasters of one of the Greek orders formed a portico, even though the reveal might not be more than the depth of the pilaster, or might be extended to a beautiful semicircular porch. Oftentimes there was a pediment over the entablature, sometimes a railed balcony. Usually the window over the entrance becomes a part of that dominating feature of the house. Often this is a Palladian window, the narrower side windows repeating the side lights of the entrance, capped by the arched head of the central window.

In some of the more elaborate entrances the order of the entrance portico is repeated at a smaller scale about the side lights and the door itself, with a beautifully proportioned fan-light over the whole. One of the best of this type of entrance is shown in the photograph. The order is Corinthian, and very well carved. Most of the glass is the old blown glass, with its multitude of reflections.

The stately posts on either side the gate become a feature of the entrance as seen in the photo of the Pierce-Nichols house, though the posts are repeated the whole length of the fence.

The columns at the entrance of the Pierce-Nichols house are Doric with the characteristic entablature and pediment.

The development of the Colonial building, and especially of the Colonial entrance, is an illustration of the way any lasting type of architecture has been built up. Such types do not spring up in a day. They come from building the same type over and over again, and in each repetition rectifying mistakes and improving the design of the earlier work, until a satisfactory solution has been attained.

Photographs of the fine old examples of our Colonial building should be available—and they can be found in any good library—and should be increasingly familiar to those who are planning to build along Colonial lines. Not that any one should slavishly follow the old lines, but, in order to follow them intelligently, photographs of the best of these old buildings should be studied, as the source of its inspiration.

What Every Woman Doesn’t Know
May Belle Brooks

It is appalling to consider how ignorant many of us are about things which we handle every day, and yet most of us go through life handling fire, electricity and gas every day without misadventure. Occasionally some catastrophe occurs, or some unusual phase appears which enlightens us along these lines. I remember as a bride fresh from the business world, how blithely innocent I was of all the forces with which a woman in the home has to deal. I had taken for granted that, of course, everything connected with a house was fool-proof. To me a light, electric or other, was a light and “it was nothing more.” After a near-tragedy, where a friend received a shock while using an electric cord which had defective insulation, while standing on a damp floor of a basement, I was given some definite information about this thing, electricity.

First, always be sure that electric appliances do not receive hard usage, and that the insulation is not broken. The delicate mechanism is very substantial
and steady in its operation if given a fair chance. Do not put it under unnecessary disadvantage, and do not overload the current.

Water is a good conductor; if you stand in water and touch a current a shock is likely to follow which will blow out a fuse, and possibly give you a shock besides. Be careful, in standing on a damp floor and using electric appliances, especially if the insulation is not perfect.

I was advised not to use the electric washing machine or to iron in the cement floored basement without standing upon a perfectly dry surface—a board, or a heavy rug, or, preferably, a rubber mat. Dampness is a good conductor and there is apt to be a certain amount of moisture in a cement floor next the ground. A friend of mine received a severe shock while cleaning a light bulb in the basement. She had used a damp cloth, which had come in contact with the metal screw portion of the bulb. It is safest to remove the bulb before cleaning, and then to see that no water touches the metal part. Never put light bulbs into a basin of water to clean them. It spoils the operating apparatus of any electrical device to immerse it when it is being washed.

In wiring a house, the cellar lights should be controlled by an upstairs switch. Trouble on the line, or a high voltage might mean a severe shock in turning on a light while standing on the basement floor. All basement lights, as well as those in the bathroom and kitchen should be equipped with a non-conducting porcelain socket. It is better not to place the electric light near the tub in the bathroom, where some one may get a shock by turning on the light while in the tub. It seems that some people are more susceptible than others to the electric current and many women might stand a voltage that would prove disastrous to another. Cases of very severe shock from such causes are comparatively unusual, but precautions should be taken against their occurrence.

Watch the electric iron carefully, and if there is the least sign of trouble, disconnect immediately and do not use until it has been repaired or inspected by an expert. Never turn off the iron, or any other electrical device, at the socket, if you use an ordinary light plug for the purpose, as the latter was never intended to disconnect so strong a current. Disconnect at the iron instead. The safest plan, as well as the most convenient, is to have a special plug installed for all such appliances, with a small red bulb indicating when the current is on, rather than depending upon the lighting connections.

Although not bearing upon the question of safety, it might be well, for economy's sake, to suggest that we be more careful about striking the bulb, which may break the fine, inner wires. We heedlessly put a number of our light bulbs out of commission by swatting the flies that so delight in settling upon them.

Most of us by this time, realize the dangers of gasoline, but many do not know that the presence of fire is not the only source of catastrophe. A woman in our vicinity was seriously burned about the hands and face while washing a silk garment in gasoline out of doors on a cold day. She was rubbing and slapping it with considerable friction when it burst into flame. It was a case of explosion from the combination of friction with silk generating a spark which ignited the gasoline—static electricity is the technical term for this phenomenon. Most automobile owners understand the fact that a too refined grade of gasoline or kerosene is to be avoided for some cars. It explodes more readily than the cruder sort, and if one uses a stove burning either of these fuels, see that it is the quality recommended by the manufacturer. It is very rarely that an oil stove gives such trouble, but care should be taken that a
wick does not become thin in places, so that the fire is not extinguished when turned down, and might reach the oil. Spontaneous combustion is the cause of many large fires. It is a force so sinister because so unsuspected, and when one considers the carelessness of the average houseworker in regard to the disposal of oily rags or waste, it is a wonder that more houses do not go up in flames. Any grease-soaked rag is apt to cause trouble if kept in close confinement. Greasy papers or cloths should never be thrown into waste baskets or stuffed away in a corner even for a short period. They are apt to be forgotten and left to store up heat that finally bursts into flame. Make it a rule to burn such rubbish at once and to keep oiled dusters in a metal receptacle, where, if combustion does occur, the fire will not spread. Small rags used to wipe the sewing machine after oiling are frequently kept in a drawer, which might cause disaster, and the oil can sometimes becomes upset, leaking its contents over everything. After much inconvenience of this kind, I put a cork over the spout of the can and set a small tin box in the drawer to take care of the can and the rag.

Some of us, too, are ignorant of the fact that water may spread a fire as well as put it out. This is true of burning gasoline or oil—a handful or two of sand, ashes or flour will smother it readily, while water spreads it over a larger surface. I know of several disastrous fires which might have been averted had a pail of sand been within reach at the beginning. It is one of the best, as well as cheapest, fire extinguishers one could keep in the house, especially in the kitchen where fires are most apt to start. This is a precaution that should be taken in every country or suburban home.

Once in a great while one hears of a fireless cooker exploding. This may be due to a leak in the metal lining, caused by rusting of the lining, produced through carelessness in drying. Through this leak, steam may penetrate to the inner packing, causing it to swell and burst. A more common source of danger from the cooker lies in clamping the lid tightly on the utensils while the contents are being heated over the fire. The steam so generated is apt to explode a vessel under so much pressure. Never adjust the clamp until all ready to drop the kettle into the cooker.

The popular cold-pack method of canning has also been provocative of accidents in the home, because we forget the power of the force we have harnessed to serve mankind. Steam expands as fast as it forms and unless some provision is made for this activity, it is sure to burst its bounds. It is easy to see, therefore, why one should not fasten the lids on fruit jars until the contents have had ample opportunity to expand. Simply lay the covers on to keep out excessive moisture until cooking is completed, then permanently adjust them about five minutes before removing the jars from their bath.

Wood alcohol is an ingredient of so many compounds in use about the house, notably paints, varnishes or cleaning liquids, that a warning should be sounded about its effect upon the eyes. Absorption through the skin may affect the vision as surely as though it came into direct contact with the eye itself. Watch, therefore, about spilling anything containing wood alcohol upon the hands, and keep it as far away from the face as possible, working in the open air preferably when using it. Be sure that the toilet articles you buy in which alcohol is the solvent, contain only the pure product.
How Will You Build Your Home?

**SECOND FLOOR PLAN**

Adaptation of the Swiss chalet type with sleeping rooms on the second floor. A picturesque and delightful home.
Built of Hollow Tile

A stucco finish of a pale apricot color is applied over 8-inch hollow tile. The wood trimmings are painted white, with shutters at the upper windows. It has been designed so that it can be built on a fifty foot lot, if necessary.

THE GARAGE IS MADE PART OF THE HOUSE WITH SLEEPING PORCH OVER PART OF IT, BUT WITH DOORS AT THE REAR.
Building the Home All On One Floor

A six-room home all on one floor is the solution here given to the high cost and servant problems. The service problem is reduced to a minimum through the convenience in the equipment and its placing, as well as in the room arrangement. Note the drawers in the closets with a window over, and the large size of the closets; the cabinets and seat in the bathroom, the breakfast alcove, and the built-in conveniences in the kitchen. There is provision for the heating plant in the basement, and low storage space in the attic. The house is stucco-coated frame construction, with cement tile roof.
Study of Roof Lines

In the lines of the roof lies the beauty of many a successful design, and the secret of that success is in the skill with which this problem of the home builder has been handled. A small change in the roof will sometimes disastrously affect the beauty of a house. It is important that the builder should adhere strictly to carefully prepared plans, especially in a home with a roof of the type here shown.
A Typical Bungalow

It is hard to find a more convenient and livable arrangement than that of a bungalow. A sun room and breakfast room in addition to the usual six rooms are shown in this home. The fireplace in the living room has been omitted, and furnace flue carried in the chimney built in the kitchen. The exterior is stuccoed, with piers on the porch corners.
Many people prefer their sleeping rooms on the second floor, with a straightforward full two-story arrangement. Such a home is here shown, attractive in the very simplicity of the lines of the design. Vines have been trained to protect the windows of the long sun porch, which extends across both living room and dining room. The interior arrangement has proved to be very satisfactory. The fireplace is centrally located, between living room and dining room, so that it really serves both rooms, opening together as they do. The exterior of the house is stucco, with an attractive hood over the entrance. The cement floor of stoop and steps are edged with red brick.
How Shall We Light the House

Before the matter of fixtures is considered, the system of lighting best suited to the house must be decided. Indirect lighting has made such strides in excellence and in public opinion that its merits should be carefully weighed. "Semi-indirect" will be found more suited to the average house, although very beautiful effects may be obtained by the use of concealed burners. Where indirect lighting pure and simple is desired, provision must be made for it by the architect. Lights may be concealed in the cove of the rooms; or stained glass ceilings may be used through which the burners of high candlepower send down the light. The latter is expensive, and to be effective must be planned throughout by a master mind.

A beautiful country house in the Middle West, planned to the minutest detail by its gifted architect, impresses visitors with its unique illumination. No room is bright, yet each is perfectly lighted. In the dining-room high-power lights are concealed in the cove, but so skilfully placed that the source of supply is unnoticed. Indeed, the word "cove" hardly suggests the architectural construction of the wall, although technically correct. From a heavy oak molding rises a barrel vault and in this molding the fixtures are arranged. The light is thrown up and
outward, but at such an angle that it gives a diffusive light. Four hanging pendants of metal bar and amber glass—throw the light downward and the two schemes together provide a delightful illumination. The walls are ivory plaster, the oak woodwork is a shade or two deeper than "natural," but not at all dark. The furniture designed expressly for the room is oak of straightforward design, and altogether there is that delightful simplicity which more and more is being expressed in expensive homes.

The entrance hall has a high ceiling with a mezzanine balcony. The staircase hall is low studded and a portion of the ceiling is in metal bar and stained glass, through which a delightful soft light filters. There are low table-lights, in amber glass and copper, where one may see to read perfectly. Other interesting schemes are carried out, always making for comfort and convenience, and producing a charming effect.

Naturally, these schemes are expensive. How can the house of moderate cost be equipped in order to secure the maximum of comfort and attractiveness at minimum cost? Semi-indirect lighting will, perhaps, solve the problem. First, the home-maker must decide what she wishes the lighting to accomplish; whether to provide low, concentrated lights for reading, writing and sewing, or to give general illumination. For the hall, general lighting is more fitting. The dining-room needs concentrated lighting, but not of the character demanded by the library. Bed rooms need concentrated lights for dressing-tables, while bathrooms can have a more general equipment.

For the average hall a hanging bowl of metal and translucent glass is a most convenient and agreeable arrangement. There are several varieties on the market. One type is of solid brass, copper or bronze, containing a high-power Tungsten burner, which gains in reflective strength by reason of a peculiar lining given to the bowl. This lining resembles quicksilver. The light is thrown upwards and outwards according to exact science.

In the first place, the height of the room, its length and breadth, and the color of the walls are all taken into consideration before the fixture is installed. The difference of a half an inch in the chain will make or mar the final effect. Such questions are not to the housekeeper.
Glass and metal ceiling lights.

She merely has to choose her design and leave the rest to the salesman, who will send an expert to make calculations. If she is unfamiliar with this mode, she will be surprised at the results.

At first these bowl-like fixtures were ugly in pattern, but competition has had its helpful influence. Several well-known architects have made designs and these are now manufactured in quantities. Some are quite Greek, others suggest old Roman hanging lamps. In experimenting with this mode of illumination it was found that alabaster, when used for the bowl, gave a charming result. In addition to the upward and outward movement enough light filtered through to give an added beauty. With alabaster a different reflector was used. It suggests marble halls and a treatment removed from the inexpensive house.

Soon a composition was on the market resembling alabaster, but having a greater transparency, and coming within a fairly moderate figure. Plain metal bowls continued to be made, improving from season to season in design. Today the variety is extensive. For a living-room of moderate size one such hanging fixture is sufficient with the addition of a table fixture for reading and writing. A room used purely as a library does not need the overhead lighting, although it is interesting to note that a number of public libraries have installed semi-indirect lighting and have done away altogether with the once popular table fixtures of plain metal and dark green shades. Offices are now being thus equipped and the benefit to eyesight is said to be very great, many leading oculists endorsing the method.

For the home book-room there is something cozy and delightful about a shadowy place, with direct light where it is needed for comfortable reading. Shadows are restful, and the one criticism this writer would make of indirect lighting in all its branches is that there are few real shadows. On the other hand, there is no glare. Certain it is that indirect schemes have won the approval of physicians, oculists, directors of museums, principals of schools and many householders, who declare that no other method will again satisfy. As the designs are constantly improving, it is safe to predict that the indirect science, for science it surely is, will go on developing until all objections are removed.

In a dining-room, there is no better way of lighting than to have a soft concentrated glow about the table without emphasizing every detail of the four corners of the room. Candles are ideal for
this purpose. Science will never cause them to seem out of date. Like fireplaces, they belong to all times. Dome lights hanging over the table have been very popular, shower lights have more recently been in high favor, and side-brackets with candle fixtures are now much in vogue. Brackets with electric candles and real candles on the table are a very pleasing combination. The improvement in all side fixtures has made it possible for the home-maker to find just what she wishes for her dining room. She may select Colonial or any period pattern, finding plain period things, which, of course, are the only suitable ones for a simple house. The refinement of well designed and appropriate side fixtures, in combination with candlesticks of harmonious outline, appeals to many women. If the care of the candlesticks is too much, there are simple shower schemes which are better than the heavy glass dome throwing down its all power-

Bowls for semi-indirect lighting—metal and glass. A composition suggesting alabaster is frequently used instead of glass.

Where direct lighting, by means of a small central chandelier, side fixtures, colonial sconces, and brass candlesticks, admirably suits a modern room in Colonial style.
ful radiance on the center of the table.

The variety in showers and pendants has greatly increased since many gifted craftsmen have specialized in this line. Some are of copper and iridescent prisms, the latter having the colors of Favrile glass.

A living room, modified Mission in type, has a ceiling scheme of lighting, together with the plainest of iron side fixtures. In the attractive inglenook is a combination of bronze and opaque glass, the latter containing a tungsten burner. This is an indirect scheme of lighting, and is well suited to a corner where merely a conversational light is required.

And when all has been said about modern methods, how pleasant it is to visit in some old house in the country where each guest takes his candle and disappears in the gloom of a long upper hall after a cozy evening of firelight and lamp-light.

How Candles Are Made

The wick is to the candle what the burner is to gas, according to a writer in a recent English trade bulletin. In the manufacture of candles the wick has always received considerable attention. This was true before the year 1820, says a writer in The New York Times, when the wick was made of twisted cotton yarn. With this type of wick, the charred and glowing end required the services of a snuffer.

Braided or plaited wicks were introduced about 1825, and the snuffer became an ornamental accessory, as it was no longer a matter of necessity, as formerly.

Modern wicks go through a regular pickling process before the candle manufacturer uses them. The wick is soaked in a solution of certain chemicals, ammonium phosphate, potassium chloride and sal ammoniac being among those used. The object is to prevent the wick from smoking, and also to retard the combustion of the cotton. After the pickling the wicks are slowly dried before coating.

Manufactured candles are of many types, but the molded candle in more or less universal household use is usually composed of a mixture of stearine and paraffin wax. The molding machine is merely a development of the idea of the old candle mold which at one time formed part of the regular equipment of every household, in the days when candles, like soap, were made at home. The modern molding machine consists of a series of molds in a bath of water. Each mold receives a wick and is filled with the molten candle material.

In the regulation of the temperature of the water in the bath during the process lies the secret of the art of making candles. When sufficiently set the candles are mechanically expelled from the molds by machinery on the piston principle, a series of pistons rising up and lifting the candles out. When thoroughly hard, the ends of the candles are trimmed, and they are then ready for packing for the market.
"Color Harmony"—the Newest Opportunity in Flooring

Do you know how to harmonize the color of your floors with the color scheme of your walls, your woodwork, your tapestries, drapes or furniture?

Do you know how to reflect the spirit and the purpose of the room by the color of the flooring—what flooring will best take a walnut or mahogany stain—what color you get in waxed or varnished Maple, Beech or Birch?

"Color Harmony in Floors" is an interesting opportunity for the expression of individual character in the home—and a subject of equal importance to the builder of a modern club, hotel, apartment or other structure calling for beauty in the floors.

The new book, "Color Harmony in Floors," will reveal new decorative possibilities to you. You may secure a copy through your local lumber dealer, or write to us, and we'll gladly mail it to you with our compliments.

MAPLE FLOORING MANUFACTURERS ASSOCIATION
1063 Stock Exchange Building, Chicago

Floor with Maple Beech or Birch
Mahogany or Walnut.

M. S.—We are building a colonial bungalow. The woodwork in living room, dining room and perhaps two bedrooms is to be dark brown mahogany with French doors between dining room and living room and also between sun parlor and living room. The walls are to be decorated. What color would you suggest for living room and dining room? We had thought of using mahogany furniture, upholstered in blue velour. Would an Italian dining room set be right for dining room even though it has mahogany woodwork? Have you any suggestions as to shades and drapes? The shades on outside will be green to match green roof. What kind of wood would you use for the corner bedroom? I wanted it in old rose. Could you give me any suggestions as to drapes and bedspread?

Ans.—If brown mahogany finish is used on the woodwork, it is immaterial whether the furniture is mahogany or Italian walnut. Either will be in harmony. Very simple lines should, however, be chosen for so small a dining room. Your plan of blue velour upholstery for living room furniture is very good, as the room has south and west exposures. A wall paper of small self-toned tapestry design, the figure in gray on an ivory ground, will be a good background. It would be well to have the fireplace facings of smooth gray brick.

If the woodwork of the sun parlor were painted a soft lichen green, the walls pale blue and the wicker furniture green and blue combined, the effect would be very attractive, opening from the rather formal living room.

We should not finish the bedrooms in mahogany; but paint the woodwork ivory. A duplex window shade, green on the outside and cream on the inside, would be advisable.

Dining and Living Rooms.

A. M. B.—Would you kindly advise color scheme for dining room having east exposure. Living room on south and east. I have thought of using mulberry and taupe shades in rug and upholstered furniture. The woodwork will all be birch, stained brown; French doors between living room and dining room.

Your plan of using mulberry and taupe shades for the east living room with birch stained woodwork, is practical and dignified. Be sure to get a brownish tone and not red, if using mahogany stain. In upholstering the furniture, it is an agreeable change to have the back and outside of the arms done in plain taupe,
while the inside of the chair or davenport has flowered velour in rich, deep coloring, on the taupe ground. The mulberry may run into lighter shades, really rose.

With such furnishings, you cannot do better than grass cloth in a warm gray for the living room wall, or if this is too expensive, a small tapestry design, almost invisible at a little distance, gray on an ivory ground. We should make the dining room wall the same. With so much warm color in woodwork and furniture, we would like the curtains of ivory casement cloth, or Shantung silk, finished either with a narrow gimp or a narrow fringe. No other curtains would be needed with these. Tint the ceilings ivory, and veil the French door with ivory net or voile.

**A City Apartment**

J. McG.—Kindly send me color scheme for a dining room. The furniture is Queen Anne walnut with blue leather seats. The room has only one window, which looks out upon a brick wall. The woodwork is all white. I should prefer blue and tan or yellow color scheme.

Also please suggest colors to use in a bedroom with walnut Louis XVI bedroom set. I should prefer rose drapes.

This is for a small city apartment.

Ans.—We suggest for the dining room wall a small, all-over design in soft tan on an ivory ground, the design picked out in gold. Cream ceiling. A Chinese rug, in blue and gold and light browns on a pale tan ground. Curtains of ivory Casement cloth tied back with heavy blue cords and tassels, and with a lambrequin at the top of blue and gold brocaded Sunfast. Use on the bedroom wall a flowered chintz paper and curtains of rose organy, ruffled, and tied back. A rug in two tones of gray, with a narrow border of black, if possible.
A SMALL HOME.

V. B. S. We are building our first little home nest and it is indeed very small and of the cheapest possible construction to have any claim at all to artistic treatment.

I want your advice about color of painted woodwork and treatment of walls and drapes and rugs to harmonize with the smallness of the rooms and make the little home as cozy and cheerful as possible with its limitations.

I would like to have white woodwork and doors over the entire house since it is so small. I would like a mulberry plain two-tone rug for the living room and decorations accordingly. I have a piano in mahogany and want to get a table that can be used for dining purposes in this living room when we need more room than the pullman alcove can accommodate. I had thought that I might get a table that could fold up into smaller space when not in use. A davenport should be in the living room to accommodate an occasional guest.

I wanted a blue and white bedroom with plain rug also. The bath room will be all white. White enameled furniture in bedroom, with blue line or floral decoration. Kitchen alcove painted white. How would yellow paper and trimmings be? I have a blue and white table cover and other things for the table, however. Would that interfere with the yellow for tone? Everything is so very small that I feel that that is the biggest problem and that things that would do in larger rooms might be very bad here. I thought of blue and white linoleum on floor of kitchen and alcove. Ceilings in all rooms are eight and one half feet.

Ans.—We think your own ideas in regard to your little bungalow are excellent. You have been wise enough to put your floor space into one good living room and a good bedroom.

White or ivory woodwork is the best choice, and while using white in the bath and kitchen and alcove, we advise ivory for the living room and bedroom. It is softer and blends in better with furnishings.

We would use a soft, creamy tan on the walls, or a warm gray; either will harmonize with the mulberry rug. We would use a lighter shade of the mulberry on the davenport and a chair or two, with floor lamp of putty-tone lined with rose. We would use ivory pongee at the windows and no other curtains, depending on the mulberry rug and furnishings for enough color. We would use the same ivory wood trim in the bedroom and instead of white furniture get it in the deep ivory finish. It will have far more character. Blue furnishings will combine beautifully.

About the dining table, we would not feel that it must be mahogany on account of the piano. We would buy walnut, stained brown. Yes, you can find a folding table that will serve as dining or library table. The little breakfast alcove should be very gay and cheerful. We like the yellow and blue combination better than the blue and white. Whatever linoleum you have on the floor should be on the kitchen also. Yellow walls with white woodwork in kitchen will be excellent. Have blue and yellow Japanese crepe at windows of alcove, yellow walls and paint the seats and table bright blue.
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Send 25c for Portfolio of Fifty Large Photographs of Homes of all sizes by prominent architects. Ask about our special "CREO-DIP" Stained Shingles for thatched roof effect; also the large 24-in. "CREO-DIP" Stained Shingles for the wide shingle effect on side walls, either in Dixie White for the true Colonial white effect, or shades of green, brown, red or gray.
CHRISTMAS parties should be simply bubbling over with Christmas spirit. Menus and decorations that are quite out of the ordinary will go a long way toward the desired effect. One may serve oyster cocktail, roast turkey, giblet dressing and so on, in the conventional way, but there are many other things that are different and just as good.

Christmas decorations should be the embodiment of joy. Red and green is the usual color scheme and is always carried out effectively by using Christmassy foliage. For all parties the dining table is usually the center of the decorations. It should be treated as such and everything that goes with it should form unity of design. A vase of holly as a table centerpiece with wide red ribbon in puffs around it, softened by placing Christmas tree twigs on top is very effective. Silver or glass candelabra with red candles and shades always have a place on the table.

Or the centerpiece might be a tiny Christmas tree, twenty inches in height, with electric or wax lights. The rest of the table might be decorated with ribbon or smilax. This is a suitable type of decoration for the family dinner party if there is to be no large Christmas tree, as the gifts may be placed on, or under, the small tree.

A huge bowl of Yuletide fruits, apples and grapes with mistletoe, holly, winter ferns and ground pine in bowls or placed decoratively on the table is also effective.

A holly and ribbon combination which may serve as the table decoration for the whole holiday season would start in a mass of holly in the center of the table and allow it to run like a pyramid to the central light fixture and from there out to the ends of the table, where bows of ribbon might be placed.

Stunning but more expensive decorations may be carried out with cut flowers. Huge white chrysanthemums lend themselves beautifully for decorative purposes. Placed in vases with asparagus fern and mistletoe only a few are necessary. In any of the decorative schemes outlined, a small sprig of Christmas tree marking each cover is effective.

Following are menus which may be adapted to holiday functions of all kinds. Only a few recipes are given, as most of them can be found in all good cookbooks.

**Suggestions for Christmas Dinners**

- Grapefruit filled with Tokay Grapes
- Creole Soup
- Browned Buttered Wafers
- Roast Turkey
- Oyster Stuffing
- Mashed Potatoes
- Turnips and Cauliflower
- Frozen Cranberries
- Neapolitan Salad
- Deviled Almonds
- Old-fashioned Plum Pudding with Hard Sauce
- Crackers and Cheese
- Coffee
- Bonbons
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HESS WARMING & VENTILATING CO.
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Cherry Cocktail
Clear tomato soup
Roast Chicken Corn Dressing Brussels Sprouts
Baked Sweet Potatoes Onions Wafers
Waldorf Salad Cheese
Mince Pie Coffee
Oyster Bisque Crackers
Celery Olives
Roast Goose Giblet Sauce
Individual Cranberry Sherbets
Mashed Squash Potatoes Creamed Peas Wafers
White Grape Salad Wafers
Apple Pie Cheese

Suggestions for Christmas Suppers

Orange Fruit Cup
Tunafish or Oyster a la King
Pear Salad Cloverleaf Rolls
Hickory Nut Cake Coffee
Hot Spiced Grape Juice
Club Salad Baking Powder Biscuits
Hot Turkey Sandwich
Lemon Ice Sponge Cake

Oyster Cocktail
Chicken Jelly with Mayonnaise
Cucumber Salad Cream Tea Biscuits
Lemon Sponge Tarts Cocoa

Chicken Bouillon Wafers
Date Salad Rye Bread
Frozen Fruit Wafers

For the Children's Party

Date Sandwiches Buttered Raisin Bread
Fruit Salad
Spice Cakes Cocoa
Pop Corn Candy Apples

The Yuletide Chafing Dish Spread

Pigs in Blankets Potato Chips
Creamed Peas Beaten Biscuits
Plain Cookies Tea

Oyster Bisque
Chop finely one head of celery. Save the root. Cover with boiling salted water and simmer one-half hour. Add two tablespoonfuls of cornstarch which has been moistened with cold water and when thick add 25 oysters which have been drained. Stir until it reaches the boiling point and then add one pint of milk. Allow to boil again and serve.

Maple Hard Sauce
Cream together one tablespoonful of butter and three tablespoonfuls of powdered maple sugar. Add one tablespoonful of thick sweet cream and beat hard for five minutes. Chill before serving. Maple syrup may be used by boiling it with half its quantity of water until a soft ball is formed in cold water. Let it grain, harden, then grate or grind to a powder.

Frozen Cranberries
Pick over and wash four cups of cranberries, add one and one-half cups of boiling water and two and one-half cups of sugar. Cook ten minutes, skimming during the cooking. Rub through a sieve, cool and pour into one-pound baking powder cans. Pack in salt and ice, using equal parts and allow to stand four hours. There should be enough of the mixture to fill two cans.

Deviled Almonds
Fry two ounces of blanched shredded almonds until well browned. Mix together two tablespoonfuls of chopped pickle, one tablespoonful of Worcestershire sauce, one-fourth teaspoonful of salt and a few grains of cayenne. Pour over the nuts and serve as soon as thoroughly heated. Deviled Almonds are often served with oysters.

Cranberry Jam.
Cook three cups of cranberries in two cups of water until soft. Press through a sieve. Add to these one cup of raisins which have been cooked until tender in one and one-half cups of water, one and one-half cups of sugar and one-third cup of lemon juice. Boil until thick and clear.

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The Cleaning Closet

It is impossible to keep dust and dirt from coming into the house; but it is possible to control, to a degree at least, how much of the housekeeper's time it shall absorb. Doing a thing, of itself, often does not take so much time as getting ready to do it. Here are the advantages of having all the cleaning things kept in one closet, so that time and energy shall not be spent in collecting the utensils needed. Each housekeeper must select the utensils according to her own needs and requirements. Here is a list, given by Farmer's Bulletin 927, as cleaning closet equipment:

- Broom, with hook in handle for hanging.
- Long handled dust pan.
- Brushes for cleaning, several kinds.
- Dusters—cheese cloth, worn silk, or flannelette. Oiled dusters may be made by dipping pieces of cheese-cloth in two quarts of warm water to which one-half cup of kerosene has been added. Keep such dusters in a tin box when not in use, and do not use around stove or lighted lamp, as they are inflammable.
- A blackboard eraser covered with flannelette, for stove polishing.
- Wall mop, made by tying over an ordinary broom, a bag made of cotton or wool cloth.
- Bucket with wringer, for mopping.
- A piece of inch board 15 inches square, with rollers, which makes a convenient platform on which to set mop bucket, and permits it to be moved easily without lifting.

An oiled floor mop to use on polished floor. Several good floor mops are on the market, or one may be made of old stockings, or old wool or flannelette. Cut into inch strips, and sew across the middle to a foundation of heavy cloth. Fasten this to an old broom or mop handle. Dip into a solution made of one-half cup melted paraffin and one cup kerosene and allowed to dry. To keep moist, roll tight and keep in a paper bag, away from a stove or lamp. It is just as well to place in a deep tin can.

Carpet sweeper or vacuum cleaner.

To Remove Ink.

When any of the common writing inks are spilled there are a few things which may be tried first which will tend to keep the spot from drying and setting in the fabric. Ink spilled on white cotton or linen, if it can immediately be immersed in water, or dipped in milk, so that the ink is not permitted to dry in the fabric, can sometimes be entirely removed. In other conditions such absorbents as corn meal, salt, French chalk, fuller's earth, magnesia, or talcum powder may be applied. This treatment will remove any ink not absorbed by the fibers, and keeps the ink from spreading. Work the absorbent around with some blunt instru-
ment, and renew it when it becomes colored. When the dry absorbent fails to take any more ink, make it into a paste with water and continue the application.

If the ink was spilled on a carpet, this treatment may be followed by rubbing the surface with a cut lemon, squeezing on the juice and rinsing between applications with a clean, wet cloth until no more ink can be removed. Rub the spot with a clean, dry cloth. After the carpet is dry brush up the nap with a stiff brush.

Paint.

Paint may generally be removed by sponging the spots in pure turpentine, or washing the whole article in it, if the spots are large or scattered. Benzol and wood alcohol in equal parts will generally remove paint, if not too dry.

Automobile Grease.

Black spots of automobile grease can be removed from washable fabrics by touching the spot first with lard, or butter, and rubbing under the fingers until the black begins to flow in the grease; then it is necessary to remove the grease with soap and water and the black spot will go with it.
Electricity for the Home

Here is so much that we do not know about electricity, and the possibilities of its utilization, even those of us who are using it all the time, that many so-called "Electrical Homes," fully wired and equipped, are being built in many parts of the country as a demonstration of what may be expected and required of electricity. Benjamin Franklin, when he experimented with his key and his kite, little dreamed of the magnitude of the boon which he was conferring on posterity. No human touch can rival the delicacy and the sureness of the electrical response, and its power is manifolded beyond our conception.

"And even today, few realize the possibilities of electricity in removing physical drudgery from the household. Tucked away in every woman's heart is her ideal of a household conducted with instruments more speedy than human hands. And the woman who learns of the service flowing through the wires which lead to the simple-looking button on her wall, is on the threshold of a new life."

Here are some facts about the Electrical House of Kansas City, built along Georgian lines, of mat faced brick and located in the Country Club District.

All wiring is taken into the house through underground cables.

There are two hundred convenience outlets in the house—thirty-six in the basement alone. (Convenience outlets are devices enabling one to instantly connect portable lamps or other appliances.)

House has intercommunicating telephone system.

The house is wired for radio service and has a complete cabinet type radio set which has the appearance of a piece of furniture.

A unique feature is the illuminated house number, controlled by a switch.

There are five cornice lights, controlled by a switch at three places inside the house. Besides the decorative feature if one is giving a party, this is a practical method of safeguarding the house at night, as the person turning on the light may be concealed in darkness while the exterior of the house is flooded with light.

All the closets in the house have ceiling lights controlled by door switch, which lights the closet when door is opened. When airing closet, the light may be disconnected.

The ice man need never call at this house, as the house is equipped with refrigerating system. The temperature of the refrigerator is maintained by thermostatic control. The refrigerator is equipped with trays for making ice for table service.

The house is heated with a fuel oil burner. The hot water heating plant is controlled by a thermostat. Flush type wall electric heaters are used in sunroom, bathrooms, and wherever a portable heater might be wanted.
A frequent difficulty in many families is remembering to turn off the basement lights. The electrical house is equipped with a colored pilot light, above the basement door, which will be illuminated when the basement lights are on.

The kitchen is equipped with a 16-inch exhaust fan, which will move approximately 1,500 cubic feet of air per minute, assuring a house free from cooking fumes.

The kitchen is equipped with electric range; also an electric dish-washer, which, when not in use, may serve as a cabinet type table. Besides the center ceiling lights, there are individual lights at range and sink.

The basement is equipped with electric washing machine. Outlets are provided for an electrically operated ironing machine. There is also a hand iron, equipped with a bull's-eye, which lights when the iron is on. An oscillating electric fan will be placed conveniently near the ironer.

Other appliances in the house will be:
- Portable vacuum cleaner.
- Electric player piano.
- Electric phonograph.
- Electric cabinet type sewing machine.
- Kitchen unit for mixing, chopping, freezing, etc.
- Electric percolator, toaster, waffle iron, grill, curling iron, vibrator, hair drier, milk warmer, Violet ray and oscillating fans.

The electric light fixtures throughout the house have been especially designed, the motif being taken from the individual rooms and general house scheme.

SLATE

The Bureau of Mines has recently been conducting a detailed study of the slate industry with special reference to increased efficiency in its production, preparation, and utilization, according to the Mineral Technologist, Oliver Bowles. A more carefully described classification is advocated, which should state more explicitly the qualities in the classification, and give a better understanding to the prospective user, of the material and of the industry. The proper laying of slate should also be better understood.

"It may be of interest to the general reader to know that slate is originally formed from mud or soft clay, carried down by streams and laid down in suc-
cessive layers in deep water. The pressure of superimposed materials gradually compresses the clay into a firm rock known as shale. In many places this shale was, during the succeeding ages, subjected to intense pressure and folding due to mountain-building forces within the earth. This intense pressure, together with high temperature, changed the clay into other minerals such as mica, chlorite and silica, which are very resistant to weathering, and also developed a very definite cleavage or splitting direction which characterizes the rock as slate. It is this property which renders slate of value for roofing, for, by using a broad chisel and a wooden mallet, a slate worker can readily split it into thin sheets which are later trimmed into rectangles.

The difference between the fading and the unfading slates should be known before selection is made. For example, the professional roofer knows the changing effects of “sea green” slate, but the purchaser commonly does not know that the original color alters to various shades. Such variability in color is by no means undesirable, for it gives many beautiful effects, and such slates are much in demand.

If slates fall below $3/16$ inch in thickness they are likely to be so weakened that undue losses occur from breakage during punching and laying.

Slate roofs give much better service when placed by men who specialize in such work. For example, most carpenters in placing slates drive the nails “home” just as they would in securing wooden shingles, with the result that when the sheeting dries and shrinks the slates are cracked. A skilled slate roofer does not drive the nail to its full depth, but allows the slate to hang loosely.

Occasionally the nail holes in slates are punched by the manufacturer before shipment. However, the practical roofer usually punches the slates at the place where they are to be used, and during the punching process he selects them into three grades—thin, medium and thick. The heaviest slates are then placed near the eaves, those of medium thickness midway, and the lightest at the ridge, which gives a very uniform roof.

The qualities of slate are well known, as it is one of the oldest and most enduring building materials. Nature has provided a wide choice of unfading and weathering colors, from black, through the blues, browns, grays and greens, sometimes mottled, and through the purples, reds and even yellow. Specially chosen slates in variegated colors and graduated thickness are provided for architectural effects. “Nature has selected and assorted the materials in the composition of slate,” authorities tell us. A slate roof was placed on an English chapel at Bradford-on-Avon over 1,200 years ago, and has remained there through the centuries, and is still in good condition. Here in America it is reported that one slate roof covered six buildings in succession, and was again placed on the seventh after 176 years of use.
Building Experiences

How We Built Our Home
G. H. B.

We have had many compliments on our new home, built from Keith plans, from which we made some changes.

We had intended to let the contract, but, digging cellar ourselves, we found a very fine grade of building sand with which cement blocks were made for foundation, and all plastering and chimney and walks were done.

This with two other incidentals changed matters, so we bought all material ourselves and various artisans were hired or contracted with, individually.

Southern pine and fir was used throughout and all interior trim sandpapered and finished. As quality and grain were good, the result is a natural finish which, we think, cannot be improved.

Floors of two and one-half inch southern pine with border, were also sandpapered after scraping, and were then varnished.

We went with the carpenter and selected all lumber ourselves with the result that our neighbors remarked that we had unusually good material and a well built house.

A man having had lots of experience, who was out of work at the time, was hired to supervise construction, and he saved us both time and money. For heating, we installed one pipe furnace with a 20-inch fire box and were comfortable throughout the house in severe cold, and high cold winds, on a little over five tons of coal, from November 15 to April 20. The house is well adapted to this heating, with all doors kept open. The house, including heating, plumbing, painting, sewer and water connections and grading, cost, aside from the lot, approximately $4,500, under high wages and material.

With our experience now we could duplicate the house for $4,000 and make money.

We built the upper part of house, shingled, stained dark brown; lower part clapboards painted pearl gray; trimming white.

It is slightly elevated and we have clear view through Wilder Terrace to the highway beyond.

We are highly pleased with our house, and have had many compliments from our friends on its appearance, build and arrangement.
Wood and Civilization

"NATURE has labored for centuries to produce raw material from which our furniture is fashioned," says the American Homes Bureau, "yet Nature makes no duplicates in wood.

"There are thousands of different species of wood in the world, but no two square inches are alike. The same wood may be plain-sawed or quarter-sawed but there will be a world of difference in the two. No inch in the same board is like another. You will never find two pieces of wood of the same texture.

"And right here it might be said that Americans, because they have grown familiar with wood, have, in a way, bred contempt for it. The federal government is teaching and practicing forest conservation, states are developing tracts for the propagation of the different varieties of wood which will be most required in years to come. It is merely a step to provide wood for the future generations.

"Trees are developed much the same as a human being is developed. They have vertical pipes or pores which carry water and a modicum of mineral through their trunks and limbs, just as the blood feeds the human body. It is generally believed that a 'tree grows out of the ground.' If air could be absolutely kept away from any kind of vegetation for 30 or 40 hours, that vegetation would die. Trees have what are known as transverse pores, which, by a difference in temperature, create expansion and contraction, invisible to the eye. This rising and falling of the temperature makes the diaphragm of the tree, through these pores.

"Were the whole history of wood and its development and uses to be written it would require writing the whole of human history. There are no products in the world whose history will compare with those fashioned from wood. Civilization itself has evolved along the evolution of wood and its uses. Civilization, as we know it today, would have been impossible without wood. And strange as it may seem to the reader, those nations which have succeeded most have been the ones that have followed the hardwood belts."

Dry Rot in Wood

It is difficult to say just how the infection of dry rot in buildings originates in every case, but in all probability some of it is due to the use of timber already infected in the lumber yard, so that builders should be extremely careful and inspect the timber to see that there is no trace of decay present. When infected
Oak Floors create a bright, cheerful atmosphere of their own. There is a warmth, a welcome that you feel the moment you enter an Oak Floored room. No amount of costly decorations can achieve its quiet elegance, its refinement.

Oak can be stained and re-stained in a wide range of tones from the usual golden brown to a beautiful silver gray, to suit any color scheme.

Properly waxed or varnished Oak Floors improve with age and use. Many old time mansions have Oak Floors that have passed the century mark.

Oak Floors save time and labor, being easy to keep clean and dustless.

And you may be surprised to learn that they cost less than ordinary floors, plus the unwieldy, unsanitary carpets they are so largely displacing.

Buildings of any kind with Oak Floors sell or rent for 25% more. Hence they are an investment for your descendants.

If you are going to remodel, there is a special thickness of Oak Flooring (3/8 of an inch) which goes right on top of your old floors. It costs less than the other thicknesses.

Two interesting booklets, in colors, will be mailed to you free, upon request. Or any architect, contractor or lumber dealer will give you exact costs covering your requirements, and other information.
timber is placed in a moist situation, particularly in contact with the ground, any rot in the stick is bound to develop and cause further trouble. In eradicating this fungus it is absolutely necessary to do a thorough job in removing every bit of infection. The timber used in replacing the decayed wood should be given an antiseptic treatment wherever possible. In the case of timbers beneath the building where the color and odor are not objectionable, coal tar creosote is perhaps the best substance to use. For timber which must be used for interior purposes a colorless preservative like sodium fluoride may be applied, according to C. J. Humphrey, pathologist for the Forest Products Laboratory, Madison, Wis. This is soluble in cold water up to about 4 per cent. Any of these preservatives can be applied with an ordinary brush, using from two to three coats, with intervals between for drying. The better practice, however, is to use timber which has been given a preservative treatment which insures that the wood is thoroughly impregnated and not merely surface sterilized.

The Colonial Home and Cypress.
The latest volume of the little Cypress pocket library is a very interesting booklet on the Colonial home, with three sheets of pen sketches, the preliminary sketches for the little drawings which appear in the book. The booklet is filled with much interesting information concerning the Colonial, much of which is used through the courtesy of the publishers of architectural books and magazines, with acknowledgments to Arts and Decoration, Country Life, Keith's Magazine, House Beautiful, etc. It is quite profusely illustrated.

Good Wood Preservative.
To preserve wood against decay a substance must first of all be poisonous to wood-destroying fungi. Decay in wood is not due to direct chemical action or action of the elements, but is always the result of the activity of these plants which feed on the wood and thus destroy it. To prevent fungous infection, the preservative must be able to penetrate the wood thoroughly enough to form a continuous exterior shell of poisonous treated wood deeper than any surface checks which are likely to develop, and to retain its toxicity, or poisoning power, under service conditions.

Safety in handling and use is another important consideration. A wood preservative must not be a dangerous poison to men and animals, a highly inflammable substance, nor a material injurious to wood. If it seriously corrodes iron, steel, or brass its use is limited because of its action on the treating equipment and on bolts and metal fastenings in contact with the wood in service. Color, odor, and effect on paint are sometimes of considerable importance.

There are materials of established protective value now on the market which are both cheap and plentiful. The standard wood preservatives in the United States are zinc chloride and coal-tar creosote. Their value has been established by many years' use of millions of railroad ties, poles, posts, paving blocks, mine timbers, and other wood treated with them. Search for new and better preservatives is constantly being made, but in the meantime the wood-preserving industry has at its command these reliable materials.
Bulletin on Mahogany

The forest service of the United States Department of Agriculture announces that under the name of "mahogany" the wood of more than 60 different kinds of trees has been marketed. Most of these woods come from the tropics, but even American birch and red gum are used in furniture and sold as mahogany.

The federal department has issued a special bulletin, No. 1050, for the benefit of those who want to be able to identify the various kinds of woods likely to be called mahogany. This bulletin tells how every kind may be distinguished.

For the buyer of furniture, or of wood for interior trim, this bulletin may be of great assistance. His own knowledge of wood grain is his best assurance that he is getting what he thinks he is buying.

The bulletin deals with the identification of true mahogany, certain so-called mahoganies and some common substitutes. It is a carefully constructed key. A hand magnifying glass and a piece of wood which can be cut to show structure and color are all the equipment needed to apply the key.

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, 1922.

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 31st day of October, 1922.

R. R. CLARK.

My commission expires June 5, 1923.
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KEITH'S MAGAZINE
ON HOME BUILDING

DEVOTED TO THE HOME, ITS BUILDING
DECORATION AND FURNISHING

NOVEMBER, 1922

Vol. XLVIII

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