After the holidays there is always an awakened interest in building affairs. When Christmas is over our thoughts always turn toward spring, whose arrival we impatiently await. With thoughts of spring there comes to us as naturally as to the birds the thought of building a home. If this is the happy year in which we have finally accumulated the required amount for building then all is joy and enthusiasm in the home. The entire family seems to be born into a new life when the final decision is reached to "have a home of our own."

Mindful of these facts we have brought together for February a splendid group of illustrated articles especially suited to this time of year. Articles that will gratify the craving for the romantic, the beautiful and the practical in home building; articles rich in new ideas for home builders, abundant in valuable information on how to start the planning of the home.

**TYPES OF COLONIAL MANSIONS.**

By Edith Dabney.

Next month we will have the third illustrated contribution by this interesting writer on the beautiful and historic Colonial mansions along the Atlantic coast. In the next article will be illustrated and described four more of these magnificent dwellings.

**PLANNING THE HOME—THE COTTAGE.**

By Arthur C. Clausen, Architect.

One of the most interesting articles to appear this winter will be Mr. Clausen’s next practical article on “Planning the Cottage Home.” This article will be invaluable to those of our readers who contemplate building small houses of about three thousand dollars and less, this year. The article will be extensive and well illustrated with specially prepared sketches by the writer, an authority on this subject.

**THE LIVING ROOM.**

By E. A. Cummins.

The day of small parlors and sitting rooms is past; almost the universal rule nowadays is to combine the old time parlor, sitting room, library and sometimes even the stair hall into one large, spacious, homelike room. How to do this successfully is well described in Miss Cummins' bright, interesting article on “The Living Room.” Miss Cummins is a recognized authority on interior decoration in the New England states, and conducts our regular department on decoration and furnishing.

**CARE OF HOUSE PLANTS DURING WINTER.**

By Ida D. Bennett.

Spring is coming and with thoughts of spring come thoughts of flowers. “A home without children and flowers is like a body without a soul.” In February will appear the first of twelve beautifully illustrated articles on plants and gardens by the well known writer on botany and horticulture, Miss Ida D. Bennett.

**THE MODERN HOUSE.**

By J. Taylor.

Mr. Taylor's writings have assumed an international reputation. He is fast becoming as well known as an authority on exterior and interior decorations in America as in his native Scotland. Next month will appear an instructive article on the decoration of the home.

**DESIGNS FOR THE HOME-BUILDER.**

This valuable and authoritative department of Keith’s Magazine will contain the usual group of from six to ten beautiful homes, showing illustrations of the exterior with floor plans and a complete description of each. A single issue of this department is worth many times the price of a year's subscription.
Illustration from our new book—"Interiors Beautiful."
Types of Colonial Mansions.

By Edith Dabney.

THE inroads of the Romanesque period wrought sad havoc with the beauty of the country, marring it with every conceivable style of impossible architecture, and, under the name of improvement, ruining irremediably more town and country houses than the fires and bullets of two deadly wars. It is gratifying to know, however, that we have come to realize that here at home there is a beautiful type, the lines of which were but the outcome of years of trial and experience. So in the revival of this Colonial architecture, killed for a time by the Revolutionary struggle, America has once more come into her own, appreciating fully the ample lines and generous space taught by the old cavaliers.

One of the most pleasing types of this early architecture is presented in “Wye House,” the famous country seat of the Maryland Lloyds. Built of frame and painted the true Colonial buff, with green blinds, the massive central dwelling with its smaller wings, its spacious lines and air of comfort, is a fitting edifice to adorn the thousands of acres belonging to the great estate.

Following the Colonial lines the rooms are large and high ceiled, and the delightful manner in which they open into the ten foot hall gives an effect of space and light found in only too few houses of today. “Wye House” being double fronted, what might otherwise have been the back door opens out upon the rear piazza which is upheld, by large columns, from the foot of this rear piazza runs the superbly beautiful garden, a series of precise flower squares and box-wood hedges.

Fortunately this manor house of the
early eighteenth century still retains the charming aspect of comfortable age and though kept faultlessly in repair, shows no additions or would-be improvements, the present owner being wisely content to live along the lines of his ancestor favored by King James.

The grounds are today as they were two hundred years ago; nothing has been allowed to mar the effect of ancient grandeur, and this country seat with its velvet lawns, monarch trees and rare old blossoms may well serve as an unrivalled model for all that is truly Colonial.

A very different style of early architecture is shown in the old Van Lew mansion in Richmond, which was famous during the Civil War as a hiding place for Federal soldiers who escaped from Libby Prison. The brick of the building is covered with cement once colored yellow, but now a mellow, creamy tone shaded with the stains of time. The entrance is both impressive and good, the gracefully curved steps and ample portico lending a dignity only too often overlooked by the modern architect. While far from ornate, the lines of this building are not so severe as those of the country manor houses of the same period, thus typifying the difference between the town and country residences of the early cavaliers.

The ivy hung conservatory on the right is shaded by superb magnolia and pink crepe myrtle trees, while the hedged lawn on the left is studded with trees and
shrubs that accord and harmonize with this historic southern mansion which lives to tell the tale of what life used to be.

Teeming with interest for the student, and holding the artist architect in admiration, Woodlawn, the gift of Washington to Nellie Curtis, near Mt. Vernon, stands today as perfectly as when built in 1800. This double fronted manor house (but for the dormer windows placed in the covered corridors to insure ample light) shows no latter day additions to the cornices, stone trimmings and quaint balcony are those thought out by the eighteenth century builder.

The Woodlawn mansion presents more ending only at the river shore, Woodlawn in its quiet dignity has been, and is, envied by many, rivalled by but few.

Still another type of the old Colonial mansion is seen in the ancient Bassett House in Williamsburg, built some time prior to the Revolution, and owned by President John Tyler at a later date.

This simple, unimposing frame dwelling presents an air of comfort and ease too often sadly missing in the more massive manor houses. Hospitality and home like comfort are visible in every line, and in Bassett House there is an indefinable charm never attained by mere structural magnificence. The double portico with its slender columns is truly delightful; the chimneys placed at either end bespeak great fireplaces inside, and the modesty and delicacy of the entire interior tell more convincingly than words of the high bred builder who numbered many house and dinner guests among the royal ranks.

The quaint flower borders that outline the walk leading up to the mansion are placed in the midst of velvet greensward, while old ivied trees and the southern myrtle adorn to perfection the beautiful grounds. Great gnarled trees of age unknown shade both house and lawn, and the peace and quiet which clings over all seems a bit of an earlier century in a worried, struggling today.
A Little House for Three.

By Una Nixon Hopkins.

Few houses are planned with the view of saving a tree, yet the one pictured was designed, not only so as to obviate the necessity of felling a fine sycamore, but in such a manner as to make the tree almost an integral part of the house.

Added to the problem of the tree was that of the lot. By a curious freak of subdivision, a lot thirty feet across the front, but spreading like a fan to a comfortable width in the rear, with a depth of over one hundred feet, was left along the bank of an arroyo or dry river bed, in the suburbs of Los Angeles. Because of its irregularity the lot was considered undesirable until three women, a mother and two daughters discovered it, saw in it possibilities, and bought it at a bargain. Then they set to work drawing plans, striving to adopt their needs to the lot and retain its best feature—the tree. The result is interesting and illustrates the fact that there is nearly always a way of overcoming difficulties in house building; and frequently the most stubborn obstacles are means by which a highly satisfactory end is attained.

The house was set as far back from the front of the lot as was allowable, and yet conform somewhat to the situation of other houses in the neighborhood. There was no attempt made to have a front porch, a small pergola arrangement protects the front door, and this will be decorative when covered with a rose vine that has just now fairly taken root.

The entrance—it can scarce be called a hall—living room and dining room are practically one room, yet each room has the seclusion necessary to its use. This has been accomplished by continuing the wainscoting, making a screen in reality, where a partition ordinarily would be. As the wainscoting is only five feet high, leaving the whole space above open, it gives an impression of roominess to the house, apparently increasing its size. The manner of dividing the dining room from the living room shows to advantage in the photograph. At the same time the dining room was being screened, a book case was in the making, thereby saving space.

The fireplace niche with seats on either sides is cozy and comfortable, and the fact that the wainscoting of the room is not broken, but continues as a back for these settles gives a feeling of continuity, so desirable in a small house, which is apt to be choppy if “features” are attempted.

The fireplace proper is of cobblestone, like the foundation and chimneys. This stone was picked up almost at the door.

The woodwork is pine, stained a soft brown, the floor a shade darker. There are a few skins, but the other rugs are Indian, showing a good deal of gray, a little red and some black. As the plaster above the wainscoting is gray, as of course are the stone of the mantel, a very soft woods-like colorings has been evolved: the bright book bindings and jars of wild flowers further the notion. The library table in the living-room was made for this particu-
lar place and several other pieces of furniture were also especially designed, but the dining room table is an heirloom. The sideboard is the same height as the wainscoting—a series of drawers over which are long shelves, holding some excellent pieces of old china—and above are three small casement windows, which conform to the lines of the sideboard, yet serve the purpose of admitting light and air.

From the rear of the living-room you enter a large screened porch—that is, its all screen along the east side, thence into the bath, bedrooms, and even the kitchen, if you do not care to go through the dining room. A screen door opens from this porch into the tiny court reserved for the tree. In a severe climate, glass might take the place of the wire netting in winter. As it is now, three steps lead from the screen porch to the level of the tree, but later, the plan is to fill in around the tree and pave this little courtyard corner, making it flush with the porch. In summer when the tree is in leaf there is a delightful woody effect here, and in winter when the leaves have fallen there is the advantage of the morning sun.

This porch does triple duty in summer—as dining room and sitting room while fulfilling the requirements of a porch. On a warm afternoon, out of reach of the sun's rays, it is a pleasant place in which to read or sew, or nap, for it is fur-
nished with a couch and easy chairs, beside a table, large enough on which to dine and some straight chairs in which to sit at meal time.

The bedrooms, three in number, are finished in pine and furnished simply according to the requirements of the house, but in the good taste that characterizes the whole.

The windows throughout the house are casements, with small square panes, curtained with a neutral tinted stuff of basket like weave, in keeping with the other furnishings, and these heavy hangings do away with the necessity of shades.

The doors are made of wide boards selected for their grain, and are battened like the wainscoting of the main rooms. The home cost about twenty-five hundred dollars in a locality where labor and lumber are high.

The most conventional six room cottage might have cost as much or more, yet this one by the discriminate use of material, space, line and color has been raised far above the ordinary, and at the cost of a little extra thought only. Everything about it is simple and economical. The attempt to save the tree was the inspiration for a very unique floor plan. And while a porch in the front was sacrificed in order to compass the extra expense of cutting into the lines of the roof and the house proper; for the sake of saving the tree, the outcome proves it to have been a wise alternative. The house is necessarily narrower on the front, because of the width of the lot, but as it faces north it was wise to have as little as possible of this exposure. Then on the east or arroyo side there can be no neighbors, so that the living-room and screen porch not only enjoy the early sun but quiet, and command a fine view of the hills beyond.

The exterior of the house is of eight inch boarding stained a good green. The wild flowers and wild grains grow about it at will, there has been no desire to make things too “nice” either within or without. The little house is a rational expression of the desire of three cultivated women for a home combining economy, utility and beauty.

Planning the Home.

By Arthur C. Clausen, Arch't.

EACH month I have laid emphasis on the economy of construction and the convenience of a central hall arrangement. Still adhering to this form of plan wherever it is possible to obtain it I realize that a central hall arrangement with rooms to either side means a broad house and a broad house can never be placed on a narrow lot. It is therefore sometimes necessary to reduce the width of a house to suit the lot and increase the length of the house to obtain the amount of space required. These and many other minor conditions sometimes keep an architect from doing as well by his client as he would like. This month I am going to explain the good points of but one more house having an entirely new arrangement of the central hall plan and will therefore branch to other good arrangements designed to suit specified conditions. Each plan being, however, complete and fulfilling all the requirements of the family it was originally planned for. My clients often marvel at the multitude of conceptions of the model house that come from the drawing board of one man. The reason for this is primarily the fact that no one comes in closer contact with a man's personality and life than the architect who plans his home, and as there are no two individualities alike so there are no two homes drawn alike for different owners.

At the top of page 13 is shown the next example of the central hall arrangement. This is a very convenient, cosy home. The exterior is gambrel roofed Colonial. The central entrance hall is not large but is pretty and convenient. The living room is very homelike, with its broad bay window and cosy nook. Both living room and dining room are seen from the hall thru broad cased openings giving an effect of space that cannot be otherwise than captivating. The dining room is longer than its breadth. This is a good plan as most tables are longer than wide
to accommodate the family. If not all the time they are extended at least on special occasions and on these occasions the room should look its best and not appear crowded. Off of the living room is a small library or den which is always a convenience, especially where there is a studious father and small children in the family. The kitchen and pantry arrangements are very complete. On the second floor are four pretty bed rooms, a sewing room, bath room and many closets.

The floor plans at the bottom of the page show the first deviation from the central hall arrangement, but even in this we have come to a central hall arrangement on the second floor. This house is also a gambrel roofed Colonial. Both of these houses, however, can be built full two stories high, thereby increasing the size of the second story rooms but losing something in external appearance. The first floor is conveniently arranged. The entrance hall could, if desired, be made larger by moving the partition between it and the living room over on a line with the partition between kitchen and dining room. This would give direct access to the hall from kitchen but of course reduce the size of the living room.
THE Decorating and Furnishing of the Home is a topic of daily conversation and one of common interest to all lovers of home, to the young home makers in the commencement of home life and to those of maturer years. It is a subject that brings out the qualities of people and develops all that is good in them. It tends toward better life and better aspirations, it cultivates the mind, elevating it above the common and sordid thoughts that arise from the daily necessities and it often shows qualities of mind and artistic taste beyond our expectations.

In the homes of the lower classes, the uncultivated and even among the savage tribes, we find indications of the love of beauty and ornament; this is especially true in Oriental countries where decoration of home and dress is thought more of than any other one thing. Thus it is that we often form our opinion of people by their surroundings and this is not always fair as oftentimes people are credited with having poor taste when, if the truth is known, it is not so much the lack of taste as it is the lack of opportunity and means to gratify their best thoughts along this line.

In this article by "Decorating and Furnishing the Home," we are confining ourselves to the modest, economical home or cottage, such a one as is an ideal for the large majority of “common people,” the middle class to which we ourselves are proud to belong. We are not attempting to describe and do not even presume to suggest how the palatial home of the wealthy shall be furnished or decorated and to many thoughtful people such displays of wealth and grandeur are not in any way described by the commonplace word, Home.

Thirty Years Ago.

Thirty years ago decorating, fresco painting, etc., implied art work in oil colors with elaborate designs. Such walls and ceilings required the outlay of large sums of money and could only be used in the homes of the wealthy. This high class of art work had a permanence to it not seen nowadays and required constant care. The simpler homes were plastered with smooth walls and papered with highly colored and cheaply made paper. All of this work has greatly changed of late years. The wall papers have become more art studies and refined, while the cost has not materially increased, the result being that the simplest homes can be papered and finished in harmony of color with the more simple house furnishings. Many of the smaller homes of the present day are gems of beauty and that without great outlay of money and in the matter of wall tinting, the rough finished walls are in much more common use, the tinting of the same and the ceilings being done in water colors. At the present time there are a number of good makes of water colors that are being used that give a very pleasant tint to the walls; they are hard and durable and will not rub and are quite inexpensive to use. Where it is desired to obtain the best wall without reference to cost, the walls should have a rough sand finish and be thoroughly painted with good lead and oil paint without the use of a “glue size.” This will allow the oil to soak into the walls but it will require at least four coats of paint. The wall then becomes very hard and is impervious to water and can be cleaned without injury. In case of sickness or contagious diseases the walls can be cleaned and repainted, making them fresh and new, but this again is not admissible, owing to the cost, in the small homes of which we are writing. A very pretty wall effect for small rooms is obtained by selecting a paper with not too large figure, the ground color of which should be of the same tone as the general furnishings of the room, carrying the paper up clean to the ceiling line without border or frieze. Where it is desired to give height in appearance a stripe will be found advantageous. However, such a striped paper looks well only where a small amount is used as for instance in a vestibule or hall or in a small den. The common living room looks well with a soft moss green color on the walls and if
there is a small den or library opening from the same room, it can be treated with very rich warm colors, a dark Venetian red or rich shade of brown and in some places a dark shade of blue looks well, although this latter color must be used sparingly and only in a small room or alcove and where there is not much sunlight, as this color fades quickly. Plain colored walls always look well, and if done with ingrain papers a modest amount of fresco decoration can be used with very good effect around the top of the room, always taking thought not to overload with too much decoration, as too little looks better than too much. The ceilings can be quite plain, always in lighter tints in harmony with the wall, also the color of the floor should blend nicely with the wall color.

Finishing Woodwork.

In regard to the treatment of the woodwork, a small amount of wood showing in the casings is preferable and may be in hard woods stained to suit the taste of the owner or may be finished in enamels, white, cream or pearl. These latter finishes are purely Colonial and date back to the old New England home when the woodwork, casings, stairs, etc., were always white and in which case the home feeling was always present.

The Furnishings.

The furnishing of the home is something that depends altogether upon the taste of the owner and the size of his pocket book. It is a fact, however that many homes are over-furnished and the rooms look loaded and stuffy. Many years ago it was customary to furnish each room throughout with a different style of furniture, all of the furnishings in one room being in the same style. Now it is quite different. "odd bits" of furniture are scattered about. The small den or library has its reading table and desk, book-shelves, a davenport is admissible, with a few odd chairs. The furnishings in this room look best very simple, plain oak in dark Flemish finish in the Mission style, such furnishings cannot be too simple to look well. The furnishings of the living room also may be very plain. If the woodwork of the furniture is in the Mission style, is quite plain but heavy, it gives the appearance of hospitality and of common home use. If there is a reception hall or small parlor, it may have a few bits of more delicate furniture, depending somewhat on the treatment of the walls and woodwork.

Selecting Pictures.

The selection of pictures for the walls forms a very important factor in the house furnishings. In the olden times, the family pictures were reserved for the most conspicuous places and this feature is still observed in the old Colonial homes and seems to form a part and portion of such a home, but in the newer modern homes the family groups are not given prominent place but are reserved for the nursery or sleeping rooms. A few pictures of this kind do not look out of place in the den or library. A failing with many people is to select too large pictures. A few carefully selected pictures with one or two etchings and a few in color are all that is required to make a pleasant room. Oftentimes, however, where there are many pictures of various sizes they can be grouped irregularly on the walls or at one corner, the regular hanging of pictures in a mechanical sort of way is not so pleasing. There are many dainty and pleasing effects that can be had at little expense and some of the good housewives are very skillful in devising and planning such schemes of decoration, but too much "cheap stuff" soon becomes tiresome and the simple adornment of the room that does not call special attention to any one feature of the furnishings or decorations makes a much pleasanter home, shows more refinement and has more lasting qualities.

Rugs.

Floor rugs have given place to the old-fashioned carpets and are not only more healthful and cleanly but add very much to the beauty of the interior. Here again, a little money judiciously expended, selecting colors that harmonize with the floors and with the wall decorations, simple and plain in design will complete the furnishings of a modest pretty home.
Character in Detail.

By J. Taylor.

If you pass through the outskirts of a town and find the entrance to the houses commonplace, you pay small attention to the architecture beyond, but if the approach be striking, you pause, and look at that to which it leads and in most cases under the latter condition you will detect some character in the style of the house. It is one of the recommendations of modern art and architecture, that some thoughtful consideration is given to the outside entrance to a man's abode. It was the custom at one time to make a great feature of this, and in some of the old rural districts of England there is an endless charm in walking along the country road and taking note of how the architect of an earlier day handled this detail in the arrangement of the house.

Modern Art.

Modern art again takes note of this opportunity, and with the aid of the expert craftsman plans and fashions the gate in such an irresistibly attractive way that interest is at once awakened.

This is accomplished by excellent design, unobtrusively simple for the most part with some ornamental detail cunningly wrought by the smith.

Machinery for a time threatened to make the representative of Vulcan as extinct as the dodo, but he has been saved by the modern movement and today is indispensable in the decorative work of the house.

One of the most famous of modern sculptors acquired a fine old house which he turned into a residence and studio.

It had a plain exterior, to which he had little objection, but he had an idea that it would be greatly enhanced by being enclosed in a tall wrought iron railing, of quaint design, with simple gateway to house and studio.

He wanted to be sure in the matter of proportion, so he made a clay model of the house to scale, drew the railing in black lines on a sheet of clear glass, fixed it in position, and by this means was able to judge accurately in the matter of proportion.

And there the house and the railing stands, and those who pass, and do not know the sculptor and his work conclude that some one above the ordinary lives behind the wrought iron railings.

Character in Wood.

It must not be imagined that in this part of the house character can only be expressed in iron. Wood as a medium, while more perishable, is yet capable of being deftly manipulated, or with a combination of wood and iron, happy results may be obtained.

In the entrance gate illustrated, de-
signed specially for this article, this combination has been adopted, and with the random ruble wall adjoining, the effect is remarkably striking.

The lower part of the gate is of simple construction, and with some slight addition at the top, might be used in cases where the ornamental panel was considered too elaborate.

This irregular spacing of balusters, with flat pierced rail at top, makes a charmingly simple railing on the top of a low stone or cement base. The ornamental panels are well within the capability of the expert smith, some designs of great detail and intricacy being undertaken by him today.

The four pillars are of timber with carved panels on front, the terminals being lamps for electric or oil illumination, with leaded glass panels, and over all the dove, emblem of peace and good will.

**Electric Possibilities.**

Electricity extends indefinitely decorative possibilities. In the present case, whether by day or by night the entrance described would give endless pleasure to owner and all who would have the opportunity of studying its detail. There is a clever method of "etching" glass, now practiced in America and in England, that makes it possible to use plate glass in a case such as that described; the process is new and the result pleasing, and for outside use the danger of breakage is reduced to a minimum. It need not be pointed out that the design submitted is capable of being broken up, and the double centre gate used alone, or in conjunction with one of the side ones, or where only a small entrance is wanted, the smaller gate itself can be adopted.

**Carved Decorations.**

The carved decoration on the pillars is appropriate for outside use, being a conventionalized treatment of a flower on elongated stem, that on the glass panel of the lamp has the motif of the rose.

There is room here for skill on the part of the designer, and if his signature was exhibited, as in the case of a picture, it might be the means of directing many commissions his way.

We live in decorative times, in which originality of conception is constantly coming under our notice. In no part of the house or its surroundings can this be better employed than at the entrance, where all men take cognizance of it.
A Well Designed Cottage.

THIS beautiful cottage is a very attractive home of eight rooms. Its principal characteristics are the long sloping roof and picturesque group of dormers, the central one being a whole room in width. The first story is sided and the second story is covered with dark green stained shingles. The entrance is into a circular hall, which is quite original. The stairway is secluded, serving as both front and back stairs. Cost $3,800.

Trinity M. E. Church.

THE building is of gray stone to the window tops, and red pressed brick half way to the eaves point. Above this is plaster work beamed. The interior of the church is finished in native oak. The pews are of the same material and are placed on a slanting floor. An audience of 700 can be accommodated in the auditorium and Sunday school room, opening into each other by folding doors. A gallery at the rear and sides seats more than 100. A room has been reserved for the future installation of a boys' gymnasium.

"It's English, You Know." -

WE introduce a very home-like study of the English and semi-English Domestic style on page 21, by Cecil Chapman, architect. A simple design of good proportions and in its plan very complete. This house would cost complete today about $5,000. It has an elegant living room with a broad fireplace with book cases at one end. The hall and dining room have beam ceilings. There are four chambers.

A Compact Cottage.

THIS is certainly a compact cottage. Within the dimensions of 24 x 28 we have a complete six room house, with hall and bath room; not only that but the arrangement of the rooms is exceptionally good and the exterior very pleasing. The house is entirely shingled (it could be sided if desired) and its estimated cost is $1,600. There is a full basement with heating plant, but all rooms could be heated by stoves if desired. The chimney is also so arranged that a fireplace could be added. It is an ideal home for the average sized family.

A Pretentious Cottage.

DESIGN No. 3 is a large frame cottage of pretentious appearance, with careful attention given to details. A long sloping roof surmounted by a large dormer is a predominating feature. The first floor plan is a conveniently arranged one with hall closets, alcove and large home-like living room which opens directly into both reception hall and dining room. On the second floor are three good sized chambers and plenty of closet room. This house would cost to build $2,624.

A Beautiful Exterior.

THE architectural details of this home are perfect. They are a simplification of the classic Doric style. The plan is certainly a very convenient arrangement with the living room, dining room, kitchen and chambers all grouped around central halls, making a home which adequately fulfills all the requirements of a family of seven or eight. All these things being true are we not then ready to acknowledge this design a model house of perfect plan, design and construction? We are. It is. And furthermore, its cost of $3,000 allows it to be duplicated many times by people desiring a splendid home at a moderate cost.

A Classic Portico.

BERTRAND & Chamberlain in their design on page 25, have given us a very good Colonial house in the Corinthian style. A two-story circular portico is an attractive feature of the exterior. This has a broad terrace on each side and a balcony half way up connecting with the second story. The entrance is into a large reception hall from which one enters the beautiful living room with its broad fireplace and alcove den. On the second floor are four splendid chambers, one having a fireplace. Cost $6,600.

Do Not Try to Build Your House Without Architect's Plans.

Homes cannot be built in a satisfactory manner without Complete Plans, Elevations, Details and Specifications. Architect's plans will surely save the owner their cost several times during the construction of the house.-Editor.
A Well-Designed Cottage.
Trinity Methodist Church,
MINNEAPOLIS
"It's English, You Know."
A Compact Cottage.

Arthur C. Clausen, Arch't.
A Pretentious Cottage.

[Diagram of the cottage with labeled rooms: Kitchen, Dining Room, Reception Hall, Living Room, Closet, Chamber, Hall, Bath, Linen Closet.]
A Beautiful Exterior—A Perfect Plan.
A Classic Portico.
SERENE dignity, quiet and restrained beauty, an air of protecting seclusion and a successful application of the Georgian style are successfully exemplified by the architect in the house on page 26 by William C. Whitney, architect. The details are clean cut and refined. Outside of the house is a pleasing combination of rough cast cement plaster, Bedford sandstone and white trim. The wainscoting in large reception hall is white enamel, ceiling beamed and mahogany. The commanding feature of the hall is a large, graceful and imposing stairway. The stair is distinctly Colonial. Estimated cost $15,000.
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Adding the Home Spirit.

OME time ago, a very large and stately city house fell upon evil days and was subdivided into housekeeping suites, and in due season one of them was occupied by some people known to the writer. The woman of the family rejoiced in a bedroom, rather more than twenty feet square, warmed by an open fire, and with low broad windows, into which the sun streamed all day long.

But how empty it looked, even after the pictures were hung and all the available furniture arranged. The white matting increased the apparent space, and the green walls, papered with a small, quite unobjectionable design, seemed to stretch away endlessly.

Then somebody said: “What you need in this room is pattern, something to catch the eye and divert it from the contemplation of space.” It had not struck the woman that way, but she went out and bought twenty yards of cretonne, with a white ground and a design of clustering green leaves. Then she set to work. The twenty yards became thirty-six before she had finished, but the room was transformed.

The golden oak bedstead had a spread of cretonne, tucked in at the head and foot, coming to the floor at the sides, which were finished with a six-inch ruffle. The couch had a ruffled cover, as did the seats of the chairs. The chiffonier had a cover edged with a green and white cotton fringe, and its mirror was taken off and used for a draped toilet table, between the windows. Green cotton Panama cloth was used for table covers, with a border of cretonne. It covered some pillows, on the couch, while cretonne was used for others. At the windows, well pushed back, hung long straight curtains of cretonne.

As a final touch, the green denim cushions of a Morris chair were covered with cretonne. It stood at one side of the fireplace, at a friendly angle with the couch, which, set across the foot of the bed, faced the fire.

Not only was the emptiness of the room overcome, but the rather crude tone of the golden oak furniture was much subdued.

Another Experience.

Another woman met her Waterloo in the large, dingy, back bedroom, in the third story of a city boarding house. Everything was in good condition, even handsome, and—brown. She too had recourse to cretonne, in this case to a white cretonne with large blue flowers and green leaves, both in pastel shades. It made a fitted cover for the couch, a dado at its back, a table cover and covered innumerable cushions and a high screen, partly concealing the dreadful whiteness of the bed. Other pillows were covered with a similar cretonne, with a design of pink hydrangeas. Blue china on the low tea table, a big pot of pink geraniums in the window and some passe-partouts with blue gray mats carried out the color scheme still further.

To Keep the Boys at Home.

The sensible mother recognizes the fact that her boy needs some place where he can see his friends and ride his hobby, if happily he has one, without being under the critical eyes of his elders. She tries to make his room a combination of bed and sitting room, laying stress upon the latter feature. If there is more than one boy, she tries to give each a separate room, even if she doubles up the girls. Two girls will occupy one room in peace, but seldom two boys.

To achieve this, with any success, something must be done to transform the bed into a couch, in the daytime. For ob-
vious reasons, the draped cot bed is hardly adapted to a boy’s room. There are, of course, folding couch beds, very comfortable and convenient, but good ones are exceedingly expensive, and no folding bed is exactly hygienic. Then there is the big Mission davenport, whose seat cushion is a detachable mattress, ready to be made up at any time. This too is expensive, nor can it be denied that it is a great nuisance to have to make up a bed the last thing at night.

There remains the narrow, iron, hospital bed, with the smallest possible head and foot board. Enameled black or scarlet, it may have a spread of some figured material, tightly tucked in on all sides of the mattress, after the bed is made, and with pillows covered with similar material be a very presentable couch. If the boy is small and the bed less than full length, a blue army blanket is a very pleasing cover. For a full sized bed, some of the mercerized materials are admirable and not expensive. A very good fabric of this sort can often be had as low as eighty-five cents a yard, in double widths.

The Table Scarfs.

The table scarf so much in vogue a few years ago, has returned to favor, and is seen in exclusive shops. It is no longer embroidered, but is made of some handsome silk material and edged with an inch-wide gimp. This gimp edges the entire scarf and two strips carried from side to side, outline the top of the table.

For the Amateur Decorator.

For the amateur decorator, some of the furniture gimps are invaluable. A very effective cover for a small table can be made from a square of Rajah pongee. Hem the edges and, on each side, and two inches from the edge, sew a strip of gimp, such as is used for the finish of upholstered furniture, letting the strips cross at the corners. This gimp should combine the color of the ground with others and be feather-stitched on. On wash materials the same effect may be had with a white cotton fancy braid, feather-stitched in color.

A gimp, in plain color is also useful for finishing the edges of photograph frames, writing sets and other fancy articles. Half the effect of such things depends upon neatness of finish, a fact not always realized by the amateur worker.

And apropos of this, the writer is moved to remark that very much of the upholstery people do at home is spoiled, because they do not measure distances accurately, in driving in brass headed tacks. First get the corners, then the central point of mantel board or chair front, then divide the intervening spaces, as if you were drawing to scale. If you do not do it, your work will be an eyesore to everyone with a trained eye.

Vassar Shirtwaist Cabinets.

The vassar shirtwaist cabinet is a delightful affair. It is really a closet, perhaps four feet wide and three and a half high, its double doors opening so that the entire interior is readily accessible. It will hold certainly a dozen and a half blouses. The framework is of white enamel, the top also enamel, the sides and front green or red burlap. The top can be used as a table. It is not specially cheap, ($11.75), but it is much more convenient, in every way, than the ordinary utility box.

An article of furniture well adapted to holding shirt waists is a man's shaving stand, with shirt drawers. The small swinging mirror has feminine uses, and the stand is so narrow that it is easy to find space for it in a good light. It is just
the thing for the tiny bedrooms of an apartment. A draped toilet table, high and narrow, with shelves under the drapery, a good sized shirt waist box and a shaving stand will give a woman far more accommodation than the regulation bureau, while the additional space gained is a boon.

**Curtains.**

Some very effective hangings, shown at an exclusive shop in New York, are of double width Russia crash, with a wide border stencilled across the bottom, in blue, green, or brown, the motive iris. The distinctive touch, unusual in a stencilled curtain, is the introduction, at intervals along either edge, of blocks, an inch and a half square, in groups of three, worked in solid embroidery, in silk of the color of the stencilling. The price is $22.75 for a pair.

**Finish for Mission Furniture.**

A new finish for furniture, seen casually, looks like black enamel. Examined more closely it shows a sort of sheen of bluish green. It is used in connection with green or blue and green upholstery fabrics, and is applied to furniture in Mission style.

**A Picture over the Door.**

When a wall is papered to the ceiling, without a frieze, hanging pictures over the doors is an agreeable variation. The Dutch painters of the seventeenth century made a specialty of pictures to be hung over doors. It goes without saying that the picture must be one which does not require close examination, or is so familiar as to be suggested by a very cursory glance. A good picture, for such a place, is the well known Portrait of Rembrandt, by himself, or some of the portraits of Franz Hals. Such pictures, in brown or gray tones, should be framed rather heavily and without a margin.

In a room with a number of doors, a large picture may be hung above one of them, while above another a narrow shelf supports a piece or two of bric-a-brac and a plaster cast, things effective at a height. A low, wide picture, like The Frieze of the Prophets, or some of the pictures in three compartments, can be utilized to conceal the transoms over apartment house doors, with excellent effect.

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The architectural effectiveness of a house may be emphasized by the character of the hardware trimmings. The importance of right selection cannot be too strongly impressed upon the prospective builder, so if you are planning to build a new home, or remodel the old, choose the hardware yourself. In this way you can keep the cost at its lowest figure, and at the same time know that in quality and appearance the hardware is in keeping with your ideas of what is appropriate.

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A Subscriber.

For my new home I have quite a handsome set of Early English Oak for the dining room with chairs upholstered in red leather. I want you to tell me what you think of having the room, which will have southeast exposure, done in gray and red, or scarlet. Could the walls be tinted gray with a frieze in red grapes and autumn leaves? I don’t want the decoration of the room to cost over ($50) fifty dollars. I hope to be able to find a Wilton velvet rug in gray ground with red design. There will be a window seat upholstered in red under east front windows. Will you also suggest hangings for windows of this room? Woodwork to be stained dark.

Ans. Your idea of using a soft grey tint on the wall with a frieze in vivid reds for your dining room, is very felicitous. There is an English frieze showing gay plumaged parrots perched among grapes, which would be distinguished for this situation but it is expensive—$1.50 a running yard. It is doubtful if autumn leaves could be found which would be good in coloring upon the gray wall, but possibly they may. In regard to the rug, a plain center of either grey or red is advised with a simple border in the contrasting color. This you will not be able to find in a Wilton Velvet, as such choice designs come in the higher grade rugs. You could perhaps find what you want in carpet, and have a rug made to order. With red in the frieze, rug, window seat and chairs, window draperies of gray toned net would be the better choice.

S. A. K.

I would appreciate a suggestion from you as to scheme how to decorate a large (double) parlor finished in red mahogany, in which I desire to produce a blue color effect. Walls to be tinted and frescoed. I am uncertain as to the color of rugs, draperies, furniture coverings, shades and wall tint.

The adjoining rooms are finished in “Holland Blue” on oak (Niagara Finish), that is the reception and dining rooms, both south of parlor.

If good effect can not be made in blue, green would be the next best color of my taste.

What can you suggest for parlor and the other room.

Ans. Blue would be a desirable color for the parlor provided there is not a north outlook, when it would be too cold. The walls could be tinted a delicate old blue, with two or three pieces of furniture upholstered in a deep, rich plain blue and two or three odd pieces in blue, rose and cream brocade. Draperies could combine the blue and rose tints with a rug of deep rich blues. Such a scheme would be excellent with mahogany, and would open well from the other rooms done in bluish green wood stain. In the dining room a gray green wall with frieze of rich autumn leaves is suggested. The reception room treated in green tones.

A. E. R.

We are building a new home and have received so many helpful suggestions from your magazine, that we feel sure you can help us in regard to the interior. The living room and dining room are to be finished in quartered oak. What stain would you suggest for each room. The furniture in the dining room is golden oak and in the living room mahogany.
Answers to Questions—Continued

Ans. The quartered oak woodwork will be best treated in a brown weathered stain in both rooms. This will be in harmony with both the mahogany and golden oak furniture.

“D. W.”

Would you be so kind as to send me a book on modern interior decoration, mission preferred, for a moderate priced cottage? If it is not asking too much (I am one of your subscribers for Keith’s Mag.) I would like you to suggest what kind or style of interior trim, that is, the wood work. This is my plan, 9 foot ceilings. I wish the stairs to be in mission style, narrow and small as practical as possible. I do not wish to put in expensive woodwork. If I have the living room in weathered or flemish could I have the chamber of a lighter color? Perhaps you can send a book that will answer all these questions.

Ans. In so small a house the finish best be the same thruout. A brown stain not too dark would be the best choice. You can lighten the bedroom by using blue and white on the walls and in the furnishings.

Mrs. J. C. B., El Centro, Cal.

Q. Kindly reply as to my fireplace. The living room and dining room open with an eight foot arch and a large fireplace across corner. Ceilings tinted in pale blue. The walls are silver gray. Wood-work enameled ivory. How shall I have the fireplace tiled. Shall I put blue silk drapes at the windows, or something heavier? Would the Art Nouveau goods in yellowish back-ground with bright spots in red, blue, orange, green, etc., resembling colored glass be suitable? Shall I cut off the extra length from the top to use on the sash doors?

Ans. The fireplace tile best repeat the ivory of the woodwork but an outer border of blue tile may be used on the hearth. Do not use mixed colors, let the blue tile be somewhat stronger than the ceiling, but not bright. Side draperies of rough shiki blue silk will be very good at the windows, as dull and strong a blue as will harmonize with the ceiling. No indeed—no art glass Madras. Yes—the extra length of lace curtains will be excellent on sash doors.

The dark green coverings of furniture should be repeated in some minor color notes—such as cushions, palms or ferns in green jardiniere and supplemented by a couple of pieces, chairs of dark green willow furniture upholstered in a rich deep blue.

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Science of Space and Location.

The average woman loves space. She has an ideal, seldom realized, but none the less dear, of large rooms, wide halls and abundant closets. When it comes to buying, or building, the house-to-be must have all these advantages, or she is bitterly disappointed. Let her take courage. The house with small rooms saves endless walking from point to point, and enables one to work with far less fatigue than in the dwelling of magnificent distances.

No greater fallacy exists than that of the desirability of a very large kitchen. In the case of a woman who must do her own work, it is positive cruelty to expect her to use a kitchen twenty feet square, probably with a pantry annexed. Far better a compactly arranged room, ten feet square, with sink, range and closets close to each other, all near a window. The washtubs, also, should have a light situation, not too far from the range. Under such circumstances, it is possible to do housework with a minimum of fatigue.

Christmas Dinner in Pills?

Scientists tell us that the kitchen of the future will be very small. They might go farther and tell us there will be no kitchens at all, as by that time we shall probably take our food in the form of highly concentrated tablets, a tablet for each of the organic constituents of nutrition. In that case, gastronomic joys will be no more, which will be hard upon some of us. Or will cooking take rank as an amusement, as rich men practise some mechanical art, as a relaxation in their hours of ease?

It's the Manner in Which We Do It that Counts.

Religious writers make much of what they term the perfection of our ordinary actions. It is a far cry from religion to cooking, but the principle is the same. Not some one great achievement makes the good cook, but the doing of little things with absolute accuracy. The faculty for detail is one of the cook's most important assets. Perhaps this accounts for the difficulty of teaching the average Irish servant to be a good cook. There is something of the slap-dash inherent in the Irish temperament, an inability to do the same thing twice alike, which is fatal. Watch an Irish servant constantly and she may do very well, but leave a delicate process to her discretion and woe betide you. Did you ever eat an Irish rarebit?

As an illustration, take the three very simple processes of frying an egg, broiling a steak and boiling a potato. No articles of food are commoner, none are less often seen in perfection.

Frying Eggs.

In frying eggs, a very little butter should be used, and the frying pan should be hot enough to melt, not brown it. The eggs should be dropped in separately, with great care, so as not to break the yolks, and they will set almost immediately. A tablespoonful of water prevents their browning on the bottom. If they are liked rather hard, they may be turned and set on the side of the range, for two or three minutes. An egg cooked in this way is very different from the ordinary greasy article. Most French cooks fry eggs in oil. It burns less readily than butter.
Household Economics—Continued

Beef Steak “Waus Sartinly G-o-o-d.”

The very best steak the writer has ever eaten was prepared by a colored maid-of-all-work, and it was invariably the rump cut of the sirloin, by no means the most expensive steak in the animal. It was cut at least an inch thick, and she trimmed off every particle of fat and took out the bone. She had her fire clear and bright, but not extremely hot, and well below the upper line of the fire bricks. She began by searing each side two minutes. When both sides were seared, the steak was cooked three minutes on each side, then removed to a hot platter, on which was laid a tablespoonful of butter and a scant teaspoonful of salt. The steak was turned over twice in this mixture, a tablespoonful of boiling water added to the gravy and the platter covered with a hot plate which was not removed until the steak was on the table.

Now for Irish Potatoes.

As for potatoes, most servants are hopeless. They pare a potato well enough, boil it till it is passably soft, then dish the contents of the kettle and set the dish in the oven, to keep hot. Exposure to the air blackens the potato, and its texture is hard and waxen. The correct way is to boil the pared potato, in plenty of salted water. Whether the water is cold or hot depends upon the sort of potato and must be determined by experiment. Plan to have the potatoes cooked tender, but not soft, at least ten minutes before dinner, pour off all the water and allow the steam to escape. Cover the saucepan tightly and let the potatoes stand on the side of the range until everything else is on the table, then dish.

Things like these are trifles, but they make the difference between good living and poor, between nutrition and mal-nutrition. For unfortunately, in our highly civilized state, the satisfaction of hunger depends very much upon the tempting of appetite.

Mending Clothes.

Mending is said to be almost a lost art, among American women. It is to be hoped this statement is a slander. If it is true, the use of ready made clothing is partially responsible, for how can we
mend without pieces? Besides, under-
muslins, at least, have a happy fashion of
going to pieces all at once, dispensing
wholly with the need of mending, because
there is nothing left to mend. And, of
course, we all mend stockings.

The sort of mending that pays is the
repair of heavy underwear. All wool
shirts and drawers, of good quality, will
last indefinitely, if washed with care, and
mended at the first signs of wear. At first
running thin places with fine mending
silk is enough. Later, when the fabric
begins to break away from these drawn
places, pieces should be set on and cat-
stitched finely, the material cut away un-
derneath. It almost pays, in buying a set
of underwear to get an extra piece, either
shirt or drawers, to use for mending. A
less expensive way is to get the same
make and quality of underwear, from year
to year, and save every scrap for mending.
This is really the better plan, because the
pieces will be as much worn as the gar-
ment.

It is a great mistake to mend underwear
with too heavy a thread. Either raw silk,
or the finest of wool should be used. The
Jaeger people sell a special wool to mend
their goods with. Filling silk, not filo-
floss, is excellent for mending. For re-
pairing all or part cotton garments, fine
soft embroidery cotton is very satisfac-
tory. But the thread should always be fine,
as the material will break away from a
heavy darn.

Filet Squares.

Small woven filet squares, to be used in
various sorts of fancy work, cost consider-
able, at needlework shops. The wise
woman buys a quarter of a yard of filet
net, for nineteen cents, getting at least
twenty-four inch squares. These squares
are inserted in linen pillow covers, bureau
and sideboard scarfs and curtains. They
are very effective when the background is
darned in, in a color, throwing up the de-
sign in white.

Book Review.

"Practical House Decoration" and "In-
teriors Beautiful" are two splendid books.
The former treats in an elaborate manner
on the proper decoration of the home.
The latter is a book of beautiful inter-
iors, all illustrations. Price each, $1.00.
Max L. Keith, Minneapolis, Minn.
Simplicity in Table Decorations.

Why is it that so many tables, all of whose appointments are beautiful, sometimes costly, fail of any appearance of elegance? Is it not, to a great extent, that people do not realize that distinction and space are inseparable? A huddle is not agreeable, even if the objects composing it are individually beautiful. This confusion of objects is noticeable in almost all the illustrations of articles expounding the proper laying of a table for various festival occasions. What is the advantage of having exquisite table linen, if every square inch of it is to be hidden by a candlestick, a bon-bon dish or a trail of flowers? It is one of the strong points of the Arts and Crafts movement that it has largely made for simplicity, in the minor appointments of life.

So, as the season of entertaining is upon us, let us reform our habits, in this particular. Let us give our fine table cloths an opportunity to display their pattern; let us not obscure the beauty of our cut glass by too many flowers; let us allow mere man, when he sits at our board at least room enough to rest his hand on the table, in the intervals of eating.

Limit the Menu.

We read with interest of a movement, in a town near New York, to limit the elaboration of the menu, at company luncheons. A dozen women, who were in the habit of entertaining each other frequently, agreed to limit themselves on such occasions, to two courses. The succession of lunches thus evolved was highly appreciated by the guests, nor is it recorded that any of them suffered seriously from the lack of cups of luke-warm bouillon or infinitesimal portions of caterer's ices.

A Good Menu.

Some of the delectable things served, for the substantial course of this set of luncheons, were baked shad roe, fried chicken, creamed oysters on toast, shrimp salad, creamed halibut, baked eggs with cream, eggs Newburg, salmon with green pea salad, oysters en croustade, muffins on toast and Spanish omelette. Potatoes, in some form, and some sort of hot bread accompanied the first course. The second was, in most cases, some sort of cake, with either chocolate or coffee.

Be More Hospitable.

The fact is that the lack of hospitality in America, upon which foreigners so frequently comment, is due not at all to a churlish spirit, but to the impossible ideals which most of us cherish as to what is necessary to offer a guest. The guest, if he have a vulgar soul, eats of our varied cheer and wonders why we did not offer him more. If he be of a different fibre, he wishes we had given more of ourselves and less variety of food. In either case, our well meant effort is a failure, and we know it and are not inclined to repeat it.

Buying a Chafing Dish.

In buying a chafing dish, it is well to inquire for one with an extra earthenware vessel, in which various creamed mixtures can be cooked over hot water. Failing this, a store which carries earthen-
ware casseroles can probably supply one of a size to fit into the hot water pan of the chafing dish. Welsh rarebit and Newburg mixtures are much better cooked in an earthenware vessel than in metal.

Hi-Ho! The Chafing Dish.

The following verses ought to be preserved, along with Sydney Smith's receipt for salad dressing:

"Now light the chafing dish and try
To have things bubbling, at the start.
A dab of butter, like a nut;
Some cheese—oh, half a pound or so!
No need to stir it melting, but
Be sure the melted point you know.
(Keep bustling round); first get a cup—
He'll beat the egg, add Worc’stershire
A teaspoonful; now stir it up:
French mustard—half a spoonful here.
A pinch of salt; red pepper now—
(A lot, men take to seasoning.)
And watch that cheese, for I allow
It's melted—ah don't let it string.
Pour in the ale, say half a glass;
Keep stirring gently, it will cream—
In with the seasoning! Quick, pass
The plates with crackers—'tis a dream!
Light beer will do as well as ale,
But if 'tis cooked right (true as true)
The combination cannot fail—
You and this rarebit built for two."

Escalloped Oysters.

In default of baking shells, clam shells, of the largest size, carefully cleaned, may be used in exactly the same way. As they hold rather less than the ordinary shell, care should be taken to round up the contents, before putting on the crumbs.

Old-fashioned escalloped oysters were savory, but horribly dry and chippy. This was due to the use of crackers, and some cooks still fondly cling to them. The ideal dish of scalloped oysters is made with breadcrumbs, moistened with a cream sauce, to which the oyster liquor has been added, and finished off with a layer, not of cracker crumbs, but of one of the uncooked cereals, rolled fine and put through a sieve.

The uncooked cereal, finely powdered gives a better crust than cracker dust. The biscuit meal, which comes in packages, is convenient, but its age is uncertain, nor does its origin commend it to the fastidious.

Uses for Rum and Pistache.

An agreeable addition to the tea-table is a liqueur flask of rum. It gives a very pleasant flavor to a cup of tea, and acts as a bracer, if one is tired or cold.

A bottle of rum and one of pistache extract are a great assistance in varying one's desserts. Both flavors are a little out of the common and give the old dishes a pleasant piquancy.

Rum jelly, made in the same way as wine jelly, is more easily assimilated by a disordered stomach. An easy way of making it is to add four tablespoonfuls of rum to one of the lemon or orange jellies, which come in packages, using so much less hot water.

"The Book of Days."

If a Christmas cake is one of the things which has been crowded out, it may make its appearance on the sixth of January, with perfect propriety, that being a day which, in old times, was made almost as much of as Christmas itself. One great feature of the festivities was always a cake, of great size and richness. All sorts of quaint customs cluster around this feast of the Three Wise Men, and they
are worth looking up by people who are in search of something novel in the way of entertainment. "The Book of Days," to be found in any large public library, gives a great many interesting details in reference to such festivities. A periodical index will give references to special magazine articles, about Twelfth Night usages.

Send Us Local Prices.

Each month you turn to these pages to see whether or not the prices of material and labor in your community are commensurate with those of other parts of the country. Send us that list which you have for comparison that others may also profit by the information you seek. Keith's Magazine is published primarily for the purpose of simplifying the burdensome task of building its readers' homes, and any helpful suggestion along this line that is received from outsiders will always receive respectful consideration. If you have something on your mind that you think will interest us, write us about it.

**Table Chat—Continued**

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* Piano-Finish, Selected Figure, Quarter-Sawn Oak Mantel is $29.40
* Dealers' price $40 to $50.
* It is 52 in. high, 72 in. wide.
* Half French Bevel Mirror, four elaborate capitals.
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**Keith's Magazine**

(Established 1899.)

**Makes**

A special study of homes, costing from $2,500 to $10,000. Each issue contains complete descriptions, building estimates, exterior views and full floor plans of 6 to 10 modern homes, selected from the current work of the leading architects of the country; a total of over 100 plans a year.

Published monthly. Yearly subscriptions $1.50 (Foreign $2.) Single copies 15 cents, at news-stands.

Special Offer—Subscribe within 30 days and you get 4 EXTRA recent issues, including a double number on "Plaster and Concrete Houses."
In recent years, such marvelous advances have been made in the engineering and scientific fields, and so rapid has been the evolution of mechanical and constructive processes and methods, that a distinct need has been created for a series of practical working guides, of convenient size and low cost, embodying the accumulated results of experience and the most approved modern practice along a great variety of lines. To fill this acknowledged need, is the special purpose of the series of handbooks published by the American School of Correspondence.

In the preparation of this series it has evidently been the aim of the publisher to lay special stress upon the practical side of each subject. The first book of the series, “Building Superintendence,” is a working guide to the requirements of modern building practice and systematic supervision of building operations. It is a work specially adapted to the use of student architects. The average student architect no matter how well informed he may be on the practical side of constructing homes and buildings, seldom has the opportunity to come in close contact with the actual work of constructing these buildings. This book is therefore intended to supply that lack of experience in his professional career and qualify him upon his advent as an architect to take care of this important part of his work in a manner entirely satisfactory to his clients. Book covers the proper method of foundation work, the framing and exterior finish of residences, interior finish and appointments, also treats extensively on the construction of large city buildings, especially those of fire-proof character. The book is bound in cloth, price $1.50. American School of Correspondence, Chicago.

“Strength of Materials.” The third book of this series is as its title indicates, intended as a reference book more particularly for practicing architects or advanced students. It is a practical manual of the scientific method of locating and determining stresses and calculating the required strength and dimensions of building materials. It treats particularly on simple and complicated stresses, on beams and girders, strength of columns, strength of shafts, riveted joints, twisting moment, stiffness of rods, beams, coefficients of elasticity. This book is bound in cloth. Price $1.00, American School of Correspondence, Chicago.

“Hard Wood Finisher,” by F. T. Hodgson, architect, in two parts. A complete, practical, up-to-date book on hard wood finishing including wood manipulation, staining and polishing. Part one gives rules and methods for working in hard woods with description of tools required, the methods of using and how to sharpen and care for them. How to choose hard woods for various purposes and how to properly work and manage different kinds of veneers. It also goes into such minute details as the proper use of glue, preparing of glue, blind or secret nailing, etc. Part two treats on the filling, staining, varnishing and polishing, also enameling of all kinds of wood-work. It also treats on renovating old wood-work, re-polishing and re-finishing generally. There is a short treatise on dying woods various colors. It goes into detail on treatment of hard wood floors, waxing, polishing, shellacking and the general finishing of hard wood under all conditions. Bound in cloth. Frederick J. Drake & Co., Publishers, Chicago.
C. V. S., Almena, Kas.

Q. In taking advantage of your information service, would like to ask what kind and how large a veranda will a one story cottage 24 ft. square with 9 ft. studding setting on a 2½ ft. foundation stand. We should like it to go around two sides. In replying please advise amount of veranda, width, size of columns and kind of roof.

Ans. To give you the answer that we would like to give, we should have had information as to the height and style of the roof of your cottage as these facts should be considered in designing the porch.

However, will say that by putting a porch on two sides of this house you place it into the charming “Bungalow” class of cottages. Make the porch eight feet wide, using five columns on a side, (nine columns in all, counting the corner out twice.) Use seven foot wood, Doric columns with a square baluster, balustrades between columns, two feet high. Make the roof a low hip roof and extend the eaves eighteen inches. The diameter of the columns should be twelve inches at the base and diminish to ten inches at the top. There are ten illustrations of cottages in the April Journal of Modern Construction (any news dealer) which would interest you.

Mrs. S. R.

Q. Kindly explain the difference in construction in “cement houses,” “plaster houses” and “pebble dash houses.” And material used in all cases.

Is there anything gained in excavating a greater space under a house than one needs for cellar space? Will a double floor give as much warmth as the cellar provided a house has furnace heat?

In putting in a fire place, would dropping the floor space directly under the grate, or andirons as the case may be, say two inches, make any difference in the draughts. This plan allows one to brush back the ashes without their flying out into the room where floor space is on level with fireplace bottom, and I want to do this if it affects the usefulness of a fire place in no bad way.

Ans. You ask us to give you some specifications and suggestions on the subject of cement houses.

FIRST.—The difference between a “cement house” and a “plaster house” lies in the fact that one is made of Portland cement and the other of hard plaster; the former being preferable for outside work.

SECOND.—I always advise excavating under the entire house for the reason that the cost is practically the same and one can, in time at least, always use the space gained. The reason for this is that in excavating only part of the space you require extra walls to hold back the dirt and the cost of these would much more than pay for the rest of the excavating. The double floors will not be as warm as a basement under the entire house.

THIRD.—Making the level of the hearth inside the fire place two inches lower than the floor, will make no difference with the draught if andirons or a grate is used. The fire place should be at least 18 inches deep, from that to 30 inches. The construction of a fireplace is a very delicate proposition and too much care cannot be put into its construction. We suggest that you obtain the January and February numbers of our new magazine, “The Journal of Modern Construction” in which are two articles of great value on this subject.

E. E. A.

Q. I have just completed a new house and the specifications call for one grille No. ______ made by ______ Chicago, Ill. There was also a lumber bill furnished the contractor as a guide to go by. Now the contractor refuses to furnish the grille saying it was not on the lumber bill. The firm he bought the lumber from do not make grilles and they would have had to order it from some other factory. It was never intended to be on the lumber bill any more than the mantels or hardware. Kindly give me your opinion in the matter. Are grilles considered a part of a lumber bill any more than cabinet mantels?

Ans. Answering yours of the 26th, would say that if the contractor building your house agreed to follow the plans and specifications, he is obligated to put in the grille, provided the grille was called for in the specifications. Ordinarily a grille is not considered a part of the lumber bill.
The heart of the home is where you live—the inside—within the Interior Walls—and Ceilings. The substance of the interior walls and ceilings, is the Plastering. The sum and substance of Perfect Plastering is—the U.S.G. Brands of Hard Plaster.

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You may know, too, by writing direct to our nearest office for interesting literature and full information. Post yourself—get the right specifications, then see that they are followed.

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Building the Country Home.

The country home must be built upon a beautiful, healthful site, preferably upon a gentle knoll and a cheerful outlook over some part of the farm or surrounding country. All swamps, frog ponds and the like should be avoided, especially toward the southwest or west, as the prevailing winds will bring malaria into the house.

The ground on which the house should be built should be free from stagnant water. To find out if the subsoil is dry, dig down six or eight feet and see if the hole will remain dry for a day or two. There is a direct connection between consumption and certain fevers and the approach of the water line to the surface of the soil. It is impossible to build a healthy home on a water-soaked soil. If the soil and subsoil are not free from stagnant water make them dry by underdrainage.

In planning the house the living rooms should be on the eastern side, where they receive the first sunlight in the morning and be in the shade in the afternoon. Even in summer time our mornings are often chilly, but the afternoons are very hot, the hottest time being about 2 o'clock. The worst exposure for both heat and wind is the southwest.

Winds from the east and south are usually gentle, but those from the northeast and southwest are boisterous, and the house should be shielded from those winds by evergreens. But these should not cover up or overshadow the house so as to exclude the sunlight. One imperative demand of health is sunlight. Plant so much as man demands light and air. The sun must shine at some time of the day on every wall of the house.—Outdoors.

Rubber Heels in Flats.

If a thing is a good thing it ought to be encouraged, in recent popular parlance, “pushed along.” Rubber heels, made from “new rubber” and guaranteed to develop and maintain a mighty spring, are advertised in every street car, to say nothing of other means of catching the public eye, and probably are a good thing. But the possessor of a really good thing seldom has an adequate idea of how awfully good it is until the public has reported upon its merits. The makers of rubber heels for boots and shoes rely upon the ease that they afford the wearer for their claims of excellence over every other form of heels ever made or even thought of. Yet it transpires that the crowning glory of their device had never, until recently, been appreciated, or even thought of.

The new use found for rubber heels is to prevent those noises ordinarily necessary to the act of walking in apartment houses. “If everybody wore rubber heels,” reasoned the landlord of a Harlem flat building, “my house would be as noiseless as the tombs.” With this energetic New Yorker, to think was to act: he flew to the office of his attorney and had leases drawn and subsequently printed, which contained the following clause:

“...And it is hereby further agreed that the said party of the second part (the tenant) obligates himself and the members of his family to wear and use only shoes equipped with rubber heels; and the said party of the first part (the landlord) hereby agrees to pay the expense of fitting rubber heels to all shoes regularly worn by the tenant and the members of his family, provided that such heels shall be fitted only at a shop to be designated by the party of the first part.”

This may, at first blush, appear to be the action of a crank, but it takes a crank to turn things in a vigorous way. It turns out, however, that this inventive landlord has profited decidedly through the practical and enforced adoption of his new idea.

Covering Capacity of Shingle Stains.

Based on the Average Cedar Shingles, Size 4 x 16 Inches.

One gallon will cover 100 square feet of surface, two brush coats.

One gallon will cover 150 square feet of surface, one brush coat.

2\(\frac{1}{2}\) to 3\(\frac{3}{4}\) gallons will dip 1,000 shingles.

Three gallons will dip and brush coat 1,000 shingles.

(The covering capacity of Creosote Bleaching Oil, No. 241, is about one-fifth less than these figures).
Splinters and Shavings—\textit{Continue}

But two-thirds the length of the shingle need be dipped. These quantities are given as the result of many trials under widely different conditions, and are as nearly accurate as possible. The covering capacity varies slightly, however, with the condition and texture of the wood.

The stains will go farther than paint on the same kind of surface, but nothing will go as far on rough wood as on smooth.

The stains are shipped in any size of package required, from a one-gallon can to a fifty-gallon barrel.

\textbf{Creosote Bleaching Oil}

for producing the “silver-gray” effect. This material colors the wood but little on first application, but a few months’ exposure to the weather bleaches the surface of the shingles to the beautiful, silken silver-gray that is sometimes seen on old buildings.

\textbf{Directions for Application.}

The stains are shipped ready for use, and do not require thinning. They can be either applied with a brush, as paint is, after the shingles are laid, or the shingles can be dipped in the stain before laying.

Concrete Basement Floors.

Basement floors in dwelling houses as a rule require only a moderate degree of strength, although in cases of very wet basements, where water pressure from beneath has to be resisted, greater strength is required than would otherwise be necessary. The sub-foundation should be well drained, sometimes requiring the use of tile for carrying off the water. The rules given for constructing concrete sidewalks apply equally well to basement floors. The thickness of the concrete foundation is usually from 3 to 5 inches according to strength desired, and for average work a 1—3—5 mixture is sufficiently rich. Expansion joints are frequently omitted, since the temperature variation is less than outside work, but since this omission not infrequently gives rise to unsightly cracks, their use is recommended in all cases. It will usually be sufficient to divide a room of moderate size into equal sections, separated by one-half inch sand joints. The floor should be given a slight slope toward the center or one corner, with provision at the lowest point for carrying off any water that may accumulate.

Two Sides of the Finishing Question.

Two recent frank expressions of opinion.

One builder writes. Nov. 8, 1907.

“\textit{In one house where the Wheeler Filler and Breinig’s Stains were not used, finished in fine quartered oak and sycamore, the finish was so rotten that I have made a life long enemy of the owner. The way woods are butchered by so-called painters is enough to make one weep.”}\textit{”}

Another builder writes under same date, Nov. 8, 1907.

“I have been using Wheeler Wood Filler since I began business, and beg to say it has always proved satisfactory.”

Our booklet, fully describing our goods, also finished samples, will be cheerfully sent upon application.

The Bridgeport Wood Finishing Co.,
Cement is the coming building material. Railroads are renewing their steel, iron and stone piers, abutments, culverts, etc., with it, and it is expected to last forever. There are no chiseling, hammering, dowelling, no heavy lifting with derricks, no misfits. The industry has already grown to enormous proportions. Drop a sack of dry cement to the bottom of a river and in a few minutes you have a solid stone that will never wear away. Drop 1,000 sacks on top of it and around it and presently you will have a foundation that will sustain for all time a million-ton bridge.—New York Press.

The Versatility of Concrete.

Here are some concrete possibilities. You can build concrete foundations, sidewalks, fences, water troughs, cisterns, water tanks, shelves, cesspools, gutters, floors of all kinds in the cellar, barn and stable, steps and stairs, well curbs, horse blocks, stalls, hop pens, troughs, chicken houses, corn cribs, ice houses, incubator cells, mushroom cellars, hotbed frames, bridge abutments, chimneys, ventilators, dams, windmill foundations, fence posts, clothes posts, and hitching posts. There is one farm where the post and rail fences, and the feed bins are concrete, and in another even the lattice under the house piazza and the laundry stove are made of it.—Farming.

An Electrified House.

The famous "house without a chimney," built at Schenectady, N. Y., by H. W. Hillman, of the General Electric Company, and heated by electricity, is to be re-placed by a still more modern house in which the application of electricity will be made use of to heat the building, do the family cooking, warm the water in the bath tubs, heat the maid’s curling iron, and light the owner’s perfectos.

Nor will this be all, for all of the doors are to be open and shut by electricity, and burglars will be kept away through a novel scheme of automatic illumination and the ringing of bells. The laundry will be equipped with motors and the tubs with electric coils for heating the water in large quantities. Even the lawn mower will clip the grass by motor power.

To Make Waterproof Glue.

Waterproof glue is manufactured of gum shellac three parts and India rubber one part by weight, these constituents being dissolved in separate vessels in ether, free from alcohol, subject to a gentle heat. When thoroughly dissolved the two solutions are mixed and kept for some time in a vessel tightly sealed.

This glue resists the action of water, both hot and cold, as well as most acids and alkalies. If the glue is thinned by the admixture of ether and applied as a varnish to leather along the seams where this has been sewn together, it renders the joint or seam watertight and almost impossible to separate.

Initiated into the Lodge of Sorrow.

A business house in Baltimore placed a bill in the hands of a collector, who, in response to a request for settlement, received the following reply:

“My Dear Sir: Absence from the city prevented my writing in answer to yours of a recent date. “It will be utterly impossible for me to settle the claim you mention at present, for the very simple but good reason—I haven’t got the money. “I lost every penny I had in the world, and considerable I had hoped to have in the future, in a theatrical venture last September. Up to the present time I have not recovered from the shock. “I think if you will lay this fact before your clients they will not advise you to proceed harshly against me. From their past experience with my modes of procedure, in days gone by, I do not think they can recall any suspicious mannerisms which could lead them to suppose I am a debt dodger.
"I have simply been initiated into the Lodge of Sorrow, Hard Luck Chapter, Fool Division, No. 69."

"My picture, hanging crepe-laden on the walls of the Hall of Fame, bears the legend, 'Sucker No. 33876494.'"

"My motto is briefly: 'I would if I could, but I haven't the dough, so I can't.'"

"Fortune may smile, however, but up to the present writing she has given me the laugh. However, I have hopes."

"Directly I am in a position, even remotely, suggesting opulence, I assure you your balance will receive my very prompt attention."

**House Interior Arranged Like a Ship.**

What might be termed something of a freak in house construction has recently been erected by a sea captain in New Orleans, La. The owner, it appears, likes to feel that he is aboard a vessel even when he is at home, and the interior of the house is so constructed as to suggest this at all times. The house overlooks the river, and the captain's vessels land directly in front when they are in port. The house is 54 feet square, surrounded by an iron fence with cement pavements. The rooms resemble the interior of a ship, as there are port holes, companionways for stairs, while the lower floor, on which is located the storeroom, bears a striking resemblance to the hull of an ocean-going vessel, according to Carpentry and Building.

The lower story is of brick, the upper of frame, while the roof of slate is modeled after the Japanese style. The eaves and cornice were built directly from the Japanese patterns. The house is ceiled with pressed steel, and finished as elaborately as the saloon of a ship. The cupola is constructed like a pilot house and has windows all around. The gallery is continuous, and at any time the owner can swing his hammock so as to be in the shade. Electric lights are used for illuminating, and everything is so situated that it is unnecessary to leave the house for anything, even the cistern being located on the gallery. The house was built by the captain and his crew of boat builders at a cost of about $8,000, and one year was occupied in the work. The owner is satisfied that he has a house the like of...
Splinters and Shavings—Continued

which cannot be found anywhere in the state, and he takes great pride in showing his friends over it.

For the Woman Who Builds.

The understanding of what is most essential in both house and land, what to avoid and what to secure, will prove helpful to every homemaker, whether she intends to build, buy, or rent a house, for with the knowledge of these important facts a woman can avoid mistakes, misunderstandings, and disappointments which otherwise might be encountered, and will be qualified to oversee intelligently the entire work of building, remodeling, or altering her house.

Location is everything when selecting land for building a house. It counts for so much that it is far better to have a modest house in a good locality than a more elaborate one on less desirable land; this, not only because it is more agreeable in every way and the outlook from the house far pleasanter, but also because of the practical business side of the question. Property in a desirable locality will find a readyer sale and will bring a better price, should you wish to dispose of it; then again a house erected on such land will always find eager tenant and will demand higher rent when you let it for the summer or longer.

Having selected your lot, before purchasing it inquire if there are any restrictions on the property. Often owners will not sell land unless the purchaser signs a paper stating that the house to be built shall not cost less than a certain sum, that the structure shall not be built nearer the street than so many feet, or nearer either side of the lot than so many feet, that no stables shall be on the grounds, etc. Be sure you understand thoroughly what is demanded, and if you do not care to comply with the requirements, and cannot persuade the owner to omit or modify restrictions, give up that particular lot and look for another.

Watch for the Mortgage.

Sometimes a mortgage exists on the property you have in view which the present owner fails to mention, so do not commit yourself in any way until you ascertain if there is one, how much it is, when

FOR ALL KINDS of BUILDINGS

where shingles, unplaned boards, or any other rough siding is used

Cabot's Shingle Stains

will give more appropriate and beautiful coloring effects, wear better, cost less to buy or apply, than any other colorings. They are the only stains made of Creosote, and "Wood treated with Creosote is not subject to dry-rot or other decay."

Samples of stained wood, and color chart, sent free on request.

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Parlor Door Hanger

The most popular hanger today, because it is ALL steel and substantially and well built on correct mechanical principles. It Gives Satisfaction. Sold by Hardware Trade. Send for Circulars to

LANE BROTHERS CO.

454-486 Prospect St., Poughkeepsie, N. Y.
payments are due, when the mortgage expires, and whether the interest has been fully paid up to the present time.

The taxes on the property form another important item to remember. Make sure that these have been paid up to date, and if payments have been neglected refuse to sign any papers until they have been made.

It is just possible that there has been granted to others the right of way through the desired land to dig a trench for piping property lying near it, or the right of way for passing or driving across your land to reach some other place, or the land may be so situated that in the near future there is prospect of a street being cut through which will depreciate the value and perhaps demolish your new house.

When looking at property, notice particularly whether the lot is lower than the sidewalk. If so, all the earth taken from your cellar will not be sufficient to level up the lot, and such land would probably cost you several hundreds of dollars extra to fill in properly.

Many otherwise fine lots are subject to dampness because of springs or swales running through, the dampness not being observed until the cellar is dug. Always investigate and make careful inquiries concerning the possibility of such condition before deciding upon the property; for a damp cellar is to be avoided as you would avoid a plague.

The All-Important Price.

The first question to be considered when about to build a house is the amount you can spend upon it. This decided, make a rough plan of the house as you want it, with number, size, and location of rooms, halls, etc. Submit your plans to a competent architect, and ask him for a rough estimate of the cost. The amount he names will probably be far greater than you calculated upon; but the architect can suggest many ways in which the expense might be reduced. He may tell you that lower priced woodwork for the interior will look well and cost much less; that if you are willing to make the foundation a few inches narrower in width and length, it will lessen the aggregate cost, as it is the size of the foundation which governs to a great extent the cost of the entire structure.

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Box 846, ATLANTA, GA.
Splinters and Shavings—Continued

But there are certain requisites in building which are so essential that the cost cannot be cut down without seriously impairing the sanitary conditions and strength of the house. These requisites are good plumbing—the very best which can possibly be obtained—plenty of light and sunshine, a dry cellar, and a strong foundation.

If you are in a section of country where the ground in general is inclined to dampness, do not let the architect, builder, or anyone persuade you not to have a dry ditch around your cellar. It will cost a little more, but it is well worth the extra money; and if necessary make up the cost in less expensive mantelpieces, use lamps for lighting the house, and postpone buying gas or electric fixtures until later when more convenient; put up with the unpapered white plaster walls for as long a time as necessary, and in many other ways decrease expense in nonessentials.

Set the House High.

It is always better, for many good reasons, to have your house stand as high as the land will permit; therefore, do not dig a deep cellar, but build up the foundation walls quite a distance above the ground. The earth taken from the cellar can be banked up and filled in on the outside of the foundation cellar walls. Possibly the house may at first appear very high from the ground, and look a trifle awkward, but as soon as the grading is made the height will not be noticeable, the only difference being that the building appears to far better advantage and of much more importance than if set low. Besides all this, when the foundations are high, they admit of larger cellar windows, and these mean a light cellar, which is very desirable.

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CHARACTER IN DETAIL......................by J. Taylor

BULBS FOR SUMMER BLOOMING.............by Ida D. Bennett
The Supreme Sovereign of the World.

To My Valentine.

Little Cupid's formed a Trust
Of lovelorn hearts both great and small,
So if you've lost Yours, here you must
Search for it for he takes them all.

While looking through his vastly store
One day to see what I could find,
I found! (w'y hang this little elf?)
I found that he had captured mine!

—Arthur C. Clausen.
NE of the best examples of the southern Colonial mansion is seen in Sherwood Forest, which lies on the banks of historic James river, and was the home of President Tyler. The beautiful old homestead, still in the proud possession of the descendants of President Tyler, once formed a part of Greenway, the superb estate of Governor Tyler.

The rambling, white frame dwelling with its ample wings, green blinds and dormer windows, portrays in each and every line the ideal home of the early Virginia planter. Built before the revolution, this manor house has admitted no additions or would-be improvements, and graces today the large estate as it did when the President of the country called it home.

The first impression of the Sherwood Forest mansion is its extraordinary frontage which exceeds by many feet those of the twentieth century, being equalled, in fact, by few of the Colonial era. It is plain to be seen that the early builder sought an effect of space and comfort wherein be gained an aspect of solidity and age. On any but grounds of great area such a structure would be entirely out of place, but with the many acres at his command the old Colonist did wisely in adopting for his manor house an architecture which adorned the vast lawns, possessing an irresistible air of simplicity and home like ease.

A very different style, yet one in absolute accordance with the surroundings of a city, is appreciated in the Governor's Mansion in Richmond.
This rather severe, formal building is placed at the east end of a broad avenue which is shaded and outlined by monarch trees and leads from it to the stately capitol. While not built in Colonial days in the strictest sense of the word, the lines of the executive mansion follow perfectly those of houses of the earlier period and may rightly be classed among such types. The architect, Mr. B. F. Latrobe, one of the most eminent of that time, hid the bricks of the walls under a grey stucco surface the color of which contrasts perfectly with the white facings and darker window blinds.

The formal grounds surrounding the building are partly enclosed behind a low brick wall. Magnolia trees of great size grow symmetrically on either side of the mansion, while box-wood bushes and English ivy, trimmed and clipped in faultless precision, lend to both grounds and building a touch of the romantic eighteenth century.

A covered corridor on the right connects the mansion with a smaller wing which is used as a conservatory. The interior of generous proportions gladdens the heart of the lover of high ceilings and spacious rooms, and though throughout it is most evident that the architect had in mind a dwelling that should be perfect in every detail for entertaining, one is immediately impressed with the result, which shows clearly that in attaining that end Mr. Latrobe did not sacrifice the homely atmosphere.

The President's house at William and Mary College, Williamsburg, affords as good an example of the purely Southern Colonist as may be seen. Built about 1750, the bricks were laid in Flemish bond with the customary blue leaders now mossy and worn with age. The one story wing thrown out on the left; the broad, sloping roof with rows of dormer windows and finished by the tall chimneys placed on the center top, are all typical of the mansions most in favor with the early Colonists, who strove to combine comfort with all that was practical.

The little portico forming the entrance is one of the best points of the structure while the broad lines and simplicity of the whole awaken unlimited commendation in the connoisseur and unenlightened alike.

The interior shows the usual central hall running the depth of the house, the library, dining room, living room and salon all opening into this hall way in a truly delightful manner.

The grounds surrounding the mansion are in absolute accord with the dignified building. Aspen and lindens, elms and sycamores lend their shade. A prim little gravel walk leads through the thickly turfed lawn direct to the mansion, being
finished with two massive cannon balls that could tell a tale of centuries when war music thrilled the nation and chivalry reigned supreme.

No more interesting or remarkable building is to be found in America than Stratford, the homestead of the Lee family of Virginia. On the banks of the Potomac river this curious structure, half domicile and half castle, has stood since 1730 when it was built by Queen Caroline for Governor Thomas Lee, whose first house had been destroyed by fire.

Perhaps the most remarkable features of this most unusual edifice are the thick walls and quaint chimneys of two groups of four each, being different from any to be found in the country.
The great mansion in the form of an H appears to have been built for strength and durability rather than mere beauty. The cross line of the H is a large, double fronted hall entered by inconspicuous steps both front and rear and forming a connecting link between the two wings. The vaulted ceiling of this famous hall is particularly high, while into the superb oak paneled walls are set bookshelves, proving it always to have used as a library or living room. The wings on either side are at least thirty feet wide and sixty deep.

Stratford House may be called typical of the habits and customs and general mode of living of the period in which it was erected. The kitchen placed some feet from the mansion possesses undoubt-edly the largest fire place in America, being six feet high, twelve feet wide and five feet deep, ample in which to roast an ox.

The cemetery at the foot of the old kitchen garden holds a wealth of lore and legend in itself, and in the entire surroundings, from the giant trees to the cannon ball fired at the house from a British ship on the Potomac, romance and history are forever blended.

Today the tourist who travels up or down the picturesque Potomac may wonder and ask what is the great building resting stolidly upon one of the river's brows. He is told that it is Stratford Hall, the gift of a queen, home of history and triumph of an early architect.

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**Care of House Plants During Winter.**

*By Ida D. Bennett.*

As the days begin to lengthen in February and the cold to grow more intense, there is a compensating quickening of all plant life looking towards the renewal of vegetation that will have already begun in the southern portions of the country, but is yet afar off at the frigid north. Curiously enough, however, the plants grown in the artificial atmosphere of the living room, feel this impulse towards renewed growth and will begin to reward one for their winter's care in increased bloom; indeed there are many plants that obstinately refuse to bloom, in spite of all one's coaxing, until this period.

It will pay now to give them extra attention and coax forward every latent leaf, shoot and bud. Every plant should be gone over carefully and all dead leaves removed. This may be done with a free hand as at this time a new shoot will start at the axils of most of the fallen leaves and every new shoot means a new blossom point. All weak growths should be nipped back, not slightly but to strong, vigorous growth, and preferably to a point that gives an outward turning shoot rather than an inward one as these serve to clog the plant and prevent the free circulation of air and light.

Many plants that have been making growth during the winter will need repotting and if a supply of earth has been stored in a convenient place in the previous fall this may readily be done at this time. To ascertain the condition of the roots it is only necessary to spread the fingers across the earth in the pot and reverse the pot on the hand and tap it sharply against the edge of the table or shelf when the ball will loosen and may be turned out in the hand without breaking it. If the ball of earth is well covered with a network of roots which are brown and dead looking it will be well to remove as much as possible of the dead matter and all of the drainage material which has been drawn up into the earth by the action of the roots and repot in fresh earth. But if the mass of roots show many white roots (Feeding roots) and appears healthy and vigorous it will only be necessary to remove the drainage material, if enclosed with roots, and to shift the plant into a crock one size larger, placing the drainage material in the bottom of this, with sufficient earth to fill, which should be worked up around the sides of the pots, leaving sufficient room for the ball of earth. A small supply of bone meal—a teaspoonful for a four-
inch pot, may be added to the earth before placing in the pot and thoroughly mixed with it. Plants that are merely shifted may be watered and returned to their place in the window, but those which have had the roots disturbed should not be placed in full sunshine for a few days but rather in a somewhat cool, shady position.

The plants will require more water at this time but overwatering should be guarded against as it is prolific of sour soil and decayed roots and crowns. Whenever in working about the flowers a musty odor is detected search should at once be made for the cause and any plant found sour or musty should be placed at once in a dry position and all possible efforts made to sweeten the soil. This may often be done by setting the plant over a dish and pouring quite warm water on the earth until it runs freely through the earth, washing away the mould and mus-

* * *

tiness; sour soil is caused frequently by keeping plants in jardeniers which prevent a free circulation of air about the pot and by allowing water to stand in the saucers—something which should seldom or never be done.

But before treating the plant with hot water it will be well to slip it out of the pot and ascertain the condition of the
drainage, usually this will be found to be inbedded in the roots and should be care-
fully removed and fresh charcoal sup-
plied in its place. Charcoal is one of the
very best materials for drainage and
broken up fine it is excellent to mix with
the soil as it purifies and sweetens it.

If the plants have not been crowded in
the windows they will have made consid-
erable winter growth, especially will this
have been the case if they have been sup-
plied with abundant fresh air and a semi-
weekly bath as they should have been. The
air should not, however, have been ad-
mitted directly upon the plants as a draught
is always harmful, but should have been
supplied by opening a door or window in
an adjoining room and so airing the plant
room thoroughly, or, when it is necessary
that the air should be admitted directly
to the plant room a tall screen should be
introduced between the current of air
and the plants.

Many plants like the heliotropes or
salvias will have formed quite a network
of roots near the surface which the water
will not freely penetrate; by opening
channels in the ball of earth with a fork
thrust down through it the watering will
be more effectual and satisfactory. Water
should not be given plants every day, but
only when they appear really dry. A
good thoro watering twice a week, so
that every part of the earth is saturated
and then allowed to grow dry before
watering again is far better than the con-
tinual slushing with water so commonly
practiced and which results in sour soil,
weak growth and little bloom.

At this season of the year the various
insect pests which afflict plants in the
house will begin to appear and should be
taken in hand promptly as one affected
plant will quickly contaminate a whole
window full.

The first indication of insect pests is
usually given by the presence of small
black flies hovering around the plants;
these are produced from a chrysalid in
the soil and are the precursors of the
small white worms which so often in-
fest the soil. Little, if anything, can be
done as far as the flies are concerned but
the worms are easily exterminated by
soaking the soil with lime water to pre-
pare which a piece of lime as large as a
coffee cup may be placed in a gallon ves-
sel and hot water turned over it; when
it has settled the clear water may be
drained off and is then ready for use. In
using it the plant should be stood in a
bowl or other deep vessel and the soil
thoroughly saturated with the lime-water
and the pot allowed to stand in that
which drains away into the bowl that it
may act as a seal to the drainage hole
and prevent air coming to the relief of
the worms so that they will be obliged
to come to the surface for air, when they
may be removed.

Next in order of appearance is usually
the various aphids or lice. The green
louse is the one usually seen, black and
grey lice being more in evidence in the fall. For all varieties of aphids there is
no more standard remedy than tobacco
in some form—either as a powder to dust
over the plants, as a liquid to spray, or as
sulpho-tobacco soap for the same pur-
pose, but probably the most effectual
form in which it may be applied, and the
one commonly resorted to by florists, is
for fumigating by placing damp tobacco
stems on live coals and placing it under
the plants. It is necessary to confine the
plants under a cover of some sort that the
fumes of the tobacco may envelop it and
remain for some time. Where there is
an unused room the plants may be taken
there and sufficient smudge created to
fill the room, which should be tightly
closed, and left for an hour or more.
Where no such room is available a large
box may be employed by nailing cleats
at opposite ends and placing boards
across to hold the plants and placing the
kettle holding the tobacco on the bottom
underneath the plants. But such an ar-
rangement requires close attention as
thenearproximityofthefiremaycause.

Red spider is one of the most trouble-
some foes of the house-plant. Favored
by the dry atmosphere of the living room
it increases at a wonderful rate and be-
fore its presence is suspected it has gained
a foot-hold almost impossible to dislodge. My usual remedy in all cases where the plants are of no special value, and easily replaced is to destroy, by fire, the affected plant. But where it is desired to save the plant I have found no better remedy than plain hot water, used either as a shower or plunge bath, the last being more thorough and effectual. In using it as a spray the water should be about an hundred and forty degrees and about ten degrees less for plunging the plant.

In plunging the plant a piece of paper or cloth should be held over the earth in the pot and the entire plant plunged headfirst into the water and held there for a couple of minutes. This treatment is entirely safe on all but the softest leaved plants and a little experiment will give just the temperature which will be safe for those. The hot water bath not only kills the spider but also cleanses and invigorates the plant.

Various forms of scale insects appear on hard wooded plants, notably the oleanders, ivy, palms and the like. The most effectual way of removing these is to go over the plant leaf by leaf and scrape them off. The white scale so prevalent on certain palms appears first in the crevices at the base of the leaves and may be easily removed with a stiff tooth brush, but after they begin to crawl over the leaves are more difficult to remove. The larger brown scale is found, usually, in isolated patches or singly and must be scraped off. Afterwards the plants should be washed with whale oil soap or any other good plant soap—sulpho-tobacco, or the like or a wash of a solution of zenolium may be used.

The Phoenix palms are the easiest grown of this class of plants, standing changes of temperature and the dry air of the living room far better than any other variety. P. Reclinata is the variety most commonly seen but P. Farinifera is a finer palm and equally easy to handle; the foliage is fuller and richer and is armed with sharp spines. Unlike most palms its growth is continuous throughout the year, new leaves being in constant state of production. It requires little water—merely enough to keep the soil moist and if the surface of the soil is covered with sphagnum moss and the water poured into the base of the leaves when watering it will require but little further attention beyond keeping it clean by an occasional bath with a watering pot or hose; handling the leaves of any palm should be avoided as far as possible and the use of anything to make the leaves shiny should not be indulged in, a clean healthy plant will have a gloss of its own far finer than any artificially produced and will not be mistaken for the artificial palms as the treated palms sometimes are.

A very ornamental and effective plant for the drawing room or corridor is found in the banana. These plants are as easily grown as a canna and when grown in the house so that the leaves are not injured by wind which whips and tears the great leaves badly they are very beautiful. They require more root room than ordinary plants and very rich soil and may be planted in a tobacco pail or plant tub. They should be kept fairly damp but must have good drainage. I like to find a drop of water hanging to the newest leaf of the plant as that shows that it has sufficient moisture and is absorbing it in a wholesome manner. The upper surface of the leaves should be kept clean by showering or by dusting very gently with a soft cloth, but handling the underside of the leaves and the stems should be avoided as it destroys the beautiful bloom they bear.

There are three varieties of banana procurable of the southern florists—Hart's Choice, Cavandish and Orinoco; Hart's Choice and Orinoco are tall-growing plants but Cavandish is a dwarf plant attaining but eight or ten feet in the open ground and is well adapted for pot culture. The leaves are immense and are splashed with a dark red like spots of blood. I do not think it is quite as easily grown as the other two, but it is very effective when well developed. If kept in a warm room they will continue to produce their great leaves all winter but if kept too cool and damp will decay at the base and be lost. They may be wintered dry in a warm cellar and bedded out in summer if preferred making under favorable conditions, a great growth in a season.

Rex Begonias—which do not do well in the dry, dusty atmosphere of the living room may be grown to perfection by plac-
ing the pots in a narrow window box and arranging a pane of glass over the front of the box—the top resting against the window. This excludes the dust and retains moisture about the foliage of the plant where it is most needed, but too much moisture at the roots is productive of decay and the resultant loss of the plant and water should never be allowed to stand in the saucer.

Primroses are plants requiring much water at the roots and should not be allowed to dry out, but water should not stand in the saucer. After all surplus water has run out of the pot the saucer should be emptied. These plants should be in full bloom at this time and all flower heads should be removed as fast as they wither, also all dead leaves, as perfect foliage has much to do with the beauty of the plant. Fern-leaved primroses do best grown on brackets where the leaves will not be crowded by other plants for they are very easily injured. This is true, also, of the cinneraria, gloxinia and calceolaria which should have a window by themselves and be handled as little as possible. Primroses are one of the few flowers which do well in a west window, the baby primrose doing especially well there while an east window will be found congenial to the calceolaria, cinneraria, gloxinia and if not too sunny to the begonia. A south window is best for geraniums, pelargoniums, heliotropes, hibiscus and most other plants. Few plants are likely to be injured by too much sunshine at this season of the year; how to give them enough to keep them in health and blooming is more likely to engage our attention.

Do not be in too great haste to give the plants a taste of out-doors at the first warm spell in the spring—much damage is done by placing the plants outside and leaving them and letting them become chilled by a shifting of the wind or the going under a cloud of the sun or a fall in temperature; better wait until settled weather unless one is willing to watch closely and bring them in before there is any change in the temperature. Neither should a window be opened directly upon the plants from the direction from which the wind is blowing, as this not only whips the leaves and stems but may also result in the downfall of the plant and much damage.

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Casement Windows.—A Reply.

By Harold F. Babcock.

Here is undoubtedly a great question, whether or not the casement window has come to stay. Is it a fad? No, for my part I do not think it a fad, but a window that we can hardly get along without for certain designs or requirements.

The casement window will never take the place of the double hung window for many reasons.

For an artistic and picturesque treatment the casement is the proper thing, and always finds a place in the well-planned cottages and suburban residences of today. As for the casement swinging in, I do not think it a success, as neither shades or draperies can be used unless fastened onto the frame of the window.

On the other hand the casement swinging outward, gives one all these advantages. If the casement swings out it does not interfere with the screen, if the proper screens are used. The only screen for a casement is one hung on hinges, it swinging in. There is a patent fastening that can be used so that one can open the window from the inside, without opening the screen. It can then be fastened, and held firmly. This does away with the swinging of the casement.

The shades can be placed between the window and the screen, and the drapery can be hung on a rod, the rod being placed on the casing. Now who does not think this a better plan, than the one in the article on “Casement Windows?” in the November number? I do and am sure others will, who have had similar experience.
The Living Room.

By E. A. Cummins.

Originally, the living room was the kitchen. In colonial times one room supplied all the social and material needs of the family, except those of sleep. The great fireplace at one end warmed the family and cooked its food. Within it they gathered, in their hours of relaxation, and just beyond it they ate their meals.

We have improved upon that. It is an exception when the living room is used for eating and, as for cooking, it may possibly witness the manipulation of a chafing dish or a samovar, but nothing more, while in the more luxurious houses it is eliminated altogether.

But in the average house it is the center of family life, where the children learn their lessons and the father reads his paper and the mother darns her stockings. It is the scene of all the pleasant domestic intimacies and, being such, it ought have a little better treatment than it usually gets.

For there is an unfortunate tendency, abating of late years, to feel that our good things are a little too good for common use. It is an inheritance of the best room idea, which still possesses country neighborhoods, and, like other inherited traits, dies slowly. Still there is a strong current of opposition and the living room is getting to be a very much pleasanter place, than it was once.

In planning the house, the position of the living room should be the first consideration. It must be well lighted and well ventilated centrally located, of good size and have a measure at least of sunshine. If the rear outlook is a pleasant one, and the kitchen situated in a wing or an extension, it is well to place the living room in the back of the house. It secures a certain measure of seclusion, and the mistress of the house is near enough to the kitchen and dining room to exercise a judicious supervision, while the children can reach it easily from the side or back door.

The ideal living room is perhaps only
possible in a very large house. It has windows on three sides, so that some part of it is sunny at any hour, and it can be perfectly ventilated at short notice. It is, of necessity, cool in summer, and warmth in winter is secured by double windows. But such a living room being exceptional, one can be very comfortable with windows on two, or even on one side. The most satisfactory exposure is a southwestern one, which gives actual sunshine the greater part of the day and the prophecy of it in the early morning. If this cannot be had a southeastern exposure has distinct merits, particularly in summer time. Anything is better than facing directly north.

Certain structural points are of much importance. It ought to be of generous size, even if other rooms have to be stinted: the windows should be large and fitted with plain glass: there ought, if possible, to be a fireplace and there should be a door that will, at need, shut the room off entirely from the rest of the house. Americans generally need to cultivate a taste for privacy. It does not add to the happiness of a casual guest to hear through an open door, the discussion of household ways and means, or the hum of children learning their lessons, nor is it desirable that Bridget should hear all the family affairs talked over.

Cheerfulness should be the decorative note of the living room. It is not necessary, for that reason, to color its walls bright red or rose pink, because such treatment however cheerful is not restful. But a room in constant use, and by a number of people, ought not to be sombre. A good deal of modern decoration errs on this score. A room whose furniture is dark oak, whose walls are a light greenish drab, in which the only color is derived from a figure in red and blue stencilled at intervals, on the upper part of the walls and a panel of stained glass, let into the centre of the leaded panes of the windows may be very artistic, but few people would choose to spend their days in it.

But a happy mean is possible. If a room is exceptionally well lighted, a soft, rather light green is an excellent choice. With less light, a warm tan may be selected and there is a beautiful color generally known as burnt orange. Any of these, and also a light terra cotta, are admirable in burlap, which gives probably more service than any other wall covering, and is the best of all possible backgrounds.

Next to burlap and very much cheaper, are the imported ingrain papers, whose colors are exquisite and which do not fade. In less expensive papers, there are various designs with a neutral ground and a softly colored conventional figure, at intervals, the whole crossed by waving black lines. For hard use, it pays to insist on an imported paper, as the colors are not only better but far more permanent than those of the domestic product.

The woodwork of the room must depend upon the color of the walls, or in the case of an already existing hard wood finish things must be the other way round. For the average room, paint in flat color is very satisfactory. With a green wall, a medium low toned olive is desirable, with terra cotta the best color is Indian red, although white woodwork is very effective, and tan and orange shades require a darker brown tone. We take the stained or painted floor for granted. Most people will agree that a single large rug is best for hard usage. Whether it shall be Axminster or Wilton, an English art square, an East Indian dhurrie, or a made rug of Brussels is a matter to be decided by the taste and the pocket. A rug with a comparatively smooth surface is more readily kept clean and some method of holding it in place is desirable. Either a mixture of brown tones or else a Persian effect of many colors will keep clean longer and show dirt less than one of more pronounced colors and with large plain spaces. The long piled, red rug is a means of discipline from beginning to end.

The furniture of the living room is apt to be a miscellaneous assemblage. Within bounds, this is rather desirable than not. Tender associations cling about the old chairs and tables. But a hospital for disabled rubbish is not a pleasant place. Repair the old furniture and recover it, but don’t condemn the family to sit on broken springs and write at tottering tables.

If a long hair cloth sofa has survived, let it be furnished up and stand it facing the fireplace, with a long table at its back. A Morris chair is almost certain to be among the household goods. Add to it a steamer chair, with a plenty of loose
cushions. If possible, have one big easy chair, even if you go to the second hand shop for it. Besides, there ought to be a number of small, easily portable chairs. In buying this sort of chair, one is too apt to hit on those which look exactly like dining room chairs. It is better to look for bedroom chairs, with good backs and to upholster the seats. There are worse things than splint bottomed chairs, with slat backs, painted black and cushioned. Then too, there are very comfortable chairs in colonial styles, with wooden seats. A stool or two will supplement the sitting accommodations of the room.

One large table, preferably in the centre of the room, and supplied with either a lamp, or a drop light, is a sine qua non. There ought to be at least one other table at which one can write, one for papers and magazines and a small sewing table. A set of shelves fitted into a recess, with the lower two curtained is almost indispensable. An old fashioned secretary, inclosed shelves above, drawers beneath, is a treasure not to be under valued and window seats with boxes or shelves beneath them are great helps to tidiness. A large, firm screen should not be forgotten.

In a warm climate, one may wisely elect to have only cane or wicker furniture and dispense with upholstery, depending for color on loose cotton or linen covered cushions. But such furnishing is rather chilly for northern latitudes. For our colder regions, we must have more or less upholstered furniture and, for covering sofas and chairs, which see hard service, I know nothing better than the tapestry fabric, which looks like cross stitch embroidery and ranges in price from a dollar and a half to three dollars and a half. While not every piece is artistic, it is always possible to find good designs, and it wears practically forever. For covering Morris chair cushions and the like, craftsman canvas has the same good qualities, and costs a dollar and a quarter a yard.

So much for essentials, unless some of my readers insist upon considering curtains as such. I am of the opinion that the one curtain, which has any place in a living room, is the long curtain of heavy material, hanging to the floor, which can be pulled entirely clear of the window, in the daytime, and drawn over it at night, and not always then. If however, people must have curtains, let them be of the thinnest net, running easily on brass rods, frequently washed but not starched.
Interior Decoration.
By John Taylor.

The day is past when the fixtures of a decorator's store held all that was required in the decorating of the house; then machine-like similarity was the order of the day, one house resembling another, like the units in a flock of sheep.

I do not say that life was less happy then than now; a man has no craving for that which is as obscure to him as the conditions of life on a distant planet—if there be such life.

But let anyone with musical taste get to know Beethoven and Wagner and the composers of the thin, scrappy stuff of today will be intolerable; likewise the present generation having been educated to the point of appreciating beauty of environment, the styles of thirty years ago can never again become popular. Then I was a decorator's apprentice, part of my daily duty being to strip old paper from the walls of musty houses, and woe betide the stripper and the atmosphere, if arsenical green had been employed in the coloring of it.

The widths of paper had also to be pasted, and during the process one was cognizant of how badly designed and extravagantly colored it was in most instances, going to the making of surroundings that in many cases must have driven nervous temperaments to distraction.

There was no censor in decorative art, as there was, and is, in dramatic art. As for intelligent public opinion it had no existence.

Gradually, nay suddenly, it dawned on an artistic temperament here and there, that this was all wrong. Artists, architects, designers, manufacturers, decorators, and the people awoke to the fact that the home should be beautiful, and might; and in the short space of a generation there has come about such a radical change in the character of the house that a new atmosphere, one that makes for health, happiness, and aesthetic pleasure is within the reach of all.

Now the chief charm of a room consists in the individuality of it, a quality peculiar to a particular apartment; this may be imparted very simply, in one of many ways. For example, a pretty cottage was built beside two willow trees. It was named "The Willow House," and in all the principal rooms there was a deep frieze, with the willow motif in white plaster relief, over a plain wall, of willow green, in parlor, and brownish grey in living room; corresponding to the color of the tree trunk. Then there was the room decorated to receive a collection of those charming wall panels the Japanese bring out from seclusion in honor of the favored guest, selecting those best suited to the taste of the visitor. The floor was covered with a peculiar tomato red Yokohama matting, the walls were a light grey, and all the metal fittings were of hand hammered brass, oxidised to resemble silver.

The color was supplied by the dainty Japanese panels and the grey background in its neutrality brought out the quality of the Japanese art perfectly. It was a publisher who conceived the idea of a charming room in which to receive authors, and the books that result from interviews there, are more original and dainty than any publication issued by the contemporary press.

A green, unpatterned carpet, of deep
hand tufted make, suggests the mossy bank; dark grey panelling to a height of 7 ft. 6 in., the weather beaten tree trunks; and the simple rose motif stencilled on the frieze, memories of the wild briar bush in the country lane, and signifies besides that the rose is the authorized trade mark of the publisher.

It was a pretty idea of the art student with pre-Raphaeilite tendencies to have a small "Rossetti Library" fitted with dark stained dull polished mahogany paneling, and bookcases all around, with fine mezzotint reproductions of pictures by Rossetti let in to the panelling at regular intervals.

The environment acted as an inspiration in the work the student set himself to accomplish. Instances might be multiplied indefinitely of rooms with a distinctive character, whereby they possess a charm, and exert an influence unlooked for in rooms of an ordinary degree.

The ceiling decoration for vestibule herewith illustrated is eminently simple, with just enough variety to make it interesting.

It may be carried out in either of two ways, by cross beams with sunk carving, or by stencilled lines and ornament throughout. The decoration is a conventionalized primrose, and may be executed in the natural color of the flower and leaf, or any other color suitable. Such work is easy and interesting and when completed it may be confidently assumed that the danger of coming across a repetition of it—an eventuality in the case of all printed goods—is reduced to a minimum.

Ceiling decoration is more popular in America than in Europe today. The modern men discourage all ornamentation where the eye has to be set at an uncomfortable angle to see it. Plain plaster, with the absence of cornice, a small cove serving to connect wall and ceiling, being adopted by many of the best architects, when art and hygiene are considered, in place of show and lavish expenditure.

In the decoration for hall and staircase the idea is to have a fine plain surface, made interesting by a special design, all the more attractive because of the undecorated space around.

The small leaf border, with the little touches of ornament toward the ceiling, will greatly enhance the decorative quality of the scheme.

The designs given need not be followed slavishly, they are offered merely as typical of a style. Firms like the manufacturers of Fabrikona make a great speciality of such decorative treatment, and have unlimited suggestions and designs by some of the most eminent authorities and artists of today, always at the service of those whose aim is to have unconventionality and beauty in the home.

Let your color be selected carefully, your scheme well thought out and with such a foundation as an artistic wall fabric, easy to procure in the states. You start successfully, and supposing you add little in the way of ornament, you may yet be nearer to decorative excellence than with the best printed goods of the year.
Planning the Home.

By Arthur C. Clausen, Arch't.

The first and most important part of the house to consider when preparing to build is the floor plans. No house can be skillfully and correctly planned without carrying in the mind a mental picture of the finished house while planning, but the plans, the arrangement of the rooms, their size and convenience, their relation to each other and to the external surroundings of the house are items which should always be considered paramount. Strange to say the planning of a house is the hardest part of the drawing of it. When the plan is satisfactorily arranged, the design will in nearly every case be at least acceptable. There are but few really skillful house planners among architects, and yet this is the part of the work that the average house builder thinks he can handle satisfactorily himself. Some of the most famous architects in America, men whose names and works are known to every quarter of the country, men who are recognized authorities on all subjects of artistic or structural designs sometimes fail utterly when it comes to planning a simple cottage. The principle reason for this is not incompetence, but lack of enthusiasm. Without sympathetic and enthusiastic co-operation with a man and his family who is planning a home no architect can succeed as a designer of houses. The reason for this lack of enthusiasm on the part of some architects is principally the remuneration. As long as an architect keeps in mind the little money he gets for planning a home as compared with the commission he receives on larger work for the same amount of time and labor he cannot put the heart and enthusiasm into his work that is necessary to properly plan and design a home. That architect who finds a joy and holds a pride in properly designing a home for a man to whom the building of a home is an effort as well as a pleasure is invariably successful as a planner of homes. In other words there is something besides skill and experience required in the planning and building of a home. That something is—sentiment. Young architect—take this for your motto, print it on a card and place it above your drawing table. “It is my ambition to fill America with beautiful homes” and entirely forget that other motto too often drilled into student architects by short sighted employers—“get it out and get your money.”

Now mind you I do not mean that the unskilled, unemployed or student architect is the most apt to get out the proper design because of more time on his hands to devote to the work. Select the busy architect, select the skilled architect, but select the right one. A preacher of national fame once asked all the men in his congregation who were too busy to take care of the affairs of a certain committee, to stand. From among those who stood he selected three and placed them on the committee. His explanation of this was that “One may get sick and another leave town, but we’ll get the work done.” It is the busy people who do things and do them right. If skill is all that is required to plan a home then a modern flat building ought to be a paradise of homes. But have you ever heard a man console himself as he climbed the last flight to the fourth story with the fact that he was nearer heaven than the man whose cottage chimney he could look into? I think not, and yet one of the greatest achievements of present day architects is a modern flat. “A complete home,” as one man expresses it “in a space hardly wide enough for a dog to wag his tail.” The writer can go him one better. He has been told that some people have to go out doors when they want to smile because they live in a flat. They are to be pitied whose circumstances require them to live as modern cliff-dwellers in one of those human kennels called a flat. They are probably the most complete homes known but are utterly void of the fine sentiments that go to make up a home. The true text to this sermon is “The sentiment of home building” and if the reader can be made to realize the importance of enthusiasm and sentiment in the planning and designing of his home a greater service will have been done him than a mere definition of the plans illustrating this article.
The easiest, most satisfactory, cheapest and only practical way of building a home is first to have a complete set of plans drawn and specifications covering all parts of the work in an accurate and technical manner not only enabling you to take competitive bids from several builders and thereby greatly reducing the cost of the house, but also assuring you from the start the possession of a strong, warm and beautiful home.

The building of a home is too important a matter to place in the hands of the most honest builder without knowing what he is going to give you. In the building of a home, not only are there important structural problems to work out but there is an artistic element to consider as well.

It has been established as a fact that an accurately drawn complete set of plans and details will save their cost in an actual saving of the foreman's time on the job while laying out the work to say nothing of the satisfactory results obtained thru the systematic arrangement of details. If you can afford to build at all you can afford to build right.

**Are You Right?**

"One need not necessarily be rich to give grace and charm to his habitation," says Charles Wagner in the "Simple Life."—That is true. In fact, there is more grace, charm and homelike comfort to be found in modest homes properly planned and designed than is possible in the palaces of the rich. Why? Because the true home spirit, the sentiment that pervades a cottage home properly built is lost in the social scramble to outdo a neighbor or rival millionaire. But—are you going to build right? Are you going to invest your several thousands in a home which will be a lasting joy to you and your family? Are you going to be assured at the start of the greatest possible comfort in the most conveniently arranged, and artistically designed home obtainable for the amount you desire to invest? Or, are you going to try and save on one of the least expensive, but the most important items in the construction of the house,—the services of an architect, and accept as an impossible substitute the most expensive item you could possibly put into a house,—a carpenter's plans?

If this is your bent of mind, banish the thought. It will prove an expensive un-
S the nation grows people are coming to more and more realize the fact that it is actually an expensive proposition to build homes without properly drawn and dimensioned plans. When the country was young the architect and builder were the same man, the reason for this being that there was hardly work enough then to support both. Then too, labor was cheap and a little time spent in experimenting and changing did not amount to much.

From this has grown a tendency, among the villages especially, to follow the old order of things and let the builder design the home, but conditions call for a different arrangement today. A good builder is always a busy man, far too busy to give attention to the education and training required to properly plan a home. On the other hand it is far more necessary to have plans drawn today than it was a hundred years ago. A complete home requires far more than it did a hundred years ago. The heating plant and plumbing, things unknown then, are but two of the requirements of the times. To properly design and plan a home it is necessary for a man to have a far greater technical experience, a broader perception and a better academic education than is found in the average carpenter or builder. Their vocation requires practical experience in the way of fitting together and laying out work, enough common sense to follow the working drawings but not much more. This is not saying, however, that some builders are not intellectual men, but that their business does not require it and it therefore naturally follows that there are a great many in the business who are not intellectually capable of planning a home.

In another part of this magazine will be found the timely advice of a prominent architect on planning the home. Editorially we can approve in its entirety that article. It expresses the keynote to the proper designing of homes. Having probably a broader association than that writer with architects, we know it to be a fact that prominent architects are not necessarily good house architects. It takes something more than technical knowledge and experience to plan a home, but all of that.

A Beautiful California Home.

This beautiful California bungalow with long sweeping roof, expansive porch and large cobble stone chimney is one of the most attractive bungalows ever built in that land of sun and flowers. Furthermore, it serves all the requirements of a good sized family, having besides the large reception hall extending clear through the house, a large living room, dining room, kitchen and four bed chambers. While the style of this home does not necessarily confine it to the southern district, it needs must have a generous, attractive ground, beautifully planted for a setting to do it justice. This bungalow would cost to build today $3,000.

This of course does not include heating or plumbing and the cost would probably vary in different parts of the country. The fireplace inside is of brick. The dining room is of very pleasing proportions and large in size, being 13 feet by 15 feet, including the bay. The stairway is so designed and planned that it serves the purpose for both a front and back stair, it being easily accessible to the kitchen. The cellar stairs go down in under the main stairway, first three steps to a grade landing on which is a door giving access to both cellar and kitchen.

A Home with Feeling.

A GOOD house should express something more than the arrangement of the plan as indicated by the doors and windows. It should express not only hospitality, home comfort and the abode of love and all the virtues, but it should live with feeling, have a character and almost a personality of its own, express an ideal. If the owner wants "something English" then his house should be the best looking house of Domestic English character that the architect's pencil can draw within the amount of building funds available. The house published this month illustrating the work of Architect Bernhard Becker is one of those houses with "feeling." The exterior is cement plaster divided into panels by wood strips according to the style prevalent during the reign of Queen Elizabeth. Some would call this a "Shakespearian" house, though just what the design of a house should be to acquire this rather lofty title has never been exactly defined.
It contains the general attributes sought by the average household. While not large—still spacious—it represents a type, which in a general way has usual features, but as a whole has an individuality which is suggestive of a home more than a mere house. The plan is very simple and complete, having a central hall and eight good sized rooms.

The first floor rooms are splendidly arranged with reference to each other, all opening together through wide double sliding doors which can entirely separate the rooms on occasion. Estimated cost $7,000.

Bespeaking Wealth and Refinement.

If we were to believe many people (even some architects) any house that has green blinds, and white porch columns is colonial. More than one host has startled the writer by exclaiming with ecstasy that their home was designed by the builder in "pure colonial." This of course called for a smile of approval which was the compliment desired. As a matter of fact there are very few homes that are true interpretations of the colonial style.

A fine exterior of colonial, showing many marks of progress, is shown by Kees & Colburn, architects. Its details are perfect and quite ornate. The most prominent feature is its imposing entrance, which has a rich appearance and bespeaks wealth and refinement. As one approaches from the front, it is quite suggestive of the beautiful stair hall with tapestry, rugs, mahogany furniture and bits of statuary to be found within. It is built of dark red pressed brick with white mortar joints, white trim and a dark roof. Cost to build, $9,000.

An Original Home.

As said before, every home should fill some ideal, if that ideal is originality than it should be entirely original. Strict originality, that is, homes designed without recourse to any known style, is very rare. In fact what some are pleased to refer to as originality in a home is more often a meddle oddity or an unusual combination of several styles, meritorious or otherwise.

The house illustrating the work of Fremont D. Orff, while having a little of the Tudor gothic cast is in the main an original design.

Do Not Try to Build Your House Without Architect's Plans.

Homes cannot be built in a satisfactory manner without Complete Plans, Elevations, Details and Specifications. Architect's plans will surely save the owner their cost several times during the construction of the house. — EDITOR.
A Beautiful California Home.

The porch is unusually large and homelike, with the porch posts set far apart to afford a perfect view from the living room. This room occupies most of the front portion of the house and is especially well planned for home comfort. Cost to build, $3,900.

A Mission Suggestion.

HERE is a small cottage with a mission suggestion. The lower part up to the second story window sills is cement plaster on metal lath; above that is broad ship lap. The general treatment of the exterior is simple, and this same simple idea has been carried out in the plan, the large living room being at the same time the reception hall and connected directly with the dining room with only a columned opening as a division, giving an “altogether” homelike effect. On the second floor, are three chambers, with an abundance of large closets. Estimated cost, $3,700.
A Home with Feeling.
Bespeaking Wealth and Refinement.

Kees & Colburn, Arch'ts.
An Original Home.

First Floor Plan.

Second Floor Plan.
A Craftsman House.
Lowell A. Lamoreaux, Arch't.

Of Gothic Style.
A Mission Suggestion.

[Architectural plans and images]
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White and Its Uses.

QUITE a number of us remember the time when the average wall was white, plain, uncompromising white, with a distinctly bluish cast. It might be whitewash, it might be kalsomine; in the case of newly built houses, it was hard finish. People, with more or less money and pretensions of gentility indulged in satin surfaced paper, with a modest gilt figure. The height of elegance was the white-papered wall divided into panels with more or less elaborate arrangements of gilt scroll work.

We have changed all that. Yet white has its merits. William Morris used to say, "There's nothing like whitewash," and the spaces between the heavy oak beams of the rooms he built were uncompromisingly white. It is a good deal a matter of shadow, also of the tone of white used. Even in a room where blue predominates, a bluish white is unpleasant, while a gray tone is agreeable. Everyone knows the merits of the ivory and cream shades. In our modern rooms with their curtained windows and their abundant furnishings, there is small chance of the long, blank stretches of unrelieved white, once so common.

There are certain places where nothing is quite so satisfactory as a white wall, always premising that there are white walls and white walls. In the dimly lighted inner bedrooms of a city apartment, the white wall reflects whatever light there is, giving a semblance of natural illumination, as well as making the best of the gaslight. Nothing is quite so dainty as an entirely white bathroom, tiled or painted. One might well choose white walls for the walls of a dormer windowed bedroom, in the upper story of a summer house, where the sun filtering through a drapery of vines makes shadowy traceries in the chamber.

One does not, however, choose kalsomine, or its kin, for the finish of the white wall. A perfectly plain surfaced white may be successful, in clever hands, but it is not worth while to take chances. One inquires for ceiling papers and finds small diapered patterns, in two tones and surfaces of white. These papers afford a capital background for long sprays of leaves and flowers cut from imported papers and applied as a border, in orderly confusion. Or one may choose to copy an old fashion and to set a stiff, nosegay border about doors and windows, finishing at the ceiling line with a narrow white moulding.

Another satisfactory way is to leave the white papered wall quite plain, considering it simply as a background for curtains and upholstery of a highly decorative cretonne, having the strongest note of color in the plain-colored rug. One may choose for this a Morris cretonne in blue and white, or green and white, or one of the English or American repped cretonnes with a riot of flowers on a white ground. With plenty of mirrors, a flowered china vase or two and brass candlestick, and pictures in color, you will have a charming room equally agreeable in the country house, or in a sunny exposure in the city. The Morris cretonne looks best without pictures, and with very little better bric-a-brac. Mirrors and brass will light it up better than anything else, the cretonne
Decoration and Furnishing—Continued

itself being far more decorative than any merely flowered affair.

There is another use for the white wall. Not so often as a dozen years ago, but occasionally someone is inspired to fit up a smoking room, in Oriental fashion, moved thereto by the possession of more or less Oriental bric-a-brac. There is a general impression that a crimson, or at least red wall is the correct thing. By no means. Who ever saw a picture of an Oriental scene in which the walls of room or court were anything but white? If one feels a call to put together an Oriental room, let her have a white wall, buying the best imported tiled paper she can find, having the woodwork the darkest oak she can get, as near as possible the color of teak. Thrown up against this background all the rich hues of the Turkish or Indian fabrics will acquire a new value, while the delicate details of metal work and embroidery will be appreciated as would be impossible in a dimmer light.

I should not close these suggestions without alluding to a charming American wall-paper, mentioned and illustrated in a former number of the magazine, which has the effect of a trellis of deep red roses against a tiled white wall. The roses are so arranged that there is a considerable expanse of white wall space, and an examination of this paper will give one a more practical idea of the value of a white wall than any written words.

Draping a Cot Bed.

In draping a cot bed, to be used as a couch, in the daytime, ample length should be allowed for the cover. Three yards and a half is none too much material to get and, if the couch is to stand against the wall, a single width of 50-inch goods will be ample. If the couch is to have a flat top, the corners of the cover should be cut out and seamed up, after the fashion of a slipcover, and the lower edge finished with a fringe, more or less elaborate. Or a length of material may be draped over the cot after the pillows are on. This is the more comfortable arrangement, for day use. A very great addition is a couple of very fully stuffed bed pillows, covered with the same material, to stand against the wall, making the couch a comfortable

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Decoration and Furnishing—Continued

lying, as well as sitting, place. Two smaller pillows will be needed, and one of them should have a white washable cover, preferably ornamented with lace insertions, or embroidered medallions.

The uncomfortable sagging of a cot bed may be prevented, or at least remedied, by nailing several strips of upholstery's webbing across, from side to side, on the upper side of the frame, just below the wire spring. Or the edges of the spring may be firmly fastened to the side pieces, with matting tacks.

Green Jap-a-lac.

Among the new colors, in this old standby, is a very admirable green, neither too light nor too dark, which ought to find much favor with the home decorator. Despite the directions given, any of these preparations give much better results, if the old finish of the wood is removed first. With the admirable preparation sold for the purpose, this is comparatively an easy matter.

In vamping up old bedroom furniture, a good green is much more satisfactory than white enamel, and more serviceable. The green brings out a cretonne with a cream colored ground admirably, and is about the only thing one can use with a cotton with lavender flowers. Another sort of thing with which it looks well is the cheap, American cretonne, with small designs in yellow and green, which imitate expensive printed linens.

Materials for Picture Mats.

A good mat is the making of many a picture. A very little skill in cutting and folding enables one to make charming and original ones, for which a framer would charge a goodly sum.

A Japanese print is much improved by a mat of silvery gray grass cloth, inside of a dead black frame. A color print, in warm, autumnal tones, is helped by a border of russet brown cartridge paper. Other effective mats are made from French charcoal papers, in various grays and blues. Still another material is a heavy fabric paper, made for manuscript covers, which can be ordered from dealers in typewriting supplies.

Beauty and Usefulness

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Answers to Questions on Interior Decoration.

N. B.—Please address letters intended for answer in this column to Decoration and Furnishing Department. You should state in your letter the exposure of room, interior finish, height of ceiling and dimensions. Answer will be given in next issue to go to press if possible.

Mrs. O. H. H. asks advice about dining room, to be finished in weathered oak, weathered oak furniture. "It is a southwest exposure. I should like blue on walls, what above rail at top of windows and ceilings, what run and curtains? It opens by folding doors into living room, which has southeast exposure, 14x17, 9 ft. ceiling; dark golden oak finish to match furniture. Would like brown on walls, a burlap or fabric of some kind, rug tan, green and mahogany; living room has buff brick fireplace.

"I have read Keith's Magazine for two years and find it very helpful in many ways."

Ans.—Your ideas as outlined in your letter are excellent. A decorative frieze between the rail at top of windows and ceiling, would add much interest to the room. Carry the neutral tone which forms the background of the frieze up on the ceiling. If this should be a soft ecru, it would be very harmonious with the brown tones proposed for the living room.

Body Brussels rug gives good service for dining room wear; select one having a small, inconspicuous figure in blue and green tones to correspond with the frieze. For curtains use figured cream madras which launders beautifully.

R. B. G.—Montclair.

* * *

Q.—Would you kindly advise about furnishing the living room and library of a bungalow cottage? The two rooms are to be used as one—see plan. The house faces west, but the entrance is on the south. Very broad verandas shading house. Beamed ceilings, cypress trim. Cobblestone fireplace reaching to ceiling in one room, ordinary brick in the other, about five feet high with plain shelf of cypress. Should this brick be painted? The walls are sand plastered and tinted faint green, ceiling cream. Plate rack around entire floor. The windows are casement. I have a large walnut bookcase, a birdseye maple desk and mahogany suit covered with tapestry in greenish gray effect. What kind of curtaining? Rugs? I have a dark blue Wilton, 8x10. Could that be used? What furniture besides, and of what style? What kind of screen? Where should piano go and what kind? I intend to put an extra room on to serve as ordinary dining room and will then put oak sideboard there which at present I thought of putting under stairway so that it faces south. I have electric fixtures to provide, five in each room. Each fireplace is provided with two. What do you suggest? What cushions for window seat?

Ans.—Your floor plan presents several difficulties. The two large fireplaces are so close together in practically one apartment, yet so different in character; and the ceiling should be a greenish gray, as the cream ceiling is neither a contrast or an accordant tone with the faint green wall. You do not state the finish of the woodwork, but being cypress it is probably stained brown. If the brick fireplace is red, of a fairly even tone, do not paint it. If the common, nondescript brick, then best paint it a greenish gray, and use the furniture with the greenish gray tapestry in that division of the floor. You can use the dark blue rug here also if you keep it in countenance with cushions of dark blue Monk's cloth on the window seat and a square, stiff cushion of the same upright in each end. For other pillows have red or warm color. On the casement windows above the seat have short, straight curtains of heavy greenish net or craftsman's canvas, with bands of blue linen. The birdseye maple desk is incongruous and should be exchanged for one of fumed oak or walnut, or old mahogany.

A screen of brown wood with panels of dark blue burlap would be in keeping with the character of the two rooms. On the other side is needed a large rug, which might well be a Donegal, in blues and greens, a library table, a couple of substantial chairs and a settee, or davenport of wood, mission style, furnished with pillows and cushions. This furniture should be in strong and simple lines of brown wood to correspond with the massive fireplace. The piano should be of oak or walnut.
MENTION has been made, before this, in these pages, of the Vassar professor, who prayed, in the college chapel, "Lord, give us a due sense of comparative values." The good man was probably concerned wholly with the things of the intellect, not realizing the application of his words to household affairs. We may hope that, in later years, many of those who heard him, put his thought to practical use. For no one more than the housewife needs to discriminate between the essential and the merely desirable. Food, nourishing and satisfying, shelter, warmth in winter, coolness in summer, and cleanliness, not fussy but thorough,—these are the essentials, to be had at all cost. Circumstances may arise to reduce them, in one way or another, but fundamentally they remain the same. But, beyond their limits, what a vast array of things which are often intolerable burdens, but which custom, or the opinion of other people, leads us to confuse with the essentials.

The habit of independent thought is slow in affecting these matters. In rural communities, in New England, one finds women who have discarded all the great verities of religion, but cling tenaciously to the fussy housekeeping standards of their mothers and grandmothers. Human nature finds theory far more attractive than practice. Possibly, too, some minds find it difficult to make the transit from thought to action.

Be this as it may, the whole matter is worth an effort. It is a good plan to go over the day's routine, with pencil and paper, writing down individual acts, noting those that might be eliminated, abridged, or combined. Such an analysis will probably lead to changes, more or less far reaching. It may result in the putting away of a good deal of useless kitchen furniture, leaving the pantry shelves less cluttered and easier to take care of. It is quite possible that sweeping changes in the bill of fare may be made, and simple dishes substituted for troublesome ones. Fruits and uncooked cereals, for breakfast, in place of warm bread and porridge, means at least three-quarters of an hour's extra sleep in the morning. The substitution of pudding for pies is still another saving. Note, too, that all these changes are in the interest of the health of the family.

Or it may be that some form of readjustment will suggest itself. A change in the hours of the meals, quite possibly not in accordance with the neighborhood habits, may result in a real saving of time. This is almost always the case as regards dinner at night, instead of at noon, and there are very few families in which the change might not be made with advantage, even if it involves leaving the washing of the dishes till the next morning. Again the readjustment may take the form of a different distribution of the duties of the various members of the family. Each person in the family has an aptitude, and it is the business of the head of the house to discover it, and to set him or her at doing the thing which is easiest for him, and which he can do best. It may well be that one of the girls has more skill at chopping wood than either of her brothers, while a boy anticipates a West Point cadetship by his ability to make a bed. In such cases there should be no debate, as to the propriety of restricting Jemima to her feminine sphere. Her later lot may be cast where muscular develop-
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Diet for Nervous People.

In the treatment of ordinary nervous conditions, much depends upon diet. Everything of a stimulating character should be avoided, especially when insomnia exists. A whole or partial milk diet is often beneficial, in such cases, and two quarts a day is about the proper quantity to take. In all cases of serious nerve trouble, there is a certain desiccation of the nerves, which demands an increase of fluid nourishment, water as well as milk.

The old theory that fish was a specially valuable brain food seems to be exploded, but it is valuable for the nervous patient, as being less stimulating than meat. Soft-boiled eggs are also excellent, at once nutritious and easily digested, containing the same elements as meat, without its stimulating qualities.

In sanitariums and rest-cures, much stress is laid upon frequent eating, large quantities of bread and butter being consumed between meals. In one institution of the sort, the patient is encouraged to eat as many oranges as possible. It may be laid down, as a general principle, that the more food a nervous person can take, without digestive disturbance, the better.
February brings St. Valentine's Day and Washington's Birthday. Lincoln's Birthday has not, as yet, gathered around it sufficient associations to make it much regarded, as an occasion for entertaining, although it is rather a good day for some sort of supper for one's husband and his men friends.

But Valentine's Day can be made much of, and has all sorts of pretty conceits attached to it. A variation from the time-honored scarlet hearts and red carnations is to use true-lovers' knots of blue ribbon and pink roses. For a centerpiece, have a big basket of roses, with long ends of blue ribbon coming from a knot upon the handle. Arrange these gracefully upon the table, tying a bow-knot, here and there, around a single rose. Have little silver or glass dishes of pink bonbons and iced cakes, some of them heart-shaped and heart-shaped sandwiches. A big heart-shaped cake and some sort of a pink ice cream, or a white ice with candied rose leaves frozen into it. If one paints, candle shades, for the pink candles, may be made of white cardboard and decorated with festoons of tiny roses and knots of blue, with place cards to match them. Whatever is served should carry out the pink and white scheme, no very difficult matter.

For Washington's Birthday, the enterprising hostess organizes some sort of a colonial fete. The most practical way to manage is to have the costuming restricted to a few people, say to eight couples, who will furnish the evening's amusement by dancing a minuet and later a country dance or, to call it by its prettier name, a Sir Roger de Coverly. The men will hire their own costumes, the girls manufacture theirs.

In decorating the table, carry out the colonial colors, blue and buff. In some places, yellow tulips are procurable in February and are very stunning, arranged in a large blue bowl. In default of them, there are buff carnations. Tall glass candlesticks deck the colonial table. blue Canton and all the silver available. Modern cut glass strikes a false note. A continental soldier may adorn the place cards, painted upon the card, or merely pasted on.

A Plea for Moderation.

Isn't it about time for people of social influence, in the smaller places, to call a halt in the matter of expense, in the social activities of their young daughters? By the time a girl is fourteen, she begins to make continual demands upon the family purse, and for things almost wholly connected with "having a good time." And almost invariably the pace is set by a set of girls to whose parents expense is a matter of indifference. The other girls do not want to be left out, nor to make a poorer showing than the rest. But the strain is too often frightfully hard. One doesn't expect half-grown children to appreciate a financial situation; it is almost impossible to make them, except at the cost of a good deal of suffering, quite real to them.

Any reform must come from those so well-placed financially as to be acquitted of any suspicion of meanness. If two or three such women, in every town, would
Table Chat—Continued

set themselves seriously to consider the situation, as it affects the other mothers, there would be an immediate reform.

Then let the other woman, she who burns to excel, at any cost, devote time to wholesome meditation. She will be pretty sure to discover that hospitality and expense are not synonymous terms. Following the reduction of her standard of entertainment, she will surely note, here and there, the appearance of a hostess hitherto in abeyance, or, if she is a prominent member of the club, new names upon the roll book.

A Pink Soup.

In the consistent carrying out of a pink scheme, most people rely upon mock bisque, which is pink after a fashion. A soup which is really pink is made from beets. This is made by simmering half a dozen red beets in a quart of milk, until the desired color is obtained, rubbing the mixture through a sieve, thickening it with flour, and seasoning it with pepper, salt and butter. The beets should be pared and cut small. A spoonful of whipped cream, in each plate, is an improvement.

When a pale green soup is wanted, a can of peas can be treated in the same way, and a deeper shade can be had with spinach juice. There is no limit to the variety of cream soups, and they are both palatable and nutritious. The mistake many people make is in not cooking the flour sufficiently. The soup should simmer at least ten minutes, after the thickening is added, so that the cells of the flour may burst. This is unnecessary, if the butter and flour have been cooked together into a roux. Another point is to put in a liberal allowance of butter.
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J. W. R.

Q. Will you kindly tell me whether the dampness which is common to brick and stone houses in a climate like this is due to water rising by capillarity from the ground, or is it due to water which penetrates the wall from the outside atmosphere? In a brick veneer house is there danger of the sheathing under the brick veneer rotting? A local firm is putting a newly patented cement block on the market which contains three rows of holes. Will it do to plaster on this without furring and lathing? (Our climate is moist, 30 miles inland from Norfolk and considerable of the sea-coast element in it). In a recent issue of your magazine I saw the statement that a cement block should be made under pressure. Those manufactured here are made by tamping the material into the mold by hand. Is that pressure enough?

Ans. With reference to the dampness which you say is common to masonry houses in Williamsburg, we would state that it is not possible for us to advise you of the source of this moisture at this distance. Whether or not this moisture comes from the ground you can determine by investigating the cellars of your city. Is unusual precaution necessary to keep them dry? Are surface wells easy to obtain? Is quicksand often met with near the surface? By investigating these matters you can determine for yourself whether the ground contains an unusual amount of moisture in your city. This condition exists in most of the gulf states, parts of Mexico and most of Cuba, requiring the people to build their homes six to ten feet off the ground with latticed pans on the sides to let the air thru.

We do not advise plastering onto any outside masonry wall. Concrete absorbs more moisture than any other kind of masonry and altho they are getting the manufacture of concrete blocks down to a science, the block has not yet been made that moisture will not penetrate. Experienced and reliable block manufacturers advise furring in for plastering as a protection to the reputation of their material. Tamping blocks by hand will produce fairly good blocks, if the best materials are used and considerable care taken in making and curing them.

Hand tamped blocks, however, are not as good as those made under high machine pressure.

G. E. G., Waterville, Minn.

Q. I own a store building 22 x 80 built in two parts, back 40 ft. made of common red brick. Front 40 feet of Chaska white brick trimmed with red pressed brick. The white brick is very soiled and gives the building a dingy appearance. Would like to freshen it. Also the two combinations of brick in front and back parts are not pleasing. Kindly advise your idea of treating the same to make it a clean, up-to-date store building without too much expense.

Ans. There is nothing that will remove the dirt from a brick so porous as Chaska brick. The only way for you to make the two parts of your store look alike in color is to paint both parts three good coats of high grade paint. (Do not use a cheap ready made paint, but we recommend the Lowe Bros. goods as a mixed paint or the use of pure linseed oil and white lead, the National Lead Company’s products). Possibly two coats would do the work if the paint runs heavy, but it does not have the lasting qualities you would get out of three coat work. I do not think it possible for you to merely paint the cream brick to match the old red brick as the difference could readily be told. It would be all right to line off the mortar joints with white, but if you prefer to have it different than your neighbor’s store, you can line it in black. The apparently red brick residence of Thos. Lowry in Minneapolis is so painted and lined off. The best color for the exterior woodwork of a store front is a greenish black. It is not necessary to remodel the transom lights unless you would like to install prism lights. These lights are a decided success and are now used in all up-to-date stores as they make the entire interior of a store perfectly light.

Books for Home-Builders

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The constantly widening field of artistic possibilities in treatment of interior walls—is one of the most fascinating features of Home Building. But no Decorations can be permanently beautiful when applied to an ill chosen decorating surface.

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Concessions from Neighbors.

It is very important to ascertain definitely before purchasing where and how your plumbing is to be connected with the main pipes. Not infrequently it is necessary to obtain permission to dig across the adjoining land to make connections for gas, water, or sewerage. If this is necessary, you will incur extra expense, regulated according to the extra labor and the extra distance the pipes must extend. Investigate the question thoroughly, and have the owners of the land through which your pipes must run sign and date a paper in ink giving you privilege not only to lay your pipes, but also at any future time to dig on their land in case trouble with the plumbing renders it necessary. If you purchase land in this way, have a diagram made showing just where your pipes cross the adjacent property. These papers are of great value, being always a protection for your privileges, and without such privileges, your property would be practically useless.

It is well always to consider the possibilities of development of adjacent lots before signing any papers. If the lots are vacant, you run the risk of having undesirable buildings next to you, which would not only make life uncomfortable for you, but would depreciate the value of your property; therefore, it is wise to select a lot where the neighborhood is well built up, leaving little opportunity for the erection of other than agreeable buildings. Ask questions about the land you have in view and also that lying next to it—ask as many questions as you can think of, and do not fail to ascertain beyond all doubt the vital facts.

When you have found just what you want, let a trustworthy lawyer examine the records and make sure that the title is clear. Have the land surveyed, making arrangements beforehand with the surveyors in regard to the cost of surveying, and require from them a carefully made out plan of the lot.
Splinters and Shavings—Continued

If all goes well, have the lawyer draw up the papers; then pay cash down for the lot, that it may be entirely yours, with no more anxiety except the annual taxes.

When you have purchased the lot you will think the land is yours; but remember that as soon as you begin to build, new conditions arise. When the cellar is dug, the builder has a perfect right to cart off and sell the earth, unless you state in the beginning to both architect and builder that no earth shall be taken away or sold; that you will retain it all for yourself.

Should there be trees on your place which it will be necessary to cut down in order to build the house, consider well whether it will be best for you to bear the extra cost of felling the trees and having them sawed and cut up for firewood, or whether you will let the builder cut them down and have the timber for his own. You must make a choice, because all trees on your lot which come down to make room for the house belong to the builder, not to you, unless previous arrangements have been made with both architect and builder.

Concerning Ice Houses.

The house should be built above ground and if it can be placed where it will be protected from the noonday sun by shade trees, it will be found to be of advantage. A low cost ice house can be built with ordinary lumber and by any one handy with tools. The essentials to be observed are: First, drainage below and ventilation above; second, a perfectly tight foundation. Warm air rises and if a current of warm air gets started through the ice it will cause quick melting. Third, a reasonably double wall surrounding the ice on sides and top.

The foundation should be made of brick, concrete or stone masonry, and in which sills 2x8 should be bedded in cement. On this erect 2x8 studding 24 inches apart. On the inside for the inner wall ½-inch sheathing material may be used of almost any kind of lumber. Some durable wood is to be preferred, as these boards are apt to decay quickly. For the outside good novelty siding may be used. It should be free from knotholes and cracks. The rafters should be 2x4, with sheathing on the under side. It is

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important to have air space between shingles and sheathing beneath the rafters, as everyone knows how hot it gets under a barn roof in summer. The space between the two walls on the four sides may be left empty if the outer inclosure is very tight, as a dead air space is one of the best non-conductors. But it will not be a dead air space if there are holes or cracks in the siding, but the air will circulate and prove of little value as a non-conductor.

If the ground on which the house is situated is of a gravelly, porous nature, no provisions need be made for drainage, as the water will be absorbed as fast as the ice melts. Otherwise, the floor should be graded off, so as to slope to one point, where surplus noted may be taken off by means of a trapped outlet pipe to exclude all air while allowing the water to escape.

The door opening of the house should begin about 4 feet from the ground and extend upward nearly to the top of the roof. The outer may be made in two or three sections, and the inner inclosure supplied by boards crosswise, put in as the house is filled and taken out as it is emptied. It is a mistake to provide too much ventilation. For an ordinary house 1-foot square openings at each end under the apex of the roof are sufficient, and it would be of advantage to provide for closing these on warm days.

In filling the house never lay the ice on the ground. The warmth of the earth will melt the ice continuously. The cakes of ice should be laid on old rails or any kind of timber. Straw or cornstalks are not good, as they crush tightly to the earth, and get wet, and water is a good conductor of heat.

The ice on the pond should be worked out carefully and the blocks made of uniform dimensions. In laying, the joints should be broken and a space of 8 to 12 inches should be left between the ice and the wall. This may be filled with straw, the same material being used to cover over the top of the ice after the house is filled. The house should be painted white.

An ice house 15 feet square and 12 high will require approximately the following amounts of lumber: 26 pieces 2
Splinters and Shavings—Continued

by 8 inches by 12 feet, eight pieces 2 by 8 inches by 15 feet, 14 pieces 2 by 6 inches by 10 feet, 720 feet sheathing, 850 feet siding, 900 feet shingles. It will cost at present prices of lumber about $80, independent of the foundation.

Bright Tin Best.

A wooden floor under a stove must have on it a sheet of metal extending a foot in front of the ash pan, and if wood is the fuel used the metal should extend that distance out under the stove door. All cold air entering the room falls to the floor and is drawn toward the stove, so an airspace between floor and zinc is unnecessary. However, it is a very proper precaution to put a layer of one-eighth inch asbestos cloth under it, for it may have to catch some very hot coals.

Many fires occur from a clothes horse or chair holding clothing or laundry being placed too near a stove or grate and a few from kindling put in a warm place over night to dry.

The Wood Stove's Tricks.

The wood or coal stove often takes advantage of the absence of its general manager to fire something, usually the nearby woodwork. A stove is likely to ignite laths from which the plaster has fallen or a wooden partition within three feet. The danger signal is the browning of the wood which occurs if the heat reaches 414 degrees Fahr. If the wall is protected by tin, zinc, or sheet iron the stove may be placed within a foot. The metal to protect the wall must have a space behind it so that circulation of air will keep it cool. This may easily be secured by hanging the sheet of metal on screw hooks. The pipe is often the hottest part of the stove, therefore the metal to protect the wall should be run three feet above the stove.

Bright tin reflects heat better than any other metal. If the elbow of a pipe is within a foot of the ceiling sheet metal should be placed above it.

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[Image of hardwood floors]

NOTES ON PRICES.

Lower Prices.

In last issue our editorial on lower prices for 1908 gave a general outline of the situation affecting the building material market and a statement of what to expect. The Associated Press have just published an interview with the most prominent man in the lumber business, Frederick Weyerhaeuser, and we give here a report on this interview because of its direct application to our last month's editorial on prices.

Lumber prices are down. Nearly everything in the northern pine list is cut from $1 to $3 a thousand.

Frederick Weyerhaeuser, the lumber "king" of the country, is known to be the directing spirit in this move, which was taken by the Weyerhaeuser companies recently. Other concerns have been selling at concessions from their August price lists, generally 50 cents or $1 a thousand, but the Weyerhaeuser cut is deeper than any yet made, and will undoubtedly be followed by all the other Minnesota and Wisconsin manufacturers.

The reductions from the August list are as follows:

- Dimension and timbers, $2 a thousand.
- Common boards, Nos. 1, 2, 3, 4 and 5, $1 a thousand.
- Fencing, Nos. 1 and 2, six-inch, $1 a thousand; four-inch, $2; No. 3, six-inch, $2; four-inch, $3 a thousand.
- "C and better," eight inches and wider, $2 a thousand.
- Siding, C and better, $2; D and E, $1; C and better, Norway, $1 a thousand.
- Lath, 50 cents a thousand.
- No reduction on inch D or on thick select and shop.

The competition of other woods has been cutting into white pine territory considerably. Since the financial flurry a good many of the smaller mills in the south and the Pacific coast have been in urgent need of money, and have sold their stock wherever they could and for what it would bring. So considerable yellow pine and some fir has been unloaded at bargain-counter prices. The worst of this movement is over, as the mills have raised their money and passed their financial crisis, but it has produced a new market condition, and the white pine cut will adjust prices on northern lumber to those of competing woods.
Notes on Prices—Continued

The price reduction puts white pine about where it was 1½ years ago. Three advances in price, each one covering a part of the list. All told, the three advances are just about offset by this one reduction.

Retail lumbermen have complained that high prices during the past season reduced their sales in the country districts, though they seemed to make no difference in the cities. Lumbermen have some idea that the price-cut will stimulate building in the coming season.

Strong activity in building is promised for 1908. The fact that materials will cost less for a time, and that the demand for some classes of buildings is ahead of the supply will result in much construction in the next twelve months. More houses and flats will have to be erected to house the gain in population, resulting from the general expansion which requires more people to work. Already some improvements have been mapped out, in addition to the work which has just begun and which will go on through the winter.

The Consumer's Interest in the Freight Rate Advance.

In a very evenly balanced editorial of the Miss. Valley Lumberman this week is given food for thought, covering the lumbermen's suit against the western rail-ways and now under the consideration of the Interstate Commerce Commission.

A decision unfavorable to the railroads would by no means be final. In fact, the railroads have intimated, or broadly stated, that in the event the decision is against them they will carry it through the courts until it reaches the Supreme Court of the United States, the court of last resort. This means a fight for months, and it may be for years, just as the southern lumbermen were obliged to fight the advance of two cents in freight rates before the commission and in a number of courts up to the highest.

For a great many reasons, the entire lumber trade, and more than that, the en-

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Notes on Prices—Continued

tire shipping trade of the country is interested in the fight, and should lend its moral, if not financial support to the lumbermen. It is probable that this attempted raise by the transcontinental roads is only an entering wedge. If the roads are able to make this rate effective there will be nothing to stop them when they start raising rates all over the country. A favorable decision in this case would give them moral support in any other like movement they chose to make, and they would not be slow to take advantage of it.

If this rate from the west is permitted to stand, the manufacturers in other sections will be favored for the time, and at the expense of the lumbermen of the coast, but they will not be secure in this advantage. Other railroads from other producing sections will take it as their cue for making advances, and the final result will be that the retail lumbermen and the consumer will pay the freight. An advance of ten cents in the lumber freight on such lumber as comes from the west, means an added investment of ten per cent in the lumber coming from that section. Eventually it will mean an addition of that amount on all lumber carried in the retail yards of the country.

Mr. Hill, who, without doubt, holds the whip hand, has claimed to have built up an empire in the west. He says that the railroads he now controls were the chief factors in developing the country. They carried men and machinery to the Pacific Northwest and encouraged the building up of the lumber mills of that section. He made this possible by making a freight rate without which the lumber industry of that part of the country could not have developed. Then, having built it up, on the implied, if not spoken, promise that it would be protected. If these coast-interests are saved it will be at the expense of the consumer who must pay the excessive profits to the R. R. Co., by being compelled to pay high prices for his lumber.
Next Month, Bungalows!!!
Our Double Easter Number. Don't Miss It.

For several years it has been the custom to treat the readers of Keith’s Magazine to an elaborate double Easter number. This year all previous efforts will be excelled in our special double number on bungalows. To our present subscribers and to those who subscribe during the month of March, there will be no extra charge for this beautiful edition, but at the news stands the price will be twenty-five cents a copy, and worth it.

This number is to fill a growing demand for that unique style of home that is entirely of American origin. Starting in California the popularity of the bungalow has traversed the continent and today we see bungalows built as summer homes for millionaires on the Atlantic coast from Florida to Maine.

The Bungalow.

Many illustrations of the American Bungalow will open the number. In this article will be described several new styles and developments of styles of the American one-story cottage, telling how it should be planned, how it should be designed, of what materials it should be built in different localities, the relation of the bungalow to its surroundings and interesting and practical suggestions to builders of the picturesque bungalow.

Comfort for Two.

This interesting article written in the very heart of bungalow popularity, Pasadena, by Mrs. Kate Randall, is about two very unique little homes, each designed for the comfort and convenience of two people. For so small a family group, the bungalow is especially appropriate and this article will furnish some practical suggestions on how to live in a “cottage built for two.”

Clearing Ground for a Bungalow.

Before a bungalow can be built an appropriate place must be found for it. Much of the beauty of a bungalow is derived from its surroundings. In this article Miss E. L. Gebhard tells how to prepare the site for a bungalow, leaving some of the native beauty of the surroundings, but tempering them with a touch of true art.

The Philippine Bungalow.

This article was written in the Philippines especially for Keith’s Magazine, on the construction of the native home of that interesting country. The writer goes into some detail, telling just how and why the natives build their odd looking little habitations.

Ornamental Hardy Hedges.

A beautifully illustrated article giving much valuable information on how and when to plant the home grounds. The importance of a proper setting for the bungalow can not be too strongly emphasized.

Other Leading Articles.

There will be a number of other equally interesting articles in this, our big double number. Some of the leading articles will be “Architectural Triumphs of Virginia Cavaliers” by Edith Dabney, “Entrances” by J. Taylor, “My Neighbor’s Porch” by Ora W. Alford and “Twentieth Century Paints.”

Designs for the Homebuilder.

Ten or more designs of the bungalow order with floor plans and complete descriptions. A rich number—don’t miss it.
FASHIONS in houses are commendable as well as deplorable—which, of course, sounds paradoxical. However, when a new style improves our dwellings from the standpoint of beauty and livableness, its adoption is wise, but, as frequently the case, when it is simply an excuse for something new and novel, it is to be lamented. One doesn't associate fashions with so dignified an art as architecture, but the close observer cannot fail to perceive year after year that fads in houses are as prevalent as fads in bonnets. Fortunately, fashions in houses are gradually, almost rapidly, improving and the outre in architecture is the exception rather than the rule.

Strange as it may seem, the natural order of things has been reversed, and the west of late has originated the most delightful architectural creations! Nowhere is there to be seen, at present, such marked originality as in the homes of Californians, particularly. And it is safe to predict, at least, that in the near future no one section of the country will produce models which will be so widely copied as those of southern California. Even now, our house patterns are appearing in numbers, in eastern magazines. They have attracted attention because, for the most part, they have ignored all academic rules in building, resulting, if the phrase is permissible, in an architectural free masonry; and their beauty,
which is indisputable, has appealed to those who are on the lookout for high standards of architectural excellence.

But California homes, primarily, have been built for use, and taken as a whole they have included features that make for simple, healthful living. They are constructed to admit plenty of sunshine and fresh air, there are a great many windows and doors, large screened porches, courtyards and loggias.

Various sections of the country are confined more or less to the use of one kind of material, but California is fortunate in having a variety of stone and woods, which she has manipulated with the dexterity of a French modiste in the "building" of her gowns. Some "stuffs" long relegated have been brought forth with gratifying results! The old-fashioned split shakes, for instance, are being used in many of the new houses, and proves delightful both in texture and color, for when weather beaten, they have the subtle tones of the bark of trees. These shakes are also used in pleasing combination with rustic siding, and together with arch brick or cobblestone. The fashion being for stain rather than paint, the shakes take it better than shingles, and some of the most successful of these houses are simply oiled with linseed oil, with not a particle of stain in it.

The Swiss Chalet is a foreigner that has taken kindly to western environment, and is one of the sensible fads of the hour. It may be designated in two ways—as the standard and climbing, in the same nomenclature that we speak of standard and climbing roses—the standard is evidenced in houses occupying flat areas of ground—in conventional situations—say on suburban lots, but here the lines employed are those prevalent
in the real chalet, and the detail is carefully adhered to. The climbing chalet perched high to obtain "views", is frequently the better of the two varieties, architecturally, and is usually most picturesque.

The plaster house is growing in favor and the combination of plaster with shingles, shakes and heavy beams is one of the same fashions of present-day building. This combination of plaster with all sorts of rustic effects results in splendid color combinations. In houses built along economical lines, it is surprising how a change of material and consequent change of coloring takes the place of some architectural feature that would be expensive. For illustration, in a rather high, square house, where the lower part is of plaster and the upper of shingles, the height is relieved and heaviness subtracted by this introduction of another material and color.

There are many small conceits among popular fashions which one observing casually passes by. For instance: many country houses are being built with two entrances, the old-time back yard being done away with. This is frequently seen where the building plot runs through from street to street, and there is a desire to make both sides attractive. The house pictured is an illustration of the successful accomplishment of this. In fact one is obliged to look the second time either at the photograph or the original to see which is the facade. The kitchen wing is cleverly screened by trees in the front and in the rear, and the entrance to this part of the establishment is by way of a gate that connects the house with a sort of courtyard fence, the base of the latter being covered like the house with shakes, and the upper part of lattice, which gives the desired impression of lightness. In fact latticework is found these days in much of the detail part of rustic houses. It is one of the many hints we have adopted from the Japanese. This basket like weave has even pervaded interiors of some of the western houses. The writer has in mind a beautiful ceiling, woven of very thin strips of wood an inch wide, and extending down on the side wall for about a foot. A wide band of wood serving as finish between the rough plastered wall and this frieze and ceiling.

Outdoor balconies are built more than ever, and have many uses. They often are an excuse for lowering or cutting the roof lines, where otherwise it would be almost impossible to do so gracefully, and again, so doing is apt to give an extra exposure to sleeping apartments. In case of sickness or where there are confined invalids their uses are manifold, and at least they furnish excellent places for the airing of bedding and clothing.

The roofs of modern houses are almost as susceptible to fashion as the crowns of our chapeaux. The present preference is for very low roofs—making them much in evidence according to the canons laid down by Ruskin. This makes for picturesqueness, and ventilation is so scientifically managed now-a-days that there is no longer the old objection from that standpoint. However, the old-fashioned housewife is apt to begrudge her store room, which must either be low, or else built on the first floor of the kitchen wing along with the servants' quarters. This relegating the servants' rooms or room, as the case may be, to the first floor, according to the pretension of the house, is very wise, for it not only saves servants time and strength, but the fact that there is no opening and closing of doors and walking about on the third floor does away with noise. Occasionally a store room and servants' quarters are built at the end of a pergola walk. And not to have a pergola is to be out of the world of house fashions altogether! They have many uses too. If a house is not quite broad enough on the front for its height, even with a port-cochere, a pergola on the opposite side will help this shortcoming immensely. Or it may be the means of screening one part of the yard from another; or, form a tree for planting certain vines. The pergola is undoubtedly one of the newer adjuncts of a house, comparatively speaking, to which we owe much from the picture point of view if no other. The roof garden, too, is frequently protected by pergola detail. Where no rooms are desired above, a flat roof with a pergola to cap it, makes an outdoor living-room for daytime, and is a place of perfection for evening entertainment in summer.

The designing of the house and garden together is an old idea, but not in America. It is only recently that the two have been combined to any extent with us, and is another of the old-world fashions we have so wisely copied. After all, however trite the statement, it is taste
rather than money that makes the home as a whole, and though the house itself may be a masterpiece, if the approach, walks, gardens and general surroundings are not in keeping, there can be no satisfaction in the house taken as a separate unit. California, to be sure has an advantage in being able to plan and build for the whole year, and her gardens are not simply made for summer, but even so there are many suggestions in homes here of which any part of the country may do well to avail itself.

One of the many improvements in styles everywhere is seen in the fashioning of windows, which are, individually smaller, though greater in number. There are as few houses that can wear large plate glass windows to advantage as there are few women who wear large and brilliant stones becomingly. Further, plate glass windows in a small house give it the appearance of a little child with huge eye glasses. The subject of windows is, incidentally, well illustrated in the pictures. For those who object to small panes, plain glass is cleverly divided, so as to do away with the brazenness of very large, plain windows, and yet not cut them up sufficiently to distract the eye in the contemplation of a view.

Chimneys, too, have changed their architectural tactics greatly in the past few years, and to advantage. They are no longer constructed for their utility alone, but are one of the beauty features of the house, made as they are of a variety of materials.

If possible, a greater change has taken place in the designing of interiors than exteriors. Furniture as well as woodwork is being executed by architects, and wall tints, curtains and little furnishings are receiving the careful consideration necessary to the successful ensemble.

From a hygienic standpoint the change is quite as marked. No one with any pretension to keeping abreast household modes has carpets, and the use of enamels on kitchens and bath rooms has contributed to make such apartments healthier and more pleasing to look upon as well. So taken collectively, fashions in houses, have, during the past few years made great strides, and few mistakes in furthering economy, beauty and healthfulness in our domestic architecture.
The Hall.
By E. A. Cummins.

The hall is the keynote of the house. It gives to the stranger, at least, the impression of the whole interior, and it is unusual to find a house whose inner rooms do not fulfill the prophecy of an agreeable entrance.

Unhappily, the builders too often ignore this consideration. They content themselves with spacious and beautifully decorated drawing and living and dining rooms and let the hall shift as it may. Notably this is so in the average city house although there are tiny square entries galore in rural New England. In which will answer the double purpose of a hall and a sitting room, what is known as a reception hall; he may choose a short and wide hall cut by another of equal width leading to a side door; or he may give his suffrages to a rather narrow passage leading from the door, past a small reception room, to a square central hall. Each of these arrangements has its peculiar advantages, not one but has its drawbacks.

The first is that adopted in the best colonial houses. If the hall is sufficiently broad to allow of furniture being arranged against the walls, the effect is admirable. It rather presupposes rooms opening on either side of it, although there is a way of adapting it to a narrower house, which will be mentioned later. Not the least of its advantages is its spacious second story which can be utilized for an upstairs sitting room. Aside from its esthetic good points, it secures admirable ventilation for the entire house. The writer knows an old New England village in which the only house which is not musty and moldering, is the single one whose hall runs straight through the house from front to rear.
The disadvantages of this sort of hall are the difficulty of heating it and the fact that it does not sufficiently isolate the kitchen from the other rooms.

The reception hall giving directly upon the porch or piazza, is perhaps the commonest type in recently built houses. It adds one to the available living rooms, it affords an opportunity for making a picturesque feature of the staircase, it has an air of great friendliness and sociability and it is readily furnished, not demanding pieces of a special type. Its principal drawback is its lack of privacy. Guests, formal or informal, or the man who comes to collect a bill or to sell soap alike penetrate into the domestic circle without ceremony.

The L shaped hall has not the esthetic advantages of either of the others but it compromises with their drawbacks. The staircase can be thrown well back, the kitchen is isolated, on a rear hall and the side door accommodates the more familiar comings and goings of inmates and tradespeople. Unless provision is made for a staircase window such a hall is not often well lighted, as it is seldom wide enough to allow of a window beside the door.

The fourth hall is incident to city conditions to building on a narrow lot and to the necessity of providing a place in which to see guests who are on such formal terms as not to be admitted to intimacy. Unless the house is exceptionally large so that something can be subtracted from the width of the rear room to give a window in the rear of the hall it can have no direct light and cannot well be used except at night. But it admits of a fireplace and there is plenty of room for a staircase of good sweep and with an easy angle.

A variation on this arrangement has been made in remodeling some old city houses with basements. Here the front basement has been made into two halls, a wide main hall from which a staircase leads to a square hall in the center of the floor above, and a narrower servants' hall leading to the kitchen in the rear. The drawing room occupies the entire front of the floor above, the hall the center and the dining room the back. This is the general plan of a great part of the newer New York houses, of any pretensions.

The lighting of the hall is an important point, and one too often neglected. No amount of decoration compensates for gloom. If nothing else can be done, the door can be half glass or with colonial treatment, sidelights will add a great deal. With the reception hall this difficulty does not exist, but with other types of hall it is hard to manage. But a window on the staircase landing is worth making sacrifices for. If nothing better can be done a window into an airshaft can be arranged, which can be filled with leaded glass, and be a great deal better than nothing. Where the hall is on the exterior wall of the house, a bay window can be thrown out in its center with charming effect. A long hall one of whose sides is almost entirely glass is not unusual in country houses, on the other side, and with a sunny exposure might be almost a sun parlor.

The artificial lighting of the hall is not often successful. The central lantern, very high up, often adorned with bulls-eyes of colored glass is about the most dismal illumination that the mind of man has conceived. Softly shaded sidelights, gas or electric, are much more agreeable and in a large hall, nothing quite takes the place of a well trimmed and brilliant oil lamp.

The decoration of the hall depends very largely upon the amount of light it receives, to some extent upon the style of the house. In a colonial house, the bulk of the woodwork is of necessity white, and the color of the walls should not offer too strong a contrast. The ideal thing for a hall of this sort is a landscape paper, laid above a wainscoting. A yellow or buff paper, with a large conventional design in self color, is effective, or a Morris paper in white and blue. The rather light old red is also good. The deep red, which is so often advised, is too strong a contrast and dwarfs any thing but the most spacious hall. In a hall, whose openings are ordinary single doors, it is unnecessary to pay very much attention to the harmony of its coloring, with that of the rooms adjoining it.

With the reception hall the case is different. In most houses of moderate size it is desirable that the entire first floor all of whose rooms are so closely related, should be in the same general tone of color. The hall for instance, may be in a medium tone of green, the drawing room in a lighter and the dining room in a darker tone, while the library may combine green and brown.
The staircase with its panelled side naturally suggests a continuation, in the way of a panelled wainscot, which may cover two-fifths of the side wall and be made a very beautiful feature. The wall space above it should have a paper of positive character, either one of the beautiful duplex ingrains, tapestry paper, or burlap. Some of the latter, which have metallic threads in them, are excellent and may be finished with a slight stencilling at the ceiling line. The halls in which a frieze is desirable are few. Even if the height is such as to warrant it, it involves an awkward break at the beginning of the staircase. Where it can be managed, without too much difficulty at the staircase the upper third treatment, with a shelf for pottery at the junction is excellent for a long hall or for an L shaped one much broken by doors. Another good treatment consists in covering four-fifths of the wall with burlap or grain paper, bringing the ceiling down on the side wall to meet it, and laying a narrow landscape frieze at the joining, strapping the burlap and the frieze off into panels with narrow strips of wood, and setting a ledge or narrow shelf just above the frieze.

With the foyer hall in the center of the house, a screen of grilles or spindles, separating the staircase from the narrow passage to the door is a pleasing feature. This converts the passage into a small room by itself. With a long hall the same thing can be done by giving the stairs a right angled turn at the foot and building the screen between the landing and the hall.

Any hall must contain some provision for hats, coats and umbrellas, and a mirror. The average hat rack is supremely ugly. A mirror with a wide frame, furnished with heavy hooks, a narrow table beneath it or even a shelf for card tray and matchbox and a long chest upon which coats can be laid down, and an umbrella rack are all that are really essential. A chair for the messenger who must wait in the hall, is desirable. The long hall may appropriately contain a sofa, a cabinet of china, a second table and a number of chairs. So much the better if it may boast a long clock, or high on the staircase wall a banjo clock. Here, too, is the place for portraits of one's ancestors, or other works of art whose antiquity is greater than their merit. If one can only have one colonial room, it had better be the hall.

The reception hall is to be furnished precisely like any other room. Mirror and umbrella stand should be as little conspicuous as possible. It is desirable to have something in the shape of a high screen to make the semblance of a vestibule. It should be tall enough to conceal the interior from people at the door, and hall chest and umbrella stand may hide behind it. Sometimes a screen of wood is fastened permanently to the floor about four feet from the door, and adds greatly to the privacy of the hall.

Whatever arrangement of furniture or scheme of coloring is chosen for the hall, it should be marked by a certain dignity and restraint. No more than the individual should the house wear its heart on its sleeve. Pictures should be few and good, there should be no litter of trifling ornaments. The bare hall is as much to be deprecated as the crowded one. There should always be something of interest to catch the eye and if it is to be used as a waiting room, a book or two lying about. A handsome foliage plant adds a great deal to the general effect, or one of the pottery wall baskets from which hang trailing green vines.
Types of Colonial Mansions.

By Edith Dabney.

Of the Colonial mansion there are two separate and distinct types; one being the massive, formal structure of brick or stone and the other the unpretentious, rambling, gambrel roofed frame dwelling of simple lines and picturesque appearance.

Of the second type, no more perfect example is to be found than the quaint manor house of Appomattox, the scene of one of the greatest events in the history of America. This mansion, the homestead of the Epps family on James river, Virginia, is built with a brick foundation painted white in keeping with the frame work, its lines being those of the houses most favored by the Colonists. Many, in fact most, of the historic buildings in Williamsburg show this particular design, the homes of John Blair and Peyton Randolph being of the same architecture.

The informal grounds are shaded with great trees and more modest shrubs; ivied trunks of weeping willows, vine hung boughs of elms and lindens, add to the picturesque beauty of the old fashioned mansion which owes a debt to the years gone by, borrowing little from the centuries of change.

A very different style of architecture, but much more stately, depicting the lines and design of the early Georgian period, is seen in Sabine Hall, a manor house that since its first beginning has been in the possession of the famous Carter family of Virginia. This brick mansion crowning a 2,000-acre estate was built in 1730, since when it has remained unchanged both on the inside and out.

The front portico supported by four Tuscan columns has a dignity and charm all its own, while that on the rear is more of a veranda extending the entire width of the house. The customary Colonial
one story wing is seen on but one side of the mansion, being a bit longer and less ornate than those of most other early structures.

A great hall on the interior runs from door to door; a very beautiful stairway extends from story to story, while the paneling and wainscoting, cornices and door ways show the wonderful handiwork of the eighteenth century workmen.

Terraced gardens shed a glory of bloom and blossoms from April until November. Superb trees of age unknown shade the velvet greensward of the lawn justly rivalled by luscious vineyards and smiling meadows which slope from there to the brink of the river, the beautiful Rappahannock, flowing as it did in the red man's time.

The first glance at the old Wythe house in Williamsburg impresses one
with a feeling of weird interest, for the very atmosphere, even under blue skies and brilliant sunshine bespeaks the ghostly visitors which, tradition says, invade the halls and walls of the grimly silent structure. This massive building was erected by Chancellor Wythe prior to the Revolution, the bricks being laid in Flemish Bond. The lines are essentially plain and substantial, proving the old statesman to have been a personage to whom extra adornment or superfluous beauty appealed not in the least. The portico, with an upper balcony, is of wood with a quaint, little carved cornice placed between the two sections. The Wythe house on the interior is divided on both stories by a wide hall out of which two rooms open on either side, everything being placed with systematic precision.

The once beautiful grounds are now a mass of picturesque shrubbery and tangled vines. Huge catalpa trees stand guard on both sides of the mansion, and pink crepe myrtle trees and bushes soften and lend color to the ravages of time. Wistaria climbs over the old paling fence; ivy clings wherever it may, while an exquisite, waxen leaved, Cherokee rose smiles at the stranger as he enters the gate.

In old Yorktown, the scene of so much history once, but which now is reaping the harvest of a peaceful age, still stands Chelsea, built by Governor Nelson about 1760. Chelsea is not only one of the most interesting, but is one of the most distinguished Virginia homesteads in existence. Built of the characteristic brick laid in Flemish Bond, the quoins and window facings are of white stone and the handsome cornice is of wood. The roof is high and sloping and the chimneys a bit taller than the ordinary.

The entrance is over stone steps direct into the hall, there being neither porch nor portico to break the severely simple lines. Altogether the mansion presents a rather formal appearance, showing but few scars of the Revolution though it was at this point that the first shots were directed in the siege of Yorktown.

The wood work of the interior is particularly fine, and the large fire places noticeable features. Mahogany greets one at every turn and the amount of time spent on the finishing gives rise to wonder and pity on the part of both artists and workmen who live in a hurried today.

The brick wall topped by an eight-foot box hedge is one of the greatest charms of the place, and though the old fashioned blossoms that once grew so brightly in their garden squares have long since withered and died, the brick walk and steps leading up to the mansion are yet as they were two centuries ago.

The term Colonial is, unfortunately, only too often misapplied, but of this great period there are true types providing one with a study as interesting as it is historic.
The Modern House.
ITS FURNITURE.

By J. Taylor.

It is a somewhat curious anomaly that the house of today should be so greatly indebted to tradition and ideas of long ago, in the matter of style in furniture and decoration. This may be chiefly owing to one of two causes, either the work of the past has been super-excellent, or the men of today are deficient in initiative.

Well now, there is something in each of these suggestions, perhaps more in the first than the second. Visit any of the great furniture stores, or if you have the opportunity go to one of the great cabinet factories at some of the centers of furniture making in the states—and you know there are three thousand of them—and what will you find? I will tell you in this way: Some three years ago I found myself at Grand Rapids when the sales were on, that is when every factory has a great stock of finished furniture, all nicely displayed for the salesmen who travel from every state in the union to see and to buy.

Now on this particular occasion one company had 26,000 pieces of finished furniture on show and sale, and what was the style of it?

A little "Francis I" and "Louis XIV," some "Louis XV" and "Louis XVI", more of "Sheraton" and "Chippendale", a great deal of "Colonial" and a considerable quantity that would be difficult to classify. Now this was an up-to-date establishment, and the stock represented the demand. There is a style of architecture in America, still very prevalent that no class of furniture is better adapted for than well designed and skilfully executed "Colonial" which after all is founded on some of the best features of eighteenth century art.

Now about the men of today, it must not be assumed that there is no initiative amongst them. The "Mission style" and the "Modern Renaissance" that has stirred the artistic sense of Europe are products of today, but because of their unfamiliar features too much credit must not be given to the new men for complete originality.

The genesis of the "Mission" has been discussed in American publications, the new movement in Europe is purely individualistic, in its most interesting manifestations. But a careful study of the older styles discloses the sources whence many of the new school men draw inspiration; but they give a new interpretation to an old idea just as Whistler discovered the Japanese fine delicacy and sense of color and startled the art world by new and charming combinations.

Now reproduction of seventeenth and eighteenth century styles is all the rage in Europe, and this has been going on in
America for quite a while, particularly with regard to eighteenth century styles. Manufacturers like milliners, however, cannot ring in the changes too long on the same styles, so from time to time a fresh one is added and for a time it claims a good deal of attention.

The latest to become popular is "William and Mary", and almost every cabinet maker of repute in the old country is now producing or rather reproducing it. The "William and Mary" style as originally known had many of the Dutch characteristics, the new reading of it eliminates much of the heaviness and presents a style of great attractiveness.

The illustrations are from examples in English Walnut, the decoration on the panels of wardrobe and work table are in tortoise shell and mother of pearl. The arched top of the screen panels has a filling of clear and colored leaded glass. In the fine dining room of the "Muritania" the style is "Francois I", a sixteenth century French growth of the Renaissance that from the fifteenth century began to influence all Europe.

That "Francois I" will be the next style to become popular is more than likely, it has many attractive features and amongst the thousands of American and European with a week's leisure to study it crossing the Atlantic, many will adopt it when it comes to furnishing a home.

Now all this is quite appropriate in a notice on the Modern House for the proportion of old styles to new in the homes of today is still very much in favor of the old.

Some of the new men go in for compromise, selecting one of the older styles as the basis of design in the furniture and placing this in a setting entirely modern.

For example a "Queen Anne" or a "Colonial" suite will be associated with a simple decoration, a plain wall surface in color perhaps popular during the eighteenth century, but in any case calculated to emphasize the fine lines in the furniture and the grain or color of the wood. Or the furniture may be quite modern with a decoration of old world suggestions, in which the "Tudor" rose or some emblem of the past is a prominent feature. One of the new departures in the furnishing of the modern home is the style of the wood; oak, mahogany and walnut are still largely used, but grey wood, from a light silvery tone to one verging on black is now largely used. When the decoration is carefully planned, a scheme in which grey furniture and wood work is adopted may be made very striking because of its extreme usefulness and great unfamiliarity.

Whatever the style adopted, an effort should be made to give the home an individual touch, that will differentiate it from all other homes, and give it an interest and attraction all its own.

The nineteenth century was a period of degeneration in the character of the house, the twentieth comes and brings a new Renaissance, and the influence of the new movement is manifesting itself in many directions and will yet establish a brighter era in this old world of ours.
HE use of summer flowering bulbs much increases the supply of flowers available for cutting and most of them may be grown among the perennial plants or used as borders for beds of taller growths and so prolong the florescence of the beds devoted to spring blooming plants and their use is much to be recommended.

The gladiola—one of the finest of cut flowers, really requires to be planted among other plants for best effect, as its manner of growth is not attractive but its spikes of gorgeous bloom are all that can be desired, so if the lower part of the plant is hidden by the foliage of other plants the effect will be much enhanced.

Even the old forms of the gladiola were exceedingly attractive and the newer sorts—to which notable additions are being made each year, are very beautiful. Many of the newer variety bear a price in proportion to their worth, but as the gladiola is a plant of great prolificness no one variety remains high priced for more than a season or two, and except where a notable increase in size has been attained by the florist, it is usually possible to select quite as satisfactory varieties from the cheaper bulbs.

Unless one is a specialist and connaisseur of gladiolas it will generally be found more satisfactory to select clear colors rather than the various blues and smoke tones which are often more odd and curious than beautiful. Most of the clear, soft pinks, the bright scarlets, deep reds and the white are entirely satisfactory and some very desirable shades are listed among the five cent bulbs such as Africa—a very dark amaranth shaded black with a greenish white throat—very odd and conspicuous. Blanch, Boston, Cardinal, Hohokus, Henry Gillman, Saratoga, Salem, Splendor and Wm. Falconer are all excellent flowers while among the higher priced flowers a wide range of color and enormous size are offered.

I like to plant the gladiola bulb quite deep—eight to ten inches, as by this method they may be planted earlier in the spring and lifted later in the fall and will not require staking. I have often had flowers do exceedingly well when left in the ground over winter and have an Africa which passed the severe weather of last year in the open coming out in good shape in the spring and it will be left to form a strong clump if it will.

Gladiola may be planted among the iris and so keep the bed in bloom throughout the summer which is a distinct advantage. Before planting all the dead husk should be removed and the dead bulb at the base of the new; this allows the moisture of the earth to penetrate to the bulb promptly and the roots to break through with the least resistance.

The montbrettiás—which much resemble miniature gladioli, may be planted
around the edge of the gladioli and will be found very valuable for cutting. They do not possess as fine a range of color as the former, being shown in shades of red and of yellow only, but they are exceedingly graceful and artistic in manner of growth and contour. Their culture is the same as the gladioli but they are planted not more than four inches deep.

In partially shaded and protected positions there is nothing more desirable for summer bedding than the tuberous begonias. I had a bed of these one summer in an angle of the house where they got the morning sun but were protected from the west wind, that was the admiration of all who saw it and once established they required little care save an abundant supply of water poured about the roots. In the same bed I grew the finest of gloxinias and fancy leaved caladiums all doing much better than when grown indoors. A bed of the tuberous begonias bordered with the double Vernon begonias and edged with the summer blooming oxalis will be a sheet of bloom all summer.

The Tuberous begonias should be started in the house setting the bulbs in pots with the hollow part uppermost and just below the surface of the soil. When they have made two or three leaves and the weather is warm they may be carefully slipped from the pots into the ground. In the fall they should be taken up and repotted and gradually ripened off and stored in a dry, frost-proof place.

One of the most beautiful summer bedding plants is found in the giant Ismene. This has large white flowers curiously fringed and throated green and possessed of an exquisite fragrance. Usually it sends up but one spike of flowers during the season but if a considerable number of bulbs are planted they will come into bloom at different times so that a display may be had throughout the summer. The bulbs should be started in pots of soil in the house and bedded out when all danger of frost is passed. In the fall they may be lifted and wintered in the cellar. They increase very rapidly and one soon has sufficient bulbs for effective planting. The wide, strap-like leaves are very ornamental and if the plants are planted with other bulbs of freer blooming qualities the result will be very good.

The summer blooming amaryllis are good for such planting and the atamascos will give a succession of flowers all summer.

Tuberoses are very satisfactory in the open ground and may always be depended upon to give abundant bloom. They should be started early in pots of soil in the house and not planted out until the earth and nights are warm. Before planting all small bulbs should be removed and the thick tissue at the base of the bulb cut away with a sharp knife. The bulb should be planted so that only the tip is above the surface of the soil and the pots should be placed in a quite warm position, as the tuberose is very sensitive to cold and if both cold and wet will decay instead of starting into growth.

In the garden they do best in a warm, sunny position, but any good, sandy soil will grow them successfully. They require a reasonable amount of water but no extraordinary culture, their management being quite simple.

Tigridias are curious and beautiful flowers which should be grown in masses or among perennials as their manner of growth is rather straggly and like the gladioli they are improved by having a partial screen of other foliage about them. They are started in the house in pots and transferred to the open ground at the proper time. They are rather more difficult to carry over winter owing to their proneness to decay and should be wintered in a warm, dry place in sand or earth.
Planning the Cottage Home.

By Arthur C. Clausen.

With the coming of spring there comes to us as naturally as to the birds the thought of building a home. If this is the fortunate year in which the family has finally gathered together the amount required to build a home that will suffice for the family’s needs, then all is joy and happiness by the fire side. The family seems to be borne into a new life when the final decision is reached to have “a home of our own.” A home of our own, what a thrill this sends to the heart of every American without a home of his own. Thousands cherish it in their hearts every year, but of these thousands comparatively few ever come to a full realization of what it really is to have a home of one’s own.

The first dream of every youth is a cottage. The very word itself seems to stand as a symbol of the simple love and happiness that marks the early wedded life of our young people, unmarred by contact with later social and business strife. It may be a stately home on the “fashionable drive” that appeals to them in later years, but at the start it is always a cottage among the trees. Then again when the young birds have grown up and flown the nest, the home on the fashionable drive becomes too large for the old folks and it is back to the simple cottage once more to spend their autumn days as they commenced them in the early spring time of life. The cottage therefore is associated closely with the beginning and ending of life. It is to the cottage that we lead the happy bride and it is at the cottage we love to gather together and hear grandmother’s stories and eat her generous slices of bread and apple butter.

Simple as the term cottage seems to us, suggesting the most informal arrangement of rooms conceivable, the successful planning of a cottage home often presents many difficult problems. The hardest problem of all seems to come from the useless endeavor of trying to build too large a cottage with too little money. Another problem which often presents itself comes from trying to get too many rooms into too small a space. If you want a picturesque home at small cost, build a cottage, but do not try to have that cottage contain as many rooms as your neighbor’s good sized house. The ar-
Arrangement advised for a cottage is first, one good sized living room containing a fire place (of course) and the stairway to the second floor, combining the parlor, sitting room and hall into one large, homely-like room. There should always be a coat closet somewhere handy, making it unnecessary to have a hall rack. The very informality of such an arrangement is in keeping with the spirit of the simple outward expression of simple needs that should and does pervade a real cottage home. The dining room should not be too small and if the size of the house makes it advisable, a large bay can be added to increase the space. A dining room eleven feet square will do in a pinch, but twelve or thirteen feet square would be better. The living room should be at least twelve feet wide. It is usually advisable on account of both expense and space to not include a pantry in a cottage home. Cupboards in the kitchen and a china closet off of the dining room will almost invariably take the place of a pantry when the family is not large and it necessarily is not in a cottage. A common mistake made in the planning of a cottage is to try and economize by excavating under only part of the house. This always requires an extra wall, which would pay for the additional excavating. For a small home it is always advisable to excavate for a full basement. By having an outside door on the cellar stair landing, the same as shown in the floor plans accompanying this article, an outside cellarway becomes unnecessary. It is always advisable to provide a two-part laundry tub in the basement. A pipe connection can be made with the kitchen hot water boiler and the washing done without interfering with the regular housework. Then, too, it is always cooler in the basement. If a small gas or wood stove is put in the basement the ironing can be done there also. The writer knows of one lady who does her preserving in the basement on such a stove. The house illustrating this article is a typical cottage home in every way. It has never been built and was not drawn to meet anyone's special requirements, but is a good example of what the average cottage home should be like to obtain a livable home for a small amount of money. The plan arrangement is ideal in every way, the living room and dining room being very attractive and homely.
Each month a varied assortment of houses is published and described with the idea of furnishing ideas for as great a number of readers as possible. Opinions vary greatly when it comes to deciding which house in each collection is the most complete and beautiful. One reader may be influenced in his opinion by the floor plans, another by the cost, but most of them by the exterior appearance. It is therefore aimed to present as great a variety each month as possible, that each reader may find one or more houses in each collection of interest to him. This month an unusually attractive collection of homes is presented.

**Of English Design.**

The first one of English design is an attractive home with somewhat original features. The second story bays extend up through the cornice and form dormers. They are rough plastered and timbered in an English design, giving not only character to the exterior but adding to the attractiveness of the two front bed chambers. The interior finish of the lower floor is birch stained mahogany. The entrance hall is quite attractive. It is entered through a large vestibule to one side of which is a coat closet. The ceiling is beamed. Opening just off of the hall are the dining room and living room. The entrance to each is through a wide opening which gives the effect of space. On the second floor are five chambers all finished in white enamel. Mr. A. L. Dorr is the architect of this house, which could be built at an estimated cost of $5,500.

**A Picturesque Bungalow.**

Built upon a rising knoll covered with pines, with views of a little creek running past in the near foreground, high hills and mountains across the valley for a background; such is the setting of this little four-room bungalow. It is built of rustic rock for the foundation, wide rough siding stained moss green for the walls and shingled roof stained a bright red.

The windows of the front rooms are casements and all sash are divided into smaller panes in a pleasing design.

The front porch is of stone with a cement floor. The front rooms are finished in curly fir; the rear rooms are finished in pine. There is a good sized cellar under the kitchen.

The front hall partition might be omitted, thus making the living room larger.

The cottage cost complete, built in a very thorough manner, about $1,400. The architects are Keith and Whitehouse.

**An Attractive Cottage.**

This design is of a typical story-and-a-half house with gabled ends and a gambrel dormer front and rear. The first story, up to the cornice line, is sided, the gables and dormers being shingled. In the vestibule is a seat with a hinged lid, making a convenient place for rubbers. The reception hall is unusually large for a house of this size and is connected with both living room and dining room. This house is arranged for one intending to do their own housekeeping and has every convenience provided with this end in view. On the second floor besides two bed chambers is a good sized sewing room, an arrangement appreciated by every housewife. The estimated cost of this attractive cottage is $2,380.

**An Original Design.**

The most economical way to build a house without a doubt is to build it as near to a square rectangle as possible. Building homes in this rather formal manner as a rule detracts from its picturesqueness, but such is not the case in the design of the original cottage home by Arthur C. Clausen, architect. It not only has an attractive exterior, but a very well arranged plan. The porch could not be made more picturesque, but if one desires more room on it, it could be obtained. The large living room is very homelike with its broad brick fire place on the long side and a cozy window seat at the end. The kitchen appointments are very complete. On the second floor are four bed chambers, each with a large closet, a bath room, linen closets and a clothes chute. The lower part of the exterior is shingles, the upper part either cement or shingles of a different stain. It is a design which will admit of various color combinations.

**A Doric Colonial Design.**

The large, well designed Colonial porch is one of the principal attractions of this beautiful home. Owing to the dark color it was painted the real
merit of the design is not as evident as it would be if it had been painted white or a rye straw color. Light colors always set off the detail of a Colonial design. The porch is of the Doric style of architecture. Entering the home we find a pleasant arrangement of parlor, living room and library all grouped about the reception hall. The parlor or reception room is a perfect octagon and quite attractive. Between the hall and living room is a wide columned opening, which renders the interior in keeping with the classic exterior. Directly opposite this opening is the large fireplace which sends its cheerful glow throughout the rooms. The dining room is especially well planned. It is of good size, has a sideboard and china closet, also a broad window seat. One of the characteristics
of the second floor are the many large closets, there being one for each of the five bed rooms and several more. This home was designed by William M. Kenyon, architect, and is estimated to cost without heating and plumbing $4,900.

An Architect's Beautiful Home.

When an architect builds for himself we can expect to see either a home that is exceptionally beautiful or one that is unique. This beautiful residence, the home of Architect Edward H. Hewitt, is indeed both. The exterior is a pleasing combination of rough, vitrified brick, cement plaster of a terra cotta shade and dark stained wood work. It has many prominent and unique features that give it a personality and character all its own. One of the principal features of the interior is the large living room with its heavy beamed ceiling and broad fireplace. Just off the living room is a sun parlor filled with flowers. This luxuriant home contains every modern convenience. In the third story are the pleasure rooms arranged for the enjoyment of young and old. The second story wall is made of hollow tile with three coat slapdash exterior. Before applying the cement, however, the tile was given a good coat of Dahydratine to render it moisture proof.

Simple but Home-Like.

The last design shown in this collection is a simple but homelike house built on economical lines, but containing an unexpected amount of room. To begin with, there is a good sized porch. There is a vestibule which adapts the house to a cold climate. If built in a warmer climate the vestibule and alcove could be omitted, thereby increasing the size of the hall. The parlor and dining room are connected through a wide opening that can be closed off by the sliding doors when necessary. The dining room
An Attractive Cottage.

is very homelike with its broad bay window and fire place. The value of a fire place in the dining room to warm up on chilly mornings cannot be overestimated. On the second floor are four good sized chambers and many closets.
An Original Cottage.

ARTHUR C. CLAUSEN, Arch't.
A Doric Colonial Design.
An Architect's Beautiful Home.
Simple but Homelike.
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OW that the professional decorator is to the fore, there is much talk, more or less intelligent, as to different periods of decoration. Perhaps some of my readers will find a brief mention of the distinguishing features of the different styles helpful.

For practical purposes, we may leave out the distinctly classic styles, the Gothic and the Romanesque, as belonging to architecture, rather than to decoration. For domestic art we seldom get back of the Renaissance, with its adaptation of classic forms to modern use. We must remember that each European country was influenced in this adaptation by its peculiarities of circumstance and artistic temperament. But whether Flemish, Italian or French, the decorative art of the Renaissance is distinguished by its wealth of ornament whose central idea is always borrowed from the Greek. Acanthus scrolls in high relief, fluted columns, swags or festoons of fruit and flowers and lion's claws, for feet, are all characteristic. Italy gives us the dolphin and the elaborated fleur-de-lis, the lily of Florence, and makes large use of human and animal grotesques. The French Renaissance is distinguished by simpler forms, giving the impression of greater solidity of construction. The salamander is its distinguishing animal form. In the Netherlands we find the energy of the craftsman displayed in most elaborate carvings of fruit and flowers. Here and in France the spiral or turned chair leg was characteristic, but Fleming carried the curve still further and applied it to first to the foot, later to the entire leg of chairs and couches. He made use of incised and elaborately carved pierced ornament. The typical piece of furniture of the Italian Renaissance is the marriage chest, of the French the square chair, with turned legs and a square back with an oblong panel connecting the two uprights. In ordinary use today, the styles of the Renaissance are chiefly applied to dining room and hall furniture, in oak. They demand leather or tapestry upholstery, in rich colorings and a good deal of space.

The Jacobean period comprises practically the whole of the seventeenth century and, in England, is contemporaneous with that of Louis Quatorze in France. It is of special interest to Americans as all our oldest Colonial furniture belongs to it. It is distinguished by extreme simplicity of construction. Most of it might have been made by the joiner. It is uncompromisingly right-angled and the decoration is generally carving in low relief applied to panels. The commonest designs are arrangements of repeating circles and of double scrolls, also of rather crude and angular acanthus leaves. The oak chests, the gate leg tables and the high backed chairs with panels of cane work inserted in the backs framed in carving are Jacobean. I noted lately the very last thing in dining chairs, a high backed Jacobean with a cane back and a tapestry seat.

Queen Anne names the next period in English furniture. What were familiarly known as bandy legs characterize chairs, tables and cabinets. The highboy and the lowboy belong to this period, likewise mirrors and bookcases with broken pediments. If the Jacobean is the period of oak, the Queen Anne is that of mahogany. The intimate relations of England with Holland, at that time, led to the introduction of marquetry more or less elaborate, an art of which the Dutch were past masters.
Decoration and Furnishing—Continued.

To Queen Anne succeeded the Chippendale period. As Chippendale and his successors, Heppelwhite and Sheraton, have been treated in a recent article in Keith's Magazine, it is unnecessary to allude to them in detail here. The bulk of antique mahogany furniture, here in America, derives its design from one or other of the three.

Contemporaneous with the work of Chippendale is that of Adam. Adam’s style is the English Louis Seize, and is distinguished by great delicacy of outline and a close adherence to classic models. He was first of all an architect, and designed furniture to suit his rooms. He generally employed satin wood, painting it in delicate colors. He made use of cane work panels of exquisite fineness. The Adams brothers are responsible for the best features of our colonial architecture, the quaintly leaded oval windows and the delicate carvings of festoons, done on white wood, so often found in the houses of the eighteenth century. It may be remarked, in passing, that there has been a recent revival of interest in the Adams style and that fashionable decorators are applying it to drawing rooms, in houses of more or less pretension.

Roughly speaking, the three French styles may be distinguished on the basis of the straight line and the curve. In the Louis Quatorze, the outlines of the pieces combine straight lines and curves. In the Louis Quinze, the whole outline is practically a combination of curves. In the Louis Seize, although some use is made of curves, the general outline is a combination of straight lines. Other distinctions will suggest themselves. In the first period there was a lavish use of applied metal ornament, buhl and ormolu. In the second, the wood of furniture was almost universally gilded. In the third the frames were usually painted in white, ivory or gray.

French Empire, the remaining style, is distinguished by a recurrence to classic forms and by a profusion of applied brass ornament. In England, the form was copied, minus the metal decorations. Its typical piece is the swan neck sofa, the parent of most of our long mahogany sofas. Its distinguishing decorative feature, especially in America, is the pineapple.

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The Value of Restraint.

People who collect old mahogany furniture, or buy its modern reproduction, need to be reminded that colonial rooms were never crowded. Each room had its distinct purpose, our modern compromises of bed and sitting room were unknown. A desk, a center table, or a couch was not placed in a bedroom. Above all there was no confusion of small pictures on the walls. The bed, the washstand, a bedside table or somnole, a mirror above a large bureau, possibly a low dressing table, these and the necessary chairs were all the bedroom contained. Often the wallpaper was highly decorative, or there were bed hangings and curtains of bright chintz, but that was all. In these somewhat bare rooms, each piece of furniture had its fine points displayed to the best advantage. On the score of economy too, there is an advantage in dividing one's treasures. A reception room might easily be furnished from the surplus of our modern colonial bedrooms.

Refinishing Brass.

It is said (the writer assumes no responsibility) that after brass has been thoroughly cleaned, it can be treated with photographer's retouching varnish, and will stay bright indefinitely.

A Valuable Asset.

Many houses contain, in a greater or less state of dilapidation, the long, haircloth covered sofa of our childhood. It has its uses. Re-covered with tapestry in a Persian or verdure effect, it is just the thing to stand at the side of the staircase, in the reception hall. Or it may be used to stand at an obtuse angle, at the back of the fireplace, and break up a too long and narrow parlor.

Three-Fold Screens.

The familiar, tall, three-fold screen, covered with red or green burlap, has a good many variations. Some very good ones with weathered oak frames have a sort of latticed panel inserted at the top of each fold. Others have narrow strips of wood, running down each fold, forming a sort of point. Still another sort, this costing $8.75, has a sort of insertion of grille work across each panel, backed up with art glass, in a milky green.

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ARTHUR C. CLAUSEN, ARCHITECT -- MINNEAPOLIS
Answers to Questions on Interior Decoration.

N. B.—Please address letters intended for answer in this column to Decoration and Furnishing Department. You should state in your letter the exposure of room, interior finish, height of ceiling and dimensions. Answer will be given in next issue to go to press if possible.

A. E. D.

I would deem it a favor if you would lend me your valuable assistance through the columns of your magazine regarding certain features in my new house, colonial style, with main hall 8 ft. wide in the center. The woodwork throughout is of British Columbia fir, the floors laid in same edge grain. Hardwood is out of the question in this part of the country, the freight rates, and the long haul making the price prohibitive except in very expensive houses.

I would be glad also if you could give me some ideas as to finishing the floors. Can they be waxed like the hardwood floors and should they be filled before being waxed?

I have had some trouble with my masons in laying the cobble stone foundation and chimney. Mine is the first house in this town with this style of work in it, and the masons never having seen or heard of anything of the kind, in my absence flashed up the stone with cement to make a smooth wall. I made them rake out the joints before the cement had time to harden, but the result is rather unsightly, the stone being splashed with the cement so that it looks very dirty. Is there any way of cleaning this off and brightening up the stone so that the color will show? The stones are boulders taken from a river bed, mostly granite of various colors and would be handsome if the real colors could be brought out.

Ans.—In regard to best method of finishing the floors of western fir, we advise the use of a good filler and then a good floor varnish before waxing. Some finishers do not think a filler necessary; but it is doubly needed in the case of the fir, on account of the pitch coming to the surface. The filler and the varnish will give a hard surface to wax on. If only a slight darkening is desired, the stain may be put in the filler, but if very dark floors are wanted, the stain must be applied first. As it is a colonial style house, we advise a mahogany stain for woodwork in the northwest drawing room with walls covered by one of the beautiful silk surfaced, brocaded papers in a light terra cotta or old rose shade. The green Axminster must be repeated in some of the upholstery of the mahogany furniture. The mahogany finish had best be carried into the hall, while both library and dining room are stained to match the fumed oak furniture. The dining room color scheme to be in old blues, the library in soft browns.

For the misfortune of the cobble stone fireplace, about the best thing you can do is to make that mason spend a few days going all over it and chipping off the surface of the stones. Then soak what daubs of cement still remain with muriatic acid, which is about the only thing that will remove cement.

Mrs. W. H. B.

Q. Will you kindly advise me what in your estimation is the most up-to-date mantel for a living room 17½ x 18 feet. Woodwork is white enamel, furniture in mahogany with shades of olive green predominating. The space for fireplace is just five feet three inches in width, ceiling ten feet high. If a mantel of ornamental brick is advised, is the chimney papered and plastered above the mantel or would the bricks be carried to the ceiling? Are the brick mantels used in living rooms or are they intended more for libraries and halls?

Ans. Although you have not stated the style of your living room, we will assume inasmuch as it is in white enamel with mahogany furniture, that the same is Colonial. This being the case, we suggest that you build in it a mantel of Colonial design. You will find a good many to select from in the July 1905 number of "Keith's." It is our opinion that five feet three inches is too small for a fire place in a room 17 x 18 feet. It would look much better to make it at least seven feet wide, and even more. Whether you use a brick mantel or not would depend entirely upon what design you would select. A brick fire place of dark red brick in a Colonial room, if properly designed, looks very well. Brick mantels are appropriate for all rooms in which the style of the mantel is in keeping with the style of the room. I do not advise running the brick face to the ceiling unless the room is very large and the fireplace a broad one.
Discrimination in Dirt.

One sometimes overhears illuminating bits of wisdom, in trolley cars, or as one walks the streets. A sentence which reached me over the shoulder of a portly matron in the seat in front of me, one day last summer, set me thinking: "There is dirty dirt and clean dirt. I can put up with a little dust, but I draw the line at moist and odorous dirt." I do not doubt that she was discussing the shortcomings of Bridget, but it seemed to me her distinction was a good one for the woman who does her own work. The important thing, on which health depends, is not keeping rooms in speckless order, but in seeing that everything connected with the plumbing and with the food of the family is absolutely clean. Dust gathered upon the surface of polished mahogany is unsightly, but a refrigerator in which food has been spilled and allowed to dry up, or accumulations of damp and dirty scrubbing and dishcloths are prejudicial to health. Most housekeepers need a demonstration of the value of boiling water, in disposing of germs, and for flushing out pipes. As for the dishcloth which has been used a week, the fire is the best place for it. You may boil it in ammonia and water for an hour and the musty odor will not depart from it.

The ideal kitchen has no holes and corners, but we seldom realize the ideal. That being the case, it behooves us all to see that the holes and corners are distinguished by a swept and garnished emptiness. The same rule should be applied to closets inclosing plumbing pipes and the outlying regions of the cellar. We laugh sometimes at the extremes of the Dutch housekeeper, but we may be sure that no germs lurk in her byplaces.

Emergency Pickles.

By the first of March, unless one's provision has been unusually ample, pickles and preserves are nearly exhausted, and it is necessary to think of substitutes. Really good pickles are expensive to buy, but at the expense of a little trouble some very good things can be evolved from the vegetables at command in early spring. Generally speaking, cabbage and white onions are the foundation of chopped pickles. To them may be added a moderate allowance of the cucumbers, which all the grocers sell in brine. Green peppers are unattainable, but the red ones which the Italian shops supply all the year round can be used. Garlic at discretion is delightful. It is the secret of the distinctive flavor of Crosse and Blackwell's pickles.

Chow chow can be managed by getting some of the cauliflower, tiny pickles and button onions, sold by the pound by the German delicatessen stores. They are put up in a vinegar which has a suggestion of acetic acid, although supposed to be white wine, and should be soaked out in cold water, before using. Add to them canned string beans and sliced grocer's pickles, and cook them in a highly seasoned mustard dressing, not forgetting garlic and turmeric.

Chili sauce is easily made from canned tomatoes, allowing four chopped onions to each can, cooking until thick and seasoning to taste with red pepper and salt. Another simple relish is made by chopping finely equal quantities of salted pickles, celery, onions and cabbage, allowing a teaspoonful of salt, a saltspoonful of pepper, and half a glass of grated horseradish to each quart, pouring over it enough boiling cider vinegar to cover the mixture. The coarse part of the cel-
Household Economics—Continued

ery can be used, saving the choice pieces for the table.

Cold slaw is another thing which everyone makes, but which is seldom good. This is the proper method. Shave the cabbage finely and sprinkle it lightly with salt. Beat an egg with a teaspoonful of dry mustard, a scant teaspoonful of sugar and a little celery seed. Over this mixture pour a cup of hot, but not boiling vinegar, stirring constantly. Pour the mixture into a saucepan and set on the fire, stirring it until it thickens like custard, and pour it over the cabbage immediately.

The Use of Dried Fruits.

The fruit question is more important. We may do without relishes, but fruit, in some form, is necessary to health. To some extent, California solves our problems. We grumble over the thick skins of her fruits, over their shortcomings in flavor, but we consume them in yearly increasing quantities. The key to the successful use of dried fruits is prolonged soaking, until every wrinkle is smoothed out of the skin, and the fruit regains its original size. When that has come to pass the fruit is as nearly as may be in its original freshness and is ready for cooking in syrup. In cooking evaporated fruit, most people use too little sugar. So too many people think it unnecessary to add any sugar to bought canned fruit, whether in tin or glass. They do not realize that, except in the case of the most expensive varieties, the maker uses just enough sugar to keep the fruit, and is not concerned with the flavor.

The Easy Way.

Already the spectre of spring cleaning is looming up. The work of the housewife is much simplified if, in March, the attic and store room and the closets are gone over one by one, before the actual cleaning of the rooms is done. One morning a week in March, given to this work will sensibly diminish the strain later on. Going over the closets early is also a help with the spring sewing, enabling one to estimate one's resources for making or remodeling, many an article coming to light which might have been forgotten. People who keep Lent may find the operation valuable as a penitential exercise, as nothing is more depressing than the contemplation of one's old duds. Unless, indeed, it be accom-
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"Cyco"-Bearing Carpet Sweeper. You can double its benefits by having two sweepers—one for upstairs and one for down; this saves the work of carrying the sweeper up and down stairs; besides, you always have a sweeper at your command when you want it.

There is no article in the home at double the cost that contributes as much comfort, or that saves as much hard labor and fatigue as Bissell's "Cyco"-Bearing Sweeper. It operates easily, silently and thoroughly, raises no dust, brightens and preserves your carpets and rugs; will last longer than fifty corn brooms. Prices: $2.50, $3.00, $3.25, $4.00, $4.50, $5.00, $5.50.

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Beware of frauds who claim to be sent out by us to repair Bissell Sweepers. We employ no agents of this kind.

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(Largest and only Exclusive Carpet Sweeper Makers in the World.)

Household Economics—Continued

panied by the resolution to place them immediately where they will do the most good.

A Mistaken Economy.

There is a certain sort of housekeeper who is persuaded that her house never gets quite as dirty as other people's. She tells you with pride that she never has great cleanings. She is of the opinion that once a month is often enough to sweep the living rooms, and her parlors are not done more than once in each season. As a result her family is preoccupied with keeping the house tidy, in the long intervals between sweepings. One shudders to think of the microbes which must accumulate in remote sections of her rooms, in those same intervals. No argument will persuade her, but something may be done to prevent other people from imitating her. To put it on the lowest plane, there is no real economy of labor in continual pickings up. More time in a week is consumed than in one thorough sweeping, with a rapid and systematic dusting each morning. On the other hand, rooms require a thorough cleaning, once a week, in order to be suitable habitations for human beings.

Country House for a Small Family

Have you an idea of what your house should be like? Are there special features which you have seen, and like, and want to have in your house when you build? Why not write me your requirements and let me make some sketch plans so you can see how the ideas work out, and have something definite to study over and perhaps change a little here and there, so that when you are ready to build, you will have plans which exactly suit you? It is not very expensive and is certainly worth while.

ALFRED M. BLINN, Architect,
89 State St., Boston, Mass.
In Honor of Saint Patrick.

ARCH is rather bare of holidays, as well as coming entirely in Lent. Saint Patrick’s day, March 17th, affords an opportunity for a luncheon or tea, in the key of green.

For a luncheon, we will have a centerpiece of ferns and narcissus, or white carnations, or even early tulips. White china, if possible, with as many green dishes as we can muster, and a generous display of glass.

The first course will be cream of clams, in cups with celery and wafers. Then comes a platter of fillets of some white fish, boiled and cooled and covered with a tartare sauce made very green with pickles and capers, followed by vegetable cutlets of spinach, or young cabbage sprouts. The cucumber and lettuce salad will be covered with a white mayonnaise and garnished with balls of cream cheese to which finely chopped parsley has been added. White cake, pistache ice cream, green grapes and coffee served if possible in green cups, and completely covered with whipped cream, conclude the repast.

If favors are desired, nothing is any prettier than a tiny fern set into a cardboard basket covered with vivid green crepe paper. Place cards might be of pale green bristol board, with a shamrock painted in the corner. Variations of the idea will suggest themselves, and it is possible to give such an affair a very amusing turn, by using some of the grotesque favors which are supplied by the dealers in such things.

A tea is of course much simpler, the main point being decorations and edibles in green. Lettuce sandwiches are always liked, so are those made from cream cheese and olives. Green bonbons are easily found and home made cakes can have a green icing. If the weather is warm enough to make it agreeable sherbet glasses of chipped ice and creme de menthe can be passed on trays, being prepared in a convenient pantry.

Springtime Salads.

Most people experience a feeling of lassitude and loss of appetite, with the first warm days. Then is the time to tempt the jaded palate with food at once light and easily digested. Nothing meets the needs of the fatigued stomach better than salads. To be sure, fresh green things are high and hard to get in March. Still there are substitutes. Celery is good and eggs are cheap. An apple and celery salad costs only a few cents and is appetizing and nourishing. The materials for potato salad are always at hand and a very good dressing can be made with milk and butter, in an emergency. The secret of good potato salad is in letting the potato and onion absorb each other’s excellences for two or three hours before the dressing is poured over them. Cabbage, too, if very finely shaved is good, but needs a highly seasoned dressing. Or it may be combined with thin slices of Spanish onion and a French dressing. A can of string beans drained, covered with oil and vinegar, later laid on a bed of celery and finished up with mayonnaise is a successful salad. There are also cans of vegetables which come already prepared for serving as a salad, and are not expensive, although not carried by the average grocer. They can be ordered from the department stores.
The making of salad dressing has terrors for a great many people. It is really very simple, the main thing being to have the ingredients very cold. If oil, eggs, and vinegar are thoroughly chilled, all the ingredients can be put into a cold bowl together, and five minutes' work with a Dover egg beater will result in a perfect dressing.

Here is an expedient to be tried some day, when oil is limited. Thicken a half pint of milk with a tablespoonful of flour, cook ten minutes in a double boiler, or on an asbestos plate and cool. Empty a ten cent bottle of salad dressing into a bowl, rinsing out the bottle by shaking a tablespoonful of vinegar round in it. Add the thickened milk and beat till smooth, then beat in three tablespoonfuls of oil and a tablespoonful of vinegar. Salt to taste, add a dash of cayenne, and any additional flavor you like. Mustard improves most of the cooked dressings. This is a very good substitute for a mayonnaise pure and simple. Any of the boiled dressings are quite transformed by the addition of a little oil, after the mixture is quite cold.

The Best Way to Buy Oil.

Oil, imported in glass bottles which never, under any circumstances, seem to hold as much as they claim to, is quite an expensive item. The pint bottle seems to disappear entirely with two or three salads. Do you fancy, gentle reader, that the Italians in our midst, of whose diet oil forms so large a part, get oil in any such way? Not a bit of it. Go down into the part of your town where they congregate, and seek out a grocery store, and inquire for their best oil. They will pour it out from a quart can, limpid, slightly greenish, with a delicate fragrance, and they will sell you the can for fifty or sixty cents, good measure, pressed down and running over. If the grocer has some little command of English, he will discourse to you about the oil trade and he will tell you that the French oil, brought over in glass is almost invariably adulterated with cotton seed, an adulteration harmless enough, but not pleasant to contemplate, when one pays a high price for purity.

Dollies and Centerpieces.

In the matter of small pieces for the table the fancy for white continues. The needlework shops exhibit elaborate...
colored embroideries, but they are not often seen in use, and white silk embroideries are still more passe. For ordinary use, rather heavy linen, with scalloped edges and eyelet or French embroidery is the best choice, as it wears and washes indefinitely. The pieces can be bought simply scalloped and the design worked at home, and the cost will be quite moderate. If one has not the patience or skill for solid or eyelet embroidery, Wallachian embroidery, done with linen floss, is easy and effective.

**Sandwich Filling.**

Some Spartan hostesses restrict themselves to wafers, with afternoon tea, but most of one's guests appreciate something more substantial. A capital filling is made by boiling and mashing French chestnuts, mixing the paste with half its bulk of creamed butter, flavoring slightly with vanilla or pistache. Another is cream cheese and stuffed olives mashed together, and a third cream cheese, the same quantity of chopped olives and half as much of chopped nut meats, seasoned with salt and cayenne and moistened with cream.
Prof. E. R. H.

Q. What is the proper mixture for exterior cement work?

Ans. With reference to the question of proper mixture for cement exterior application, would say that for solid walls use Portland cement, one part, clean, sharp sand three parts and four to five parts crushed rock. For rough cast cement coat and for coat on metal lath, use one part cement and one part sand. For a little cheaper job, two parts of sand may be used. Hair is seldom used in concrete work.

J. B. R.

Q. I have a red birch wood floor on my dining and drawing room and would like to stain it to imitate black walnut. What stain should I use and how should it be applied. I want a wax finish, not a varnished floor. Can it be done to last in good appearance?

Ans. If the floors you mention have already been finished, we suggest that this old finish be first removed with Electric Solvo, which will leave them bare and clean, ready for the new finish. They may then be refinished with a coat of Wood Dye, the desired shade, and two coats of Johnson's Prepared Wax. We think the No. 178 (Brown Flemish) is probably the dye you will want to use. The dye should be applied with an ordinary brush, and when it is thoroughly dried out, which will be within three or four hours, two coats of Prepared Wax should be applied with a cloth, each coat being polished with a weighted brush.

Mrs. E. E. B., Dayton, O.

Q. We are very desirous of having some art glass in our dining room, yet wanting a good supply of light. Desire your opinion as to art glass transom in center of bay window with large plain glass window beneath. Long narrow side windows of diamond shaped glass to be made to swing in. Would this be in good taste?

Ans. The size, location and ornamentation of windows present many different problems. If you have stated all of the conditions in your case, would say a transom glass of art glass would be in good taste and as you have considerable clear glass, you should have sufficient light. As you have a large plate glass stationary window below the center window, we might suggest the use of diamond shaped windows on each side for art glass, if this would not cut out some desirable view. Do not consider the use of cheap colored glass but remember that the difference in appearance of art glass windows might be compared with examining a cheap oil painting with one done by an artist. Get only the best. We would refer you to our April number, Journal of Modern Construction as well as the May issue of Keith's Magazine on the subject of "Oriole Windows," containing some helpful suggestions on this window problem.

E. C. T.

Q.—In my new house it is my idea to tint the walls of all the rooms and while the woodwork is all hard wood in the main room down stairs, I am unable to decide whether to follow one style of finishing or use a different finish for each room. I am after simplicity and some scheme that will wear well and meet this want, will please the best. Will you kindly give me your suggestion?

Ans.—In deciding the finish of the woodwork, the character of the furnishings should be taken into account. If mahogany furniture is intended to be used, the effect is better if a mahogany stain be used for the woodwork. The dining room might receive this finish while the rest of the house has a uniform brown stain. In general, a uniform wood finish throughout the lower floor of a medium house, will be found most satisfactory, especially if "simplicity" is aimed at. It is impossible to give you a color scheme without more particulars as to furnishings.
RAW March Winds—driving rains and chilling blasts of Early Spring, will not disturb the health and comfort of the folks in this home, for—

The Inside Walls are as sturdy a protection as the outside walls. They are built of rock—Rock Gypsum, crushed and calcined into plastering material, and re-crystalized into rock when mixed with water and applied by the plasterer.

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Made from Rock Gypsum

protect the home from the frequent colds, sicknesses and general discomforts of damp, drafty walls. For the children’s sake, if not your own, keep out the “demon of dampness.”

No intelligent Home Builder can afford the Extravagance of cheaply plastered walls—they mean Doctor Bills, endless repair expense, ruined decorations, fuel waste. Taboo lime plastering!

See that your Architect specifies and your Contractor uses U. S. G. Hard Plasters and make your home cozy and snug with perfect interior walls—hard, dry, non-absorbent, non-conducting, strong and enduring. Even fires and floodings will not destroy them.

A good start deserves a good finish—see that the final plaster coat is of

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and you will have the finest, truest, smoothest, hardest and most enduring Decorating Surface your Decorator ever worked upon.

Interesting, illustrated literature, explaining in plain, simple language, the relation between perfect plastering and Domestic Comfort, Health and Economy—yours for the asking, by addressing our nearest office.

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Kalsomining.

The first thing to be done is to look over the walls and ceiling and see if they are in a fit condition for kalsomining. If not, it will be necessary as a preliminary step to put them in shape. If the walls are coated over with old kalsomine, the latter should be removed by sponging over with warm water, says the "Painter & Decorator." Wet the surface thoroughly first and let it stand a little to soak through the layer of kalsomine and loosen it up. Keep the sponge well saturated and renew the water frequently. If the kalsomine is not all removed the first washing go over it again as it will come off all the more easily for having had time to soften. It is necessary to get this old material all off, otherwise the new may be loosened and caused to peel off, and in any case it affects the clearness and uniformity of the new coating. The next step is to repair any cracks or breaks in the walls. This should be done with a mixture of plaster of paris and whiting reduced to a putty with glue size. The plaster and the whiting should be taken in equal quantities and will take up about the same bulk of fluid size consisting of glue and water. The glue and whiting both retard the setting process and allow sufficient time to manipulate as required. When properly made it should harden in a half hour or so. A little larger proportion of plaster than stated above will not hurt if so desired, but only requires faster handling. After it has hardened sufficiently sandpaper off even with the surrounding surface. All nail holes, cracks and crevices should be stopped in this manner. Another material which will require complete removal is old wallpaper. If this will not pull off readily, go over it with a paste brush and hot water to which some flour paste has been added. This helps to hold the moisture. When soaked sufficiently, as found by testing with a knife or scraper, remove the paper. Do not use a liquid filler, as it is not necessary. Prime with a coat of raw linseed oil, two parts, adding one part of turpentine; let the work stand two...
days, or until dry, sandpaper smooth with No. 0 paper; touch up knots and sap with thin white shellac, then give two coats of best exterior varnish, rubbing the first coat.

**Tile Construction.**

The fact has been clearly demonstrated that in tile construction is to be found a system of fireproofing which cannot only be installed in less time than is required by any other system, but also at much less cost.

Tile construction will answer every requirement and condition of a truly fireproof building. It does away with the use of structural steel and the noise which would result in the assembling of members and in driving of rivets.

The discarding of steel frame work also lessens the cost by one-half and the time taken in manufacturing steel will be three times as long as that of making tile; whereas work can be started immediately with this system.

The exterior walls are built entirely of hollow tile, the floors being of long span hollow tile construction, reinforced with steel bars, and reinforced columns and girders of concrete.

Eight, ten or twelve-inch tiles, varying in depth according to span, are placed between the lines of concrete joists, which have a uniform width of four inches.

Besides greatly lightening the construction, this system has the advantage of giving a drier floor and one more nearly sound-proof. But the remarkable distinction is realized in the shorter time occupied in erection over that consumed by any system where a solid concrete slab is used.

The outside surfaces of these wall tiles are made with a depressed groove which gives a very strong bond to the plaster. The double airchamber of the tile makes impossible the conveyance of moisture through the wall.

One of the greatest advantages gained is the elimination of inside wall furring, the plaster being applied direct to the tile.

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This No. 45 Steel Furnace is sold direct from our factory for $49.00, freight prepaid anywhere east of Omaha. Heats six or eight rooms, store or church.
To Clean Window Glass.

Take diluted nitric acid about as strong as vinegar and pass it over the glass pane, leave it to act a minute and throw on pulverized whiting, but just enough to give off a hissing sound. Now rub both with the hand over the whole pane and polish with a dry rag. Rinse off with clean water and a little alcohol and polish dry and clean. Repeat the process on the other side.

Painting Metal Work.

Although it is necessary to paint galvanized iron in order to preserve it, there is no more difficult problem that the painter is called upon to meet than to paint it in such a manner that the paint will not scale off. If the work is allowed to stand exposed to the weather for two or three months, Prince's mineral brown is one of the best materials that can be used to prime it with. But new galvanized iron cannot always be allowed to stand for three months before being painted it can be treated with the following wash, which will put the surface in condition to hold the paint. In one-half gallon of water, dissolve one ounce each of chloride of copper, nitrate of copper and sal ammoniac. When the solution is perfect, add one ounce crude or commercial hydrochloric acid. This wash must be made in a glass or earthenware jar, and is applied with a wide flat brush. In a few hours the metal turns black and finally dries to a light gray. After twelve hours the non-adhesive chemicals are brushed from the surface with a dry brush. On this a first coat of Prince's mineral brown or of red lead may be given. If the latter is used, the dry red lead should be bought and mixed as it is needed. Pure red lead will not keep in the mixed or paste form.

Wax Finish.

At the Canadian Convention, held in London, Ont., the question of the relative merits of wax finish and varnish, especially for outside use, was brought up. A Toronto member stated that three years ago he had finished some front doors with wax, and that since then, the butler has rubbed them two or three times a year with a little wax. They are today in much better condition than any doors finished with varnish at the same time. In order to renew a var-

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Splinters and Shavings—Continued

nished door, the old varnish must first be taken off with varnish remover or alkali, while the finish on a waxed door may be renewed by the use of a polishing brush and a very little wax. Or the old finish may be removed very easily by washing it with turpentine. The doors in question were first filled with paste filler, then oiled with two-thirds linseed oil and one-third turpentine, and allowed to stand for a week. They were then given a coat of wax and rubbed and repolished with a little more wax. The great secret of success is not to use too much wax.

In finishing a floor, the same member recommended filling the floor, if made of an open-grained wood, but if close-grained no filler was necessary. Then he oiled it and finished with wax, polishing it with a weighted brush. The advantage of the wax finish on a floor is that it can be renewed on those portions of the room which become worn without taking off the old finish in the entire room, as would be necessary in the case of varnish.—Am. Carpenter & Builder.

Portland Cement.

THE composition of Portland cement has been reduced to a science and its definite chemical proportions and method of manufacture have been regulated to such a nicety that a proper article of cement today must pass the tests of the U. S. Government.

The properties possessed by Portland cement are certainly remarkable to a degree, and have made its use in modern construction a revolutionizing influence of wonderful extent. When mixed with water to a stiff paste, it immediately begins to harden and the process continues, perhaps indefinitely, certainly for many years, resulting in a fine grained stone, without cleavage or cracks, hard enough to scratch glass, very tough, but not brittle.

This hardening into stone goes on even more rapidly under water than when the cement is exposed to air, and no matter how great the volume the interior becomes as hard as the surface.

The Door Beautiful

is only beautiful as it is useful. A perfect, substantial and artistic door, not only enhances the attractiveness of the home, but adds materially to the permanent or rental value.

Morgan Doors

are singly and collectively perfect doors in design, material and workmanship. They are made as thoroughly beautiful and useful as doors can be made, and become a real part of the building.

The cost of Morgan Doors is a trifle more than the ordinary kind, but they will outlast the building itself—are absolutely guaranteed not to warp, crack or shrink, and are made in any style of architecture—Colonial, Empire, Chateau, Mission, etc. with the most exquisite grain and finish. The name “Morgan” is stamped on the top of every genuine Morgan Door. It is the maker's guarantee of satisfaction.

Write today for our illustrated book “The Door Beautiful,” which shows you the variety of design and more of the detailed beauty of Morgan Doors, and why you should use Morgan Doors if you are going to build or remodel.

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eliminates nails, screws, brackets, shoring, time losses, and excess lumber and will save you in labor alone on a single foundation TEN times the cost.

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House Plan Service

Subscribers interested in any house, or plan published in Keith's, may secure full information from the architect by addressing a letter to him in care of Information Service Dept. Keith's Magazine

Keith's Magazine

Notes on Prices.

This magazine has been quite persistent in its recommendations to prospective builders that this present season will be found the time to build to advantage. Two months ago we published a page editorial on the question and if any reader is still uncertain as to the soundness of our advice, the following just published by the recognized leader of the strictly building trade papers, American Contractor, should clear away any doubt.

Building Operations for January.

Influenced by national financial disturbance, the most sensitive of all industrial undertakings, building and construction, has suffered a severe depression, as shown by official reports received by the American Contractor, Chicago, and tabulated. As forecasted by the decline of stocks of every variety, the decrease in building operations as compared with January, 1907, was expected, and has materialized, to the extent of 44 per cent in the aggregate of 47 cities presented in comparison. The indications for February are more favorable and a large volume of building may be expected as the season approaches, subject only to such restrictions as are presented each presidential year.

Among the cities that scored an increase despite of the financial panic are: Bridgeport, with a gain of 22 per cent; Denver, 9; Kansas City, 16; Little Rock, 6; Omaha, 10; Peterson, 28; Reading, 32; Spokane, 10; Topeka, 91. Greater New York shows a decrease of $7,000,000, a loss of 50 per cent; Philadelphia, 61; Chicago, 21; St. Louis, 51.

"Low prices in building material are generally chargeable to a suspension, or rather great diminution of building operations, which in turn, are predicated on overproduction, and, more especially, a lack of public confidence in the future. There is in the present situation nothing to show that the present depression in building operations is to continue; on the other hand, a sharp revival may confidently be expected with the opening of the building season now near at hand.

"Leaving out of account the curtailment of operations in some lines of business, building and manufacturing in particular, chargeable to a lack of loan-
Notes on Prices—Continued

able funds in the recent past and hesitancy on the part of timid people, this country was never in better condition, more promising for the prosecution of all kinds of legitimate enterprises than at present.

"Nor has building been overdone, even though all records have been broken in the achievements of the recent past. This is shown in the high figures at which rents are maintained. If one doubts this let him start out to rent an office, house or suite of apartments. It matters little in what city or section he is located; he will find rents high, much higher than they were a few years ago, and will probably experience considerable difficulty in securing exactly what he wants, leaving the rental out of account.

"Under such conditions it is a good, an excellent time to build. The labor skies are quite clear and the price of material has declined to a point where buildings can be erected at a very decided saving. These are ideal conditions and will not long continue, since prices are certain to slowly advance under the stimulus of reviving building. At present material men are in the market to sell. They must keep their plants in operation and must sell, even at prices that promise little actual profit. During the unprecedented building activity of recent years the prices of all classes of building material greatly advanced under the influence of competition among buyers. At present and for some little time to come they will rule low.

A Good Catalogue to Have.

There has been received at the editor's desk a new, well illustrated, catalogue on heating and heating appliances. This book is full of valuable information to any who are interested in the complicated problems which present themselves to all home builders when they come to the point where a final decision must be made on "what kind of heating shall I buy?" This booklet will be mailed on request by Kellogg-Mackay-Cameron Company, Chicago.

How to Avoid Paint Waste—

Two-thirds of the cost of painting is in the labor.
It costs more to put-on a poor paint than a good one—
Because poor paint won't work so well under the Painter's brush—won't spread so easily or evenly.
And you can't get as good a job.
The poor paint won't cover as many square feet to the gallon as "High Standard" Paint—the good paint—will cover—
And won't last anything like as long.
Now, the best paint—

Low Brothers
High Standard
Liquid Paint

Costs only a little more per gallon than the poor paint—It takes fewer gallons of "High Standard" Paint to do-the-job will be less than the total cost for enough of the poor paint. It takes less Painter's time to put-on "High Standard" Paint—
And "High Standard" Paint lasts from two to four years longer than the other.
There's a "High Standard" Paint for every purpose—for both exterior and interior work.
That "Little Blue Flag" on every can is your protection. Write for free booklet "Attractive Homes and How to Make Them." If you request, will include Color Cards showing latest fashions in combination.

The Lowe Brothers Company
Paintmakers—Varnishmakers

450-456 E. Third Street, DAYTON, OHIO
New York Chicago Kansas City
BOOK REVIEW.

"In Tune With the Infinite" as its title indicates, is intended by its author, Ralph Waldo Trine, to make its readers aspire to higher thoughts and deeds and to live more in keeping with that life which the Divine being would have us lead. It is not necessarily a book on religion as it follows no special creed except that of love and peace and happiness between all human beings. It dwells in an interesting manner upon the supreme facts of human life. The primary object of our existence, taking life as we find it and guiding us to the fullest realization of earthly happiness while we live. The book not being a treatise on where we came from or whither. For those who are in the habit of worrying about the dreaded tomorrow, its problems, its trials, this book is especially written, as its author truly states in a little verse,

"Some of your griefs you have cured
And the sharpest you still have survived;
But what torments of pain you endured
From evils that never arrived."

Prices vary according to binding.


"Brothers of Peril." A Story of Old Newfoundland is a tale of the wilderness, the scene laid in 1624, the time of the first settling of Newfoundland. Theodore Roberts the author, "whose boyhood was spent amid those brown, barren, shaggy woods and empurpled hills"—knows and loves them. He has resurrected the ancient and extinct tribe who first inhabited them, the Beothic Indians, and woven a romance about them in their island environment, drawing his inspiration from the heart of history, rather than the letter. Those who like adventure stories, will find this a good one.

Foretelling the Future of a Painting Job

The outcome of your paint investment, involving gallons of paint and many dollars worth of labor, can be foretold, so far as the durability of materials is concerned, by examining a very small specimen of the White Lead which you propose to use.

Paint is made of a pigment and a liquid. The pigment, in order to have the best paint, must be Pure White Lead, the liquid Pure Linseed Oil and these ingredients should be bought separately and mixed fresh as needed.

To test the paint, take a small bit of the White Lead, before it is mixed with the oil or coloring matter, and blow a flame upon it with a blowpipe. If little globules of metallic lead form, the White Lead is pure, and you may allow the painters to go ahead. If the mass is stubborn and refuses to turn to lead, the outlook is bad. The White Lead has been adulterated and you will rue the day you allow the imitation paint to be used on your house.

We Will Send a Blowpipe Free

The connection between this test and the durability (and consequent economy) of paint is told instructively in one of our booklets. This book, together with a blowpipe to test White Lead, will be sent free to any houseowner who intends to paint this season.

NATIONAL LEAD COMPANY
in whichever of the following cities is nearest you:
New York, Boston, Buffalo, St. Louis, Cleveland, Cincinnati, Chicago, Philadelphia [John T. Lewis & Bros. Co.], Pittsburgh [National Lead & Oil Co.]

FULL WEIGHT KEGS
The Dutch Boy Painter on a keg guarantees not only purity, but full weight of White Lead. Our packages are not weighed with the content; each keg contains the amount of White Lead designated on the outside.
PRING is an awakening of life among all of the activities of man as well as nature. It is a time of rejuvenating happiness and a time of awakened ambition and industry. Happiness is the object of all lives. Our whole life, from the cradle to the grave, is one continual search and struggle for happiness. "Hope springs eternal in the human breast; man never is, but always to be blessed." And a home of one's own is the one place in all the world where true satisfying happiness is found. To possess one and provide for it, is therefore, the prime object of all natural people. That this should bring about building activities in the spring time is quite natural. When we see dumb nature building, we are convinced of our own powers and we build.

The building of a home is indeed a business proposition. It is somewhat cheaper to own a home than to rent, provided that the home is built properly and does not require continual repairing. The building of a home, however, is far more than a mere business proposition. There is too much sentiment connected with the building of a home to count its worth in mere dollars and cents. A bungalow appeals strongly to home loving American people nowadays for the two important factors already mentioned: the economy of its cost and its homelike possibilities.

The origin of the bungalow is no doubt derived from the American log cabin, and these two styles are the only two distinctly original styles in American architecture. This, of course, is a surprise to some who have been in the habit of looking upon the colonial style as the American renaissance. But as a matter of fact, the colonial style of architecture is nothing but a adaptation of the English Georgian style which had its transient popularity in England about the time that the Colonies were in their formative period, and for this reason it was the first style adopted by them in their homes. Its association with the early history of our country always has and always will keep it popular with the American people.

In the building of a bungalow, the same as in the building of any other house, the first consideration is its plan. The plan of a bungalow offers the same advantages as our modern flat, (but without any of the disadvantages of those human kennels), the rooms being all on one floor, and this is one reason why it is so popular with young people, just starting out in life. Then too, the distinctly picturesque cottage appearance of the bungalow seems to suggest, even in the name alone, the simple love and happiness which characterizes the early life of our young people. They may desire a more pretentious home in later life when the size of the family and social requirements, require a more imposing habitation, but at the start it is always a home of the cottage order which appeals to them most.

Having all of the rooms on one floor
has many advantages; also some disadvantages. One of the advantages being that no reception hall or stairway is necessary. One of the disadvantages is that only a limited number of bed rooms can be obtained unless the bungalow is made of considerable size, and if made of considerable size, a bungalow loses much of its picturesqueness and charm.

In the planning of a bungalow, two things are indispensable. One is a large homelike living room, having direct connection with the dining room and a good sized old fashioned fire place. There is some conflict of opinion apparently upon what constitutes an "old fashioned fire place." Many incongruities and monstros-

ities of design are originated often by clever but misguided people and then pardoned by giving to them the unexplainable charm of antiquity. Why a thing should appeal to us merely because it is old fashioned, is hard to explain, and yet there is no doubt but what the old fashioned things play a very strong part in the designing and building of bungalows. If there are several bed rooms, say three or four, they should all open into some kind of a separate hall connecting with the bath room. The reason is obvious. In planning a bungalow, such conveniences as pantries, linen closets, etc., sometimes have to be omitted to make room for other requirements, but it is best, when possible, to include them in the arrangements. The plan need not necessarily take a rectangular form altho up to a certain size this is usually found to be the most economical. Wings and appendages can be built out from the main body of the house, to provide for different rooms and conveniences, but there is where the danger often lies in making a bungalow look too "freakish." That is one point on which more emphasis will be laid later. Bungalows should always have a porch of some kind, and if built in parts of the country which are subject to that pestilent nuisance, the mosquito, the porch must be so designed that it can be screened in. This requirement, confines the design of the porch almost entirely to a square post and straight balustrade treatment. Fortunately all parts of the country are not so afflicted in the summer time and more latitude is allowed in obtaining rustic and picturesque effects on the porch, or entrance.

John Ruskin used to lay considerable emphasis on the "poetry of roofs," and the importance of the style and shape of it. Had he lived to see them he would certainly have gone into ecstacies over the roofs of Pasadena's bungalows. Even Ruskin could probably not tell us of a roof style or combination of roof styles which cannot be found in the fair city of Pasadena. The favorite seems to be the low hip roof. Next best is the low sweeping gable, and third best seems to be various combinations of these two. The roofs are invariably shingled. Where there is a little space available in the attic story owing to the considerable ground area covered by the house, the opportunity to break the somewhat
monotonous appearance of a plain roof by the building of a picturesque little dormer is taken advantage of. A true bungalow, however, has little or no space on the second story, and where rooms are provided in the second story, they are of but little use except during the cooler months of the year, for sleeping directly under the low roof with comfort is impossible.

Many bungalows are not provided with eaves troughs for carrying the roof water to some desired place. While it is not necessary to have an eaves trough all around the house, there ought to be one at least across the front to keep the water from falling heavily upon those who pass in and out during rain storms. The rain water gutter and conductor seem to be necessary evils. They certainly do not aid to the appearance of a home, if anything, detract from it, but we have to put up with them under some circumstances, and can simply make them as inconspicuous as possible. The roof of a bungalow should always have a considerable projection at the eaves. The plan of giving from three to five feet projection to the cornice of eaves had its origin in the idea that in so doing it would protect the sides of the house from the direct rays of the sun, and as the bungalow is more often built in the southern states than elsewhere, this is an important point to be considered. Care must be taken, however, not to project the cornice too far. In carrying out this broad, sweeping effect in the roofs of bungalows,
it is not necessary to go to the extreme that suggests a big man's hat on a small boy.

The rafters are invariably given prominence. They are sometimes carved into various fantastic shapes at the ends and here is where another good point in the designing of a bungalow is carried to the extreme—originality, yes, but it should also be simple originality. "Simplicity is the terminal point of all progress," says the immortal art critic, and he is right. The more progressive an architect is, the simpler are his designs. This does not mean, of course, the simplicity which is carried to the barrenness that suggests a shallowness in the owner's pocket book. One of the charms of a bungalow is its utter unconventionality. In the designing of a bungalow, the architect is never hampered by precedents, as he is in the designing of classic homes, but this liberty should not lead him to grotesqueness, for the mere pleasure of having originated something "different from the rest"; a mere oddity having no soul or sentiment, suggesting a dream mixed with rarebit instead of a dream of hope and love and homelike comfort.

Slight mention has been made of the fireplace. Tradition dictates that the fireplace should be of solid masonry. The modern creation of wood and tile though often very beautiful, is not adapted to the bungalow. The bungalow fireplace should be broad and massive and built of either brick or stone, the design varying with the size and style of the room.
and the materials of which it is composed. The chimney on the outside should be built of the same material as the facing of the fireplace on the inside. A word or two might be in order with reference to the grouping of windows. American designers are just commencing to appreciate what has been known in England for centuries; that the appearance both inside and out is improved by placing windows in picturesque groups. They can be placed in the wall as bays or oriels, or merely as groups of two to five in a row on a plain wall. Window boxes placed below such groups are always attractive in this style of a home.

The entrance to the bungalow often gives one an opportunity to show his originality (tempered by his reason). The front door to a bungalow should always be broad as an indication of hospitality. "My door is broad, my heart is broader," is an English saying which is carved in Latin over the entrance of several historic castles. The door can be plain paneled, but it is better to have some kind of a design in the way of divided lights on it. A door without any lights in it gives one a feeling of repulsion, and seems to say strongly, "You are shut out." The entrance should always be an indication of the hospitality which one will receive at the fireside within.

And still we have made no mention of what should compose the exterior of a bungalow. Siding, shingles, brick, stone or cement are all used in the exterior of bungalows. The relative cost of the
materials used in the exteriors of the wall very often decides this problem for us, and this accounts for the fact that nine-tenths of the homes put up are of frame construction, with either shingles or siding on the outside.

When the question of cost, however, is not always the main factor, the problem becomes at once more complex and interesting. The more a home builder enters into the study of exteriors, the more amazed he becomes at the numberless materials and combinations of materials used in homes. Shingles seem to be the favorite, however, among builders of bungalows, a variation from this being the western shake, a great, long, clumsy, hand made shingle. They are very picturesque indeed when properly used. Siding is the next favorite, probably because it is the least expensive, but the ordinary lath siding is not advised. It is too plain for a home of this kind. Building exteriors of 10-inch boards well lapped and stained in mission brown is an inexpensive covering permissible where the climate is mild and gives a somewhat rustic and attractive appearance, suggesting the old days when workmen were handicapped for a lack of tools. Cobble stones, "nigger heads" they call them in Dakota, are used to a large extent in building the foundations, porch piers and chimneys of bungalows and the effect is good.

In closing let it be stated that if one wants to build a home in which he can best embody the spirit of home comfort and all the fine sentiments which go to make up the true home life, if he wants to build a home which seems to be pervaded with an air of love and happiness and domestic content, let him build one of those little homes with their straight forward expression of simple needs, so characteristic of the land in which it had its origin,—the American bungalow.
Ornamental Hedges.

By Ida D. Bennett.

Here are few places, be it the humble cottage or the more stately home of wealth, but what are benefited and beautified by planting of a hedge of blossoming shrubs. Especially is this true in the case of rural or suburban homes where there is a considerable area of land, much of which is devoted to the cultivation of garden products or fruits. These while beautiful from an utilitarian point of view, and, perhaps, in the case of fruit, from an artistic standpoint when wreathed with snowy bloom are seldom beautiful throughout the year. An exception to this will, however, be found in an orchard, especially when old and hoary, its branches sweeping the grass beneath and wreathed with rosy bloom or bending beneath their load of fruit or with bare trunks showing the strength and resoluteness of the framework of the trees, but where the ground is put into cultivated crops as is usually done the orchard does not add to the attractiveness of the grounds.

Here, then is a place for the hedge or the planting of masking masses of shrubbery. The presence of outbuildings also calls for screening as does the service part of the grounds. Here the screening hedge serves the double purpose of hiding the domestic life of the family and affording the privacy so desirable.

Every flower garden should be given the protection of a hedge or wall if one is to get the greatest amount of pleasure and benefit therefrom and stable yards and hen parks call for masking shrubbery on the residence side at least.

For all these places the various hardy shrubs are available and one may readily select those specially adapted for the purpose.

For a hedge of medium height to separate the lawn from the flower or vegetable garden there is no finer plant than the hydrangea paniculata grandiflora as it may be grown to any height desired and is a mass of bloom at a season of the year when flowering shrubs are least in evidence. The culture of this shrub is simple but there are certain requirements which must be conformed with if one would have the hydrangea at its best, and the chief of these is an annual pruning of a rather severe character. This pruning may be given at any time when the plant is dormant but I prefer the spring as the extra wood is some protection to the main trunk of the shrub during winter, but any time in early spring the last year's growth should be cut back at least a half, and two thirds is better. The more severe the pruning the larger will be the panicles of bloom, but the medium sized sprays are far more graceful and there will be more of them. Moreover the immense panicles sometimes produced require supporting, so great is their weight and they are much injured by rain and storm and should always have sod under the edge of the branches or a heavy mulch of lawn clippings.

Given this annual shortening and rich soil and abundance of water through the summer and especially when the plant is setting its buds and it will be found all that can be desired. In the fall the plants should be heavily mulched with coarse, old manure—this for the enrichment of the ground and the protection of the roots.

In certain sections of the country blue hydrangeas are much in evidence. These, however, are not a distinct species of hydrangea, for there is no blue variety; but the change of color is due to the presence of iron in the soil. In sections where the soil is impregnated with iron, white hydrangeas soon show a change of color to the coveted blue and this may be brought about in other localities, especially with potted plants by treating the soil to an iron solution produced by the action of nitric acid on iron filings.

Blooming at the same time as the hydrangea the various altheas are especially beautiful as hedge plants if shortened back to a reasonable height. These come in such a wide range of color that very beautiful effects may be produced by combining harmonious shades and varieties—pure white, white with crimson eye, white striped with red and double rose may all be grown effectively in the same hedge, while the purple varieties combine admirably with the white varieties. Altheas do not require, nor should they receive the pruning given the hy-
drangea, but when used as a low or medium hedge will have to be shortened back to conform to the requirements of the position.

They should be given good soil and abundant water during the blooming period and in most localities require some winter protection. The presence of nearby trees or buildings will often be sufficient especially if these are on the side of the prevailing winds.

The various deutzias afford material for charming spring-blooming hedges. D. Pride of Rochester is the finest of this class of plants and with age grows to a considerable height unless it is kept back, requires little care beyond clearing away all dead wood in the spring, planting in good soil and mulching with manure in the fall. In planting set the plants far enough apart to allow of good, symmetrical development, this will be from two feet six inches to three feet while hydrangeas should be at least three and when they have closed up the gap every other plant should be removed and used to extend the hedge or for other planting or they may be set six feet apart on the start.

For high screens the Japanese snowball is excellent covered as it will be in early summer with its great, snowy balls, but charming low hedges are formed of D. Gracillis which rarely exceeds two feet and in spring is covered with its feathery white flowers considerably in advance of D. Pride of Rochester. No special culture other than rich soil and water during the flowering season and while they are making their new growth is required. As much of the old growth is killed annually by the winter's cold this must be removed in the spring to leave the plants slighty and give the new growth room.

The crimson spirea Anthony Waterer is a shrub especially adapted to low hedges as it rarely exceeds three feet and is very compact and symmetrical; moreover it may be kept in bloom the greater part of the summer by removing the withered flower heads as they fade. It requires little care beyond clearing away all dead wood in the spring, planting in good soil and mulching with manure in the fall. In planting set the plants far enough apart to allow of good, symmetrical development, this will be from two feet six inches to three feet while hydrangeas should be at least three and when they have closed up the gap every other plant should be removed and used to extend the hedge or for other planting or they may be set six feet apart on the start.

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Then there is always the Quince Japonica with its lovely scarlet flowers in early spring, but for prominent positions I think it will be admitted that the fall flowering shrubs are rather more desirable.

Less often seen in the embellishment of the home grounds are the ornamental reeds and grasses. They are, however, well worthy of a place of prominence on the finest grounds, so stately and distinguished are they in general effect. The class contains some most beautiful varieties not the least effective of which is found in Erianthus Ravennae with its graceful, waving leaves and tall flower plumes which rise to a height of twelve feet or more and remain throughout the winter. Less stately but even more beautiful in flower and manner of growth—the leaves making a veritable fountain of silvery green, is the Pampas Grass so familiar to the residents of California and known at the east by the silvery plumes which are sold in the stores. This variety is not hardy at the north but must be lifted and wintered in the cellar so it is seldom seen here at its best but even when handled in this way it is very beautiful. Then there is the beautiful zebra grass—Eulalia Zebrina, one of the most effective grasses grown. The blossom stalks are not as tall as those of the erianthus and the leaves are upright, but it is a very striking plant and one which always attracts attention and admiration. Good effects are realized by planting the taller grasses in the rear using such varieties as the erianthus or the arundo donax and placing such lower growing varieties as Eulalia Gracillima Univittata or some of the annual grasses in front. For this purpose there is nothing more lovely than the annual grass Pennisetum Rueppelianum (Purple fountain grass) which may be grown from seed started early in the hot bed and planted out the latter part of May. This has a very graceful manner of growth and beautiful rosy purple plumes. There is a new form of this grass which has crimson plumes; this, however, has to be purchased of the florist and set out in spring and where any considerable planting is to be done is somewhat expensive compared to the other varieties which may be grown by the hundreds from a ten cent package of seed.

All of the perennial grasses except the pampas grass is hardy and once established will last for a number of years, but are better for a liberal mulching of rough manure and leaves over winter. All require very rich soil and an abundance of water to give best results.

Some of the dwarf bamboos make attractive and novel hedges. B. Metake is especially desirable having large leaves—the largest of the species and increasing rapidly from the root. B. Arundianaria, on the other hand, has quite tiny leaves. None of the bamboos is entirely hardy at the north, but the roots are entirely so and new dwarf growth springs up each spring. Where they can be lifted and wintered in a warm cellar they make very effective beds for the lawn when grown in groups and abundantly supplied with water. If protection could be given the tops they would, doubtless, stand the winters and increase in beauty from year to year. Some of the varieties are so tough and pliant that it might be possible to bend them down close to the ground and so protect them. It would be worth trying certainly.

"There are places around many homes that look dark and vacant all summer, when at little expense they can be transformed into places beautiful to look upon. The easiest way to decorate these lonesome spots is by growing some of the easily cared for annuals.

"Of the tall-growing annual plants, the cosmos, Nicotianas and cleomes are among the most deservedly popular. The better way to plant these is between scattered shrubbery, although they can be used in beds. They may be planted close to some unsightly building or fence and will form an excellent screen, if trained against a support. The young growths should be pulled gently to the supporting piece of wood and fastened with short pieces of rubber or cloth.

"The nicotianas are useful in obtaining subtropical effects. Their rich foliage and numerous sweet-scented tuberous flowers make them very decorative. Nicotiana sylvestris grows from four to five feet high and bears great numbers of pure white flowers. Nicotiana Sanderae is three feet to four feet high, with rich carmine flowers.

"Cleome pungens is useful between shrubbery along fences. Its flowers are attractive because of their long stems, reaching out like spiders' legs."
ARCHITECTS are realizing the demand for small picturesque homes and very charming little houses are the result. Some, of course, are most beautiful and elaborate, but many are simple, comfortable and inexpensive. I have selected two at random from the many all about which seem to illustrate my ideas of what can be done in the way of "Comfort for Two," either a man and his wife or two women together. The furnishings and the same scheme of colors could be carried out in less expensive materials and still be successful.

In the first house, the woodwork of the dining room is Oregon pine, weathered with a dull finish. Long French windows at the back open onto a low brick floored terrace, and book shelves fill the space on either side of the brick fireplace. Above a high wainscoting the rough plaster is tinted a dull dark blue. The hardwood floor is almost covered with a Wilton rug in several shades of blue and a large mahogany davenport is upholstered with velvet of the same color. Other pieces of mahogany complete the furnishings. The curtains are of a fine cross barred net with side curtains of dull blue silk.

The bedroom has a paper in two tones of soft pinkish gray in a very fine pattern. The rug also is gray and has a touch of old rose in the border. The bed is brass, the furniture satinwood. The curtains are of the same net as those in the living room. The bathroom and kitchen are both done in white, with blue and white crepe curtains.

The second house has Oregon pine woodwork stained mahogany. Above the wainscoting in the living room there is an art paper in two tones of dark green and the mahogany furnishings are cherished heirlooms. The old davenport and arm chair are upholstered in dark green corduroy. The rug is a beautiful large cashmere. One bedroom has quaintly flowered paper with pink wild roses and an Oriental rug in which pink predominates. The net curtains have an edge and insertion of linen lace. The bed is an old mahogany high poster and there is also a Sheraton dresser and other pieces of the
same wood. The toilet set too, is very old, of Canton ware. The other bedroom is in blue and white with blue and white striped paper, white enameled bed and dressing table, willow couch and chairs. The rug, a Wilton, is also in blue and white and the curtains are the same as those in the front bedroom. Here too, the kitchen and bathroom are white, but with soft green tinting and Japanese cotton rugs and curtains of plain green crepe.

The door from the little hall at the back opens into a long vine-covered pergola which is a most charming feature of the house as seen from the living room and adds very materially to the "Comfort for Two."
The bungalow in our home land is almost invariably built as a place of recreation and with a view to escaping the discomforts of our city summers. The exception to this rule is in our southern and southwestern states, where the bungalow form of house is built for permanent occupation. Here, in the Philippines, the bungalow, in some form, is a necessity, the artistic being more or less disregarded and convenience alone considered.

The little house taken as an example was built by an army officer at his own expense as an alternative to a hospital tent.

But three materials enter into the construction of a building of this class, bamboo, nipa (nee-pah), and bejuco (bee-hook-oo).

Bamboo occurs in the structure in various forms. The large pieces, just as they are felled, are cut into proper lengths and form the framework: coarsely split, it makes floors, window frames, porch railings, and the finer parts of the framing; finely split and shaved thin, it makes a heavy close matting, called swale (soo-wall-ly), used for partitions, awnings, and frequently for the sides of the building. With several coats of heavy paint, swale can be made almost waterproof.

Nipa takes the place of shingles and siding. It is made from the leaves of a fernlike palm which abounds in the great swamps of the islands. Nipa is put up and sold by the thousand at a price averaging about $2.00 per M. Bejuco is a species of rattan and takes the place of nails. All parts of the structure are bound together by this extremely tough, pliable material. It is marketed in bundles of one hundred pieces. The pieces are about fifteen feet long and three eighths of an inch in diameter. The price is from $5.00 to $7.00 per hundred.

The native builder begins his house by making the framework of the roof first. This is not so illogical as might at first appear. The framework being bamboo is very light. To put this smooth, round material in place eighteen or twenty feet from the ground, would not only be inconvenient but dangerous, except in the case of very large buildings, strong enough to admit of the use of scaffolding. The native carpenter, therefore, in building the ordinary sized house, constructs all the main framing of the roof where he can reach every part of it from the ground, or from the top of a box or other low support.

The plate is first laid, pinned, and lashed at the corners with bejuco. The ridge pole is double, the rafters being ar-
ranged so that the pairs cross at the upper ends leaving these ends projecting a foot or more. One ridge pole passes beneath, the other above this crossing point. The two are then pinned and lashed securely together so as to bind the pairs of rafters where they cross. The entire structure is then braced. The common form of bracing consists of bamboo run from the middle of each rafter to a strong bamboo stringer. This stringer is lashed to the plate, parallel to the ridge and vertically beneath it. The ridge is supported by vertical compression pieces erected from the points where the braces meet the stringer.

The floor is usually of split bamboo, the pieces being from an inch to two inches wide. These separate pieces are lashed together and to the floor joists at intervals about as frequent as nails occur in ordinary floors. Each lashing is continuous throughout the length or width of the room, depending on which way the strips are laid.

The framework completed and the floor well under way, the roof covering is laid.
THE KITCHEN AND SERVANTS' ROOMS ARE IN THE REAR.

The resulting strands are very little larger than coarse wrapping twine. One end of each of these strands is left slightly heavier and sharpened to act as a needle. Provided with a quantity of these strands and a bundle of nipa shingles, the native shingler kneels or stands just inside the roof at the eaves on temporary bamboo supports. Seizing a shingle in his left hand and a bejuco strand in his right, he carefully passes a shingle out between the bamboo strips provided for its support, adjusts it over the eaves, and with two or three rapid motions of his right hand, sews its upper edge securely to the nearest strip. Each shingle is adjusted and fastened in the same way, a single bejuco strand serving to fasten several shingles. Working thus from the eaves on each side of the roof, the native shingler finally completes his work at the ridge. As nipa is a very light flexible material and is really nothing more than a superior kind of thatching, the roof has to be protected against the wind. At the ridge this is done by the use of roof caps. These are split bamboo frames, made in saw buck form. The roof cap is put on in sections, crushed down tightly over the nipa at the ridge and lashed with bejuco to the ridge pole and rafters. The rest of the roof is protected by roof mats. Long slender pieces of split bamboo are woven into coarse gratings, having about a six or eight inch mesh. These mats are put on the roof in sections, a section extending from the ridge to the eaves and about ten feet in
width. Each section is securely sewed to the rafters through the nipa, thus preventing the weather ends of the nipa shingles from turning up in the wind. When nipa shingles are used for siding they are put on in the same way as those on the roof. The scheme for holding down the weather ends of the nipa siding is different. Stout pieces of split bamboo, about the width of a lath, are adjusted along the line of each row of shingles, and above the weather ends. These strips are securely lashed to the framework of the house.

The windows are merely square or oblong openings in the walls. A bamboo frame is built just large enough to cover this opening, covered with nipa shingles and ingeniously hinged at the top of the window frame with hollow sections of bamboo. In fair weather this substitute for a window is pushed out at the bottom with one end of a short support the other end of which rests on the window sill. The window thus forms an awning.

There are no ceilings in this class of house. The partitions extend from the floor to where the ceiling ordinarily would be. Partitions are usually of swale. The bamboo of which swale is made is not the same as that used in the frame work of the house, but of a very light, hollow cane known as mountain bamboo, and useless for framing purposes. Swale comes in 300 yard rolls and sells at from three to seven cents gold per square varra (33 inches). A roll of it is shown in Fig. 3.

The house shown in Fig. 1 was built by contract and cost $175.00 gold. The living portion of the house has four rooms, each 14x14 feet with partitions of swale about 8 feet high. These rooms are disposed two on each side of a 7-foot hall, into which they all open. There are no doors between the rooms. In continuation of the hall is the covered passage way to the outbuilding at the rear. This outbuilding is divided into four rooms, a kitchen, two servants' rooms, and a bath room. Everything is as simple as can be imagined. Running water is supplied to the kitchen and bath room by an off-set from post water system. The steps leading to the front porch are made entirely of bamboo, and are merely an improvement on the principle of the ladder. The sides of this ladder are double and made of heavy bamboo. Each step is also made of two pieces of heavy bamboo laid side by side to give it width and pinned between the side pieces so as to lie horizontal.

The porch railing is made of bamboo, split and woven into fantastic figures that appeal to the native builder.

This convenient little house will, with slight repairs, last for four or five years. The interior decorations of these houses are as simple as the houses themselves and in keeping with their material and structure.

As to interior decoration and furnishing pages might be written, but space limits the description to a general one. For floor covering the ideal is our own "Crex" rugs. The next best thing is the native "patati" or grass mat. These may be purchased in plain straw color or of many colors woven in various designs. They are too light to satisfactorily answer this purpose, as the least gust of wind sends them sailing through the house. They do, however, make artistic wall decorations, as do the more expensive East Indian reed or fiber mats. Other suitable wall decorations are the East Indian, Japanese, and Chinese embroidered cloths and prints. Samoan tapa cloths, which can be purchased in Honolulu, may also be used to good advantage. All these may take the place of pictures, which are hardly suitable to the architecture of a house of this class.

It would be much more practical to have no curtains at all at the open spaces used for windows, as one is in need of all the air they can get, and the frequent rains soon discolor and rot them. But to secure privacy, sash curtains of dotted swiss or of Japanese cotton crepe have been used to good effect. But they must be gathered on a rod at both top and bottom, otherwise they do not answer their purpose. In lieu of sash curtains, in living and dining room, draperies at the side are used to rob the open spaces of their bare effect. They, too, must be gathered at top and bottom and, were it not for the breezes that blow, the cottage window draperies at home would be delightful.

In furniture there is infinite variety, most of which is familiar to our readers. Any of the furniture used for summer homes and porches in the states would be very appropriate for our nipa houses and bungalows and in perfect keeping with its surroundings. Among this class of furniture we find wicker, rattan, grass,
and bamboo. The Chinese wicker is charming and artistic. The shapes are wonderfully fascinating. What specially commends it to us is its cheapness and durability.

Then there is the grass furniture made at Bilibid prison, which is very much like our prairie grass furniture, except that it is straw color, and the grass instead of being twisted is braided.

Then there is furniture with bamboo for framework and rattan or cane for seat and back. It is very attractive and clean looking in its original color, though it may be stained to harmonize with any color scheme desired. Another style has its foundation of bent wood. Its back and seat are of cane. It is very comfortable, graceful and unassuming.

Last, and best of all, is the native bamboo, made on perfectly straight lines. It is artistic, durable, comfortable and appropriate. One finds almost all one wishes in bamboo—couches, chairs, straight and reclining—cases of shelves for books, magazines, or china, tables, tabourets, screens, and even beds for the tiny ones.

As for bric-a-brac in these native houses, as in all else, one should content themselves with specimens of native workmanship. They have some pottery of good design and coloring, found in copper reds, light grays, and blues, somewhat on the order of Mexican pottery, but not nearly so fantastic in design.

Then one finds many useful things made from the cocoanut, natural or polished, as bowls and ladles. The carabao horn supplies us with handles for knives, forks, and spoons, the bowls of the latter being of shell or silver.

Almost all the islands in the archipelago furnish baskets in some form or other, which make very attractive wall decorations as do the various forms of native hats. From Jolo, or Sulu, comes Moro brass work, crude in workmanship, but of good design, and mats peculiar to the Sulu group made from bejuco. From the great and unexplored island of Mindanao comes the sarong, which corresponds in some degree in the Moro costume to the zepape in the Mexican, also Moro brass work. The sarong makes attractive wall draperies and couch covers. The Krises, spears, bolos, and various forms of knives are also sought after the decorative purposes, although, I regret to say, not originally designed for that purpose and never used exclusively for decoration by the Moro. Mindanao and Cebu furnish shells of infinite variety. The beautifully tinted mother of pearl shells in their original shape are used for fish or salad plates. Smaller shells furnish bonbon and individual almond and salt dishes. The islands of Leyte and Samar are famous for the more beautiful mats and baskets—baskets of all sizes, shapes and colorings, from the large rice and market baskets and baskets large enough for hampers to the dainty bottle shaped baskets of splendid color and design and no larger than an ordinary eight-ounce bottle.

The writer brought only American beds which are almost a necessity, bedding, table linen, kitchen utensils, and a breakfast set of blue and white china.
My Neighbor’s Porch.

By Ora W. Alford.

My neighbor across the way begins early, already her flower boxes are in preparation. She fills them herself with plants in bloom and many vines, while the rest of us send our boxes to the florist to be filled. She saves enough to have many boxes while we poor managers can afford but one or two.

Last summer she had green cocoa matting for the floor; this she took in when a storm was in view. She tells me it is perfectly good for another summer. Now she may buy a gay Navajo to lay before the door, while the rest of us left our matting out even until snow came so we must invest in new.

The swinging seat stained green graces one end while a white hammock, which can be washed, invites to the other end. Pillows in gay colors give even a white hammock the needed outdoor strength of color.

My neighbor told me she purchased three rockers, a stand and a table, of the second-hand man. The varnish was nearly off the chairs and table; she took the rest off with a piece of glass and Var-ni-go, or she says, if you can put the article in the bath tub of hot lye water, with a broom you have a varnish remover that far exceeds any you read about. Her opinion of varnish removers is pronounced. She says no one but a person who is hard pressed for a job will try the second time to remove paint or varnish.

Next the furniture was stained green, then given two coats of spar varnish. The little stand had a coat of green paint which is not nearly as artistic as the stain. The stand holds flowers, the table has a drawer and a shelf below. It is fine for writing and magazines. There is also a folding table tucked away in the hall closet for an occasional game or a little lunch. That hall closet—no house is complete without it—accounts for my neighbor’s porch furnishings doing duty for several years.

Her curtains of ticking made to roll up are much less expensive than any of the many kinds of shades on the market. Japanese fern balls swing gracefully from the ceiling. The flower boxes will be all at bloom and the roses will be peeping through the lattice by the first summer day. Altogether my neighbor’s porch is a place of joy and rest at morn, at noon or at the twilight hour.
Character in Detail—The Front Door.

ANY a house today is distinguished by its front door; an opportunity is presented here of which the architect and designer is not slow to take advantage.

Modern art considers no detail too insignificant for careful attention; think you then she will forget such a conspicuous feature of the house as the front door?

In olden times a mark of distinction was the knocker and there are those who have made quite an interesting collection of those early useful and artistic adjuncts to the street door. There is a row of villas, all built recently on a modern plan. In each case the door leading from the front is distinct in style and character and one of the charms of walking down that avenue is to study the versatility of architecture, and especially the various designs in the entrance doors. An outside door should be constructed of hard wood—teak or oak will stand the weather best; it should be framed flush, leaving no ledges or projections for dust to collect; it should be strengthened by metal bands, which at the same time may be made a feature of decoration.

The door illustrated is of oak, the shade of "Fumed Oak" in Sherwin Williams' "Handicraft Stains"; the metal bands with piercings, and the drop handles are of antique copper, a fine contrast in color to the light oak.

The side posts are carved in simple design, giving a splendid balance to the picture. But the feature of the door is the two small leaded glass panels in the upper part.

The modern school has taken this old-
est of arts and given it a new birth. By cunning design and charming color it comes upon one with irresistible charm in unexpected places. Think of the art in decorative glass that has given an added fame to the S. S. “Lusitania”; the man who designed and executed all this has the greatest reputation for door panels.

Not long ago he was commissioned to design a leaded glass door panel for a marine club. The committee were minded to have a ship, afloat in real water, the tank to consist of two sheets of plate glass, hermetically sealed, an inch apart, the ship to move with the action of the door. The scheme was crack-brained not at all practicable, and promised to have little artistic merit.

Instead of this the artist produced a delightful nautical effect in tones of blue, green and yellow, and the club is none the less popular because of the front door.

George Logan is an artist and designer who does not trouble much about what other men are doing, he has a style all his own, and whether the work of the moment be a front or vestibule door, a garden or entrance gate, the decoration of a dainty bedroom, or fine parlor, he will introduce a touch of nature, believing with the poet that such will surely “make the whole world kin.”

Take the vestibule door shown with the elliptical clear glass panel and the surrounding leaded glass ones. Could anything be more original and striking, placed in one of the modern homes of America?

The door is made of teak, finished a natural color, the center panel is bevelled glass, the silk curtain behind being of soft silk, in fine, fresh apple-green shade.

The leaded glass side panels show the fuchsia tree, with pink and white bells, outlined with the dark lead lines; the upper panel has the apple tree design, with birds flying through the branches.

The metal work is in antique copper. This door has actually been carried out as described, but there is no reason why it should be confined to teak; oak, stained like “flemish oak,” or “cathedral oak,” the color of a tree trunk would form a fine contrast to the bright and joyous colors around, and give a natural tendency to the whole scheme. Compared with the ordinary vestibule door what a character this will give to the house. It would be a practical illustration of how “a thing of beauty” may be “a joy forever.”

For all these embellishments to the modern house we are entirely indebted to a generation of thinking architects.
Clearing Ground for a Bungalow.

By Elizabeth L. Gebhard.

A BUNGALOW draws a bungalow, an Adirondack shack breeds a shack, a camp anywhere under God's blue sky, and among nature's most wonderful beauties and generous gifts, suggests to some other of the sons of men that he build a simple habitation for himself near to nature's heart.

When this thought has taken full possession of a camper's mind and heart, and spread its branches out into many vagrant desires and wishes, he sets himself to acquiring a tract of land whose virgin soil has never been subjected to the steady tread of the horse before the plow, or the cultivation of man's hand. There is much manual labor connected with clearing the ground for a bungalow, and a garden beside it, if that also goes into the vision. But steadily keeping time with the work of feet and hands, the brain builds air castles composed of peaked roofs, broad piazzas, dormer windows with wonderful views, fire places of generous proportions and equally wide hospitality, young trees bearing rarest fruit, a garden whose output will rival Eden, and flowers in keeping with the forest trees and the stony corners of the home acre.

The men of '48 wove their dreams about gold mines in the wild lands of the west. During the next decade the homesteads of the prairies drew the men of vision, and their dreams when materialized grew into broad fertile acres where once waved mile upon mile of prairie grass. The men of today weave their dreams about a summer camp and a few acres of ground, where woods and streams lend their charms, stretching off into the delectable land.

These camps were at first many miles from the winter habitations of their owners, in the Adirondacks or the Maine woods, in Canada's forest wilds, or hidden along the wooded sides of the many mountain ranges of our land, but as the love of outdoor life increased, hill tops and small stretches of forest at no great distance, have been utilized as bungalow sites, sometimes the summer home being placed within a few miles of its winter companion. In these cases the pleasure of clearing the land, and watching the growth of the summer home, is a diversion which glorifies the months of the remaining three seasons.

One camper carried for years in his mind the remembrance of the hillside woods where he spent happy days hunting partridges in his boyhood. The large trees which delighted his youthful heart with their huge bulk had been cut down
in the intervening years, and a second
growth, smaller in size, but equally dense,
had taken their place. When the would-
be camper came into possession of the
land of his youthful dreams, he felt like
a boy with his first jack knife.

In the beautiful fall days crisp and
bright and full of brilliant coloring he be-
gan to clear the land. His first attempts
were made in secret with a sickle and an
ax in his own hand. Each little cleared
space, and the ensuing bonfire of brush,
increased his enthusiasm. Soon he had
men at work cutting down brush, and felling
small trees till each ten or fifteen feet
held a pile of neatly trimmed saplings ly-
ing in picturesque piles. The sunlight
began to sift through the trees in earnest,
and reaching their further side the rays
fell upon a busy scene, for here on a
southern slope the camper meant to have
a garden.

Every young tree of second or third
growth had been cut down, but the great
stumps and roots of the original mam-
moth forest trees still remained. Here
the destructive force of dynamite was
called into play. With a crowbar a long
hole was bored in the earth till it ended
under the center of a great stump. A
small round stick was used to bore a hole
into a stick of dynamite. Into this a ful-
minate of mercury cap fastened to the
end of a waterproof fuse was inserted.
The dynamite stick was then pushed far
down the bored hole, the fuse still ex-
tending some distance above ground.
When the fuse was lighted the workmen
lost no time in getting from fifty to a
hundred feet away, and in a few min-
utes a flash of light and a deafening noise
accompanied a wild upheaval of stump,
roots and earth, reaching often to fifty
feet in the air in a great half circle, and
sending flying stones and clods of earth
many feet away.

Sometimes two sticks of dynamite were
placed under one stump if it was a very
large one. At other times two men
worked together and one explosion was
quickly followed by another. It was like
a Fourth of July without the fire and
flame. Returning to the scene of action,
one found a great stump of a tree torn
into large pieces, a deep hole in the earth,
and a great scattering of leaf-mould and
also the subsoil beneath.

This noisy clearing of the land was fol-
lowed by quieter methods. The large
stones, which occurred oftener than the stumps, were loosened by crow bars, after which the horses drew a stone boat over the ground which was soon heaped high with rocks. These were destined to form the lower story of the bungalow. The ground was now ready for the plow, and strong patient horses drew it through the virgin soil, upturning great furrows of sweet smelling earth, or more stones. Again the stone boat was in demand, and the pile of stones awaiting the building of the bungalow grew to greater proportions. The ground was still full of small roots untouched by the dynamite upheavals, and a harrow driven over the rough surface drew them together in the center of the field. The camper's bonfire illumined each of his victories over mother earth, and the small roots added one more conflagration.

At this point the camper hesitated. In a field plowed only once he might plant buckwheat to advantage, but if he repeated the process of plow, stone boat, and harrow, at right angles to his first labors, he could plant potatoes and corn. He longed to get some life-producing seeds into the ground, but the desire for a well-tilled field won. After the second plowing and gathering of stones and root roots, he again felt the glad thrill of a creator in the world's great processes. He had redeemed the land, won it from the wilds, turned it to a man's will. In time he would see it reap a harvest.

Greely was wont to cry with his magnetic voice, and the influence of his powerful personality, "Young man go West." Today the young man of visions and dreams may make his money in the heart of the city, but know the pleasure of owning and redeeming land, trying experimental farming on a small scale, of living for the summer vacations, and perhaps nights and mornings and holidays, in the heart of the woods, getting back to mother nature in the glad summer days, and when the snow flies and the camper is glad to enjoy his home in the heart of the city, he dreams his dreams over again, looking forward with joy to the return to the little bungalow in the mountains, and the land he has redeemed and marked with his own personality.

Architectural Triumphs of Virginia Cavaliers.

Westover, the Home of the Byrds, and Most Renowned Country Seat in America.

By Edith Dabney.

HOSE Americans whose lives are cast within the confines of a town, and who narrowly believe progress impossible to any other life, will do well to glance for a brief instant at some of the rare old country seats which live today, the monuments of a past age of practical, yet artistic, forethought.

One of the most celebrated of these magnificent estates is Westover, the thousands of acres of which lie on the north bank of historic James river.

The manor house commanding a superb water view, and which stands today unmarred by the fires of the wars that passed over and about it, was erected in 1737, the bricks of which it is constructed having been made on the plantation.

On first viewing the generous proportions of the mansion, one is deeply impressed with the substantial appearance betokening the combined effect of comfort and age. The three story central building with its high, sloping roof is flanked on either side with smaller wings that show gambrel roofs, the east of which, having been pulled down by troops during the Civil War, has only been rebuilt within the last decade.

The entire house is under run by spacious cellars, beneath one of which is a hidden room. Tradition supplies many weird and curious tales of these rooms, eight feet square and placed at a depth of as many as fifteen, which were supposed to have connected with the subterranean passage that led to the river in years gone by. Two other underground
rooms, reached through a dry well, were used as hiding places from the Indians.

Running the full depth of the house is the great eighteen foot hall from the rear of which ascends the graceful stairway with its twisted balustrades of solid mahogany, which were imported from England centuries ago.

The walls and ceiling of the dining room show the same decorations which adorned them in the beginning; the furnishing is entirely in choice antiques, while the built-in corner cupboards and carved mantel are splendid examples of true Colonial art.

The drawing room on the opposite side of the hall is of spacious lines, and here the paneling is a bit more ornate, and pilasters are placed on either side of the doors and mantel. The mantel is the piece de resistance of the delightful room, being of black marble into which is built a mirror framed in exquisitely wrought white Italian marble of superior workmanship, the grape design being followed. The pediments and other ornamentation

The Eighteen-Foot Hall which Runs the Full Depth of the House.
are of the same carved white marble. To the minutest detail the furniture brought from abroad is in perfect harmony and accord with the eighteenth century effect.

Adjoining the drawing room is the library, which in the time of Col. Byrd harbored the finest collection of books in the country.

The dainty morning room with its pale green walls and creamy woodwork is a most inviting retreat, while the ball room of arched door ways and mirror-like floors is a feature of only too few country houses.

The upper stories are finished with the same care and thought as those below, the high walls being paneled to the ceilings, producing in common with the entire mansion the effect of comfortable, luxurious age.

The gently undulating lawn with its velvet greensward is protected from the constant river wash by a massive wall of masonry, re-built upon the old foundations. Monarch trees which afford shade to the house stand conspicuously in front of the water entrance, the rest of the incomparable turfing being dotted with tulip poplars, elms and lindens.

The handsome iron gates visible from a distance were all brought from England when the mansion was built, and stand today the finest examples to be found in America. The famous North Gate is upheld by huge stone columns still in an excellent state of preservation, each being surmounted by a stone globe upon which perches a life-sized leaden eagle, the center of the gate proper being ornamented with the monogram of the first owner of Westover.

The ivy grown grave yard at the back of the grounds holds much of interest in its curious epitaphs and quaint old tombs, many of which show the armorial belongings of the proudest families in the land.

Though the beautiful estate has changed hands many times since the day of the Byrds, it has always been in the possession of those who have appreciated its history and revered its past. No modern lines detract from the ancient effect, but modern improvements have been so skillfully added that neither lands nor manor house lack one detail in the perfection of a true Colonial country seat, saved for today from the wreck of a wonderful age forever irrecoverable.
Practical Notes on Hardwood Floors.

It is seldom, indeed, nowadays that a house of any pretensions to completeness is not furnished with what is termed “hardwood floors,” but the great variety of woods now used under this term and the equally varied methods of treatment of these woods furnish material for endless discussion. Shall the floors be of oak or birch, beech or maple, or hard pine? And, indeed, it is not uncommon of late to see some of the softer woods pressed into service for floors, sometimes for supposed economy, sometimes for the color effects which are possible in the softer and more open grained woods, such as cypress, pine or the southern gum wood. None will deny that the wearing quality is of prime importance, but that need not interfere with bringing out the special beauty possessed by the woods themselves—beauty which lies in the grain, the texture, the surface appearance, the natural shading of the natural woods and the effects produced by color treatment in various ways.

It is not so very long since oak was the only wood thought of for hardwood floors. People thought it was the only correct thing. But within a few years many new and surprising effects have been developed from other hard woods or combinations of them, such as maple and the birch and beech woods from Michigan forests.

For dark rich effects oak has no equal. The houses of our English ancestors were of oak and in some cases even their sacred edifices and the test of time shows them after a lapse of several hundred years remaining sound, sometimes outlasting the stone and brick with which these structures have been repaired.

The American white oak concerns us more than any other. It grows in dense forests, has a straight trunk sometimes reaching fifty or sixty feet without branches and often four and five feet in diameter. Its bark is rather smoother than that of other species and of a lighter color, from which it takes its name and not from the color of the wood, as is commonly supposed.

Oak is cut into boards in two different ways, known as plain and quarter sawn. The plain sawed shows an extremely coarse and common figure, while quarter sawing develops a beautiful grain, the surface of which does not check in drying nor curl as does the plain sawed lumber. Quarter sawed oak is, of course, quite expensive on account of the waste of material, but the advantage to appearance and durability can scarcely be overestimated.

Maple is very dense and hard and takes a beautiful polish. Its light cheery coloring is most effective where light color schemes are used and for bedroom floors is par excellence. With but a protective finish applied some maple is almost ivory in tone and is a perfect back ground for dainty boudoir rugs in soft colorings. An upstairs maple floor is recalled, which was in such perfect condition as to occasion remark, having been finished with floorstain two years before and not since touched except the ordinary dust. Truth compels the further explanation that the finish had three months in which to harden perfectly before a foot trod upon it.

Beech and birch are used considerably and they not only answer the demand of durability but are susceptible of a beautiful finish and will receive a variety of color stains. A birch floor really demands a stain as its natural shading is so varied as to produce an unpleasant striped effect if laid alone, unless more carefully selected and matched up than usually happens. Mahogany stains seem best adapted to it. Beech takes an excellent walnut stain, and will also receive a green flemish tinge, making it appropriate for use with the almost universal green color schemes now in vogue.

The possibilities and combinations are endless to the worker in wood and our modern parquetry floors are a rival to the more expensive tile and mosaic.

The Finishing.

The first thing, of course, is to be sure your flooring is of the best quality of its kind and too much stress cannot be laid on unhurried finishing. With the end almost in sight it is so hard to wait to get into the new house where it looks all right. But to have a permanent finish to our floors we must have time. The wax or varnish should be put on in thin even coats and allowed to thoroughly harden before a second coat is applied. Two weeks is not too long to allow for the finishing of the floors, though it is often allowed but three or four days. The wax finish for floors gives a rich even surface and is not more difficult to maintain than other finishes. Oil is not to be thought of where beauty is a consideration. It darkens the floors, holds the dust to it and has no finished surface.
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Descriptions and Color Schemes for Designs Following.

UNGALOWS of every style and construction, of every size and of every material adapted to the climatic conditions of every locality are being built everywhere. While the cottage is still the most popular in our eastern and southern states, and the bungalow adds greatest favor among our southern and western people, the "Bungalow Craze" has taken such hold of the eastern fancy, that its popularity is very apt to become universal and permanent. There are many advantages in the building of a bungalow, the principal advantage being without a doubt, the fact that the rooms are arranged all on one floor, somewhat on the order of our modern flat buildings. This reduces the labor of house work to a minimum. Whether it is cheaper to build a bungalow than a two-story cottage is doubtful, but it certainly is not more expensive to build a bungalow of the same number of rooms that one would find necessary to build a cottage, but it has many more advantages than the latter. The bungalow style of a home allows for a greater variety in design and plan than any other class of American habitation.

One of the essentials for a bungalow is a broad lot. To place a house of this style on a narrow lot between two full height houses, never looks well. Many a home which would prove very attractive had it the proper surroundings, has had this effectiveness sacrificed to the owner's ideas of economy with reference to the cost of the lot. Never build a good home on a cheap lot for several very good reasons. In the first place, a cheap lot will usually mean an influx into the neighborhood on every cheap lot, of houses belonging to the laboring class, bringing neighbors which although entirely respectable, might not prove amiable. It is a good deal better to put a little more into the lot to begin with and then wait a year if necessary to assemble the required amount of funds for the building of the home.

DENVER, Colo., has set an example to the country in not allowing any homes to be built within the city limits whose outside walls are not of incombustible material. This works some hardships, of course, among those who desire to build cheap homes, but reduces the possibility of one of those horrible holocausts to a minimum. The first design illustrated is that of an attractive Denver home, designed by Fisher & Huntington, architects. The outside walls are of cement and the whole bungalow is designed in the quaint southern style with odd shaped dormers and far projecting eaves. The floor plan shows a very homelike and convenient arrangement. One whole wing of the building is taken up for the beautiful living room, with fire place at one end. This room is designed for both summer and winter comfort and pleasure.

The arrangement of the bed rooms on the ground floor is very convenient and sensible. All three bed rooms and bath rooms are connected by a separate hall. This is a feature which is often overlooked in the planning of this style of a home, and the value of it is never appreciated fully until one has lived in a home in which this arrangement has not been provided. Even though the loss of space is felt it is always advisable to have the bath room and bed rooms connected with a common hall, so as not to make passage through the living room a necessity. On the second floor of this home are three bed rooms, two for the servants and one for emergency. The inside woodwork is pine stained a dark brown. The fireplace is faced with red tile. The estimated cost being $5,000.00.

The most appropriate colors for the exterior is a tan colored rough cast cement, mission brown trim and dark red stained roof, giving it a very decided southern aspect.

A $3,000, Bungalow, page 207.

KNAPP & West are the architects of the next bungalow which is designed in the quaint and somewhat original style
A Western Bungalow—All Cement Exterior.
which predominates with their work. While this is really on the order of a two-story cottage, it is built in the bungalow style, with a low sweeping broad roof, and the rooms on the second floor would be obtained by virtue of large dormers. The porch is of generous size. The arrangement of the plan is a very informal one, there being no reception room. One enters directly into the large living room which occupies almost one side of the house, and directly opposite the entrance, is seen the broad brick fire place. To the right is the stairway and just under it is a direct passage through double doors to the kitchen. The dining room is of good size, a point often over-looked in the designing of all kinds of homes. This is one room in the house of which more study should be made than probably any other, in order to get the proper wall space for side board, places to set back chairs and still have comfortable passing space all around the table. There are seven rooms in this bungalow and it is estimated to cost, not including heating or plumbing, $3,000.00. Finished in yellow pine throughout. The exterior walls which are sided, are painted white, and the roof is stained a moss green.

In the Craftsman Style, page 209.

A FEW years ago, there came before the world of art, a strange style called the L'Art Nouveau—"beauty run mad." It was the last effort to produce a style that was as beautiful, artistic, original—different from the rest. Its popularity was of short duration, for a reaction came and from the most complex, we have gone to the simplest forms of architecture. Some called it the mission style, but it is more properly the "Craftsman Style." This home built up on the Pacific slope, is a house built after craftsman ideas. It is perfectly simple both in its materials and design. Those are not shingles on the exterior. They are old back woods cedar hand split shakes, laid almost a foot to the weather.
A $3,000 Bungalow.
Neither are they stained, but left to the mercy of the elements to turn their own natural soft gray. The plan covers considerable ground, but has every convenience. On the first floor are such accessories as a lavatory, a library and a den. The plans of the second floor have since been somewhat altered and instead of considerable waste room in the hall and the study by a skillful re-arrangement, the entire right hand side of the plan is occupied by two large bed rooms. The house is estimated to cost without heating and plumbing, $4,200.00. The most appropriate color for the exterior, is of course, a dark brown mission stain with a dark red roof.

A Pretentious Bungalow in Concrete, page 211.

No collection of bungalows would be complete without a genuine Southern California bungalow in solid masonry mission style. Walls of solid masonry have many advantages besides being mere fire proof. They keep out the excessive heat in a hot climate and the cold in a cold climate. In this home, the walls have been made of hollow tile covered with rough cast cement. The hollow tile affords through its air space an added protection from either heat or cold. There is no material that offers the protection of the elements or is as good a non-conductor from heat or cold as the confined air space. There are three porches to this home, all of them screened in, and two of them having fire places. There is a large living room 14x19 feet and a good sized dining room each with a fire place in it. A kitchen and two chambers with a bath room between. On the second floor are the servants rooms. The rough cast cement exterior is of a light tan shade. The trim of a Mexican orange cast, the roof stained a dark blue. The estimated cost of this home, which is designed by Eugene Ward, is $12,000.00. Being over 70 feet in length, it necessarily requires a generous piece of ground to do it justice.

A Modern Cottage of the West, page 213.

No style of home allows for greater variety of informal, homelike arrangements both inside and out than the

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In the Craftsman Style.
Descriptions and Color Schemes—Continued.

bungalow. For this reason a great many designers have gone to ludicrous extremes and have produced homes of the bungalow style which, while they are certainly ingenious creations, are mere curiosities, and are far from beautiful. The true intent of the bungalow style is simplicity and today it is as true as when Ruskin said that “simplicity is the turning point of all progress.” The simpler we can keep our homes both as to plan and design, the more beautiful and homelike they are and the more permanent place they occupy in our affections, for it is perfectly true that after living for a while in a home of our own, we come to love it.

This beautiful homelike little bungalow because of its utter simplicity and straight-forward expression of simple means, is one of the most attractive homes in this collection. That is saying considerable when we consider that it only cost to build about $2,000.00. The living room is very attractive with its fireplace and broad bay window and its views in many directions. Good wall spaces have also been left for the davenport and piano. Dining room and living room are directly connected through a wide cased opening and back of the dining room is a small hall leading to the bedrooms and bath room. While the illustration shows siding on the house, it will look equally well, perhaps better if shingled, and in either case, should be stained a mission brown with either a moss green roof or a dark maroon stain as the prospective builder may desire.

The Charm of the Cement Exterior, page 214.

On page 214 is shown a very charming little bungalow of the truly Southern California type with an all cement exterior and a patent felt roof. The living room is large and homelike. It has a broad window seat at one end and at the other an inglenook with a fire place in it. There are two chambers. Its estimated cost without heating and plumbing, in pine finish, is $1,100.00.

Most Unique and Artistic, page 215.

The next home was described in detail in a very interesting article appearing in our last November number. As many readers have asked to see the floor plans of it, it is here published for their benefit. While this house is not strictly speaking, a bungalow, it is somewhat on that order and is probably one of the most artistic homes ever built in that state of sun and flowers. Its architects, Greene & Greene, spared no efforts in its design, not only the house itself, but in designing the lighting fixtures, beautiful art glass windows and some of the furniture.

The front of the house faces the sea, and the exterior wood work left entirely to the mercies of the sea laden air, is weathering into soft grays and browns, while the brass and copper work is brightened with dashes of verdigris, touches of nature's own artistic hand.

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A Pretentious Bungalow in Concrete.
Descriptions and Color Schemes—Continued.


There is something about the quaint old English style that is in full harmony and accord with home life. The attractive design by Foltz & Parker is in this beautiful old style. Foundation and porch are rough faced brick with wide mortar joints and rough cast cement is used in the panels, the brick being brown. There are seven rooms including three chambers. Cost to build, $4,200.00, not including heating and plumbing. The cement work is on metal lath. The interior arrangements are very informal which is not only permissible but even desirable in a bungalow style of home.


To people who would own a suburban or lake home and who desire to live all on one floor, this plan should prove very attractive. The living room with its large fireplace, built in book cases and bay window, the dining room with its well arranged windows and the large bed rooms, the well planned kitchen and pantry accommodations, makes an arrangement which should satisfy the most exacting. The space under the roof can be used for servants bed rooms or a pleasure room.

Complete in Every Detail, page 220.

The tenth design shows a well arranged bungalow which is complete in every detail. The living room and dining room have beamed ceilings. The interior finish is a dark stained pine and the exterior is a dark brown mission stain with a maroon roof. The brick porch pier and chimney being a dark vitrified brick. Estimated cost $2,800.00, not including heating and plumbing. The living room is large and homelike, having a broad bay to add sunshine and cheer during the day and a broad fire place to fill the room with its cheerful glow at evening time. The chambers are on a separate hall connecting with the bath room. There is a coat closet just off of the living room which is a decided convenience when there is no hall. A full basement is provided for under the main part of the house with a heating plant, making it a home suitable for all climates the year around.

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GREENE & GREENE, Arch'ts.

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- Entrance
- Kitchen
- Dining Room
- Living Room
- Deck
- Porch
- Terrace

**SECOND FLOOR**
- Hall
- Bedroom
- Bedroom
- Bathroom
- Library
- Serving Room

*Foltz & Parker, Arch'ts.*
An Original Designed Bungalow.
are not all alike. Some never look well. Some look well at first but soon give out because not honestly made. Others look well at first and continue to look well because they are honestly made.

We guarantee our floors against all defects that may ever arise from faulty material or workmanship and our guarantee is good. We could not afford to do this unless we did our work well. We can satisfy you on this point. All we ask is, that the floors have reasonable care. We furnish wax and brushes for keeping floors in order.

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AN INEXPENSIVE BUNGALOW

In designing this bungalow, I have tried to get a summer home easily run without a servant but have provided a bed room on 2nd floor separated from the rest of the house, which can be used for a servant's room, if desired. All the carpenter work is of the simplest kind and does not require skilled labor.

On the 1st floor are, large 2 story living room, bed room, bath, kitchen and porch, which can be used for dining room in good weather. On the 2nd floor, leading from the balcony which overhangs the living room are three bed rooms, and a covered piazza, which may be used for an outside sleeping room. There are closets in each bed room, coat closet, large larder, and separate space for ice chest, two fireplaces, one in the living room, and one on porch. The seats in living room are all large enough for sleeping purposes.

Plans consist of 1/4 scale working drawings, framing plans, specifications which are very complete and describe everything used in building the house including plumbing; there are large scale drawings for all detail work, also schedules of lumber and hardware. These plans are so complete that a foreman is unnecessary, the owner can superintend the work himself.

If this house does not suit you, let me design you one that will. I make a specialty of house work.

ALFRED M. BLINN, Architect.
99 State Street, BOSTON
Complete in Every Detail.

- Porch
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- Pantry
- Dining 13 x 13
- Living Room 13 x 20
- Bath Room
- Chamber 11 x 13
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Hardwood Front Doors
We carry this door in stock, veneered oak only. Choice veins of selected grain are used and the stiles and rails are built up from soft woods, thoroughly glued and put together. A door guaranteed to hold or money refunded.

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Cohoes, Glazed, Best Beveled Plate, $1.10 to $1.75, other doors in oak, birch, hardwood veneer, yellow pine finish, from $2.80 to $10.95.

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E. P. HOERR, the guaranteed Millwork Man.
Circassian Walnut to the Fore

ET no one assume that there is any but the remotest kinship between our old friend, black walnut, and its modern successor. The Circassian wood recalls French walnut in its markings, but its color is unique. It is a tobacco brown, a brown with much gray in it, and is many shades lighter than ordinary walnut. On its first appearance, some four years ago, it was almost always elaborately carved. Bedroom sets of it ran above the thousand dollar mark. Now it is making its appearance in perfectly plain pieces, depending for their beauty solely on the exquisite markings and finish of the wood. About seventy dollars buys a bureau of large size, with an immense mirror. Other pieces are in proportion. Wisely, the makers seem to confine themselves principally to bedroom furniture, the fact being that the wood is too sombre to look well with the dark schemes of color in vogue for living rooms. It seems to need the relief of brightly colored cretonnes, of a flowered wall paper, whose predominant tone is pink.

The same amount of money, or less, buys mahogany furniture of rich color and exquisite finish, a better purchase, by far, for people who do not care for the passing fashion. No wood has stood the test of time like mahogany, none is more substantially beautiful, and none adapts itself so readily to every scheme of color.

Furnishing a Small Dining Room.

It is a great mistake to buy dining room furniture so large that it dwarfs the room. The dining room should give a suggestion of space. One must have a table of sufficient size, but very few rooms are large enough to hold a sideboard, a serving table and a china closet.

A good plan is to dispense with the sideboard, altogether, replacing it by a serving table of generous size. Such tables can be had with two small drawers for silver, and a large one beneath the under shelf for linen. Then, on the wall above it, hang a long plate rack, with hooks for cups and jugs. The effect is very good indeed. Another space saver is one of the wall cabinets which combine a plate rack, a shelf and a closed-in compartment for specially choice pieces. Some of these are exceedingly decorative.

A simple overmantel, two long shelves above a mirror, with smaller ones below, at either end, is very effective for a dining room, particularly for the display of old china, and can be made by any intelligent carpenter, painted or stained to match the woodwork of the room.

Pictures for the Dining Room.

Happily, we have passed the stage of taste in which pictures of dead game and fish, or flamboyant fruit pieces were considered the proper things for a dining room, but in most houses the pictures in the dining room are open to criticism. A convention places family portraits in the dining room, but most of us are not burdened with them. A picture with suggestions of good cheer, in eating or drinking, is always appropriate, but it should not be of the minute order. Some of the colored reproductions of Dandy Sadler's pictures are charming for the dining room. In black and white, they require close examination. If one is willing to banish everything else, and has much Oriental china, nothing is better in a dining room than some of the Japanese prints, simply framed in black or dark brown wood. But they are very unhappy in uncongenial society.
Decoration and Furnishing—Continued

Framing Japanese Landscape Prints.

A smart New York shop treats Japanese landscape prints in this fashion: Next to the print comes a four-inch mat, of Japanese brocade, in rather dark, bluish green. This mat is not flat, but slopes in to the level of the picture, the brocade being mitred at the corners and stretched over a beveled frame of wood. A glass is laid over the print, but the mat is left uncovered and the whole is enclosed in a narrow black frame. The very expensive result could easily be copied by any picture framer, at small expense.

Japanese brocade comes in a great variety of designs and costs two dollars and a half a yard. A letter to any large Oriental shop would probably bring samples.

The Rage for Filet.

There is an absolute craze for filet, the net with a square mesh and darned-in designs, which is one of the Italian peasant industries. The real thing is expensive, two-and-a-half-inch squares costing twelve cents each, but there is a capital imitation, in a sort of fine Nottingham, and this is the thing generally used.

All the things usually covered with cretonne, hat rests, pincushions, head rests, handkerchief cases, photograph frames, are covered with filet laid over pale pink or blue. Its latest use is for lamp shades, of the large Empire variety.

A lining of very thin silk, preferably yellow, is applied to the wire frame. Over this is laid the filet net, in a small design, plain at the bottom, fulled slightly at the top of the shade. A full frill of wide lace finishes the lower edge, a half-inch frill the top. Footing is excellent, as no lace really matches the net.

Separate squares are good for insets, for various purposes. A sash curtain, of common cheesecloth, with hemstitched edges, has squares of filet let in at regular intervals. Large squares are set into the ends of linen bureau and sideboard covers. A pretty variation, for a one color room, is to darn in the background, with cotton floss, or linen, to correspond.

It is a good plan to wet both squares and linen, before inserting the squares, so that both will shrink evenly, also to se-
cure the squares with a line of machine stitching, before buttonholing them in.

**Homespun Linen Teacloths.**

No later than the middle of the last century, old women wove linen towels, in elaborate patterns. A good many of them must still survive, and they make charming teacloths. One way of finishing them is to cut them square and baste a hem a quarter of an inch wide, all around. Cover this hem with a close buttonhole stitch, in mercerized cotton using stitches of varying length, in a sort of saw tooth pattern. Then add an edge of Cluny lace an inch wide.

Another good finish is a deep scalloped point, three inches deep and two inches wide. If the towel is strong enough to bear them, insets of real filet, or cut out squares of reticella work are effective. A teacloth of this sort has an interest and distinction quite lacking in the hand somest modern article. Only beware of intrusting it to the tender mercies of Bridget, a caution which may well apply to all one’s fine linens and embroideries.

**Furniture in Sections.**

It is now possible to buy furniture of the Mission order in sections, a very slight amount of mechanical skill sufficing to adjust them. The wood is oak, ready for staining and finishing, and the saving over ordinary furniture is said to be very considerable. It is an idea which should certainly appeal to people who have more mechanical skill and leisure than money.

**Postal Card Wall Paper.**

The latest development of the postal card craze is a wall paper with a ground of soft olive, with ribbon stripes with bow knots at regular intervals. Between the bow knots, the ribbons spread out to form a frame for a postal card. It is intended especially for children’s rooms, but might be used with good effect in a den, the spaces enclosing photographs or blue prints.

A new nursery paper has a light blue ground, with all sorts of delightful animals silhouetted upon it, in white. Such a paper is apt to soil and it is best to use it above a three foot dado of blue cartridge paper.

---

**Painting As An Investment**

An outlay of money can always be divided into two classes: Expense and Investment. It is always Expense when you do not receive full value for your money.

It is an Investment when you do receive full value. All paints can be classed in this manner. Some are simply Expense. Others are an Investment. Some fall short of requirements. Others more than fulfill all requirements.

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When expense must be considered, it is a good plan to have a draped toilett table, hanging a mirror framed in white enamel above it, substituting a chiffonier without a mirror for the more expensive bureau. Substitute glass knobs for the commonplace brass ones and have an enameled iron bed without brass trimmings.

Then for bedspread, chair cushions and dressing table, use a cretonne with a white ground and plenty of color. Some of the silkolines are very good indeed and much cheaper than cretonne and the cushion covers can be of plain pink or green.

A good plan for a draped dressing table is to have a sheet of glass exactly fitted to its top. If plate glass so much the better, but ordinary window glass will answer. This keeps the top immaculately clean. Another detail is the provision of a stiffly starched, ruffled petticoat of white muslin, to keep the drapery out at the bottom.

Above One's Desk.

It is a pretty fancy to make an intimate corner about one's desk, hanging there the pictures of specially cherished friends, or of places of special personal interest. It may be objected that framed photographs are not very successful, from an artistic standpoint, but try putting them in little oval frames of black wood, miniature fashion.
D. A. S., Woodboro, Md.

Q. Am a subscriber of your valuable magazine and am much interested in your answers on interior decorations. I write for information concerning our home which is ready to paper. The reception hall and upper hall are stained a golden oak. What do you think of a red paper for both, running to the ceiling, finished at ceiling angle with a wood moulding with cream moire ceiling? The rugs in the reception hall and living room will be alike. They are cream ground with small red roses and green leaves. The dining room is stained dark oak with red brick chimney and with heavy oak shelf and open fireplace. Most of the light is from the north. What color will I use with my cherry bedroom furniture? It is the old marble topped kind; and what finish and color shall I use for kitchen walls?

Ans. As the hall is well lighted perhaps a red wall is as good a choice as any. The cream rugs with the small red roses are not suited to a hall floor. Moire ceilings are no longer used for first class work. Tint or use plain papers. A dado is not advisable in the living room and a rather light soft tan would be a better wall tone than green. The portieres between could be tan on one side and red on the other. As this room lies between the red hall and dining room in browns and all have dark woodwork, the harmony will be much better than with a broken up green wall. There is a grape frieze with amber colored grapes and reddish leaves that would light up a north room better than the blues and greens. Put it on a light tan wall, almost deep cream, and use a warm, soft brown below the plate rail. Use burlaps in the red of the hall in the vestibule.

Your cherry set will look best against a wall of old blue. Cover up the white marble slabs with muslin or linen covers over blue pads. Best use oak furniture in the yellow room with the dark woodwork. Some of the pretty striped papers are a good choice for bedrooms.

Buff is a good kitchen wall, with white ceiling. Three coats of oil paint is the best finish, tho the first cost is considerable.

E. E. P., Ft. Wayne, Ind.

Q. The woodwork of our new home is poplar. What color stain would you suggest for each room? Dining room 12x14, northeast, furniture oak. Living room 14x22, southeast, furniture mahogany. Den, southwest, furniture mission brown. What would you suggest for hall with open stairway? Ceiling 9 ft.

Ans. Poplar will take almost any stain well and you are advised to stain the woodwork in harmony with the furniture. Dining room a weathered brown, living room mahogany, den to match furniture. If the hall opens from living room, make the woodwork the same.

Mrs. L. E. P., Holden, Mo.

Q. I am building a strictly modern colonial house of ten rooms. House faces east with large space on northwest and south. Shall have seven of the rooms finished in dark golden oak and one in mahogany finish. Shall have three coat plaster, last coat white sand finish. Shall finish walls in Alabastine. Am very partial to green. Have thought of coloring walls of halls—1 ft. wide—and very deep in green rather dark and ceiling with drop effect to picture moulding of lighter green. Rugs and stair carpet, dark green two toned figured velvet.

Ans. While green is an agreeable color for interiors, we think it a mistake to use it to the extent your letter suggests. It is also the most difficult to get good shades in tinting. It is unusual to finish the woodwork of a colonial interior so entirely in golden oak and if you carry green into so many of the rooms, I fear you will have a gloomy house, not in the least colonial.

It is advised to tint the hall walls a soft woody gray and the ceiling white. This particular shade of gray tones goes well with brown wood and the green rugs and stair carpet will afford a pleasing contrast. It will also open harmoniously
from the parlor which should be a lighter, silver gray, very effective with green rugs and draperies and mahogany woodwork and furniture. The sitting room and library may then be in shades of green. The northwest dining room will be dark and cold, all in green. A soft tan wall will relieve the green rug and chair seats and be excellent with mahogany. The panels below wainscot may be stenciled in a design of dull green grape leaves and bluish grapes, with a frieze of the same. Put your green in the southwest chamber instead of northeast; in the latter an old rose wall and white ceiling will be good.

Q. Will you kindly help me to make my new home modestly artistic? Living room and hall are one, west facing, 14x26, including the stairs which take north side of room. Dining room off is on east and south. The rug which must be used in this room is black ground with scroll figures in green shades, and lightened by a pinkish tan shade. Prefer brown tones in living room and will have Turkish rugs. The furniture is weathered oak. What wall decoration in dining room will reconcile my rug and golden oak furniture, and harmonize with living room? Considering tinted walls throughout but any suggestion will be gratefully received. As living room will be bright and sunny may colored madras curtains be used? If so what finishes the edge?

Ans. The only thing to do with the dining room is to give it a strong treatment. Since there is much green in the rug and the room has a south and east facing, we advise the use of either paper or burlap on the wall, as the right effect cannot be secured with a plain tint. Make a wainscot of burlap in a strong, rich green, strapping it at intervals with narrow strips of black wood beading. If there is no plate shelf, cap the wainscot with a two-inch molding of the woodwork. Above it use a conventionalized tree design or something similar in rich, deep blues and greens. Cream ceiling. Brown tones will be very good with the weathered oak and Turkish rugs. Yes, the madras will be good also, but not a flower design. Turkish rugs are strong in coloring and bold in design. Your madras must have a conventional pattern. A geometric figure in coppery reds, old blues and greens widely scattered over a light ecru ground, will be the best choice.
Architects

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In View of the Ever-Present Problem.

An authority on the economy of the household, in a recent book, makes some helpful suggestions, as to the simplification of domestic conditions, which may interest someone. Manifestly, they are adapted, primarily, to the well-to-do and to dwellers in cities, but they are susceptible to modification. Briefly, they are these: Take up all carpets and substitute rugs, and send them out of the house to be cleaned; take down all draperies, not absolutely necessary and put away the greater part of the bric-a-brac; buy bread, cake, pies and ice cream, if possible, or practicable, at a Woman's Exchange, thereby securing articles of the best quality and, incidentally, advancing the interests of women of your own class, who must earn their living in this way.

Other suggestions are the general improvement of the housekeeping plant, by the introduction of labor saving devices and up to date utensils, the improvement of the servant’s quarters and a friendly interest in her recreations.

The Profession of Housekeeping.

Suggestions like these are not addressed to the woman who just muddles along, but to the woman who regards housekeeping as her profession. For that is exactly what it is to the woman who has not had the necessity of wage-earning forced upon her. Only by treating the conduct of the house, as the business in life to which they are called, can the majority of women escape the reproach of being non-producers, parasites upon the economic body. Once this view of the matter is adopted, large numbers of women setting themselves seriously to the consideration of the problems of domestic life, there will cease to be any problems, any more than there are any general problems, in the conduct of men's affairs. There is no general labor problem, no engineering problem, no manufacturing problem. Individual exigencies are constantly arising, in every department of business, but in the main man does not set sail on an uncharted sea. Nor will the individual housekeeper, once she has realized her vocation.

Extension of the Woman's Exchange.

In the larger places, the Woman's Exchange is a fixture. It fills a recognized want and the regrettable feature is that it is, to so large an extent, a charitable institution. In common with most enterprises run by women, it suffers from an excess of red tape, as well as from the fact that, being largely patronized by the rich, it must be run upon a credit basis.

In the smaller towns, there is not sufficient support for a regularly organized exchange involving the employment of attendants and the hiring of rooms. But there would seem to be no reason why the principle of the exchange should not be applied, in these places, and women possessed of special skill in cooking or sewing be encouraged to use it, for the benefit of those who can pay for it. There is certainly a manifest advantage in securing the product of a specialist, in her own line, as well as knowing that the materials used are of good quality. The cost of home cooking is, of necessity, more than that of the baker's product, but ought to be more than balanced by its greater healthfulness. It would seem as if, in any town of ten thousand inhabitants there ought to be an ample field for the efforts of at least a dozen women, in supplying bread, pies, cake and invalid cookery to their less skilful, or more occupied sisters.
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**Household Economics—Continued**

In places where a woman’s club exists, it would seem an admirable arrangement for a committee of the club to undertake the organization of some form of economic interchange between its members. Emanating from such a source, the undertaking could be managed without the suggestion of patronage which is seldom absent, in greater or less degree from the management of a regular exchange.

**Washing Rugs.**

Oriental rugs should be shaken with the greatest care, always from the sides, never from the centre or ends, as the weave is apt to be loosened. A better way is to brush them carefully with a soft whisk broom, working with the grain. After this is done, a damp cloth should be used over the entire surface, to take off loose dirt and to brighten the colors.

Two or three times a year, a large rug should be hung upon the line and the wind allowed to blow through it all day, but it should never be beaten. After this, it should be spread out on a perfectly clean floor and scrubbed with a thick lather of white castile soap, rinsing this out with a sponge and cold water. Neither water nor lather should soak through the rug, but be confined to the nap.

Smaller rugs should be washed in the same way, but first soaked in cold water, in a tub. The lathering and rinsing follows, the water being rolled out with a smooth broomstick. Then the rug should be stretched in a frame and set out to dry in the open air. Any carpenter will make an adjustable frame for stretching rugs. It is indispensable if one has many small rugs. In cleaning a valuable rug at home, one has the certainty that no injurious processes or substances are used.

**To Clean a Carafe.**

Get half a pound of rather fine shot and put it into the carafe, filling it half full of water. Hold your hand over the top and shake vigorously two or three minutes. Pour the water and shot into a fine strainer, letting it dry for future use, and rinse the carafe, drying it in a warm place. The outside may be polished successfully with a little naptha, or benzine.
For Easter, with its suggestions of the renewing of all things, no sort of table decoration seems so appropriate as one of tender green things, from woods or meadows. Here the dweller in the country has the advantage, with a wealth of beauty to choose from. But she whose lot is cast in city streets need not be discouraged. Any florist will supply her with cowslip or primrose plants. Two or three of these, preferably pale yellow, in a long low basket, with an edging of little ferns resembling the common wild variety as much as possible, will bring a charming thought of spring out of doors. A basket like this need not be expensive and will last for many weeks.

If cut flowers are preferred, nothing is quite so regally splendid as the narcissus, or as it used to be called, the crown imperial. For a long table, it is lovely when arranged in three glass vases, the tallest in the centre of the table, lower ones half way down, with long trails of asparagus fern connecting them.

Another early spring blossom, of delicate and delightful color, is the acacia. A mass of its pale yellow blossoms, with their foliage is interesting and effective.

A New Idea in Table Decoration.

Quite new is the fashion of a handled basket, for a centre piece, using two different sorts of flowers for the two ends. For instance, one end may be filled with pink tulips, the other with white hyacinths. Or one end may be occupied by a pot of pink or white cyclamens, the other by a mass of ferns. A fad not to be commended is the addition of a bow of satin ribbon to the handle. Ribbons on a boquet laid at one's place may have an excuse for being, but not on a centre piece.

Arranging a Long Table.

The round table is the at once fashionable and artistic, but it is not always practicable, implying as it does a great deal of service and, if of large dimensions, a correspondingly large dining room. Large families will probably continue to use the long table, and be grateful if it is modern enough to have square not rounded, ends.

In setting a table of this sort, for company occasions, the ordinary arrangement of centre pieces and candles at the corners must be disregarded. A better arrangement is to have a floral centre piece, oblong rather than round, and to use candelabra placing them midway between the centre and the ends of the table, grouping the small dishes for olives and bonbons about them. This arrangement, if used on a bare table, will involve the use of three pieces of lace or embroidery, instead of one, but, as a matter of fact, a long table looks much better when entirely covered.

The Vogue of Scallop.s.

Everything in the shape of linen is scalloped, more or less elaborately. Even some of the tablecloths adorned with lace insertions are finished in this way. The scalloping is always done with cotton and is heavily padded. It gives an air of elegance to linen of no great fineness and is easily achieved at home with a perceptible saving of expense. Of the ready made product, a good deal is done by machine and betrays the fact frankly.
The Jackson Ventilating Grate is installed in old houses and in new. It may be set in any fireplace, and any intelligent mason can lay the brickwork and set the grate, complete. No. 4 shows the Jackson Ventilating Grate in use in every State and Territory and in nearly every city of the Union, we can probably refer you to some one near your home who has one and who will tell you his opinion of it.

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For use with a bare table, d'oyleyes of heavy linen, with a scalloped edge, come in three standard sizes, for plates, fingerbowls and tumblers, and are carried by all the large shops. A pretty variation, if one is making them for one's self, is to use not linen but a damask with a small allover pattern, which comes for the purpose, and is heavier than the plain linen. A set includes a circular centrepiece and oval mats for platers and vegetable dishes, these last provided with pads of asbestos. People, who like a lace edge, finish the damask with a rolled hem and add a line of Cluny lace, all very well if one can superintend their cleansing, but the scalloped edges stand a great deal of hard wear.

**The Imitative Japanese.**
Year by year the Japanese potter is extending his repertoire. His latest achievement is a French coffee pot, in ordinary blue and white china. It is not capacious, holding perhaps only three cups, at most, but it is complete. Ramekins and mayonnaise dishes, covered vegetable dishes and chocolate pots are an old story, and now the coffee pot. When he begins to turn out candlesticks, in appreciable variety, he will have become really occidentalized.

**Glass Flower Baskets.**
Very pretty baskets of pressed glass come for table decoration, to be filled with flowers and ferns. For a small table, one is enough, in the centre, for a large one they are scattered about, at regular intervals. They are pretty when filled with two sorts of flowers, in the fashion mentioned above and, at twenty-five cents are certainly cheap enough.

**New Designs in Limoges China.**
Recent importations of Limoges show a marked departure from the delicate coloring and inconspicuous patterns we generally associate with that ware. One specially good pattern is of pendent bunches of grapes, in warm tones of purple and strong greens, the ground having an ivory tone. The general effect is not unlike that of the ivory tinted Royal Worcester, so popular some fifteen years ago. The design is specially good for fruit and salad sets.
**Architect's Corner.**

H. F. L., Akron, O.

Q. Is not brick the best material for building purposes that comes within a reasonable price? Is the best method for brick construction the Flemish bond with an inch or inch and half air space between brick and plaster? Is not the best side for the living room on the southeast end rather than the northwest end as my present plans show?

Ans. Yes, brick is the best all around material to use for a masonry wall. Yes, Flemish bond makes a strong wall. By all means furr out for your plastering, leaving a space back of the lath the thickness of the furring strips. The present location of the living room on the southeast end is better than to place it on the northwest end.

D. M. W.

Q. We are just completing a concrete building, the walls of which we have moulded by placing studding on each side of a plank form. It has made a first class job except for roughness caused by the joinings of the planks and we now wish to cover the entire exterior surface of the building with a coat of plaster, tinted in a suitable color, perhaps yellow. We know nothing of plastering a wall of this kind and our only workmen here are Mexicans who are equally ignorant.

Ans. The proper coating for your concrete wall is a prepared cement plaster. I will be glad to recommend a particular brand if you wish, by letter. The matter of coloring is more difficult and often most unsatisfactory. If you use coloring matter at all, confine yourself to yellow ochre, using about four pounds to a hundred pounds of cement. We think, however, that the natural gray is best. This may be darkened by the use of a very little lamp black, not over one pound to a hundred pounds of cement.

M. J. N.

Q. My house is colonial with ceilings 11½ ft. high. I had thought of painting all the woodwork white, with possibly a mahogany trim. Please advise me what you think would be the handsomest finish for my dining room. It is 16x21 and opens from sitting room by folding doors. My dining room furniture is a heavy antique set, very dark, upholstered in tapestry. Would it be all right to paint the woodwork white with dark trim like furniture and have dark beamed ceiling? Can one use a dark beamed ceiling with white woodwork? What style mantel is best for my dining room?

Ans. In the dining room, we would suggest that the entire finish, including the beamed ceiling, be dark to match your furniture or possibly a little lighter shade. You could not get a good effect, with a dark ceiling over white woodwork, as the ceiling would appear so heavy.

The dining room mantel should be of colonial design if the rest of the room is such. You have given no information on this point. It should, of course, correspond in style. A cornice in the principal rooms would seem desirable with your high ceilings. These details should be prepared for you by an architect.

Q. Can two houses on adjoining lots be heated by one hot water heating plant? If so, how?

Ans. It is perfectly feasible to heat two houses on adjoining lots, providing they are not situated more than 50 or 60 ft. apart. If the boiler is placed in an ordinary basement of 7 or 8 ft. in depth, the supplies can be taken off and run in a trench and carried to the adjoining house, the boiler being located in the other. Or, if the ground is such that the mains cannot be carried off from the boiler with some rise before entering the trench, it is best to run the pipes up from the boiler to the second floor of the building, where boiler is located, then down again in order to induce circulation. The main can then be carried under the ground as above stated.
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Cost of Good Work.

"The cost of painting is always a question which seriously concerns the householder. It is a charge against the property, which, like insurance, taxes and general repairs, should be apportioned in advance over a series of years. The real estate agent never calls attention to this charge when he tries so hard to show a possible client how little it will cost to maintain a modest little wooden home in the country. Taxes are easily apportioned, interest on the investment is a fixed quantity, street, sidewalk and water improvements can all be anticipated, and general repairs figured down to a nicety. But painting!—that is so far in the future that it is rarely considered by the novice eager to own his home. But at the end of the second year the freshness of the paint is a little dimmed by exposure to wind and storms, and by the third season the house begins to look 'gently shabby.' The house is crying aloud for a new suit of clothes. It needs paint to retain its self-respect, but more than that it demands paint to prevent 'dry rot' in the very bones of its structure. The insidious work of decomposition attacks pillar and post, and finds its way among the large timbers which are so expensive to replace. To prove this, scrape away the paint of a house three years old under the cornices, beneath the piazza pillars, or beneath the side sheathing. The surprise which will greet the eyes will convince the most sceptical that repainting is badly needed.

"In attempting to figure upon the cost of repainting it is essential that an approximate number of square feet of the house should be ascertained. This is easily obtained by measuring the height and length of the structure and multiplying them together. Painters have rules for this work which they apply somewhat rigidly, always making plenty of allowance for errors. Thus all openings, such as windows and doors, are figured upon as plain surfaces to be covered with paint,
although no part of them other than the sills and sides are touched with paint."

Cleaning Walls.

Walls that have been painted can be cleaned, provided the paint has not begun to perish. In cleaning a painted wall it is best to have two men working together, one following the other. In this way there is not much risk of spotting or streaking. A stretch of three or four feet is as much as should be done at a time. First, dampen the wall with a sponge that has been saturated with clean water. Follow this with soap-suds from castile soap and warm water and apply same with a calcimine brush, scrubbing a little. When the dirt has been softened in this manner, scrub with a solution made by boiling the shavings of one pound of castile soap in a half gallon of water, stirring in two pounds of fine bolted whiting, and allow to cool. Dip a brush into this mixture and scrub, taking care not to scrub harder than is required to remove the dirt. Sponge off immediately with clean, soft water and wipe down with a wet chamois that has been wrung out. Care should be taken that too much water is not used on the wall. The sponge and chamois should be wrung out as often as possible and the water changed quite frequently. The work should be started at the bottom and continued towards the ceiling. The ceiling is then cleaned in a similar manner. When the walls or ceilings are smoky, a little household ammonia added to the soapsuds will add to their efficiency in removing dirt.

Painting on Cement.

Nearly all painters appreciate the difficulty that is experienced in painting on concrete, and as this is likely to become a question of much importance, the discussion at the New Jersey Convention was most opportune. One painter recommended what he termed the salt process of mixing paint. One hundred pounds of white lead ground in oil are first broken up in one gallon of linseed oil to a stiff paste. Ten pounds of ordinary salt are dissolved in three gallons of boiling water and stirred slowly into the lead and oil, stirring for about twenty minutes. The salt and water will break up the lead as well as lin-
Splinters and Shavings—Continued

seed oil. The mixture will be of the consistency of soft soap. This should then be thinned with pure raw linseed oil to the consistency required for painting. The first coat will dry flat and the second coat will stand out with a good gloss. He stated that he had tried this formula on cement and on brick and plastered walls and had never known it to fail. The action of the salt seems to be to vitrify the surface of the cement.

Another member said that he had obtained good results by priming the cement walls of a schoolhouse with graphite paint, following this with four coats of white lead and linseed oil paint.

If the cement wall is allowed to stand for a sufficient length of time, say for a year or so, it was the opinion that there would be no difficulty in the painting.

Electrical Progress.

The famous “house without a chimney,” built at Schenectady, N. Y., by H. W. Hillman, of the General Electric Company, and heated by electricity, is to be replaced by a still more modern house in which the application of electricity will be made use of to heat the building, do the family cooking, warm the water in the bath tubs, heat the maid’s curling iron, and light the owner’s perfectos.

Nor will this be all, for all of the doors are to be open and shut by electricity, and burglars will be kept away through a novel scheme of automatic illumination and the ringing of bells. The laundry will be equipped with motors and the tubs with electric coils for heating the water in large quantities. Even the lawn mower will clip the grass by motor power.

Mr. Hillman has built what is said to be the finest newspaper building in the west, the Evening Press Bldg., of Grand Rapids, and has carried out his modern ideas of electricity in that also. It is equipped with electric grates having three long filament lamps of ground glass against a highly polished copper back ground, the whole surrounded by a typical fire place front of new design and handsomely finished. The heating properties of this grate are exceptionally good and the cost of consumption reasonable. It has been sanctioned by the General
Electric Co. and will no doubt soon come into large use. It seems particularly well suited to homes in cities where electrical power is obtainable and reasonable in cost and for flat buildings similarly situated.

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“There has been little of a tangible nature to indicate the general trend of construction movements during the past few weeks. Weather conditions have delayed the launching of any important projects, but in some quarters prospective work is shaping up very satisfactorily. The feeling among the architects and engineers is that the season thus far does not differ materially from other years at the same period. It is unquestionably true that material prices have struck a level at a very marked reduction as compared with lists for several years back and this is having a tendency to bring out work which has been held in abeyance by reason of the prevailing high prices during the past seasons. Estimates which have been tabulated on contracts for execution this year are considered quite reasonable and the impression is current that these rates will not be subject to much further cutting during the present season at least. The sentiment among trades is pretty generally optimistic and the readjustment to a new order of things appears to be coming about in a manner that is a cause for congratulation.”

**""**

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As reported by I. I. Groff, contractor, who states in his letter that lumber at the present time is about $2.00 per thousand lower than last year—that recently there has been a slight advance.
Artistic Houses.

By Una Nixon Hopkins.

A House Set in a Clump of Trees.

The ordinary things of life are described in prose, the loftier themes in poetry. The commonplace house is poor prose—the artistic one may be raised to the realms of poetic art. It takes no more time, ink and paper, possibly, to write poetry than prose, nor no more time, wood and nails to build a pleasing home than an ugly one; but it does involve a deal more head work for either or both. So it is easy to see why artistic houses are the exception rather than the rule. It is simply a matter of taking pains, not a question of money, size or kind. And the really artistic home is usually original in its design for it has been thought "out." And there is no place where necessity works such delightful inventions as in home-making. That is why a woman should al-
ways have a hand in it; she being master of the art of making a little go a long way.

There is one item that is often overlooked in the making of artistic homes that is vital—namely, the setting. It is all very well to put prose in ordinary bindings, to hedge it round, as it were, in the conventional manner, but when it comes to poetry—to houses of artistic merit—one feels the need of an aesthetic environment. When this can be brought about naturally the result is likely to be more satisfying than when it is especially striven for. That is, if one can set a house amongst a clump of trees, in place of planting trees about a house—a difference with a very great distinction—the result is much in favor of the former method. Nor must this be done in a haphazard sort of a fashion, but with great care as to the exact nature of the picture when all is finished—not only the form, but the color must be right. For though the lines be perfection itself, if there are blue-green trees, about a yellowish-green house, what misery is imposed on one’s neighbors! It is as if he were constantly looking at a hideous chromo. And if the tone of the house, say, is opposed to the green of the grass, even, how the sensitive passer-by must shudder. Windows out of proportion to the space they occupy—sometimes too small, but oftener too large; chimneys too pinched, but rarely too extended, are a few of the things that spoil the picture quality.

The prospective house builder is frequently heard to say that he is going to build economically and does not intend to attempt anything artistic. It is an acknowledgment that he does not care to take the trouble to make his home a pleasureable thing to look upon and live in.

The picture designated as “A house set in a clump of trees” constructed of rough siding, shingles and half timbers, is a happy illustration of the art of taking pains. To begin with it started with difficulty, for it had to be built, or at least it was economical to build it, on a good foundation already laid before this particular house was thought of. So the needs of a family, as far as the arrangement of the rooms was concerned, had to be adapted to something gone before.

There were great pines and a splendid grove of fruit trees. One row of fruit trees had been cut out for a path to the house and a good many for the house proper, but no more than was absolutely necessary. The main part of the house as it stands is two stories, with one-story wings on either side. The height in the middle balances the pines and the two wings are in sympathy with the low
bushy trees. And the chimneys are the final masterly stroke, bringing the high part and the low part of the house together.

A study of the photograph is interesting, and not only in this but in life the picture is perfect as far as balance, proportion, line, and color are concerned. The house was designed and built by Mr. Louis B. Easton, of Pasadena, a man who is both artist and artisan, carrying out a theory of his that the one who designs story, which makes the porch, the floor being paved with cement. The house is only one room deep, so when you enter the living room by the front door you look into the orchard at the rear, as the end of the room opens by glass doors into a courtyard. This room is plastered, with the exception of the ceiling, which is beamed, and the walls to a height of five feet are divided into panels by strips of wood, so that the room is rustic in appearance. To the left of the living room

should also make, to a greater or less extent, since in no other way can he be quite certain that his plans will not mis carry. Mr. Easton further designs the furniture and suggests colorings.

The beginning of this house, as represented by the foundation was so extensive that it seemed almost impossible to build a house of moderate cost. However, this was not only done, but to advantage. The cobblestone of the foundation was extended to the chimneys, and into supports for the overhanging upper is a large den—all wood, with construction showing, being open to the roof. There are outside doors here, so that the garden may be reached without traversing the house. The dining room, pantries, kitchen and screen porch occupy the wing to the right of the living room. In the second story, besides the requisite number of bed rooms, there is a large open screened porch for sleeping. The arrangement of rooms throughout is particularly favorable for ventilation, sun and air. The shingles are simply oiled,
but the rough timbers and siding of the lower story are stained a warm brown. The furnishings are very simple, as befits such a house, having been designed with the house.

One who loves harmony cannot fail to be pleased with the bungalow pictured, in which Japanese-like qualities prevail—both in interior and exterior. The house is a wood brown, set amidst palms and low lying shrubs, and literally hedged in. The little porch is paved with large square brick, and the small entrance hall is screened off from the living room.
by hangings. Very little plaster shows in the main room, but this has been painted with oil paints in such a manner that it looks like leather. This house, too, is particularly interesting because it was designed by the owner, who made some of the furniture. The beautiful table in the foreground of the living room is one of the pieces. It is of redwood highly polished, fashioned after an old model.

The walls of the sleeping rooms in this house are in inimitable Japanese gray, the woodwork being very near the same tones, and the furniture identical with the woodwork. The dresser, which was designed by the lord of this manse is very unique, for even the lighting of the room has been accomplished by wiring this article of furniture, but this shows in the photograph. In the hangings at the window and in the small rugs of the floor a very little old blue and dull pink shows the only bit of relief necessary from the pleasing gray.

The small ranch house, which was made as cheaply as possible of rough boards battened, is as artistic as it is inexpensive. But the proportions have been carefully studied, the roof line given just the proper slant, the windows well distributed according to the space, and the chimney of artistic brick appears to have been wrought out for this particular place with an unerring eye for detail.

Two little balconies hang under the eaves at the extreme ends of the house like birds’ nests, and onto these open doors from the upstairs sleeping rooms. There is a hospitable living room with a big fireplace within and all the comforts of a pretentious establishment, with much more of taste than is to be found in many. The house was very new when the picture was taken, but growing vines are covering the platform in front.

A notable artist once advised his pupils to paint with their hands in their pockets, meaning, of course, that more thought and less labor would achieve greater results. And in housebuilding it would likewise be well if builders sometimes “hammered” with their hands in their jeans. In other words: if we would only take a little more time for thinking, even at the expense of less time for working we would have more livable, artistic houses.
Spanish Siftings.

By E. A. Cummins.

UNLESS we except the half barbaric countries of Southeastern Europe, Spain is more remote from ourselves than any other of the great nations. France, Germany, Italy, even Russia are laid under contribution by the exigencies of comfort or taste. Not so, Spain.

Partly this is because Spain is pre-eminently an agricultural country, partly because a similarity of climatic conditions has enabled the Pacific coast to produce exactly the articles which once came to us from Spain. Oranges, lemons, olives, raisins, oil and wines which were once imported are now domestic products, a fact gratifying to our patriotism, if prejudicial to our pockets. The few Spanish articles which find their way to our shores are almost exclusively the luxuries of the rich and, as such, rather outside the common sphere of interest.

For one thing, the curio shops of the great cities are greatly enriched by the loot of the Spanish churches. You may cover an armchair with a gold and copper brocade which once, as a priest's vestment, glowed through the clouds of incense in a cathedral. You may drape your very modern mantel with a crimson velvet altar frontal, heavy with gold embroidery, and a sanctuary lamp may shed a subdued radiance in an alcove, or between the draperies of a cozy corner. You will not find, in these velvets and brocades, any great range of color. You will look, in vain, for the harmonious blending of delicate and glowing color of old Italian silks; you will miss some colors altogether; practically you will be confined to red and yellow, but to red and yellow of an unsurpassed splendor.

For most of us gentry of the short purse, to whom old brocade and gold embroidery are hardly matters of practical interest, howeverlavishly they may figure in our castles in Spain, pottery is about the only form of Spanish artisticskill, which we may hope to possess. For, although its range of color is limited and its technical perfection much below modern standards, the pottery of Spain is of a sort to rejoice the eye and the touch of any one possessing even a very moderate amount of artistic feeling.

Spanish pottery is distinctly archaic. In an age which has a craze for mechanical perfection, it refuses to apologize for irregular curves and for a glaze of uneven surface. And it is primitive not only in its rejection of modern methods, but in its adherence to antique models. The counterparts of the bottles and ewers which one sees in a certain New York shop today hung in the inn at Toboso, when Don Quixote and Sancho Panza sought its shelter. Nor were they novel, even then, for their shapes were copied from clay vessels brought to Spain by the Arabs, who settled in Granada and founded the Moorish Empire. So that the pottery vessel sold in a city shop links us not only with the Moors of Spain, but also with the Saracens.

The bulk of the Spanish pottery which reaches this country is green, a full-bodied green, without the least suggestion of either blue or yellow. One thinks of an emerald in shadow. The color has a charming inequality, as if the potter, working leisurely, had allowed the pigment to dry on his palette and mixing a fresh supply had not quite matched the tint, although the new color was perfectly harmonious.

But the greatest charm of Spanish pottery is in its shapes. There are huge, spherical water bottles, with two necks, one at the top, the other high up at one side. There are ewers of all sizes, with almost straight sides and flaring necks, and tall cups some with four handles. Jardinières, a foot and a half in diameter must have been intended, originally, to hold orange or lemon trees, in the inner courts of the houses. But whatever the article, whether for use or ornament, the form is unusual and graceful.

Besides the green ware, there is a pottery of a deep orange brown, with occasional markings of darker brown. This would seem to be a kitchen ware, as it is made in plates and baking dishes, also in deep covered dishes, not unlike a soup tureen, as well as in jugs and cups.

These brown and green wares are distinctly pottery. The finer varieties of porcelain are evidently not made in Spain. There are, however, glazed and decorated wares which would come under that heading. The most of them are blue and white, the
blue, a rather deep shade, predominating. There is no great attempt at design, in the decoration, which is roughly geometrical, or else a sort of cross-hatching of fine lines. The pattern, such as it is, is evidently a traditional one, as it reappears continually, with only such slight variations as would be accounted for by the individuality of the workman. The purely conventional character of this decoration is the surest proof of its antiquity, indicating its Mohammedan source. Large plates of this blue and white porcelain are most effectively used for wall decorations, their strong color and bold design looking well at a height above the eyes. There are jugs of every possible size to be had and, wonderful to tell, washbowls and pitchers. These latter are quite unique, the bowl being very deep, and narrow in proportion.

Still another sort has a decoration, rather primitive in character, of bright colors on a cream colored ground. This appears in plates and in tall vessels, which might be described as glorified ewers, with a vase-like body mounted on a pedestal, a slender neck and a flaring mouth. Sometimes there is a decoration of armorial bearings, possibly those of some one of the innumerable provinces of Spain. Of all the varieties of decoration, this last is the least satisfactory.

To the economically inclined, Spanish pottery has other than esthetic attractions. In no other ware does so little money buy so much. Delightful small pieces of green pottery can be had for twenty-five cents; there is a wider range at fifty, while for a dollar, one has a bewildering variety of beauty at his command. Large and imposing pieces are to be had for two dollars and a half, things which have distinction and artistic charm, both of form and color.

The blue and white ware is a trifle more expensive, but good sized plaques, for wall decoration, are a dollar, jugs range from twenty-five cents to a dollar and a half, and the washbowl and pitchers mentioned a little back, are six dollars. The cream colored porcelain ewers, with a decoration in bright colors, are nearly two feet high and sell for seven dollars and fifty cents. Many odd bits of copper and brass find their way into the hands of the dealers in Spanish articles and these too are sold at reasonable prices.

In calling attention to objects a trifle out of the common, it is well to make some suggestion as to the environment best adapted to them. Pottery of bold outline and strong color should be placed where it will not contrast too strongly with other pieces of the same sort. A jar of green Spanish pottery, with its rough glaze and uneven color, loses all its charm in contact with the dainty coloring of Chinese porcelain, or the delicate perfection of cloisonné enamel. The prevalence of the Mission style, in furnishing and of positive colors in interior decoration generally, affords an opportunity for the harmonious placing of pottery of bold design, where more delicate wares would be ineffective. For such uses, and in the production of what are generally called studio effects, the work of the Spanish potters will be found very satisfactory.
ARCHITECTURAL TRIUMPHS OF VIRGINIA CAVALIERS.

"BRANDON"

A BIT OF OLD ENGLAND PLANTED ON VIRGINIA SOIL.

HAT the architecture of Colonial days is to be commended in both lines and durability is clearly proven in the many old mansions that for centuries have weathered the fires of wars and wash of years.

The prime factor in all Colonial dwellings seems to have been the attainment of a substantial appearance, which was always gained, as it has always been preserved up to the present generation. This is probably due to the great amount of hand work which the old carpenters through sheer necessity had to do, whereas latter day building is done mostly by machine. It is to be doubted if many of the veritable palaces erected in this age will be in the same comparative condition two centuries hence as the mansions of two hundred years ago that one admires to-day.

Among the finest specimens of the latter is Brandon, the famous Harrison homestead in Virginia. This manor house consists of a large main building, two stories in height in the central portion, the remainder being but one. Small covered corridors connect it to the wings which flank it on either side, the total frontage being 210 feet.

The southeast wing was erected by Col. Nathaniel Harrison in 1712, the north, together with the central building, which is said to have been designed by Thomas Jefferson, having been added a few years later by his son. When first built, the wings were detached, but a later touch made of the three, one symmetrical dwelling by the connecting corridors 14x24. The bricks of the entire mansion are laid in Flemish bond with characteristic blue, or black headers. One story is, that the bricks were imported, but this may be questioned, as most of the plantations had their own brick kilns.

The porticos on both sides of the double fronted structure are approached by a series of stone steps, and supported by six Corinthian columns, a generous balcony with jig-sawed railing decorating the upper part.

The large entrance hall runs the depth of the house and is used as a delightful living room. Midway of the hall a triple archway rises, from under the right of which the stairs ascend.

The drawing room on the left of the hall measures 22x25 feet, and the windows open out on both the land and water fronts. The walls are paneled up to...
The handsome cornices, the broken arch of the mantel decoration being as admirable as it is unusual. The furniture is all old mahogany, the Chippendale chairs and tables having been placed there, centuries ago. The entire trim of the room is white which shows off to advantage the score of superb portraits which hang upon the walls.

In size and design the drawing room is duplicated in the dining room on the opposite side of the hall, and the corridor connecting it to the left wing, forms the butler’s pantry, the wing itself containing a small hall which divides the office from a sleeping room, the outer exit being direct from the little hall.

The right hand corridor is used as an ante or morning room, that wing repeating the other with the exception of the foreman’s office, the space here being utilized as a second bed chamber.

The upper story contains four sleeping rooms and the billiard room directly over the hall.

The exterior of the house is hung with ivy in many places, and heavy vines of purple wistaria climb about both porticos. A splendid growth of old box wood flourishes immediately next the building on the water front, and leads to the old garden where the grassy walks and unclipped hedges present much the appearance of the gardens of England. The walks, too, are traced with box hedges, the same shrub outlining the little flower squares, making patches of vivid color during the spring and summer months.

West of the mansion are the store houses, and still farther away is the ancient block house, built in the early days of the estate as a refuge during the uprisings of the Indians.

Placed about five hundred feet from the high bank of the James River, the Brandon mansion rests in a bower of...
magnolia, yew and maple trees, through the dense foliage of which gleam the red brick chimneys rising high above the time stained roof.

The plantation was the scene of much military activity during the Revolutionary and Civil Wars, and though a great deal of damage was inflicted, the grand old mansion weathered the storms, of which there are left few traces beyond the bullet holes with which the garden doorway was sadly riddled.

Brandon has proved an object lesson for layman and architect alike, and the landscape gardener of this later age has borrowed many of his best ideas from the grounds and groves of the beautiful estate now reaping the benefits of a luxurious, ripe old age.
The Pansy Bed.

By Ida D. Bennett.

If I were asked to advise one flower which might be grown in the flower garden of limited area and afford abundant bloom from early spring to late fall or rather early winter and at the same time afford an infinite variety and charm, I should unhesitatingly advise the pansy. This is the one flower of which it seems impossible to have too many. Indeed to grow them at all satisfactorily one must grow them in large numbers, the larger the better. The shape and dimensions of the beds, too, has much to do with their effectiveness, long, narrow beds giving much better effects than round, square or wide beds. The most satisfactory manner of growing them is to let the bed devoted to their use form the boundary of the flower garden; it should then be not over three or four feet wide—just wide enough to reach across easily, for the pansy is a flower which requires considerable attention and the plants must be gone over daily in cool weather and twice a day in hot weather and all faded blossoms removed. This is practically impossible in beds too wide to reach across and as pansies require soft, mellow soil it is manifestly out of the question to step or walk upon the beds, so, if you would grow pansies successfully see that your beds are of a width to handle easily.

The location is another point of serious consideration; do not be deluded into the notion that the pansy is a shade loving plant, for it is nothing of the kind. It delights in sunshine when given a sufficient supply of water and the free sweep of the winds above it; anything which impedes the circulation of air and sweep of the winds is detrimental. At the same time it is in no sense a salamander and it is not desirable that the hottest place on the grounds be selected for its growing; better leave this for the canna, calladium, geraniums and the like, but give the pansies a place where they will have the morning sun at least. And where they may be in easy reach from the house that their care may be as easily given as possible and the water supply convenient.

The best soil for the pansy bed is one composed of good mellow loam and leaf mould enriched with well decomposed cow manure. The manure from the cow house is better than that from the horse stable being cool in its nature as compared to the latter which is heating. In preparing the bed for pansies where it is necessary to fill in with suitable soil, the surface soil, if at all available, should be laid one side and the poorer sub-soil removed and the top soil returned to the bed; into this the manure may be mixed lightly and the bed filled up with leaf mould from the woods or compost heap. Where the soil in the bed is all right, however, it is only necessary to trench in the manure. This is done by laying aside a little of the soil at one end of the bed, a spade's width across the end of the bed, and filling in the trench thus formed with manure. The second row of spading is then thrown over this and the resulting trench filled in as before. In this way the entire bed is trenched as quickly as in ordinary spading and far more easily and the manure is buried three or four inches below the surface of the earth where the weed seed with which the best of manure is filled, are not likely to sprout and give trouble. Then, too, its presence below the surface in the cooler depth of the soil coaxes the roots of the pansies down from the surface which is much to their advantage as the pansies' natural tendency is to make surface roots which are then easily affected by drought and changes of temperature.

The best time to sow pansy seed is in August, about the fifteenth, but early spring sown seeds will give good returns the first year but will hardly be as fine or early as the August plants. In selecting pansy seed only the best should be purchased if one would have notable flowers. Usually a packet of first class seed of any dealer's special brand—that on which they rest their reputation, will cost from twenty-five to fifty cents a packet and should contain at least two hundred and fifty seeds and as the pansy seed when fresh germinates very freely, one packet will furnish a considerable number of plants. Added to this should be packets of any special color of which one wishes a preponderance, as pure white, coal
black or yellow. The Cassier pansies, too, are so fine that I always include a packet of seed in my planting.

Until the remodeling of my garden deprived me of a regular pansy bed, my own bed was a long, narrow strip sixty feet long and three wide which encircled the south side of my garden and gave room for about five hundred pansies and was a delight to the eye from early in spring until Thanksgiving. Now the pansies form an edging to the many radiating beds of the new garden and form a lovely ground work for the tulips which border all the beds.

The August sown seeds should be sown in the spent hot-bed, cold-frames or in an outdoor bed which can be protected either by a rough frame of boards covered with thin muslin or other material, as until the pansies are up and growing they need to be shielded from changes of weather, drying sun and storms. The cold-frame or hot-bed is best as this affords protection from all varieties of vicissitudes.

The soil should be made mellow and fine and the various seeds sown in separate sections or plats of the beds and carefully labeled. The seed may be sown broadcast and covered with about an eighth of an inch of soil sifted over or in shallow drills. After sowing water carefully with a rubber sprinkler or very fine nosed watering pot, cover with newspapers and close the sash partly, screening the opening that no meddlesome cat may intrude, and placing paper or a bit of old carpet over the sash to prevent the heat of the sun from overheating and drying the soil. No further attention will be required until the pansies are up, when the newspaper immediately over them should be removed and after the plants have made their first true leaves the carpet or paper may be removed from the glass and a screen of lath substituted. These lath screens are made by using narrow strips of inch stuff for the top and bottom of the screens and nailing lath as long as the width of the hot-bed on these end pieces, laying the lath their own width apart and putting two nails in each end of each lath and clinching them on the under side. Care should be taken in starting the screens that the corners are kept square in nailing the end laths, when the remainder of the lath may be nailed on without difficulty. Such screens will last for years and will be found of the greatest convenience.

The plants should not be allowed to dry out at any time and as soon as they become at all crowded in the beds should be transplanted to other beds or to fresh rows in the same bed.

They should be encouraged to make as stocky and rapid a growth as possible and should be hardened off as soon as they will bear it by removing the screen and glass and giving a weekly dose of weak manure water. If they are well cared for and the season is favorable they should begin to show buds by the time winter sets in.

The soil in the beds should be well above the level of the surrounding ground and it will be well to make a deep hole, filled with gravel or other drainage material in one corner of the bed to carry off any water which may accumulate during winter.

At the approach of severe weather close the frames and protect with warm blankets of old carpets or anything which will shed water and keep out the cold. Canvas or duck which has been given a good coating of oil is excellent to place over old carpets and rugs, as this keeps the latter from becoming wet and doubles its protective powers.

Open the beds on mild days, providing the ground in the beds is not frozen, but never open and expose to the sun when frozen, but always allow the plants to thaw out under shelter and in the dark.

As soon as the ground can be worked in the spring the pansies may be planted out in permanent quarters, setting the plants nine inches apart each way and alternating them in the rows, which increases the space between them.

For best results the pansy bed should never be allowed to dry out but should be watered daily in mild weather and twice a day in very hot.

The beds must be gone over daily and all withered flowers removed. Never try to save seed from the pansies. In the first place they never come true from seed and in the second place it so exhausts the plants to produce seed that its period of bloom is much shortened and the size of the blooms much decreased. The secret of fine pansies is to keep them blooming freely and this can only be done by removing every blossom as it fades.

About August the plants will become more or less scraggly and the blossoms
small and inferior. If then the plants are examined it will be noticed that new growth is starting from the crowns. When this is observed the tops may all be removed with the exception of this new growth, which will then make rapid growth and produce a new crop of flow-
ers, nearly if not quite equal to those of spring. This new florescence will con-
tinue until severe freezing weather and may then be protected by a frame of rough boards, evergreen boughs or other suitable protection and will give very sat-
isfactory results the second year.

Suggestions for Painting Old Floors.

The following advice on painting old floors will be read with interest:—

Be sure your floor is clean. If there should be paint spots on it clean it off with caustic potash, and if there are any large cracks fill them with putty. You can buy staining of all kinds and dilute it with turpentine, as it is usually too thick. If the floor is to be all walnut do it with a cloth or brush. If you want to make your stain, buy a one-pound can of burnt umber, ground in oil; mix a suf-

cient quantity of this with boiled linseed oil to color it without thickening the oil to notice it much. Try it on a small piece of wood till you get the color desired, and in this way you can easily determine the quantity of umber to use. It should be a rich walnut brown. Rub this thor-

ougly into your floor till the stain ceases to come off. If the coloring is not dark enough when dry give another coat. The floor now being stained, prepare for the next day's waxing. Mix one gallon of turpentine with one pound of beeswax shaved thin. Soak the wax all night in the turpentine before using, then rub on with a woolen cloth. When the wood finally becomes well polished apply wax occasionally. A very easy stain is made by putting burnt umber in alcohol to make it the proper consistency for easy application and apply as above, then give a thin coat of shellac, and when dry sand-
paper nicely, and give a good flowing coat of ordinary varnish, which will give it a splendid finish. For oak stain.—To strong lye of wood ashes add enough copperas for the required shade. Put on with a mop. and varnish when dry.
Descriptions and Color Schemes for Designs Following.


THIS is a very attractive home of original design by Burtrand & Chamberlain, architects. It is designed with many columned details, having, at the same time, a touch of originality throughout. This is especially noticeable in the design of the bay over the front entrance. Only the center portion of the porch is covered, the greater part of the porch being open to the sky. The floor plan shows a very complete arrangement for a good sized modern home. It has a large hall, which is hardly separated from the large drawing room by a columned opening. Both library and drawing room, also one of the front chambers upstairs, have fireplaces; the one in the library being a gas log. Oak and red birch are used for outside finish. The second floor is finished in pine, white enameled. In the attic is a large gymnasium. This home is estimated to cost $6,000, and is well adapted to an all-white exterior, with a dark green roof.

Strong and Home-Like, page 269.

THE designing of homes in the cottage style always permits of the use of considerable originality. One of the most unique and original homes in this collection is that designed by Bernhard Becker. This general inspiration is that of the rural English, with brick first story, and gray stained shingles above; the trim being of light color. The entire interior is treated in "old English" with beam ceilings and high wainscoting for dining room and hall. The floor plan arrangement is worthy of considerable study. It is very simple, and that is why it is good. The entrance is into a central hall, which always makes a satisfactory arrangement of rooms possible. At the left is a very large living room with plenty of wall space, and a large bay window seat and fireplace. The dining room is almost as large and has the same features. Dining room, living room and hall all have beam ceilings, which are as plain as possible; the beams running but one way, and of simple design. The estimated cost of this home is $6,500.

English Half-Timbered, page 270.

TO correctly design an English Half Timber house, is one of the most difficult problems that confronts the modern architect. The present day builder of homes has so many requirements and hobbies, when it comes to the planning and designing of his home, that were not known to his English ancestors, that it is quite difficult to adapt them to an English design. In the first place, the average American wants more windows, and wants them more widely scattered than looks well, in a house of English design. In English style, windows should always be in groups. The different requirements of a well-designed English Half Timber house have all been fulfilled in this attractive home by Harry W. Jones, architect. A good color scheme would be a red brick foundation, tan colored cement for the half timber panels and the first story, dark brown trim throughout, and a moss green roof. The estimated cost is $8,000.

A Well-Designed Exterior, page 271.

THE gambrel roof style of cottage will always remain popular with the American people. It is a style of distinctly American origin, dating back to the time when New York was New Amsterdam. It was first used among the Dutch Colonists, and this gives it the name it is sometimes known by, the "Dutch Gable."

This beautiful home has many points of interest. It has not only a well designed exterior, but an especially well arranged plan, having six rooms and a hall. It is adapted to the requirements of the average sized family, and its cost of $3,800 complete, with heating and plumbing makes a house altogether, that will always prove popular. One feature of the first floor is the direct passage from the hall to the kitchen, and the combination outside doorway to the cellar.
An Original Design.

BERTRAND & CHAMBERLAIN, Arch'ts.

- FIRST Floor Plan -

- SECOND Floor Plan -
Descriptions and Color Schemes—Continued

A Picturesque Bungalow, page 272.

UNGALOWS will always remain popular for summer homes. During the hot weather, the housewife dislikes more than any other time of the year, to run up and down stairs while doing her housework and the bungalow, with its rooms all arranged together on one floor, like a modern flat, therefore appeals to them strongly for a summer home. This picturesque little home was originally built in California, and much of its attractiveness comes from the climbing roses and bushes about it. But it is, in itself, however, a very attractive little home, having many unusual features that would make it stand out prominently as different from other bungalows. One of the main features in the two large shingled columns on the front porch with a heavy cross beam above. The floor plan shows a very informal arrangement well adapted to a summer home. Living room and dining room are combined in one long homelike room with a bay at each end, and the fireplace in the middle of one side. There are two bed chambers and a bath room. A good color scheme is to stain side walls a dark mission brown and the roof a dark red. The trim should be white. Cost, $1,000.

A Good All-Shingled House, Page 273.

O style of house is as economical to build as a square one. That is why this very simple, though attractive, home, can be built, including heating and plumbing, for $4,000. It was designed by Lowell A. Lamoreaux, architect, and is as simple as it is possible to make it, but being of good proportion with well-balanced windows, wide-spreading caves, and with careful attention paid to all details, it is a very attractive home. The brown stained shingles, woodwork and trim of still darker brown, and dark green roof, all add to its simple beauty. The porch, having square posts and no open balustrade below, can be easily screened in without greatly effecting its appearance. This porch is a very large one, and would prove delightful to any family in summer time. The floor plan arrangement is somewhat informal. Living room, dining room and library all open together, with the hall off to one side. On the second floor are three large chambers, with plenty of closets and a bathroom.

A Two-Story Bungalow, page 274.

WO story bungalows are not common for the reason that when a bungalow is made two stories in height, it is then more often called a cottage, owing to its design and size. This is, however, a skillfully designed two-story bungalow, having a bungalow appearance throughout. The second floor projects over the first-story porch with a balcony over the center, connecting with the front bedroom through a French door. The living room on the first floor is very large and homelike. At each side of the fireplace is a bookcase, and a broad seat. Living and dining room are practically one, the division being merely a very wide columned opening. This is a much larger house than it appears to be from the outside. Long sloping roofs are sometimes deceiving as to the actual amount of space within. The foundation is of field stones, the first story is sided, and second story shingled. The estimated cost of this house, as designed by Mr. C. N. Anderson, is $3,500. A good color scheme is a dark maroon for the first story, brown stained shingles for the second story, with either a dark red or green roof with white trim.

Do Not Try to Build Your House Without Architect’s Plans.

Homes cannot be built in a satisfactory manner without COMPLETE PLANS, ELEVATIONS, DETAILS AND SPECIFICATIONS. Architect’s plans will surely save the owner their cost several times during the construction of the house. —EDITOR.
Bernhard Becker, Arch't.

Strong and Home-Like.

FIRST FLOOR PLAN.

SECOND FLOOR PLAN.
English Half-Timbered.
A Well-Designed Exterior.
A Picturesque Bungalow.
A Good All-Shingled House.
C. N. Anderson, Arch't.

A Two-Story Bungalow.

FIRST FLOOR PLAN.

SECOND FLOOR PLAN.
ATTIC SASH
1 light 16 x 20
Gla zed, Clear Glass, (Dealer's Price $1.50.)........... 55c

CELLAR SASH
3 lights 7 x 9.
(Dealer's Price $1.00.)...... 35c

SASH PULLEYS
Best Steel Grand Rapids. (Dealer's Price $1.00.)...... 2½c

HOT BED SASH
3 x 6 - 1/4 Glazed Clear Glass, made best Cypress. (Dealer's Price $1.50.)... $1.60

SASH SASH
4 Light 8 x 10. Glazed, Clear Glass. (Dealer's Price $1.00.)... 43c

2 LIGHT WINDOW
Check Rail, 16 x 20
Glazed, Clear Glass. (Dealer's Price $1.50.)... 69c

PLAIN RAIL WINDOW
8 lights. 8 x 10
Glazed, Clear Glass. (Dealer's Price $1.75.)... 57c

DOOR AND WINDOW STOPS
1/4 in. wide, Yellow Pine, (Best Quality, $1.50.) Per 100 lineal feet........... 50c

DOOR & WINDOW BARRIERS
Some Patterns. 108 square feet, Strength "A". (Dealer's Price $1.00.) Each...... 37c

VENEERED OAK DOOR
Rotary Finished, 2-8 x 6-1/2-1/4, (Dealer's Price $1.50.)...... $3.36

"B" QUALITY DOOR
2x6-1/2, (Dealer's Price $1.50.)...... 80c

PAINTED DOOR
2-6x6-1/4, (Dealer's Price $1.75.)...... $1.08

UPBOARD DOOR
1-6 x 2-6-1/4, Ready to hang, (Dealer's Price $1.25.)... 72c

SCREEN DOOR
1/4 thick, Stained Walnut, Black Wire Cloth, Best Quality. (Dealer's Price $1.50.)... 96c

CYPRUS DOOR
Complete, Ready to set up, Northern White Pine. (Dealer's Price $2.25.)... $2.31

ART FRONT DOOR
2-6x6-1/2 Glazed, Clear Glass. (Dealer's Price $1.50.)... 1.70

PORCH COLUMNS (Turned)
4x4.9 feet, Washington Fir, (Dealer's Price $1.50.)... 60c

PORCH SPINDLES
1 1/8 x 8, Finely Turned, (Dealer's Price 5c.) Each...... 1/4c

PORCH RAIL
1 1/4 x 1/4 Washington Fir, (Dealer's Price $1.50.) Per foot...... 2c

PORCH NEWELS
4 x 4 inches, 4 feet each, (Dealer's Price $1.50.)... 34c

PORCH BRACKETS
1/4 thick, 10 x 12, (Dealer's Price 5c.)... 5/2c

PLATE RAIL, Y. PINE
Made in two sections, 3 1/4 inch projection, (Dealer's Price $1.50.) Per foot...... 4c

YELLOW PINE BASE
7 1/2 inches, Best Quality, (Dealer's Price $1.00.) Per 100 lineal feet...... $2.84

GASING Y. PINE
4 1/4 inches, Best Quality, (Dealer's Price $1.00.) Per 100 lineal feet...... $1.75

CLEAR OAK GASING
4 1/4 inches, Best Quality, (Dealer's Price $1.00.) Per 100 lineal feet...... $3.32

GORMER BLOOKS
White Pine or Yellow Pine, (Dealer's Price 5c.) Per each...... 2c

BASE CORNERS
1 1/4 x 14 inches, White or Yellow Pine. (Dealer's Price 5c.)... 2c

STAIR WORK
Our stock designs admit of many variations.

BALUSTERS
Yellow Pine 1 1/4 x 1 1/4 inches, Handsome Patterns. (Dealer's Price 15c.) Each...... 3/2c

RAIL STAIR
Yellow Pine, 3 1/2 x 3 1/2 inches. (Dealer's Price 15c.) Per foot...... 7c

NEWELS
Very Handsome Riz, Smoothed, Glued Lock Joint. (Dealer's Price $2.30)

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5000 BARGAINS
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870 Case Street, DAVENPORT, IOWA

NOTE—Gordon-Van Tine Co. Guarantee Safe Delivery to Any Station, Any State.
Making the Best of Red.

HOW often the tenant of a rented house is confronted with a flamboyant red wall paper, in the living room, or dining room. There is a general sentiment in the minds of landlords that red is the color of colors for a constant companion. Now red has its merits, plenty of them. It is exceedingly decorative, especially in two-toned effects, it furnishes admirably, having the property of drawing the lines of a room together, in contradistinction to the receding quality of colder colors, like blue and green. Moreover, a strong color like red seems to be the only possible thing to use with dark and heavy weathered oak furniture, if we except yellow, of which most people are afraid.

But red makes the small room smaller, it swallows up light in the greediest fashion, it is a difficult color to combine with others, and in the cheaper qualities of paper, it is apt to rub off. Red has too a psychological quality of its own. It is, subtly and disagreeably, stimulating to the nerves, so much so that teachers, wearing red gowns, have noted the difficulty of controlling their pupils. If any one doubts this, let her work all day on a piece of embroidery on a red ground and note the effect on her eyes and her temper.

But since the red wall paper exists and must so often be reckoned with, let us think what can be done to modify its disadvantages. And bear in mind that I am dealing with the ordinary, positive red, of the average wall paper, or burlap, not the pinkish or yellowish tones, which have all the merits that are lacking to the other.

The one combination, with a positive color, possible is that with green. The right green is difficult to describe. It is a strong olive, in which the yellow is so carefully toned down that one is not conscious of its existence. It takes a person with an exceptional color sense to manage a combination of this sort, and it is quite beyond the average decorator. An exceedingly commonplace room can be quite transformed by painting the woodwork this soft, rich olive, laying a dado of burlap, to a height of four feet and a half, capping it with a card rail, and painting it a couple of shades lighter than the woodwork. The furniture should be stained green, to harmonize, or, better still, ebonized. A red and green rug, not so hard to find as it might seem, pictures in black frames, a very little bric-a-brac, either green or red, and cushions of both colors with one combining both, complete the scheme. The best possible guide to a combination of this sort is a bit of Morris or Liberty velvet, combining reds and greens, always remembering that the pile makes it possible to use higher tones of color than would be pleasing in plain surfaces.

For the average room, in the average house, such a radical change is impossible. The only thing to do is to try to over-balance the red by a mass of darker color. This is what really happens in the red walled Craftsman rooms, rooms which would seem to have been conceived with the thought of the sunlit reaches of open country, rather than the limited lighting of the city or suburb.

Therefore, in the room with red walls, we will have a rug, whose predominant tone is brown, with some admixture of wood or tan. In a living room, we will have as much upholstered furniture as possible, using tapestry in golden brown tones, corduroy or cotton velvet. Wicker chairs, stained tobacco brown, with velour cushions, give a mass of color. Mahogany furniture is not pleasing with red walls. The ideal thing is oak, stained to the tone of old French walnut, or black walnut itself. Then, for the small things in the room get together all the warm tones of cream and
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for the bottom. If anything looks cheap and shabby, it is a curtain with a selvage edge at the sides.

In dying cotton, one has the choice of a good many package dyes. It must be remembered that these dyes are sold primarily for dress goods, and that the range of color is different from that of decorative fabrics. Most yellow dyes are very good, so are the wood colors, but greens and browns are sure to need modifying. Green dye can be improved by the addition of either brown or blue, brown be modified with green, or orange. The color will probably have to be experimented with a good deal before a satisfactory shade is reached, and at least a gallon of liquid must be allowed for each half pound of material, or twice the quantity given on the packages. A very good blue color results from boiling bleached cotton in a solution of common blueing, throwing in a good handful of salt. On an unbleached fabric, a greenish hue may result.

After the hangings are dyed to one's liking, comes the pleasurable part of the enterprise. It is not a great undertaking to embroider a wide border, in outline, with crewels, or, if they can be had, carpet thrums. Single figures, cut from changeable linen and outlined with heavy couched strands of linen or wool are effective, if scattered over the entire surface of the curtain. Fleur-de-lys and clover leaves are good for the purpose, also the beautiful five-fingered leaf of the chestnut.

A mode of decoration involving much less work is some variation of stencilling. The stencils can be bought anywhere, but the intending artist had better consult someone with experience, before venturing. A periodical index will refer one to a number of published articles, which will give a very clear idea of the process. There is a variation, which can be applied to very simple designs, which consists in drawing the design upon a block of wood and, with a sharp knife, cutting out the background, leaving the design raised a quarter of an inch. Then a tube of oil color is mixed to the desired shade, and applied with a brush to the raised surface. While the paint is wet, the die is pressed down upon the surface to be decorated.
Mrs. S. E. S., Lawrence, Mass.

Q. I should like suggestions about fitting up dining room, from your house plan 117. The room has a southerly exposure. The wood work cypress. Furniture is of oak, and I have a rug 9½x12 ft., with mahogany color predominating I should like to use, etc.

Ans.—Cypress will take other stains, but is at its best with a brown weathered. As your furniture is oak, this will be the best choice. Probably green and cream are blended with the mahogany tones of your rug, and as the room has a south exposure it is advised to emphasize the green tones in the wall coloring with cream ceiling. The curtains could be madras in mahogany and cream with touches of green.

Mrs. E. J. N., Cleveland, O.

Q. Will you kindly give suggestion as to wall and ceiling decoration for reception room and parlor, the former 14x20, northwest exposure, bay window with seat, two large cased openings, the one leading to parlor taking up nearly all of wall space on that side; cove ceiling 9 ft. high from floor? Parlor 13x16, western exposure. Furniture and woodwork medium dark mahogany.

Ans. Since the two rooms are so slightly separated a unified wall treatment should be adopted, and for the northwest outlook tones accordant with the mahogany woodwork and furniture rather than contrasting are advised. These need not necessarily be dark; there is a paper showing an all-over, inconspicuous design in the lighter terra cotta shades, which would blend perfectly with the mahogany and give the warmth of color desirable, yet not darken the rooms, especially if a deep cream ceiling be used. In the reception room the furnishings could be plainer, as, for instance, seat cushions in bay of mahogany colored velour or wool rep, with rug of plain mahogany filling. In

the parlor cream and mahogany could be blended in the furnishings. Plain ceilings are always in good taste. Unless the decoration is the work of an artist, it is apt to be either florid or bald and commonplace. There are, however, simple and refined stenciled friezes which could be used on the coves and would relieve the length of plan, base ceiling space.

A. M. P.

Q.—We are building a house and would like your advice. First, it is a shingled house with a field stone chimney. What is used to hold the stones together? The foundation is also of field stone. Now, as to interior. I had planned the woodwork white enamel all through the house with exception of kitchen and pantry, but have my doubts as to whether that would look well in dining room, which has a 4½ foot wainscoting-panel effect. Dining room is 15x15 with eastern exposure separated from 15x22 living room by sliding doors. I had planned a red rug for dining room, with red paper. Do you think some other finish for woodwork would be better?

Ans.—We suggest that the stones of chimneys, etc., be put together with mortar, like foundation, but with field stone. The mortar is not raked out into smooth joints. The dining room wainscot is no objection to woodwork being white, but for a rustic style of exterior, a brown stain finish for first floor would be better. The red must be carefully chosen to harmonize with the living room in green. An ecru wall above the wainscot with a frieze of red and dull green autumn leaves would be better. The green rug in living room will be very good. White woodwork on upper floor will be best for the bed rooms, treated with flower motifs. In the boy's room, paint the woodwork olive green and use green wood furniture, with gray walls and a Japanese frieze, having much scarlet, rather than the poppies. The rosewood piano need not dominate the living room. Your ideas of furniture for
this room are very good. The sectional bookcases should match the woodwork as nearly as possible.

Mrs. L. R., Farmington, Me.

Q.—We are just completing the erection of a home built of hollow concrete blocks. I have read carefully the queries and answers in your department for decoration and furnishing, but find nothing that just fits our needs.

The dining room, living room and hall are in redwood, with redwood doors throughout. There is a fireplace of red brick in the living room. We wish to finish the redwood as light as possible.

Please suggest the proper color for the floor of hardwood to use with this finish; also the color scheme for walls and ceiling for dining room, living room and hall. The few furnishings we have for these rooms are of oak in rather dark polished finish, and the rugs have the red brown tones.

Ans.—I desire to say that the redwood may be finished almost natural, using a light mahogany stain only on the poorer parts of the wood where it is sort of faded and colorless. Part of the filler may be prepared with the stain and used as needed. This will give you a uniform color tone of a light, soft reddish tone, very agreeable. Redwood thus treated combines charmingly with soft greens or blues or warm greys. In your northwest living room with but few windows, the soft grey is advised for the wall with willow green for rug, draperies, seat cushions, etc. The red brick fireplace and the redwood finish will take away all coldness. With your brown wood furniture pieces, mix one or two green wicker chairs, having seats upholstered in soft coppery red. The hall, having no outside lighting, must have a light wall treatment. There is a paper in grey and white, with a boldly conventional design, which would open well from the living room in plain grey, and give the needed light. With this, use a white ceiling, but in the living room a very light grey. The southwest dining room will be delightful in blended blues and greens.

First Impressions are Best

The entrance to your home gives your caller the impression of dignity and hospitality when its construction is honest and its design is in good taste.

Morgan Doors make most impressive entrances. Not only are they designed correctly according to the best ideas in doors, but they are built honestly from the best grade of hard wood and by workmen who know how to make good doors. "Morgan" Doors are all stamped "Morgan" which is a guarantee—one we stand by—to replace any Morgan Door if it fails to give satisfaction. They are guaranteed not to crack, warp, or shrink.

Morgan Doors are made in all architectural styles, mission, chateau, empire, colonial, etc., and for inside or outside use.

"The Door Beautiful" Book Free

Send us your name at once and you will receive a copy of this beautiful 80 page book which shows and describes the beauties of Morgan Doors.
A Man by the Hour.

HAVE any of my readers ever tried a man, as assistant housecleaner? I have and this was the result. A large rug, completely covering the dining room floor, and with much heavy furniture standing upon it, was to be turned and cleaned, as thoroughly as was possible without having it beaten. A general jobber, whose usual functions are the carrying up of coal and the care of furnaces, expressed a willingness to labor for twenty cents an hour. He made his appearance at twenty minutes past nine, when the smaller articles had been removed from the room and the pictures taken down.

His first procedure was to sweep the rug thoroughly, how thoroughly the dustpan testified. With a little assistance, he moved all the furniture except the sideboard and one table into an adjoining room and the hall. Next he brushed down the walls, the rug in the meantime being rolled up in the middle of the room. Then he lifted the rug to the top of the table and swept the bare floor.

With some assistance, he placed the rug reverse side up and did his third sweeping. While the dust was settling he repaired to the roof and shook and swept three small rugs. When he came down, he assisted in placing the furniture and swept the brussels carpet in the hall. Incidentally, he loosened and lowered the upper halves of two windows which resisted all our efforts. Precisely at eleven-twenty he departed, well satisfied with forty cents, having done silently and thoroughly the work which would have taken a woman certainly twice that time. A woman would have talked incessantly and, in addition, I should have had constant misgivings as to her physical ability for the work.

The desirability of what may be called intermittent domestic service has often been alluded to in these pages. Probably most people who have tried to secure it have experienced the same difficulty. Just as one gets a woman accustomed to the idea and willing to make the experiment, someone comes along and offers her a full day's work. Naturally she prefers a certainty. No one offers the odd job man a full day's work. It is the condition of his occupation that it is intermittent. It seems unkind to suggest that a man is less likely to be tempted to small pilfering than a woman, but it is the fact. Also it is a great thing to be delivered from the garrulity of the average working woman.

Putting Yourself in Her Place.

"I consider it most ungrateful of Ann to leave me, after all I've done for her," I heard a woman say lately, alluding to the departure of a maid who had lived with her for several years.

Now what had she done for Ann? She had paid her wages more or less promptly, but she had exacted the uttermost penny of service from her. Moreover, she happened to pay rather less than the current rate of wages. Her maid does her work in an uncommonly dark and inconvenient kitchen, with a very inferior assortment of utensils, and the peculiar hours of the family make her work under great disadvantage. From week's end to week's end not a hand is lifted to help her in any way. On her days out she comes home late in the evening to clear the supper table and wash the dishes. No man is allowed to visit her, and the calls of other maids are discouraged. All the benefit that I can see that Ann has ever received has been a certain amount
of amateur doctoring, in trifling ailments. Her mistress happens to have a hobby for that sort of thing. Certainly, if Ann were ill, she would be promptly bundled off to a hospital, or to her sister's overcrowded tenement house rooms.

Now Ann has an opportunity to take a place as second maid, with higher wages, lighter work, the companionship of other women in her work, besides being much nearer to her sister. Would my acquaintance hesitate to terminate a business engagement for another that was more profitable in every way? Hardly. Then why blame Ann, instead of cheerfully wishing her Godspeed in her new relations?

The sooner we get at the business conception of domestic service the sooner its difficulties will disappear. The man who cannot employ adequately skilled labor in his business does not disdain to lend a hand himself. Nor does he feel that he is entitled to the gratitude of his employees, because he buys from them the service he needs. But the old paternal idea dies hard with women and, until it is defunct, the hotels will have no difficulty in finding help, and the factories will be full, but the kitchen of one maid will be frequently vacant.

Clearing the Decks.

The warm months ought to be the most delightful ones of the year and so often they are the most strenuous and hardest to bear. Particularly is this true of the spring. All through the lengthened cold of our northern winter, we have been looking forward to the first warm days, perhaps, as my grandmother used to, straining our eyes to see the first patch of bare ground, in the expanse of snow, and when they come, we are so cumbered with house-cleaning and spring sewing that we have no time to enjoy them, except as we look out the windows, in the intervals of our work.

This is all wrong. None of us can afford to miss out of our lives all the simple pleasures of the best half of the year. It is a positive duty to one's self to simplify life, the ordinary daily routine, that it affords some leisure for out of door life and, in the house with servants, for maids as well as for mistress.

"The means thereto," to quote the Prayer Book, is in a good many cases to simplify the outward aspect of one's rooms, to make less work by having fewer things. Put away the multitude of small objects which fill up the living rooms. Leave matted or hard wood floors bare. Take down all the thin curtains and the unnecessary portieres. Dress the sofa pillows in washable covers. Depend, for the charm of your rooms, upon books and magazines and plenty of fresh flowers and greenery, and note the difference in your daily work.
A Maypole Decoration for the Table.

In some parts of the country, May Day is none too early for apple blossoms. It seems a pity to sacrifice fruit blossoms, with their promise for the future, to decorate a table, but there are often trees whose yield is of so poor a quality as not to be worth preserving. If such a tree is not attainable, one can always get daisies to decorate the table and to fill May baskets.

To decorate the May Day table, one carries out the idea of the Maypole. Get one of the flat wooden spools, on which steel wire is wound, and bore a hole in its center, large enough to admit of broomstick, rather more than a yard long. In the hollow of the spool put three or four lead sinkers, to weight it. Wind the pole with pink ribbon, beginning at the base. At the top attach as many streamers of narrow ribbon, alternately pink and white, as there are guests. Finish the top of the pole with an effective bow of the pink ribbon. A streamer is carried to each place where it ends in a bow, tying a bunch of flowers and ferns. Then the base of the pole is covered with flowers. At the end of the luncheon or dinner, the ribbons are severed from the pole and a streamer and its bouquet given to each guest. If apple blossoms are used, the ribbons may be of the palest blue, with good effect.

In buying ribbons for table decorations, it is a good plan to get them of a kind which can be used for some other purpose afterward. A three-inch taffeta ribbon, in blue or white, can be put to uses for which the same width in satin would be quite inappropriate.

Making the Most of Spring Lamb.

Before the next issue of Keith's, spring lamb will have ceased to be worth its weight in gold. Even in May it is not exactly cheap. One thing is to be said about it, that every atom of it is palatable. The best investment is the fore-quarter, buying all the rib chops with it. Then one has a dinner of chops, the attached ribs can be carved off the roast, at the first meal, the thick part of the shoulder making a third meal. The neck, the fore-leg and the breast will supply the nucleus of a dish of curry, with a rice border and accompanying peas.

Many people have a prejudice against the fore-quarter, owing to the difficulty of carving it. This can be obviated by having the butcher remove the shoulder blade. Except for the convenience of the carver, the shoulder is always a better roast than the leg, costing at least a fourth less. It is also a much juicier piece. Bridget needs to be watched in cooking lamb, as it is one of her traditions that it should be what she calls well done, meaning of the consistency of sole leather.

The peculiar, woolly taste, sometimes noticed in not very young lamb, can be avoided by removing, with a sharp knife, every particle of the thin skin, under the layer of fat, on the leg. This layer of fat is absent from the other cuts, and the skin is on the surface.

Cooking Dandelion and Spinach Together.

Dandelion greens are a delicacy highly esteemed by the elect. To the average person they are apt to seem extremely bitter. The asperities of a present of dandelion greens may be softened by di-
Table Chat—Continued

lution with an equal quantity of spinach.

A contemporary advocates the addition of a few leaves of sorrel to a salad, diminishing the quantity of vinegar used in the dressing. Sorrel, in the proportion of one to three, is said to be an agreeable addition to spinach.

Speaking of spinach recalls the remark of the French epicure, who said that it was better on the seventh day than the first, as it had accumulated merit, with each re-heating in butter.

The First Green Peppers.

May sees the earliest peppers in our northern markets, and very tender and delicate they are. They are rather too expensive for stuffing or frying, but admirable for seasoning. Shavings sprinkled over the rather tasteless Southern tomatoes are a great improvement, and they are equally good with shaved cabbage, or lettuce.

The best use for peppers, however, is as a sandwich filling. Trim all the crust from a sandwich loaf a day old. Spread the slices on the loaf. Cut them very thin and provide as many covers, without spreading them. Shave the peppers very thin and lay them on the buttered bread. Sprinkle a few drops of olive oil over the pepper and put on the cover. Wrap the pile of sandwiches in a paper and cover that with a napkin wrung out dry, and set them away for an hour or two before using.

A salad combination, much better than that with olives, is chopped green peppers and cream cheese. Chop the pepper fine and work it into the cheese, either cottage cheese, cream cheese, or Neuchatel. Moisten it with a little cream, or unsweetened condensed milk. Shape into balls and serve with mayonnaise, on a bed of lettuce leaves.

Cheese Crackers for Salad.

It seems as if wafers coated with cheese were a very old story, but I continually meet people who have never seen or heard of them. They are delightful with a plain lettuce salad, or for afternoon tea, and equally good with fresh or cooked fruit.

The best wafers for the purpose are those which have a slightly salty flavor, either zephyrettes or banquet wafers. Buy them in bulk, as they are much crisper. Use a sharp American cheese and grate it finely. If you have odds and
ends of Roquefort, or Brie, add them to the other. For each two tablespoonsful allow one of creamed butter, rubbing them together, till perfectly smooth. Spread evenly, on the convex surface of the wafers, as they are less likely to break, and set them in a moderate oven to glaze the cheese. Watch them to prevent the least scorching. With ginger ale and olives, they are a good light supper for a card party. Graham wafers can be used in the same way, but require much care in the spreading, as they are so brittle.

**Strawberry Rolls.**

This is an economical way of using strawberries, while they are still expensive. Make some good puff paste and set it away in a cold place, for twenty-four hours. Cut some squares of thin cardboard, measuring six inches each way, and roll them into cylinders, securing them with a few stitches, and butter them carefully.

Roll the paste into a rather thin sheet and cut strips from it, half an inch wide. Begin at one end of a cylinder and wind it smoothly with a strip, wetting the upper edge of each round, so that the next will adhere to it. Keep on until the cylinder is covered. Lay the covered cylinders on a buttered pan, sift sugar over them and bake them in a hot oven, turning them over, when half done. When cold, slip them off the cylinders and fill them with sugared berries. If liked, pass a pitcher of cream with them.

These cases, with a cream filling are part of the winter stock-in-trade of the baker, and could probably be ordered and delivered empty. If the sifting of sugar is omitted, they can be used with a filling of meat or fish, for an entree, or for lunch. It is less trouble to make them than would seem from the description.

* * *

A cake baked in a ring mould is a pretty vehicle for serving a thick preserve of any sort. A judicious soaking of the cake in rum and an encircling layer of whipped cream gives a really elegant dessert. Failing the ring mould, a small pan, inside a larger one answers very well.

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**Mr. Builder**

Did you ever figure out how much time your carpenter consumed in putting up screens the "Old way" with hinges, spring butts or slides? It may be a small item, but as the screening of your house is about the last thing to be done, you are usually ready to "economize on screens."

**Use Rowland Hangers**

and save a great deal of the old method expense — You can still come within your "appropriation for screens" and have not economized at the Expense of Quality. **Rowlands Always give satisfaction.** $1.00 buys complete fixtures for 12 screens, of any Hardware or Builders supply dealer, or

**THE ROWLAND MANUFACTURING CO.**

1541 Champa St. Denver, Colorado.
Q. (A) The foundation of my house is cement blocks. I find water will ooze through between the blocks, also between the last course of brick of stairway leading out to the yard. As the floor of cellar is cemented and tight, the dampness must come through the wall. Can you suggest a remedy?

My builder claims that all new cellars leak until the ground has settled, but this does not satisfy me, as I do not wish to wait a year before I have a dry cellar.

(B) I have a problem to solve on wall tinting. I want a wall covering that will stand washing with soap and water, but not oil paint. Walls are lard finish.

Ans.—Your cement block house can certainly be made impervious to moisture. We will be glad to refer you to a preparation of which one coat is all that will be necessary for you to use. It is applied with a brush and any painter can put it on. Houses that are plastered on the outside can also be made impervious to moisture. We think it would require about 25 gallons to waterproof your house and cellar, and this would cost you about $12.00. As to tinting your walls; you can paint right over this waterproofing with any tint you want.

C. F. G., Rochester, N. Y.—

Question.—As a subscriber, we ask if you will please answer the following questions:

Specifications for building several small frame houses, costing about $2,000 each, say, “Roofs to be covered with shingle lath about four inches wide and two inches apart.”

Another part of the specifications say, “Slate: Cover roofs with slate of a quality and in a manner satisfactory to the owner.”

The roofs were put on as first above specified, and no paper or felt was used. The roofs leak some rain, and considerable snow, also the cold comes in so it is hard to keep the houses warm.

Did you ever hear of a slate house roof being put on in this manner?

Can the owner, under the above specifications, compel the contractor to relay the roof?

Ans.—If your roof has leaked from the time it was laid, it ought to be placed in good repair by the contractor, for the slate if properly laid will not leak when new. It is very hard, however, to keep a slate roof permanently in good condition in a cold climate, especially if the pitch of the roof is not steep. For this reason a comparatively water-tight patent roof of some kind ought to be placed under it. As your specifications do not call for this, you can not of course expect your contractor to make good the omission, unless you pay him for it. If your specifications had read that this roof should be laid “In the best manner known to the trade,” or had a detailed description been made of how it should be laid, you could hold your contractor to it, but it states plainly that the roof was to be laid in a “manner satisfactory to the owner,” and as you did not stop him from laying the roof as he did, it is assumed that the “manner” was satisfactory to you. Your contractor should have advised you differently, however.

MY AMBITION—TO FILL AMERICA WITH WELL PLANNED BEAUTIFUL HOMES

JUST A WORD ABOUT PLANS

Send me your ideas of a home, with $2.00, and I will send you the first and second floor plans and a beautiful perspective, water color sketch of a home, planned and designed to suit your requirements in every particular. The building of a home is a very important matter and many people like to see what their ideas would look like if built, before having complete plans prepared. The $2.00 for sketch will be applied upon the ultimate cost of the working drawings or refunded if sketch is not satisfactory. SEND FOR MY NEW BOOK—HOME BUILDING PLANS AND PROBLEMS.

ARTHUR C. CLAUSEN, ARCHITECT, MINNEAPOLIS
STUDIO 405-7-9 LUMBER EXCHANGE

MY WATER COLOR SKETCH OFFER.

Send me your ideas of a home, with $2.00, and I will send you the first and second floor plans and a beautiful perspective, water color sketch of a home, planned and designed to suit your requirements in every particular. The building of a home is a very important matter and many people like to see what their ideas would look like if built, before having complete plans prepared. The $2.00 for sketch will be applied upon the ultimate cost of the working drawings or refunded if sketch is not satisfactory. SEND FOR MY NEW BOOK—HOME BUILDING PLANS AND PROBLEMS.

Price, $2.00. It contains, besides 20 designs for beautiful homes, extensive articles solving all the problems that confront the home builder and many designs for fireplaces, stairways, entrances, windows, pantry and kitchen arrangements, etc. Write to me. I will answer all questions in regard to the proper designing and planning of homes.
AW March Winds—driving rains and chilling blasts of Early Spring, will not disturb the health and comfort of the folks in this home, for—

The Inside Walls are as sturdy a protection as the outside walls. They are built of rock—Rock Gypsum, crushed and calcined into plastering material, and re-crystalized into rock when mixed with water and applied by the plasterer.

U. S. G. Hard Plasters

Made from Rock Gypsum

protect the home from the frequent colds, sicknesses and general discomforts of damp, drafty walls. For the children's sake, if not your own, keep out the "demon of dampness."

No intelligent Home Builder can afford the Extravagance of cheaply plastered walls—they mean Doctor Bills, endless repair expense, ruined decorations, fuel waste. Taboo lime plastering!

See that your Architect specifies and your Contractor uses U. S. G. Hard Plasters and make your home cozy and snug with perfect interior walls—hard, dry, non-absorbent, non-conducting, strong and enduring. Even fires and floodings will not destroy them.

A good start deserves a good finish—see that the final plaster coat is of

"Universal" The Finish Without Lime

and you will have the finest, truest, smoothest, hardest and most enduring Decorating Surface your Decorator ever worked upon.

Interesting, illustrated literature, explaining in plain, simple language, the relation between perfect plastering and Domestic Comfort, Health and Economy—yours for the asking, by addressing our nearest office.

United States Gypsum Company

Chicago Cleveland Minneapolis
To Have a Handsome Home—How to Do It
and How Not to Do It

Read this from a recent letter:

"I tried all the different kinds of varnish stains, and oil stains with varnish finish, but the effect was muddy.

I tried several wood stains and found that they would rub off unless I gave them a wax finish and then they would show light and dark spots.

Then I used your Dye finishing with your Prepared Wax and was surprised and delighted with the results. All the beauty of the wood was brought out and your Wax gave it a beautiful soft tone, so different from the harsh effect varnish gives."

And now read this from a recent number of the American Carpenter and Builder:

"Although great claims are made by varnish manufacturers for their floor varnishes, it may be truthfully said that none of them will stand the hard usage of walking on them without sooner or later marring white. As was very pertinently said by a varnish manufacturer, speaking on the subject of varnished floors at a master painters' convention, 'floor varnishes are not made to be walked on.'"

These matters are easily explained—

Stain and varnish, shellac, hard oil and similar preparations cannot sink into the grain of wood because they are too "thick" to penetrate the pores—so the wood is simply stained over or coated—thus the coating, instead of bringing out the beauty of the wood in the grain, hides it and makes it look flat and muddy—and, as the coating is only on the surface, every scratch and scrape and blow makes a light spot—the uncolored wood shows through the coating.

Now Johnson's Wood Dyes are dyes—not mere stains.

Johnson's Wood Dyes do not coat over the wood—they color it (to any desired shade) because they are so prepared that they penetrate the pores—thus they develop and accentuate the beautiful grain of the wood.

That is why they give an unequalled richness and depth of permanent tone and a perfectly even texture which will not rub off.

Any one can secure the best results with Johnson's Wood Dyes and you can easily keep all your woodwork, furniture and floors in perfect condition by applying Johnson's Prepared Wax with a cloth right over the Dye or any other finish.

Johnson's Prepared Wax gives a rich, subdued, lustrous and enduring surface which cannot be produced by any other finish, and, unlike shellac, hard oil or varnish, it does not show heel marks or scratches—"it is made to be walked on"—and "sat on"—rubbing only gives it a finer polish.

Johnson's Wood Finishes are not new preparations.

We studied them out years ago in order to be able to preserve and bring out the natural beauty of the fine hardwood flooring which we make and ship all over the world. You see we had an object in seeking out the very best finish for our wood that could possibly be made.

Now you can profit by our self-interest.

For your name and address on a postal we will send you, with our compliments, a very handsome and interesting 48-page illustrated book, "The Proper Treatment for Floors, Woodwork and Furniture."

This book tells you in detail the easiest and most economical way to have a handsome home. You can do all the work yourself and the expense is trifling. Just send us your name and address on a postal now.

S. C. JOHNSON & SON, Station K5 Racine, Wis.

"The Wood Finishing Authorities."

Johnson's Wood Dyes for the artistic coloring of woods (14 shades), half-pint cans 30 cents, pint cans 50 cents.

Johnson's Prepared Wax, 10 and 25-cent packages and large size cans. Sold by all dealers in paint.
Warm Air Furnace Heating, Ventilating

Warm air heating has made rapid strides in the year 1907, and will likely hold its own or advance in 1908.

Whether it is being sustained in the better class of houses against steam and hot water, may be questioned. To prevent inroads from this source and to elevate warm air heating to a higher level, that it may be selected for the very best class of buildings, the dealer needs to speedily get away from thinking he knows, to knowing by rule, that is, by a fixed rule or system that never fails or changes and is adapted to the varying conditions of different buildings.

The following is copied from an article published in one of the leading trade papers:

“There is seemingly little first-class residence heating done with warm air furnaces. The reason for this is that the furnace heating has been ruled out, from the fact that furnaces of too small capacity have been used and that improper, slipshod, and unintelligent installation has prevailed. Where warm air furnaces have been badly installed, hot water and steam are taking the lead, and where hot air furnaces have been put in correctly and of the right capacity, etc., furnaces are taking the lead.”

The correctness of this statement is being constantly backed up by actual facts.

The writer recently had occasion to call at a building used as a day nursery. The house was cold and uncomfortable, and some thirty little babies and children were suffering. The furnace in use appeared to be large enough, but the pipes were badly arranged, and the cold air taken from the south, and poorly connected to the base of the heater. The smoke pipe had been pushed up into the square opening of the chimney, with no mortar around it, thus cutting off the draft almost entirely. The owners of this building will quickly become advocates of steam or hot water.

In another dwelling house, I found a furnace of the proper size, but located badly, the pipes all out of proportion, the cold air taken in one side of the heater, through an opening 10 in. by 15 in. (less than one-half of what it should have been) and the cold air duct connected to a tight enclosure under an extension of the dining room, into which no outside air could be admitted. The owner of this house regards warm air heating as a failure.

In another fine dwelling, exposed to the north and west, I found a furnace at least two sizes too small, and all the hot air outlets of the same dimensions with no cold air connection at all. The owner of this house says “give me hot water heat.”

The dealer constantly asks, how can I increase my furnace trade and make a leader of warm air heating, and how can the manufacturer assist me to accomplish this?

The answer to this would be, that the one chief way is to lay out and install your heating jobs by rule and follow a system and adhere to it strictly. Hot water and steam heating engineers do this; why should not warm air heating engineers do likewise?

Imagine the effect on the owner when you go to his house, measure the rooms, also note the glass and wall exposure in square feet regarding the points of compass, etc., and then hand to him an estimate with a plan showing size of furnace, dimensions of heat pipes, flues, registers, cold air duct, etc. This would mean at once a good price for the job and a large profit, which would insure a satisfactory plant, both to yourself and customer.

This becomes a constant advertisement for you, and encourages you to go and hustle for other good jobs.—A. J. Wright in Sheet Metal Journal.

* * * *

Impure Air in Dwelling Houses.

The fact that when a house is to all intents and purposes closed up and the interior temperature is the same as that outside the building, an interchange of air can take place between different compartments of the house, renders it incumbent upon the architect and builder to give special attention to the cellar and foundation construction. Analyses of air in a house under the conditions named have shown that the air of the first story is 7 to 8 per cent cellar air, and that the air of the second story is 3 to 4 per cent...
cellar air. When contamination to this extent can take place without accelerating conditions it is reasonable to suppose that with the chimney-like action possessed by the warm interior in winter a greater amount of the cellar atmosphere can be expected in the floors above. Figures recently published affirm this assumption, the first floor in the heated house showing 40 per cent cellar air and the second floor 25 to 30 per cent. Granting the tendency that must exist in the average house the question is, does the cellar contaminate? If it has been built with impervious walls and bottom it cannot be a serious menace through transmission from the surrounding earth, but from the condition in which it is kept. Similarly, if the cellar is in direct communication with the outer air, it is not likely to be regarded as unwholesome, for the free admission of the atmospheric pressure serves to destroy the suction or chimney action of the house on the cellar, subjecting the walls and the earth to the same pressure as that out of doors. The chance of the emission from the walls into the cellar of gases or organic matter is then minimized, but the importance of having well built walls and bottom, particularly if located in made ground is obvious. Besides the hydrostatic pressure to which the cellar walls and bottom may be subject, due to the higher earth surrounding, which would be a fertile source of contamination with the presence of much dampness, there is also the tendency for gases to be forced in by the atmospheric pressure transmitted to a greater extent than generally realized, through the earth and through the cellar walls into the cellar; this is so, provided the cellar atmosphere is at slightly less pressure than the atmosphere, which would be the case in a reasonably tight house in the heating season. Depending on the character of the soil earth has been found to take up different amounts of air, according as the atmospheric pressure, recorded by the barometer, is greater or less. The earth is the seat of bacterial changes on a large scale, and the possibilities of the exudation through cellar walls of gases and organic matter, leading to such diseases as malaria, should not be ridiculed. The tendency of the times in building lines is
Splinters and Shavings—Continued

close attention to the soil of the site and the proper preparation of the foundation walls.—Carpentry and Building.

* * *

Painting and Decorating the Bathroom.

The plaster walls of a bathroom should be painted with oil paints on account of the possibility of their surface getting splashed with water from the fixtures, and for the advantage of being able to wash the walls when required.

The rooms where the walls show dirt should be thoroughly brushed with a broom, and if this does not clean them they should be washed with a solution of soda water. This solution should, however, be washed off with clean water before it has had an opportunity to thoroughly dry. After the washing of the walls it is well to let them dry for at least twelve hours. When dry give them a thin coat of fresh slacked lime with a fairly good amount of alum mixed with it. The alum to work properly should be dissolved in hot water.

Before applying the size coating, care should be taken not to allow it to come in contact with the lime wash until the lime wash is thoroughly dry, as the lime will immediately destroy the strength of the size. The size coating should be made of whitening and of a good glue size.

If there are stains which are impossible to take out, a thin shellac varnish may be applied previous to putting on the finishing coats of paint.

The walls which for the fire time are to receive their paint should have, for the first coat, boiler oil, or a coat of drying paint, and then a thin coat of size. This will prevent the showing of any sponge spots that there might be in the wall. After this, one coat of paint may be applied, and then when this coat is dry we can apply our finishing coat.—Building Management.

* * *

Asbestos Shingles.

Shingles are now made under a patented process from asbestos fiber and Portland cement. Owing to the enormous pressure under which shingles are manufactured, it is said that they absorb, when fresh, only about 5 per cent of their
No matter how the windows are raised or lowered, full-length Window Screens hung with GOSSETT HINGES keep out all the flies. Put in place or replaced with storm windows in an instant. No tools or ladder needed, even on upper stories. Circular free sample set for 5c to pay postage.

KEES MFG. CO., Box 326, Beatrice, Nebr.

A NEW CONCRETE FACE—

Cement products in blocks with natural rock face applied with compressed air is an entirely new and unique process. Also many other varieties are possible such as Marble facing, imitation of Mexican Onyx. Both very beautiful to the eye. These products are made on the medium Hollow Block machine and are absolutely waterproof. Machines and process for sale reasonably by the undersigned, who is also agent for the celebrated Coltrin Mixer. Homebuilders, Architects and Block Makers will be much interested. Write for information or call and examine my work.

NELS ERIKSON, Mgr.
MEDIUM HOLLOW BLOCK MACHINE CO.,
406 Boston Block, Minneapolis, Minn.

Do You Want The Best?
We make a Specialty of Hot Air, Combination, Hot Water HEATING
Space here is too valuable to tell you why. Write us for an estimate and catalogue. We have cheaper furnaces if you desire them.

THE PRINCE ROYAL FURNACE is particularly suited for residences.
HART & CROUSE CO., Utica, N. Y.
80 Lake St., CHICAGO.
235 Water St., N. Y.

AND BY THE
SAXTON HEATING CO.
405 Sixth Avenue South MINNEAPOLIS, MINN.

Splinters and Shavings—Continued

weight of water; and when exposed to the atmosphere for a year or two that hydration and subsequent crystallization convert them into impermeable roof coverings.

* * * *

Fashions.

There is shortly to be inaugurated a condition which I am satisfied will be of vital interest and of lasting benefit to us, that is the creation of a fashion style of colors for exterior house painting. The question has long been a mooted one and it simply required but a beginning to prove its acceptance by the householder and approval of the architect. As you with myself very well know that the selection of colors for exterior residential painting in 90 per cent of the cases is made by the ladies. A woman's first question prompted by her experience where colors enter into other matters is "What are the prevailing style of colors?" She has been educated up to expect and look for well defined lines in most all matters, as she does in the color, cut and shape of her personal adornments (even her good man knows what color and cut means), as well as in countless other matters in which she is brought into contact. you have nothing to offer today except probably a card of promiscuous colors which means nothing to her. You probably will convey the information that you painted Brown's house red, Green's house blue or Black's house white. She has no interest in that; show her something that means something, a style, a fashion adopted, and these requirements are not confined to class or conditions. What more persuasive argument could you or I present than a combination suitable for almost all styles of architecture and this the individual selection of experienced master painters? I am satisfied that a proper bringing of this matter before the people, a getting away from the old beaten path, will result in great good to the master painter, in fact a revolution.

The chief colors adopted, and their associated colors, should appeal to all. We have prevailing styles of architecture, why not prevailing styles in coloring? What greater embellishment is there than the harmonious grouping of colors, what greater incentive for their use than the
Splinters and Shavings—Continued

knowledge that certain combinations are the fashionable ones for making of the house beautiful—Canadian Painter.

Don't let that new tin roof get yellow and red before you paint it. When rust begins to eat, paint is not going to stop its appetite.

* * *

Paint Problems of the Builder.

An old time painter, a master of his craft, now employed as decorator in a passenger car shop, recently told this story: “Several years ago a friend came to me and asked me what base colors to use to secure a certain shade of pea green. I told him as near as I could, but he asked me as a special favor, if I would come up to the house he was painting and mix the color for him. He said he had been trying for four days to make it, but could not get what he wanted. I went up there and he had half a barrel of non-descript color. I mixed up what he wanted in the right shade and he told me he had started out with a quart and kept adding color and body until he had half a barrel. He had no more use for this mixture than a wagon has for a fifth wheel. This fellow was a pretty good painter, but he never could make the color he wanted and it was a practical impossibility for him to match the color some one else had made.

The old master workmen do not like to use mixed paints, because their use makes it impossible for them to utilize the knowledge acquired through long years of experience. This gentleman has advocated the use of mixed paint by the present “half baked painters” because he thought that only through their use could they finish a building in the colors selected by the owner.—American Lumberman.

* * *

The Benefit of Manual Training.

The value and importance of manual training in the public schools and also of the trade schools in general has occasioned much discussion and considerable controversy. Many approve and few disapprove. Some time ago ago the National Manufacturers’ Association appointed a committee on industrial education which made a thorough investigation of the subject and presented a report deal-

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Splinters and Shavings—Continued

ing with technical, manual and industrial training. Therein it was pointed out that 80 per cent of the public school pupils do not enter the high school and many of these drop out before the course is finished. Statistics show that out of sixteen and a quarter million pupils in various schools of the country only 165,000 are in colleges, about one in a hundred. The children of the poorer people are less likely to enjoy the advantages of a college education than those of parents whose means are large or at least moderate. It is the welfare of this class which is worth while to take into account very earnestly and thoughtfully.

The committee of the National Manufacturers’ Association declared in so many words that “it is the modern trade school and that alone which will make our American boys skilled artisans, educated mechanics and hustling, adaptable, willing workmen capable of filling any position.” The trade school supplants and supersedes the old apprentice system which was long, tedious and attended by poor pay, though its graduates were bound to have a very thorough knowledge of the craft they had studied. The modern trade school is a shorter cut more in accord with latterday haste along all lines of activity. The committee also commended manual training features in the public schools very thoroughly and said that much good is done annually by this feature of the curriculum.

In the popular mind manual training in the public schools should not be confused with manual training schools or trade schools, which are separate. In the latter Germany has indulged to a large extent, paying a great deal of attention to its trade and technical schools, which in a large measure may be held responsible for that country’s industrial success in various manufacturing industries. A trade school is a good thing in any city and now and then wealthy men are taking that view of it and providing the funds with which they can be built and conducted.
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BOOK REVIEW.

A modest, unpretending novel, unheralded by any blare of extravagant advertising, is Clara E. Laughlin's "Felicity—the Making of a Star." Yet it is one of the season's books that it is really worth while to read, and that one is lucky to have by them to while away a rainy day or a wearisome journey.

It is in fact a book one may safely stand sponsor for, if run into a corner by that tiresome question—"Tell me something good to read.

Felicity—one feels to be almost a misnomer, in spite of its charm, as a name for the girl who is made into a wonderful "star." She is so consumed by loneliness, and that "sitting still by solitary fires, to hear the nations praising them far off."

In this passion of loneliness, Felicity marries a gay and debonair gentleman, a player comrade of many years, a weak but lovable character who at the last—in his own broken words "makes square." by giving his life for Felicity's, receiving in his own heart the pistol shot meant for hers. To our mind, the story from this point loses in interest and dramatic power, by the author's effort to give Felicity in a second marriage the ordinary happiness of wifehood and motherhood. Logically carried out, such a temperament as Felicity's, of such intense emotional life and great power, must be content with the rewards that come to genius.

But Felicity is a wonderful conception. She is nothing whatever like our conception of an actress. Loving, innocent, pathetic, she hardly mixes with the footlights and our notions of a great star. There is in fact nothing of the flavor of the stage in these pages, except the sure touch, and the knowledge of the insider, with which the life behind the scenes is drawn. Moreover, there is a keen comprehension and a rich, kindly philosophy of life pervading the book which would make it above the average even if Felicity's sweet, tender love story did not win our hearts.


Miss Ellen Glasgow's latest novel, "The Ancient Law," has all the fire and passion and compelling force which characterize this gifted writer, and also her de-
Glimpses of Books—Continued

fects of incoherent and disjointed character grouping, undeveloped plot and unsatisfactory climax. One reads the successive chapters with a feeling of getting no further toward any particular goal. One feels that the author is fervent and brilliant, rather than large and well poised. What is “The Ancient Law” does not clearly appear. We suppose it to be that “Whoso loseth his life for my sake, he it is that findeth it.” But one finds a lack of clean-cut realism in the various scenes and characters.

The principal character of the story is Daniel Ordway, a man who in the prime of life goes to prison for five years. His struggle for a new life upon his release, and the triumph of his strong character over a relentless combination of adverse circumstances, is told with great sympathy and force, but he is hardly a satisfactory creation. It is hard to reconcile his strength with his sudden impulses and his too great meekness. In the course of the story Miss Glasgow depicts several phases of Virginian life with the accuracy and easy familiarity of one who has been there. The chief women of the book are strongly contrasted characters: the one, Emily, refreshing as a cool draught, strong and sweet; the other, Alice, undisciplined, self-willed, a beautiful animal only. In spite of its defects of style and construction, it is a story of absorbing interest. Doubleday, Page & Co. Pubs., New York. Price, $1.50.

Mr. Mason’s latest book, “The Broken Road,” is so good a story that it will surely increase the popularity won by his “Running Water,” “Four Feathers,” etc. It is a story of England and India and the motif of the story is an argument against the education of the sons of the native Indian princes in England. The opening chapter sets forth squarely this view, which is worked out in the incidents of the book. The young prince, who is made the subject of the argument, is lovable and delightful, and far nobler than the English cads who in the end ruined him. It is not pleasant to find that young and beautiful and nobly born English women were the worst and most dangerous part of his ill-chosen environment.

The scene setting, both English and Indian, is delightful and satisfying in its easy realism. From the first paragraph the reader feels the master of his art and of his material. All the charm of the
Glimpses of Books—Continued

Orient is here without any of its cheap fakir and magic business and without the wearisome repetition of native words and phrases that fret the reader in Kipling's East Indian tales. Perhaps for the very reason that the question involved is rather far away from us and does not tease us, like the more insistent problem novels of the time, one finds this admirably written book restful as well as absorbing and quite above the average story of the year. Chas. Scribners' Sons Pub., New York City. Price, $1.50.

The Iron Heel.

That prolific and virile writer, Jack London, has just published a new novel, "The Iron Heel," which is, if possible, even more lurid than his "War of the Classes." For Mr. London has forsaken his specialty, his stories of wild northern nature and life, which he paints with such strong, sweeping strokes, and in which his craftsmanship is truly superb. He has taken up socialism, and out-Herod's Herod at the game. "The Iron Heel" is modeled on the idea of an older but far milder socialistic novel, "Looking Backward." It projects the teller of the tale forward two thousand years from our era—to Nov. 27, 419 B. O. M. From this distance the writer describes the events—as he anticipates them—of the next twenty years of our century, through the medium of an imaginary M. S. written by one of the actors in the drama and lost for seven centuries. Foot-notes are profusely interpolated, explaining the meaning of words and terms in common use in our times, such as "patent medicines," "Wall St.," "prize fight," etc.

"The Iron Heel" is the name given to a terrible oligarchy of the money power, which ruled mankind with frightful and crushing terrorism for seven hundred years. The M. S. describes the First Revolt from this black and bloody rule and its failure; also the world-wide preparations for the Second Revolt, which was also to fail, with many to follow, "all drowned in seas of blood."

With all its extravagance and absurdities, its twisting of facts and perversion of language, this is a book to make one think. True, it is also a dangerous book, for it describes a worse than the French Revolution, than the Spanish Inquisition, and justifies it on the part of the socialists, as the only way. They must meet
Glimpses of Books—Continued

terror and blood with blood and terror. Yes, it is a dangerous book; for it will inflame unreasoning minds and fan already violent passions. Yet no one can read it without a shudder of fear that such a social evolution is possible. Nay, that the trend of centralization of power now so menacing, if not checked, leads logically to such possibilities. It is a pity that the objectionable anarchism of the book could not be eliminated, and its vigor, clearness and impressiveness count for their full value and stir thinking men from a dangerous apathy. The McMillan Co., New York, Pubs. Price, $1.50.

"The Flower Garden—A Handbook of Practical Garden Lore"—does not belie its title. Miss Ida Bennett the author is a practical and enthusiastic gardner who is well known as a contributor of garden lore to the various publications making a feature of nature subjects. This book is a gathering together of many experiences and much plant wisdom in a plain and practical style. The very full and complete index alphabetically arranged at the close of the volume, adds greatly to its usefulness.

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A Plea for the Out Door Living Room.

By Kate Randall.

On these strenuous days one cannot say too much about the simple life, or its equivalent, "The Life Out-of-Doors." It is largely habit and we should hear less of nervous prostration if the habit were more assiduously cultivated. Here in the far west there is no reason why one cannot spend 300 days of the year, and nights, too, in the open air. When we build, if we are wise, we will plan, first of all, for generous porches, both above and below. If it is necessary to economize, let the front entrance be simple, merely an entrance, but at the back, or side, away from the street and chance callers, build a beautiful large "out-of-door living room." Make it the center of the home life, the place to rest and read, and have one's tea and coffee, too. I never fully appreciated how few good outside living rooms there were, until I began to look about for illustrations. I found no end of beautiful front porches, broad and deep, and sumptuously furnished, but they were seldom occupied. However luxurious a front porch may be it naturally belongs to the public and the family will never enjoy it, but the privacy of a garden porch is delightful.

I have in mind a simple bungalow for
two, where no maid is kept, and where one steps from the small back hall into a large, brick-paved living room. It is shaded with flowering vines and here, through all the long summer days, the breakfast and tea table is habitually set. It is but a step from the butler’s pantry and the kitchen, and there is no added work. Serving is really much more simple in this vine-covered living room. In another home, the porch is reached from the dining room, a serving table is placed in front of a large window, which is raised when one wishes to serve on the porch. A door from the butler’s pantry would be a most convenient feature, and in this case, very easily arranged. One beautiful house has the porch across the back, pergola in effect. It opens into the hall as well as into the dining room. This is practically a new house and the vines growing, so one can get a good idea of the construction. Japanese awnings are hung on the west to be lowered in the late afternoon. From the broad eaves of the
bungalow in our illustration, iron rods are arched to the railing. These support awnings which may be changed to suit the day or hour. The garden lies close about us as we take our tea and the feet of the world is far away.

Our Spanish predecessors in this land of sunshine understood to the full, the science of healthful and restful living, and they built more artistic and suitable homes for this climate. One of their favorite plans pied by the court in the former house is here high in the air, but has been most ingeniously utilized by building a large, deep porch between the two wings. Glass doors open into all the rooms and the result is a most picturesque living room up in the tree tops.

After many experiments we have found that climbing heliotrope is almost certain to banish the pest of flies and we never see one on our tea table. It is to be hoped our

had wide tile paved porches on three sides of an open back, or inner court. Vines, shrubs, flowers and falling water filled the court and there were vistas of snow capped peaks through the arches of the open end. We may borrow this charming feature for the simplest bungalow. The projecting wings, of bed rooms on one side and the kitchen on the other, fronting the court. One I remember has a pergola built across the open end. This is covered with wisteria and climbing roses. The little court is partially paved with red brick, but there is room for some choice shrubs and flowers. The kitchen windows, daintily curtained, are no drawback, for the kitchen door opens on the opposite side of the room, away from the court. One such court has a most beautiful, great live oak tree in the center, the tables and chairs under its sheltering arms.

Another bungalow of this type is built on a lot that falls off very rapidly in the rear, necessitating a high basement under the kitchen and bed rooms. The space occu-

eastern friends may discover as sweet an antidote.

Upper porches make ideal sleeping rooms. They may be enclosed with netting, but curtains or awnings are preferable, for even the thinnest of netting seems to shut out a certain freshness and charm. When there is no roof over the upper porch, many set up a square walled tent of canvas and fit it up as a sleeping room. In either case, a warm, inside dressing room makes the arrangement perfect. After one has slept in the open air but a very short time, the most perfectly ventilated bed room seems close. A large sheet of canvas spread over the bed, both during the day and night, protects it completely from dampness.

Rattan furniture is in every way the best for outside sitting rooms, most decorative, as well as durable. It comes in all styles and prices. Couches, chairs and very pretty tea tables. A couch you must certainly have, well cushioned with some durable stuff. The real imported turkey red twilled cotton makes most successful cushions.
There are, however, other Oriental goods that come in attractive figured patterns, for those who do not fancy the brighter turkery-red. They endure the sunshine better than any domestic goods in my experience. The real Canton blue and white china, is the ideal ware for porch service. Still if that is not to be found, there are pretty things in the gay Japanese china. They have almost too much color for the dining room, but suit the porch table exactly. For the floor there is nothing equals the Navajo Indian blankets. You will find all sizes and every combinations of gray, black, white and scarlet. If something cheaper is wanted Crex rugs are very good. They, too, come in all sizes. The soft, natural color of the grass harmonizes well with rattan furniture and any cushions.

When it is necessary to have the porch or pergola entirely detached from the house, it may be made a thing of joy in the garden—but this takes us into the realm of pergolas, a fruitful subject by itself.

Whichever you build, be it porch or pergola, cover it with sweet flowering vines, fill it with easy chairs and hammocks, bring here your books and your work, and it is certain to be charming.
Architectural Triumphs of Virginia Cavaliers.

“SHIRLEY”

A French Colonial Manor House of the Seventeenth Century.

By Edith Dabney.

In the year 1650, a dwelling house was erected on the northern shore of James River, Virginia, by one Edward Hill, who had acquired a vast tract of land in that locality which he called by the name of Shirley.

This early building of rather rude construction was remodelled in 1770 by Col. Hill’s grandson, Charles Carter, and since then has been in the possession of the Carter family.

The great, square mansion, now one of the most notable in the country, is built of brick laid of course in Flemish bond, the contrast to the white wood work and dark green blinds proving a happy one. The roof which in 1650 was of the gambrel style, is now a high mansard with a row of four dormer windows on either side, while five dormers light both fronts. Equi-distant from the outer edges two tall chimneys rise, a curious wooden pineapple decorating the apex of the roof.

Double decker porches extend through

"SHIRLEY."

the second story on the two fronts of the house, all being supported on Tuscan columns, while the upper part is enclosed in a railing of simple design. The floors of the lower porticos are flagstone, the steps leading up to them being fully thirty feet, run-
very finest examples in the country, illustrating the artistic sense of the designer, and thoroughness of the Colonial workman. The stairs, balustrade and doors are of solid mahogany, dark with age.

Back of the hall is the square dining room 20x20 feet. Here again are paneled walls and carved cornices, the pediments of the doorways repeating the same ornamentation. The mahogany furniture is of the Colonial and Empire periods, and the creamy walls are enlivened by old portraits from the hands of famous painters.

The drawing room, 20x25 feet, with the dining room, fills out the river front, and is entered from the latter room through a doorway, the heavily moulded casement of which is surmounted by a carved pediment,
"The pineapple design is everywhere followed in this room."

The centerpiece being a pineapple. In fact the pineapple design is everywhere followed in this room, signifying the unbounded hospitality extended to stranger and friend alike. It is seen in the carving about the very beautiful fireplace, and is the prime motif in the hand work of the paneled mantel. The walls here, too, are unadorned save by family portraits, and the hard wood floor has well withstood centuries of use and abuse.

Opening out of the drawing room is the morning room 20x20 feet, where another fine old mantel charms the eye.

In the second story a wide hall cuts the building in two and forms the entrance to the balconies on either front. Three sleeping and one hall room complete this floor, the third being its duplicate in regard to bed chambers.

The kitchen and servants' quarters are in separate buildings.

Though not more than two hundred yards from the river, the manor house can only be glimpsed from there owing to the magnificent trees which guard it so closely on all sides.

The garden laid out in early 1800, is in the southern part of the grounds, and is remarkable for the great variety of shrubs and flowers that have been carefully watched over and tended upwards of a hundred years. Box hedged walks lead through the gardens to quaint old arbors, the trysting places for the beaux and belles of long ago. Shirley's box hedges are the pride of the estate growing to a marvellous height and compactness where they enclose the beautiful grounds.

One of the most appealing characteristics of these old homesteads is that since their beginning they have remained in the possession of the direct line of one family, a significant fact, proving them to retain the same local attachment of the generations that succeed generation as they did of those by whose hands they were made. No modern mansion boasts such true affection; the desire for constant change is too insistent. Happily for they that own them, the ancient manor houses were built to produce results, and in each brick and every nail that they contain are forever intermingled the beautiful traditions and honored legends of the history of America.

And though fast approaching the three hundredth anniversary, the Shirley mansion and acres are far more perfect in detail than many rich modern estates wherein superfluous adornment has been allowed to take the place of real, intrinsic worth.
Cottage Kitchen Ideas.

By Katherine Adams Keith.

In fully two-thirds of the homes of today, the housemother performs all or nearly all of the necessary housework, with what assistance the growing sons and daughters can give her. The servant question has been discussed pro and con without any solution being reached and sensible people of moderate means have resolutely put it aside and are facing the fact of simple living in small houses which will not too far tax the strength of its inmates to care for. Cottages are coming to be the rule everywhere, many of them with the rooms all arranged on one floor, and in these the kitchen is receiving most careful attention so that the disagreeable duties necessary may be performed quickly, thoroughly and in pleasant surroundings.

Upon modern kitchen utensils one might write a volume and spend a fortune, but many of the most important conveniences of every day life may be briefly mentioned and perhaps help some housewife who is now considering this part of her new home.

Harmony of color is most restful in the kitchen, not only the harmony of walls and woodwork, but harmony in the pots and pans will be found to detract materially from the general air of disorder into which this room is so easily thrown. We almost never see a kitchen consistently furnished with graniteware of all one color, for the bargain counters, which frequently offer articles of real merit in a mottled green or that bright blue which is an abomination, lure us from the path of harmony and our kitchens are reduced to the nondescript and left over appearance which would have been avoided by a strict adherence to the chaste white with blue bands or the cool gray that was perhaps originally chosen as our color note.

Modern kitchens are not large, and every inch of their wall space is most carefully planned. The pantry, except for farm houses, is a rarity as the generous sized cupboards, covering perhaps one whole side of the room, give ample space and are within a few steps of where their contents are most frequently need-
dirt and grease as if it were kindred. Painted floors may be wiped up and an occasional scrubbing will keep them clean, but they are usually of such soft wood as to sliver unpleasantly after a few scrubbings and the paint must be frequently renewed. The linoleum floor is most attractive in appearance and is very durable. To be sure it is quickly soiled, but is as quickly and easily mopped up. The objection of cracks where the pieces go together may be overcome by the use of cement made for the purpose. The linoleum is fully as expensive as the hardwood floor, but where labor saving is the consideration is way in advance of it.

A high stool seems quite sufficient in the line of separate furniture and is most grateful to the tired back of the housemother who has just a few more pieces of ironing to finish, or must watch carefully the slow cooking of some article and feels “ready to drop.” It may even be used while the dish washing is in process after all things are in readiness. The kitchen rocker, so often recommended, does not appeal to me as it is too suggestive of the leisure which I prefer to take elsewhere.

The kitchen windows seem best uncurtained, the shade alone answering every purpose unless the house is set so close to the street as to invite unpleasant scrutiny. The room should present a cool and open appearance and present as few surfaces as possible for the lodging of the unavoidable grease and dust. Walls should be washable and may be painted or covered with oil cloth or enameled paper.

My ideal of a kitchen is in dark blue and white, with linoleum covered floor, hooded gas range, built-in cupboards, central work table and a generous supply of enameled ware, all of one color. I should want it as small as possible to accommodate the necessary furniture and give a convenient passage around the table. It is provided with a few hooks, on the back of a door perhaps, to take care of a garden hat and wrap and kitchen apron. It gives access to a generous sized back porch overlooking the garden where one may come to cool off a minute and gather inspiration and encouragement from the calm of the flowers; and is provided with a good sized supply closet having at least a small window and ample shelving.

This is so far an ideal only, but “hope springs eternal” and in the next house which we are all sure will be an improvement over the present, should have at least a bowing acquaintance with the ideal.
Hardy Perennials.

Ida D. Bennett.

ONE welcomes the awakening interest in that which is permanent, which makes for the garden of the future as well as of to-day. The old-fashioned, hardy garden is proving itself not a passing fad but an expression of one’s desire to live in and with the garden for many summers to come; this makes for the hereditary roof tree and the permanent home. Such a garden lives in the memory of the children after they have left the home-nest and established nests of their own old cinnamon rose, the little button roses and the York and Lancaster roses having almost entirely disappeared from the modern garden.

Many of the old-fashioned flowers are valued for their sentiment, but there are many which are strikingly effective when properly used; among these may be cited such tall-growers as the hollyhocks, the canterbury bell or campanula-pyramidalis, the foxgloves and the tall growing larkspur.

Nothing exceeds in scenic effect a fine clump or long row of hollyhocks either single or double. The latter, while more effective at close range, cannot compete with the single forms when seen from a distance. For best effect they should be planted in mixed colors and need no other background than the lawn and sky against which they silhouette finely. A clump of dark red hollyhocks in the angle of a gray stone wall is more beautiful than any carving in stone and a clump of soft pink and white against a green wall is exquisite. Their culture is so simple as to need little description, the only point of importance being that of win-

PLATYCODO—A HARDY PERENNIAL.
ter protection; the plants must stand high and dry and be protected from wet about the crown of leaves, which they carry through the winter; evergreen boughs form the best protection or a loose box without ends may be turned over them and loosely packed with leaves, but these leaves must be kept dry or they will cause decay of the crown of the plant.

Requiring practically the same treatment, the digitalis or foxglove is equally effective and should be planted in long rows for best results. It is not as tall a grower as the hollyhock, but is so free a bloomer that it makes an equally fine display and is much less common. So too, the bell campanula which sends aloft tall stems of bell-shaped flowers in white and in blue is attractive wherever a tall flower can be used and the flowers are valuable for cutting and for design work in flowers.

The tall-growing larkspur is very effective when grown in masses and is fine for banking beneath a porch or terrace or along the foundations of a house. Its flowers are useful for cutting and it produces some fine shades of blue. Grown from seed there will be much variation in color and as soon as the plants bloom so that they can be compared, all but the best should be discarded. There is a very strong ultramarine blue that is delightful and rivals the blue of the monkshood—another of the desirable tall-growing plants of which there are several shades of color, though the real old-fashioned blue is most commonly met with.

There is a cream white that is desirable and some late blooming varieties which carry the period of bloom of this plant through the greater part of the summer.

For growing against a low, gray stone wall there is nothing to equal the columbine—Aquilegias, either in the single or double form, the double forms are lovely in symmetry and in color, but the single forms, especially the long-spurred varieties, have an airy grace possessed by few flowers, the yellow columbine, the white and the blue and white. Rocky Mountain columbine remain in bloom, the greater part of the summer and are equally good for growing in the garden or for cut flowers. They are easily raised from seed sown in the open ground in spring or fall or started in the hot bed and transplanted out when large enough; they do equally well in sun or in shade and any good soil supplies them with food.

Less hardy but still available for the hardy garden, the anterrhinums challenge admiration wherever grown. The new shades and colors are fine indeed, but the prettiest for bouquets are the pure white and a soft pink—Giant Pink and Giant White. Giant scarlet is very effective in the border and there are many intermediate shades which are attractive, but none quite equals the solid color. These plants should be started in the house or hot bed early in spring and transplanted out when the weather is warm. In the fall they should be protected with evergreen twigs if procurable, or if leaves are used they should be protected from the wet, as wet leaves freezing about the plants is likely to destroy them. A large bed of these rich colored plants edged with a border of Shasta daisies will be found very satisfactory indeed. Shasta daisies are one of the most satisfactory plants to grow as their culture is simple and they supply an abundance of flowers for cutting which few perennials equal. In purchasing seeds of this plant one should be sure that they are getting the genuine Burbank strain which has many fine varieties, one—Alaska, has immense blossoms five inches in diameter.

Among the flowers of medium height which should find a place in every garden, the gaillardias are especially worthy of mention. Many of the new varieties are most gorgeous in color, showing dark bronze or maroon centers banded with crimson, scarlet, orange or vermillion and all these rich colors set off with a velvety texture that makes them exceedingly beautiful. The texture of a flower has so much to do with the color. Take two flowers of exactly the same shade and color, one of a smooth, satiny sheen and one of a velvety texture and the latter will be infinitely more rich in color effect.

The new hybrid Sweet Williams are among our most desirable summer bloomers and some of the new colors are very rich and striking. Many of them much resemble the hardy garden pinks, which, too, are almost indispensable in the garden, both for cut flowers and for effect in the garden. But let me tell you the secret of fine effects in the hardy garden—it is to grow plenty of everything, that is, large beds or long rows of a single variety of flower rather than a mixed mass of many kinds. If one has room for but a few kinds then grow as many of each kind as possible; grow them as close to perfection as possible and then when you feel that you have exhausted your possibilities of pleasure in those particular flowers, dig them up and
grow something else, but do not try to grow a little of everything in an untidy, crowded mass or mess.

The mixed border when grown as a mixed border may be made up of many kinds of plants to be sure, but it must be just what it pretends to be and the plants must be arranged harmoniously and never crowded.

It will often be found a saving of space and not detrimental to the harmony of the garden to use a contrasting, lower-growing plant for edging beds of perennials; for instance, beds of the tall-growing campanulas may be bordered with plattycodons in white or blue, as these plants are similar in flower to the campanulas (except that the flower of the plattycodons are twice the size of those of the campanulas) but only grow about two feet high in the taller varieties and from a foot to eighteen inches high in the more dwarf, Maresi variety. These plants commence flowering early in July or in late June and remain in bloom the greater part of the summer, the roots increase in size from year to year and their culture is of the simplest. They may be easily raised from seed which germinates very freely so that a single packet will produce sufficient plants for a large planting. They bloom the second summer from sowing and there after for many years.

Then there are the Oriental poppies, so gorgeous in color, so prodigal of their flowers and so persistent in enduring once they have become established. They light up the garden as nothing else can do and are exceedingly beautiful when established among the green of the shrubbery. There is a new scarlet Oriental poppy which bears its immense cups on stems over four feet high, and I have grown the Bride in specimens quite as tall as my head, which is five feet, six inches tall, with perfectly enormous single flowers. Given good soil and abundant water supply and these poppies will often surprise one, and even in a normal growth are wonderfully beautiful. Like the hollyhocks, they have artistic possibilities, when combined with architecture, of a high order. Many of the double annual poppies come up in the same place so persistently year after year from self-sown seed, as to have all the value of perennials and may well be used as such and in some of the colorings and shades are very beautiful.

One of the flowers of the old-fashioned garden less rarely seen at the present day is the scarlet lychnis or Ragged Robin, as it was sometimes called, though that name applies more to the double red variety of the flower than to the single, intense scarlet form L. Chalcedonicum which blooms all summer and the double form of the same. These flowers make delightful bouquets when combined with the sprays of the wild clematis. There is a more slender growing form of the lychnis with soft pink colored flowers which is delightful when grown in combination with the deutzia gracilinima. This is L. Dioica and another rose flowered form is L. Semperflorems Plenis-sama, which flowers throughout the summer, L. Dioica flowering in May and June. It will well repay one to make a collection of the various varieties of this plant as they are all well worth cultivating both for display in the garden and for cut flowers. All the red and scarlet varieties are of easiest culture and perfectly hardy; the pink varieties, however, are more tender and require protection in winter. Chalcedonica and Haageana are easily raised from seed, but most of the varieties are propagated from the roots, cuttings, etc., by the florists of whom they may be obtained.

Of the value of the iris, the paeony and the hardy phlox much has already been written. Indeed, they are a subject by themselves, but should form an important part of the planting of the hardy garden. A sufficient list of dependable, showy flowers has been given to blaze the way for a most successful and easily cared for garden and one which will increase in beauty and interest for many years with little care and expense.

All perennial plants which die down to the ground in the fall are benefited by a mulch of old manure in the fall, but those which make a crown of evergreen leaves in the fall should not be fertilized until spring as the manure is apt to cause decay when it comes in contact with the tops. This is also the case with wet leaves freezing about the leaves and where these are used they should be covered with loose boxes or boards to shed rain and preserve the dryness of the leaves, and this little detail of winter protection is all the special care they will require, except as they attain proportions which makes lifting and dividing advisable.

N. B.—No mention is made of the aster as it is not a perennial, but it is alluded to in "The Garden in the Temporary Home."
A Home in the American Style

It is worth something to be able to say that one’s home is distinctly American, whether it follows any particular established style of architecture or not. There was a time when the Colonial style was the only style considered typically American, but to-day we have a number of different styles which we can claim our own, prominently among them being the Western Bungalow. No matter how simple or small a home may be, it can have some individual character, and this at no unnecessary additional cost. The half shingled house, designed by G. W. Bullard, architect, is a simple home with American characteristics. The upper story is brown stained shingles, while the lower story and the trim are painted white, the foundation being of concrete. It stands on a high prominence, overlooking Puget Sound, and is patterned somewhat after Mr. Bullard’s own house. The floor plan arrangement shows a combination living room and reception hall, with a large fire place set into a niche just beside the broad stairway. This beautiful room is the attractive feature of the interior. The estimated cost of this charming home, not including heating and plumbing, is $4,000.00.

The Unique Cottage

Some homes are attractive because they are unusually beautiful; others because they are odd. This cottage belongs to the latter class. It is certainly an unusual combination of shingles, batten boards and Doric architecture, all brought together on the gambrel roof. One very noticeable feature is a large porch, 10 feet wide and 20 feet long. The comforts of a good-sized family porch must be tried before they can be fully appreciated. Supporting the overhanging second story are two large Doric columns. The first story is boarded up with plain boards and battens; the gables and domers are shingled. The shingles on gables are laid in an attractive manner, which is quite a relief from the usual monotony of a shingled wall. Instead of laying them in regular course of 5 inches to the weather, they are laid in alternating courses of two inches and 8 inches. In this way no additional shingles are required and a pleasing effect is obtained. The floor plan shows a large living room with beamed ceiling. This room contains both a large fire place and a stairway. On the second floor are four bed rooms. The foundation is of cedar posts, and the windows throughout are casement windows, with full length French windows, opening on the porch. The entire exterior is creosoted a brownish red trimmed with white. The plastered walls are tinted a dull green, while the ceilings and woodwork are stained a soft brown.

Designed in Broad, Low Gable Style

A very well built home is illustrated on page 327 and is a decided contrast in style to the other designs shown in this issue. The principal characteristics are the bold treatment of details and a tendency toward elements of the mission as carried out by the heavy bracket ornaments at eaves and supporting the several bay windows. The entire design is of western architecture.

Unfortunately the photograph was taken before the grounds were put in shape, lessening the artistic appearance.

The exterior is treated with stained shingles up to the roof eaves and cement gables. A rough dark vitrified brick is used for exposed chimney, making it an ornament than otherwise. One of the special attractions within is the corner bay of windows in the dining room, used ostensibly as a conservatory. Besides the usual rooms on first floor is a retreat for smokers—a good size den. On second floor the three principal chambers are fair size. The bathroom is unusually convenient of access to all bed rooms and of comfortable size. We have no figures from the owner as to what the house cost when built two years ago on the Pacific coast but probably close to $5,000.
Built for Comfort and Convenience

A HOME which is built for comfort and convenience fulfills all the requirements of the model home. The principal object to be obtained in the building of a home is to have it attractive without and properly arranged within. Yes, more than that. A home may be properly arranged from the stand-point of the builder, and yet lack that free, open air which makes it appear homelike. There is no waste room wherever in the hall of this house. Just room enough is given to answer the purposes of an entrance hall, and still not appear cramped or crowded. Just beside the vestibule is a coat closet. The stairway ascends to the second floor in the least space possible, and is a combination stair from both kitchen and front hall. The principal attraction on the first floor is, of course, the large living room, with its broad fireplace, and pleasant outlooks in several directions. The house is very well supplied with pantries, having a butler's pantry, and kitchen pantry. On the second floor besides the bath room, are four good-sized bedroom, each having a large closet, with a linen closet off of the hall. The estimate cost of this house, not including heating and plumbing, is $2,700.00.

A Well Proportioned Cottage

In building cottage homes there are two styles of roof always popular, the gambrel and the sharp gable or point roof. If the plan is for a real narrow house, then the roof will of course of necessity be pitched steep and a gable roof is selected.

The cottage shown under title of "A Well Proportioned Cottage," fulfills our expectations and gives us a splendidly proportioned gable roofed six room cottage. The overhang of the second story secures a large front bed room and a sufficiently large, partially enclosed porch. The treatment of this porch is such that it could be very easily screened. The combination of narrow siding on first story with the porch columns sided up and shingled gables is pleasing. The bracket treatment over the bed room windows is a little touch which gives added character to the design.

The floor space is laid out for one large living room across the front of the house, 24 ft. in the clear, from which lead the stairs. Other rooms are of convenient size. The combination stairs with outside door way is obtained.

With a finish of soft wood thruout, first story painted and second story shingles stained, this home should not cost to exceed $2,200. The height of first story is 9 ft. Second story 8 ft. 3 in. Basement under the entire house, 7 ft. in the clear.

An Attractive Five Room Cottage

THIS is a very desirable home, especially for the suburbs and the country. It is altogether quite original, also somewhat unique in its style. The second story projects over the porch, thereby roofing it and at the same time providing additional space on the second floor. This porch is a good sized one, and being sheltered by the house on two sides is well protected from the wind. The entry connects directly with the parlor, dining-room, and kitchen, making a convenient assemblage of all the rooms. The parlor is a very pleasing room, 11 ft. by over 12 ft. At one end the stairway ascends to the second floor in a picturesque manner. On the second floor are two bed chambers, each having two large closets, a good sized bath room and a linen closet. This last mentioned feature is always greatly appreciated by every housewife. The exterior of the house would look best if sided up the first story with shingled gables and roof. A good color combination would be a rye straw yellow for the main body and brown stained shingles for the dormer and gables, a dark green roof and white trimmings. The roof left to turn its own natural gray would also look well. A full basement is provided under the house, giving ample room for a heating plant and fuel bins, cold cellar, and laundry.

The size of the house is 23 ft. 6 in. by 26 ft. 6 in. The height of the first floor is 9 ft. 5 in. The height of the second floor is 8 ft. 3 in. The estimated cost, with pine finish, is $2,200, not including heating and plumbing.

Something New in Cement

THE construction of cement houses has to a large extent, followed very simple lines, adapted to simple styles of architecture. Here we have a house, however, designed by F. D. Orff, architect, to which character and style has been given, and it is quite a relief from the average stucco plastered house. The general style is that of the English half timbered construction, the entire second
A Home in the American Style.

story being divided off into panels. Woodwork stained. The dormers projecting through the roof from the second story are also characteristic of English tendencies. The entrance hall is entirely original, being more of the round Gothic style. Very noticeable features, adding considerable beauty to the house, are the many little balconies filled with flowers. The entrance is directly into a large living room which is also a reception hall as it contains the main stairway. Off of the living room is a sunny parlor, and closely connected is the dining

G. W. BULLARD, Architect.
A Unique Cottage for the Lakeside.

All three of the principal rooms on the first floor have bay windows, so that views may be obtained in many directions. The first story walls are of solid masonry, the second story walls being of cement veneer, on metal lath. The house contains nine rooms altogether, with plenty of room for two or three chambers in the attic. The estimate cost, exclusive of heating and plumbing is $8,000.00.

A. M. WORTHINGTON, Architect.
Designed in Broad, Low Gable Style

KNAPP & KNAPP, Architects.
Built for Comfort and Convenience.

LOWELL A. LAMOREAUX, Architect.
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SUMMER furniture, this year, is charming. As to cost, one may furnish a room in mahogany at less expense than with the cretonne covered pieces, whose foundation is the cheapest of ash. At best, the fashion is a transitory one, only to be indulged in by people to whom money is no particular object.

Except for its spread, the bed is omitted from the scheme, one of white enameled iron or brass, being used. Every other article of furniture, bureau, dressing table, tables, chiffonier and chairs, is completely covered, frame and all, with cretonne, or large pattern and brilliant coloring. The material is very smoothly stretched and all the edges concealed with a wide cotton gimp, coming the different colors of the cretonne. More often than not, the cretonne is one of the imported cotton taffetas, woven in the same fashion as the linen ones and showing the typical small knots, but more pliable and with a white ground. One notices, in the designs chosen, many in which the predominant note is violet, the most satisfactory of these being a wisteria pattern. Another effective cretonne has a Chinese-looking design of highly colored flowers and foliage and birds of paradise, recalling old tent stitch embroideries, of the age of Queen Anne.

The vogue of this cretonne covered furniture, now in its third season and evidently increasing in popularity, offers a suggestion to the home craftsman, who is oftenest a woman. With a not too heavy cretonne, a supply of gimp and plenty of small tacks the covering of a chiffonier or dressing table is not an impossible task, and some battered old piece of ash or oak may be transformed into something exceedingly smart. Three or four dollars would probably cover the entire outlay.

It will be necessary to remove the handles of the drawers, replacing them later by glass knobs. If the faces of the article are perfectly smooth, so much the better. If they have panels, the work will be facilitated by pasting over them sheets of the coarse pasteboard used for packing by the dry goods stores. Care must be taken to cut the goods so that the edges of the sections will be with a thread. The gimp is wide enough to cover a multitude of sins.

One feature of these pieces, and an excellent one, is that a sheet of glass is exactly fitted to the tops of bureaus and tables, protecting the place which is most likely to be soiled, and dispensing with the use of a muslin or lace cover. This is an item of considerable expense. It is possible that, in the attic, one may find an old engraving of large size, framed in the sixties, when they used French plate for pictures. Any glazier would shape it to the top of the pieces of furniture, grinding down or beveling the edges.

The greatest difficulty will occur in covering the mirror frame and its standards, unless the latter are very simple. A compromise, which solves the difficulty, is to remove the mirror, cover its frame, and hang it above the bureau or dressing table. In default of this, binder's paste will be of assistance in fitting the cretonne to the standards.

If one likes to go a little off the beaten track, one will choose for covering one of the printed linen taffetas, the imported sort, in double width, with a linen colored ground and softly tinted flowers and foliage, using a plain gimp, exactly the color of the ground. This is admirable with bamboo furniture, if one is enough of a mechanic to get it apart, so as to substitute the cretonne covering for the original matting, not a difficult task with the smaller pieces.

Recent Wall Papers.

Among bedroom papers, at low cost, one notices a good many designs on the trellised order. These are specially pretty for the country house bedroom which is little more than a sleeping place, as they hardly admit
Decoration and Furnishing—Continued.

of pictures being hung against them. The trellised paper is so generally rose patterned that it is agreeable to find some designs showing blue flowers, as the color is so specially good for a summer room. Another blue paper, whose margin bears the legend, “Sheval Poppies,” has a ground of grayish white and upright flowers in varying shades of gray and blue.

The prevalent taste for gray is reflected in an imported foliage paper, showing woodland vistas, but gray instead of green. This is $1.65 a roll, and a plain gray pebbled paper is shown with it. Another charming paper has masses of foliage and leaves in medium greens, against a lighter green ground. Either of these papers might be used as a background for pictures.

Getting a General Impression.

In choosing a wall paper, too much stress cannot be laid on the effect of the paper as a whole. Many a design, charming at close range, develops undesirable traits when seen across the room. This is specially true of a good many of the Art Nouveau designs printed in flat and strongly contrasting tones. William Morris understood the balancing of masses so perfectly that his papers and textiles give the same effect at a distance as close at hand, but few designers share his ability.

One thing about many otherwise agreeable papers is that the repetition of certain elements of the pattern is so marked as to set one to counting. Others show the mathematical basis of the design too plainly. We do not want to have the means to the end continually foisted upon us, except in tiles or inlaid floors. The best thing to do is to take home a roll of the paper and study it in its environment. Even if the design passes muster, a difference of lighting between the house and the shop may make a tremendous difference.

Heraldic Friezes.

To be used above an old gold grass cloth or a mustard colored tapestry or ingrain paper, is a frieze which is adorned in profusion with Tudor roses and leaves. A heraldic lion appears at intervals and a white scroll bears a Latin motto in Old English text. It is exceedingly decorative and is intended for a hall or library.

Cane Panelled Furniture.

The revival of the old fashion of inserting panels of fine canework into furni-
ture has evidently taken the popular fancy judging by the number of pieces of the sort, shown in the shops.

The commonest piece of furniture to be treated in this manner is the bedstead. Sometimes the frame is mahogany, sometimes Circassian walnut, more often elaborately carved wood, painted white or French gray. In the latter style the cane insets are applied to every piece of a bedroom set. (Sets are coming back.) Even the dressing table has a backing of gilded cane.

An unusual use of the cane panels was at the ends of a small mahogany bookcase. The price was seventeen dollars, and the effect was rather good.

The Revival of Wooden Bedsteads.

After twenty years of unexampled popularity, the metal bedstead shows signs of passing. To be sure the shops are full of brass and iron beds, both of which show a tendency to heavier construction. The best brass beds are made in the dull satin finish, to the great improvement of their artistic qualities.

But the wooden bed is omnipresent. Its lines are very simple and there is less difference in height between the head and foot boards than there used to be. Both are rounded rather than square. There is also a revival of the modified four-poster, which dispenses with tester and curtains, but has distinct posts at the corners. Sometimes these are little more than rods, sometimes they are short and end in carved pineapples.

Another style of bedstead found in white, or light green enamel has a strip of vertical rods or spindles inserted in both head and foot board. Whatever may be said of the sanitary merits of the wooden bed, it certainly furnishes better than a metal bed nor does it suggest a hospital or an institution.

The Proper Way to Dress a Bed.

Many people, of course, still adhere to the old fashioned white spread and pillow shams, or substitute a scarf covering both pillows for the shams. But the up-to-date bed has its day dress to correspond with the furnishings of the room. Its pillows are removed to a convenient closet during the day and their place supplied by a round bolster.

Sometimes the cretonne or lace spread is fitted exactly to the bed and the bolster covered to match it, or concealed by a scarf of lace. More often the spread is made long enough to cover the bolster, a fold being laid in the spread so that the entire outline of the bolster is visible.

With a metal bedstead the best arrangement is to have a valance of cretonne around the lower part of the bed. This valance should be attached to a piece of muslin laid over the wire spring and under the mattress. Then the spread proper falls over the sides and foot to a depth of about nine inches. It should be cut out at the corners to avoid folds.
Mrs. A. H.—Cincinnati, Ohio.

Q. We have a new buff pressed imperious brick house which we expect to occupy in the near future. It is built the square style 2½ stories with two dormers—one facing south and one east. The color of woodwork is pine in natural finish. The walls are finished white plaster to be left without covering of any kind (not even tinted). What do you suggest?

A. Smooth, white plaster walls, pine woodwork finished natural and miscellaneous furniture—give us rather a difficult proposition, but some things can be done to help the matter.

Green rugs and stair carpet in hall and living room, portieres of a soft shade of green rep at 75 cents a yard in the openings, green side draperies of the same, rather than madras, over simple white curtains at the windows and the same soft green used as much as possible in the furniture coverings—will do much to soften the hard, crude white plaster and woodwork.

There are many kinds of all-over figured nets by the yard, infinitely preferable to common lace curtains with borders. A plain, sheer white cotton voile, with just inch and quarter hems for borders, makes a dainty refined curtain and would be suitable for the dining room. As the dominating color in your dining room rug is red, it will be well to carry red into other things as far as possible. It would be warm and cheery for the east room and white walls. You might have curtains of a bright red madras here, looping back and dispensing with side draperies. The green portieres should be lined on the dining room side with some inexpensive red material. The green leather davenport should go in the living room. The book case belongs there also, but should...
have a coat of dark stain. Your rooms are small and you seem to have all the furniture that will go in there comfortably. The Morris chair could have new cushions but the leather seats on the small oak chairs should be replaced. Two of them, stained dark and seats of figured green and blue tapestry would go well in living room. The others put upstairs, with bright chintz covers on the seats, in the room with the walnut furniture and use gay, bright chintz at the windows, on the bed and for dresser cover. Put the wardrobe in the attic and make a table out of the washstand. Have green and white muslin curtains in the other room and emphasize the green in other ways. Green will be the best color for the shades inside. The exterior color depends on the treatment of the outside. If your buff brick has a white trim, then white shades would be very good.

Mrs. J. W. N.

Q.—I have two rooms with an arch between, furnished together, one 12x14, the other about 10x12. Height of ceiling 10 ft. The carpet is red, the woodwork white enameled. Has been papered in green, but I wish to make a change in the paper. Would you please advise me what colors to use. The room is very dark, and I want something to make it light.

Ans.—With white woodwork and a red carpet, since your room is dark, the best choice for wall is a soft, grey, a grey with pink rather than blue tone to it. Green is out of the question.

Mrs. M. J. N.—Nashville, Tenn.

Q. Would you kindly advise me about the interior decoration and painting of my house just being completed, a large square colonial house with 11 ft. hall thru center. Have wainscoting 4½ ft. high in hall and dining room. My idea was to have the whole house white or ivory paint with mahogany doors but I have a very handsome dark brown dull finish (Flemish, I suppose) set of furniture—elaborately carved—so I could not use mahogany trim in dining room. I have a wainscoting 4½ ft. and a beam ceiling. Could I paint woodwork and ceiling white and have my doors color of furniture and perhaps the mantel? Would the beams look well white?

Ans. Your ideas in regard to interior finish of your colonial house are very good indeed and we see little to change. The handsome Flemish furniture will fit admirably into a colonial scheme. Have your white wainscot and ceiling beams just the same, staining the doors dark Flemish; the effect will be rich and thoroughly colonial. In some early colonial houses the drawing room had black woodwork with scarlet brocade wall hangings. Keep the mantel white, the ceiling also. A tapestry wall hanging above the wainscot will be beautiful but the coloring should be rich and warm: yellow green, reddish browns, etc. In a south room you might use the cool grays and blues with the white woodwork and dark furniture. The treads of your staircase should be of oak. Dark floors are richer and more colonial than a light color. The warm red would be excellent in the hall or a colonial arabesque design in red on a white ground, with red stair carpet and rugs. The mahogany framed mirrors would be handsome and correct over the white mantels. White moldings should be used in the ceiling angles. As your rooms are so high, a cornice of several members would look well in the drawing room. With walls of gray cement, white for the exterior trim, columns, etc., is preferable to cream.
The Invasion of Illness.

MOST families live so up to the top notch of energy that there seems to be no strength left to meet an emergency. To such families, when sickness comes, the trained nurse who takes command for the time being and assumes the entire responsibility is a boon. Her demands sensibly upset the domestic routine, but the disturbance is more than counterbalanced by the merits of the arrangement.

But the number of people who can afford a trained nurse is comparatively small, and even if expense is no object, in small places the supply of such service is seldom equal to the demand, and needs must that nursing must be done by some one of the family. Most of us have sufficient instinct about such things to make the sick room fairly comfortable. The administration of medicine according to a schedule is not a serious task, nor does great ability go to the changing of bed linen and the airing of a room. But when the patient begins to eat, then is the time which tries what soul remains to us after weeks of anxiety.

However good the quality of the raw material, the sort of food which meets the needs of a healthy family is not adapted to the easily disgusted appetite of a convalescent. A section of the family dinner, although garnished with roses and served on the best china, comes down hardly touched. It is evident that the invalid must have his own bill of fare, even though there are no conditions which demand a special diet, other than those imposed by insufficient exercise and oxygenation.

In cooking for a convalescent, one thing should be remembered, that a small quantity of food will be eaten and relished while the very look of a larger portion will disgust. One must learn to concentrate, to get as much nourishment as possible into a small compass.

Another point to be noted is the importance of slow cooking for all starchy food, so that the cells may be thoroughly expanded. This affects not only digestibility but flavor. Every one is familiar with corn starch pudding made in the ordinary way, by stirring a thickening of the starch into boiling milk, a dish whose great merit is that it can be cooked in a very few minutes. But try making it in another way. Stir the cornstarch thickening into the milk, when it is merely warm, and cook it slowly over a gas jet half turned off, with an asbestos plate on it, stirring it frequently, and note the difference. The crude taste of the starch has disappeared entirely. The same thing will be noticed in flour thickenings for soups and gravies. It is the long, slow cooking of starch which makes a good poor man's pudding so delicious. In two hours' cooking in a slow oven the rice has the best possible opportunity to develop all its excellences.

The invalid cook will find the evaporated milk, which comes in small cans, a great help. Diluted with twice its measure of water, it is an admirable medium for cornstarch, rice or tapioca, which can be made highly nutritious without the use of which are often rejected by a stomach which can digest cream. In all the preparations of starchy food it is essential to remember a little salt, but flavoring is not desirable. Half the prejudice against the lighter puddings is due to the fact that they are so seldom properly salted.

The cooking of a chop for an invalid is too often attended by disaster. Academically speaking, it should be broiled. A handful of charcoal on the coals of the range will give a clear, even fire. With frequent
turning, an inch-thick loin chop can be cooked without scorching. A French chop, when broiled, is apt to have a strong taste of scorched bone.

A more satisfactory way is to cook the chop over gas, heating a frying pan very hot, but not greasing it at all. When the pan is piping hot, the chop should be put in and all its surfaces seared, edges as well as sides. After the searing has been accomplished, it must be turned every minute until it is done. When it is about half done, it should be lightly salted. For an invalid, it is best not to butter it. It should be turned out onto one hot plate, covered with another, and served immediately. It goes without saying that the chop should be especially cut, and at least an inch thick. The loin chop is the best for an invalid.

Keeping the House or the House Keeping You.

Doesn’t the latter phrase represent very truly the attitude of a good many housewives? So many women are slaves to a fixed routine. That is the one important thing, which allows of no exceptions. It is often said that housekeeping is the woman’s profession and this is certainly true as to the married woman. But one has only censure for the man who allows himself to be so absorbed in his business that he becomes atrophied mentally and morally. Yet this is exactly what happens to the woman who makes a fetch of her housekeeping and, while the man may have vague stirrings of regret as to the loss of so much that is good and desirable out of his life, she is panoplied in the consciousness of having completely fulfilled her vocation.

There is a certain maxim which is largely responsible for the over-absorption of women in domestic affairs. “Whatever is worth doing is worth doing well.” It would be a great gain to the average family if that saying could be eliminated from its consciousness. It is quoted alike as to the necessity of Johnny’s working out his arithmetic examples and as to the weekly cleaning of the china closet. It arouses wrath in the bosom of Mary Ann in the kitchen when she has scamped the corners in scrubbing the kitchen floor, and it stands as an avenging spectre over Jenny when she decides that a plain shirtwaist will answer as well as a tucked one.

The fact is that most women have a sort of near-sightedness, induced by generations of comparative seclusion, which leads them to confuse the end with the means. Housekeeping is the means, but the end is the physical and moral well-being of the family. This is not secured if one of the heads of the house, and that the one who, in the peculiar conditions of American life, counts for the most, is so absorbed in a narrow routine as to be indifferent, if not actually hostile, to the things that really count. Leisure for the acquirement of culture in its varied forms, social opportunity, a friendly and helpful outlook, these are the things that count, but they have a mighty small show in the family of the woman whose house keeps her, instead of her keeping it.
How to Make an Old Home Modern at Very Small Cost

The things most in evidence in any home are the woodwork, furniture and floors. If these things look old, shabby or out-of-date, the home cannot be modern.

Are you perfectly satisfied with the appearance of your furniture, woodwork and floors? If you are not, you can easily remedy matters yourself—you can do the work in your spare time—it's interesting, fascinating—the expense is trifling.

You can make a pine floor almost as beautiful as hardwood—you change old discarded furniture, making it handsome and modern in finish—you can change the shiny, harsh, always-marred varnish finish on any wood to the proper dull waxed finish.

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Wood stains dry so quickly that it is very difficult to apply them evenly—they show laps, light and dark spots and rub off—spirit stains and water stains raise the grain of the wood.

As for "varnish stains," stain and varnish, they produce a coarse, out-of-date, shiny finish and anyway varnishing requires expert handling—such preparations hide the beauty of the wood because they are too "thick" to penetrate the pores and they are a constant source of care and expense—they cannot wear well because every scratch and scrape takes them off the surface.

Anyone can secure the best results with Johnson's Wood Dyes and Johnson's Prepared Wax.

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Then right over the Dye, you apply Johnson's Prepared Wax—simply rubbing it with a cloth and you have a modern, subdued, lustrous and enduring finish which cannot be produced in any other way.

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The UNDERFEED is an up-to-the-minute Furnace. No other like it. Fed from below. All fire burns on top. Smoke and gases are consumed. Cheapest slack yields as much heat as most expensive anthracite. Clean, even heat is a certainty at a cost so low that it is worth anybody's while to study the figures.

Protection and Economy are enjoyed by UNDERFEED Furnace owners everywhere. Here are sample briefs from Wisconsin and Georgia—testimonials that bear us out in this declaration:

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L. J. Rusk, Chippewa Falls, Wis.
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"Am using your Underfeed for the fourth Winter, I find it satisfactory in every respect, saving in fuel at least one-third the cost and furnishing TWICE the heat of any furnace I have ever used, I will be glad to explain and recommend the Underfeed Furnace to anyone that may inquire personally."

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Frank Manly, Dalton, Ga.
writes:
"The Underfeed Furnace is giving the best of satisfaction. We have never known before what a warm house was and it is needless to say we are enjoying it. I look after the "stoking" principally and find that one good dose before breakfast and another after supper is all that is required to keep a nice, even heat."

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Mr. Builder

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and save a great deal of the old method expense — You can still come within your "appropriation for screens" and have not economized at the Expense of Quality.

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THE ROWLAND MANUFACTURING CO.
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The Pros and Cons of the Bare Table.

IFE, as has been often said, is a series of compromises and so is housekeeping. Most households spend a great deal of time in balancing the relative claims of style and comfort, elegance and utility. Which side wins depends a good deal upon the determination of the female head of the house. If she really cares, what she says goes. Few men have the courage for effective rebellion. If she elects to follow a new fashion, he falls meekly into line, if she is conservative, he does his best to stifle his desires for the more stylish methods of the Smiths or the Browns.

One burning question, which just now confronts a good many households, is that of the bare table. Shall we have the time honored expanse of snowy damask, or the chilly elegance of bare and polished boards? There is a good deal to be said on both sides. Hardly any article of domestic use has the intrinsic beauty of fine damask. Then it is always easier to go on in the old way than to make a radical change and to many people the use of numerous small d'oyleys seems fussy in the extreme. So much for the covered table.

On the other hand, the use of a bare table means a very considerable saving of expense. The cost of the necessary d'oyleys is a trifle in comparison to that of table cloths of corresponding quality. Any one can launder d'oyleys successfully, but a great deal of skill goes to making a large tablecloth look well, also a large amount of time. A catastrophe on a bare table involves at most one or two d'oyleys, while the large cloth can hardly ever be made presentable after a large slop of tea, coffee or gravy. Then too the temptation to leave the cloth on between meals is absent, and the setting of the table is a much simpler matter.

With all due deference to tradition and to the beauty of fine damask, it must be admitted that for the family of one servant or none, the bare table makes for simplicity and despatch. And using the bare table, let us be consistent and not draw the invidious distinction between the other meals and dinner, as is so often done, insisting upon a tablecloth for the principal meal. This is to complicate rather than to simplify. As to the good form of a dinner served upon the bare boards there can be no question, since in one of the great houses in Newport, a few years ago, the widely travelled host seated his guests at a mahogany table whose only ornament was a silver bowl of roses on a lace centrepiece, the entire table service being of solid silver.

This was extreme. Most of us would prefer to use a tablecloth for a dinner party, but festivities do not come every day and the bare table has cleanliness, convenience and fashion to recommend it.

Materials for Doylies.

The most satisfactory d'oyley is made of heavy and fine linen sheeting, circular and with an edge of embroidered scallops. Three to a place is quite enough, for plate, tumblers and butter plate. Oval mats for platters and vegetable dishes should be provided, if they are to be set upon the table. If the vegetables are passed from a side table, only one for the platter will be necessary. The centre-piece should have a scalloped edge matching the smaller pieces, but be enriched with solid or eyelet embroidery.
A heavy damask, with a small repeating pattern, dots, fleur-de-lys, or shamrocks, is sold for d’oylies and is very effective. Remnants of heavy double damask can often be bought very cheaply and embroidered and will wear indefinitely.

**For the Mission Table.**

In a dining room furnished in Mission style, runners of heavy linen are often substituted for the separate d’oylies and mats. Naturally these are best adapted to a square or oblong table. A half-yard wide strip of linen is laid from end to end of the table, and crossing it as many similar strips as there are places at the side of the table. Each person’s plate, tumbler and butter plate occupies the end of one of the runners, while the meat and vegetables are set on the centres.

Heavy crash, with quaint embroidery in strong colors, is used for these runners. Sometimes the decoration is an appropriate motto in old English, or Gothic letters. The coloring should harmonize with the decorations of the room.

**Mission Chafing Dishes.**

One of the prominent arts and crafts firms makes chafing dishes of rough brown pottery, the metal fittings being of copper. Copper trays and flagons for alcohol form a part of the outfit.

To be strictly in keeping, the contents of the chafing dish should be served in cocottes, the tiny saucepans of brown stone ware, with handles at the side, so much used by caterers.

**Orange and Apple Dishes.**

Someone who had difficulty in making an orange keep its position, while he scooped out its interior, must have invented orange dishes, rather deep bowls, just big enough to hold a good sized orange, and set on a plate. A similar dish, but larger and shallower, is intended for the baked apple with cream, which is such a popular breakfast dish with many people.

**Almond Sets.**

Something rather new are the sets of one large and six small dishes, in the shape of elongated hexagons with curved edges, intended for the service of salted almonds.

**Tumbler Desserts.**

It is said, by people who ought to know, that custards can be baked in tumblers, without danger of breakage, if they are set in a pan of cold water. Be this as it may, quite a number of things...
can be prettily served in tumblers. Here are some combinations:

One-third of the tumbler filled with gelatine blanc mange flavored with vanilla, a third of wine jelly, the rest of whipped cream.

A salpicon of bananas, pineapple and strawberries, sweetened and flavored with rum, the tumbler filled up with soft custard, finished with a meringue. The meringue tops should be done separately, arranged on a sheet of waxed paper and browned in the oven, before being transferred to the glasses.

Baked chocolate custard, whipped cream, flavored with vanilla, grated cocoanut.

Strawberry jelly, whipped cream, macaroon crumbs.

Other combinations will suggest themselves. In serving the tumbler should be set upon a plate, with a dessert spoon lying beside it.

June Forethought.

In the early days of June, strawberries are at their best for preserving. The later berries are apt to be less solid and run to juice. Strawberries develop so much acid when cooked that they are almost certain to ferment, unless done pound for pound. The easiest way is to weigh fruit and sugar and pack them in jars, putting on the tops, but not screwing them tightly. Set the jars in a washboiler, with a pad of hay to protect them from the heat of the range, and pour in cold water till they are three-quarters covered. Let the water come to the boil and cook them about half an hour, removing them if the berries seem to be losing their shape. Let them cool, take off the tops and fill up with boiled syrup of sugar and water and seal up. A layer of paraffine above the syrup makes assurance doubly sure.

In May or June, when eggs and butter are cheap, it is a good plan to make a loaf or two of pound cake, for winter use. Two pounds of everything will make a liberal supply. It is well to add to the ingredients a little salt, as the old-fashioned article was a trifle insipid. Grated lemon peel is better than the rose-water of our grandmothers, and a glass or two of brandy will do no harm. Each loaf should be thickly iced and wrapped in a double sheet of paraffine paper.

Hardware and the House

The selection of the hardware trimmings for your new house is of equal importance than the choosing of the wall-paper or other decorative features. Hardware is purchased as a permanent ornamental utility, and by making its selection a personal matter you will be able to express your own individual taste and at the same time judge as to the quality of the hardware itself.

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151 Leonard St., New York.
D. M. W.
Q. We are just completing a concrete building, the walls of which we have moulded by placing studding on each side of a plank form. It has made a first class job except for roughness caused by the joinings of the planks and we now wish to cover the entire exterior surface of the building with a coat of plaster, tinted in a suitable color, perhaps yellow. We know nothing of plastering a wall of this kind and our only workmen here are Mexicans who are equally ignorant.
Ans. The proper coating for your concrete wall is a prepared cement plaster. D. W. N., Marshalltown, Ia.

Q. Can you tell me what material should be used for the exterior of an English half timber and plaster house where field stone is used for piazza walls? Would it be preferable to use the plaster from the foundation up or could the first story be more properly built of brick?
Ans.—There are so many combinations of materials that are entirely proper to use in the designing and building of an English half-timbered home that it is hardly right to say that only this or that material should be used. Combinations consisting of a half-timbered second story, with the first story brick, cement, stone or combinations of these three materials are often made. As a matter of fact, it depends entirely upon the ability of the designer whether the combination of the materials is a success or not. We will state this, however, with reference to your field stone porch. If you use field stone up to the porch floor, then the foundation of your house up to that height should be the same. If you use field stone up to the height of the window sill, then it would look best to carry the stone around the house to that height. If you use brick above that, it should be dark in color.
Q. Can two houses on adjoining lots be heated by one hot water heating plant? If so, how?
Ans. It is perfectly feasible to heat two houses on adjoining lots, providing they are not situated more than 50 or 60 ft. apart. If the boiler is placed in an ordinary basement of 7 or 8 ft. in depth, the supplies can be taken off and run in a trench and carried to the adjoining house, the boiler being located in the other. Or, if the ground is such that the mains cannot be carried off from the boiler with some rise before entering the trench, it is best to run the pipes up from the boiler to the second floor of the building, where boiler is located, then down again in order to induce circulation.

W. J. H.—
Q. How much larger should radiators be for hot water heating than steam? Why is hot water heat considered steadier heat?
Ans. The radiating surface for hot water must be nearly twice that for steam. When radiators are heated by steam, they are made real hot or not warm at all. This of course affects the evenness or uniformity of the heat. With hot water you can have a gentle continuous circulation of warm water through the system, giving off a mild heat, but to get any heat from steam radiators, you must first get steam at 212 degrees.
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**UNITED STATES GYPSUM COMPANY**

New York  Cleveland  Chicago  Minneapolis  San Francisco
Success and Failure of the Concrete Block.

We have in several issues the past year published articles on concrete surfacing, the cement block, etc., and adding to this fund of ideas and supporting our former sentiments expressed on this subject, the Cement Age for May gives the following:

"The three prevailing types in concrete houses are those constructed of hollow blocks, houses with solid walls and those with cement stucco surface. Block houses outnumber the others, and it is interesting to note the improvement recently made in the manufacture and application of the concrete block. The blocks first on the market were not accepted as a desirable substitute for brick or stone. They were usually of the rock-faced pattern, and were condemned by architects and builders of good taste. Many are still used, but they are gradually giving way to the plain surface block. The protest against the rock-faced block has been so general that manufacturers and builders are gradually discarding them. They have substituted a perfectly plain surface so far as any design is concerned, merely seeking to produce a pleasing texture and color. Some of the finest houses in the country have been built of these blocks, the facade being relieved by columns and cornices in moulded concrete.

A block with this comparatively smooth surface, in warm gray tone is suitable for any type of house for which stone would be appropriate. It might be made with rougher surface without destroying its pleasing texture, and one can conceive of a quite rough and uneven block (not rock-faced) set in wide mortar joints which would be decidedly artistic in a large wall area.

In other words, it has been found that the most simple, direct and economical methods in block manufacture and building processes produce the best results. Heretofore there has been a straining after whimsical effects, something not confined to blocks, however, but introduced on occasion in all forms of concrete construction intended to represent the more refined types with the result that the right sort of progress has been retarded to some extent. It has been akin to the forced designs in masonry as exemplified, for example, by boulders set in cement like so many huge marbles, or gate posts decorated with projecting stones for cap pieces, which are not only ugly in themselves but invite the disrupting influence of rain and frost.

The improvement in the design and method of using blocks, has been accompanied by another gratifying discovery, namely that blocks will in time become waterproof if well made and that the use of a reliable water-proofing compound will carry them over to that period. Therefore there is no barrier to prevent the building of a durable and artistic house of concrete blocks. With the water-proofing problem solved and a return to rational and common-sense methods in the use of blocks, the industry should continue to expand, even in localities where careless workmanship, 'shoddy' blocks and bad designs have created a prejudice against a material really excellent when properly made and used."

Passing of Wooden Laundry Trays and Sinks.

IME was in the history of plumbing when most of the fixtures were made of wood. In the evolution which ensued, some of the fixtures, like bath tubs and pantry sinks, were lined with copper, zinc, or other sheet metal, and at that time were looked upon as the perfection of sanitary ware. Conditions changed, and manufacturers put upon the market plumbing fixtures which on account of their snowy whiteness and impervious surfaces, forced the old copper-lined fixtures to the scrap heap. Some relics of the old-time fixtures still remain, however, and it is noted that health boards are now putting them under the ban. In this connection it is interesting to note Section 13, Table XIII, of the Cleveland Code, which provides: "The installing or maintaining of fixed wooden wash trays or sinks is prohibited in any building or part of building designed or used for human habitation, but may be used in any building where such trays are in daily public use, such as public laundries and dye houses.

Wooden troughs or sinks, with or without metallic linings, shall be allowed only for bar sinks, soda fountain sinks or dish sinks in hotels, restaurants and public kitchens, and may be lined only with copper or lead."

In keeping with Section 13 is Section 15 of the same title. Section 15 provides that
THE special steel to be used for making "IRWIN" Bits is first tested for temper taking quality and then tested by specially designed heavy machinery for tensile strength—stretching or straining and for torsion—turning or twisting.

"IRWIN" Bits are all drop-forged which solidifies and strengthens the steel and thus "IRWIN" Bits give the best and longest service for this reason, as well as because of their peculiar pattern.

"IRWIN" Bits are all carefully turned on a lathe to make them absolutely true and accurate and are highly finished—full polished from tip to tip.

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Every "IRWIN" Bit is tempered by a secret process, in molten tin, oil and brine. This process is so arranged that it is absolutely accurate, insuring perfect temper in every "IRWIN" Bit.

When each bit has received the finishing touches from the polishers, it is tested for boring capacity in the hardest of highly seasoned hard woods such as lignum-vitae—a wood which will ruin most wood-working tools. Then each bit passes to other hands for final testing which detects the slightest defect in any particular.

The detection of the slightest imperfection condemns a bit to the scrap pile.

Every bit that passes this final test is stamped with the name, "IRWIN," which guarantees it to you to give absolute satisfaction.

Look at the picture of the finished "IRWIN" Bit (shown in the brace "ready for business"), and note the stamp on the stem. It is placed there for your protection in buying the best, for the dealer’s protection in selling the best, for our protection in producing the best.

Find that stamp if you want the most for your money and the Strongest, Easiest and Fastest Boring Bits Made. Will Not Clog and Will Bore in End or Side of Wood

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**Announcement**

The Henry Sanders Co. of Chicago, and Hartmann Bros. Mfg. Co. of Mount Vernon, N.Y., Manufacturers of Koll's Patent Lock Joint Columns have consolidated their interest under the name of HARTMANN-SANDERS CO. The main office and factory will be at Webster & Elston Avenues, Chicago, Ill. The eastern office at 1123 Broadway, New York. The best columns, for porch, pergola or interior use. Send for catalogue G-19 of columns, or G-29 of sun-dials, pedestals, etc.

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Our No. 51 is guaranteed to heat 8,000 to 10,000 cubic feet of space in zero weather. It will suit any fire-place and mantel. Retains a fire over night and is cleanly to operate. Write for descriptive circular. High Grade Wood-Mantels and Tile furnished at Cost with our make Grates. Large catalogue sent on receipt of postage 7 cents.

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Splinters and Shavings—Continued.

"no new copper-lined wooden bath tubs shall be installed, nor shall any old fixtures of this class be recommended in any location where it had not been personally set. No old tub shall be relined. Any defective bath tub condemned by the inspector shall be removed."

The sweeping condemnation of wooden fixtures, whether metal lined or unlined, shows the temper of health boards where wooden plumbing fixtures are concerned. So far as bath tubs are concerned, however, we doubt if any ordinance is required to prohibit their use. Twenty-five years ago 99 per cent perhaps of the bath tubs installed were made of wood and lined either with zinc or copper, but within that quarter of a century such a revolution has been wrought in the manufacture of porcelain enameled goods that metal-lined wooden bath tubs have practically been driven from the market and porcelain enameled ware now supplies about 95 per cent of the bath tubs used. This supplanting of the copper-lined bath tub by the porcelain enameled ware is but another example of the law of the survival of the fittest, as it has been the desire of householders to have in their bath room fixtures that are inviting to sight and touch; something to be proud of and shown to friends as one of the desirable features of the house, not disgusting and unsightly fixtures that always look unclean and are hidden in dark corners of the house, as in unlighted closets under stairways.—Modern Sanitation.

In the calculation of air leakage through windows and the resultant heat losses caused thereby, heating engineers have been accustomed to use certain factors without, apparently, giving a thought to the possibility of materially reducing this leakage. Indeed, it is safe to say that the allowances usually made for exposed glass surfaces are among the least certain or definite, from a scientific standpoint, of all the ratios given for figuring heating work. This is especially true where a plenum system of heating is used, for it is not an uncommon experience, in such cases, to find the air leakage outward through windows far in excess of that expected or considered possible.

Recent tests along this line would seem to confirm the theory that the factors for air leakage through windows may be easily far larger than those in general use. An even more important result of the tests, however, is the really remarkable showing...
in the lessening of the air leakage when effective weather strips are installed. If anything like the results obtained in the tests can be duplicated in actual practice, it will be within the power of the heating engineer to reduce his window leakages to a degree that will have a very decided bearing on the amount of radiation required.

Plumber's Supplies for Chile
Additional Cities are Putting in Water and Sewage Systems

In order to answer several inquiries relative to plumber's supplies and plumbing, Consul Alfred A. Winslow, of Valparaiso, reports that increased attention is given the question of sanitation throughout Chile.

The national government has taken an interest and has directed that a large number of the cities put in complete water and sewage systems. This means a greatly increased demand for all plumber's supplies. Heretofore the demand for this class of goods has been limited to Valparaiso and Santiago, while from now on it will be much more general and the demand should soon be doubled. The Chilean people are, in the main, progressive and quick to grasp improvements that can be brought within their reach.

So far the United States has been supplying only a comparatively small part of this business, when the trade should really be ours. Where American-made goods are in use they are well received, but the trade has not been thoroughly worked.

There is a good opening here for increased business in this line, and a list is forwarded of parties with whom it might be well for those interested to correspond. (The names may be obtained by business firms from the Bureau of Manufactures.)

Redwood Water Pipes

California redwood stave pipe is made in all sizes, ranging from 8 in. to 10 ft. in internal diameter. Nine feet internal diameter was the largest used until the present year. This year one San Francisco firm is manufacturing 10-ft. pipe. These large-sized pipes are used principally for penstocks in water power plants.

Wood stave pipe has been found far better adapted for mountain construction than iron or steel pipe. This is by reason of its lightness; and California redwood being lighter than any other wood used in the manufacture of water pipe it therefore stands to reason that it is the wood par excellence for this purpose.
$16.95 CONCRETE BLOCK MACHINE
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FOR $16.95 we furnish one of the best concrete block machines and outfits ever made for making standard 8x8x16-inch blocks, the equal of machines others sell at $75.00 to $125.00. Our marginally low price is based on cost of material and labor, with just our one small percentage of profit added.

OUR OFFER: We will ship you one of our Wizard Machines, higher in price yet only one-third what others ask for inferior machines, on thirty days’ free trial, with the understanding and agreement that you can use it for thirty days, and if you don’t find that our Wizard turns out the highest grade, most perfect blocks with one-half the cost, one-half the labor, one-half the trouble of any other machine, if you don’t find it the simplest, easiest operated, by far the fastest and most satisfactory block machine ever produced, then you can return the machine to us and we will immediately return all you have paid for freight charges or otherwise, and the trial will not cost you one cent.

Write for our new Concrete Block Machine Catalogue with the machine explained in detail, copy of our binding guarantee, our free trial offer, letters from users everywhere about the wonderful Wizard money maker; it’s a great opportunity for all explained in our free Concrete Block Machine Book. Cut this ad out and send to us and you will get the book and all our latest offers free by return mail, postpaid. Address SEARS, ROEBUCK & CO., CHICAGO.

Splinters and Shavings—Continued.

Seasoned redwood only weighs 2½ lbs. to the board foot, so that it may be seen that it is both easy to handle and to transport. This makes it just the thing to use in the great mountain mining districts of the Pacific slope.

Iron or steel pipe, besides being inherently heavy, must needs be transported from factory to place of use in its manufactured form; but while wood pipe is inherently lighter it may be transported in its “knocked-down” condition, or in other words, piece by piece. Thus the separate staves of the pipe may be lashed to the backs of burros and transported into the most rugged mountain districts where no wheeled vehicle could be drawn nor any metal pipe of considerable size could be carried.

Staves for the making of wood pipe are run out upon quite an ordinary machine known as the “sticker.” The edges of the staves are cut on radial lines, and the sides on concentric circles that conform with the radii of the pipe under construction.

Hints on Wall Tinting.

A condition of walls of which most tinters are ignorant is dampness, and it is very difficult for an ordinary man to detect this. If his hand is a trifle damp he will detect no dampness in the walls at all. When walls are damp so slightly that a naked hand cannot detect it, it is necessary in that case to apply to the wall a piece of designers’ copying sheet glue. This sheet glue is used by designers to transfer drawings or small ornamentation, and, being an absolutely sensitive glue, when applied to these walls, if they are damp, will curl up, so the curling up of the glue will indicate to the painter that the walls are damp. In that case he has

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2919 Lyndale Ave. So., Minneapolis, Minn.
Splinters and Shavings—Continued.

to tell the contractor or owner of the house that the walls are not in condition to receive any size or tinting, for it would peel off, if put on.

In order to do tinting on old walls every thing should be moved from the walls and ceilings, which means a thorough washing and cleaning. The least little soap which is an alkali, left on the walls will cause peeling afterward. Paste from wall paper must be thoroughly removed. Metal ceilings and walls need only a thin coat of flat priming before being tinted. The flat coat of priming paint is necessary to counteract the grease caused by the metal workers.—The Digit.

Yellow Pine Leads.

A glance at the kinds of lumber produced shows very clearly the passing of white pine and oak, one the greatest soft wood and the other the greatest hard wood which the forest has ever grown. Since 1890 the cut of white pine has fallen off more than 40 per cent, while that of white oak has fallen off more than 36 per cent. Today yellow pine leads all other woods in amount cut, while Douglas fir—and this will be a surprise to many—comes second. Since 1890 the cut of Douglas fir has increased 186 per cent. Louisiana is the foremost yellow pine state, with Texas, Mississippi and Arkansas following in order. Washington produces by far the greatest amount of Douglas fir.

A comparison of the lumber-producing states shows that since 1890 there have been many changes in their relative rank. Washington, which in 1890 stood sixth, now leads, while Wisconsin, which eight years ago led all others, is now third. In the same period Oregon, Louisiana, Mississippi, Idaho and California made great strides as lumber-producing states, tho,
Splinters and Shavings—Continued.

on the other hand, the amount produced in Michigan, Wisconsin, Minnesota, Georgia, Kentucky, Tennessee, Missouri, Indiana and Ohio fell off anywhere from 29 to 54 per cent.

No Wood Is Cheap.

The highest priced native woods are walnut, hickory and ash, and the cheapest are larch and white fir.

Shrinkage of Wood When Dried.

Interesting experiments on the shrinkage of wood due to the loss of moisture have been completed by the Forest Service at its timber testing station at Yale University. These experiments show that green wood does not shrink at all in drying until the amount of moisture in it has been reduced to about one-third of the dry weight of the wood. From this point on to the absolutely dry condition, the shrinkage in the area of cross-section of the wood is directly proportional to the amount of moisture removed.

The shrinkage of wood in a direction parallel to the grain is very small; so small in comparison with the shrinkage at right angles to the grain, that in computing the total shrinkage in volume, the longitudinal shrinkage may be neglected entirely.

In the usual air dry condition, from 12 to 15 per cent of moisture still remains in the wood so that the shrinkage from the green condition to the air dry condition is only a trifle over half of that from the green to the absolutely dry state.

To Combat Losses from “Bluing” in Lumber Yards.

The Forest Service has undertaken a series of experiments, with the object of rendering lumber immune from the attacks of “bluing,” thereby lessening what at present is a serious loss.

Lumbermen through all the Southern states, and indeed in many other portions...
Ornamental Crestings and Cresting Finials,

made of galvanized steel, will give your roof an everlasting "finishing touch."

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open fire. All comfort and delights of a
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### Splinters and Shavings—Continued.

of the country, are familiar with the large
amount of damage caused by the so-called
"bluing" or "staining" of the sapwood of
freshly-cut lumber, when exposed to the
open air. This staining is not an inherent
quality of the wood, but is due to the growth
of low forms of plants called fungi, which
produce microscopic organisms called
spores, which, when ripe, are carried by
the wind in countless numbers.

The air of forests, and especially around
many lumber yards, is so infested with such
spores, that when timber is placed in the
yard to dry, it is immediately infected with
them. If the timber happens to be moist,
and possesses the necessary food to support
the life of the plant, the spores immediately
germinate and send in little threads, or hyphae,
to penetrate the tissues. Their action
decomposes the sap, and causes the
wood to become discolored, and conse
sequently it is known popularly as "bluing."
The deterioration in value of lumber on ac
count of this pest amounts to thousands of
dollars each year.

It is well known that bluing can be pre
vented by drying the lumber in kilns as

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and cement and the English half timbered architecture are shown. **Price $1.50 per volume.**

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Minneapolis, Minn.
Splinters and Shavings—Continued.

soon as it leaves the saw. This is expensive, however, and unless great care is taken, considerable depreciation in its value will occur. There are also patented processes by which the timber is immersed in certain alkaline solutions.

The work could be simplified, if the lumber were piled in open forms so that quick seasoning would take place for the spores of the bluing fungus can only germinate in the presence of considerable moisture. But to pile lumber in this manner requires more

Preserving Timber.

Some experiments have been carried out at Pottsville, Pa., with creosote, avenarius, carbolineum, common salt and zinc chloride for the preservation of mine timber. Contrary to popular opinion, these tests have proved that peeled timber is superior to and more durable than the green unpeeled timber commonly employed, and it is expedient that all timber should be treated chemically. Of the various substances tried, creosote, with a solution of zinc chloride, applied by the open tank process, is said to most effectively resist decay. A paper by Mr. John M. Nelson giving the details of the tests and illustrations of the plant used, together with photographs of the treated and untreated timber in the mine, has been published in The Mining World.—Western Architect and Builder.
INTERIORS BEAUTIFUL

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This is One of Them, Shown on Page 34.

There is a fascination in seeing the inside of other peoples houses, particularly where taste and the artistic atmosphere prevail. We have examined hundreds of interior views and selected from them 120 of the best, each one of which has some special feature of interest and merit. A group of modern Halls, Stairways, Living Rooms, Dens, Fireplaces, Dining Rooms, Bed Rooms. Be sure to order this book and add to your ideas for interior treatment, style of fireplaces, cozy seats, wall decorations, price $1.00.

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MAX L. KEITH, Lumber Exch. Bldg., Minneapolis, Minn.
A Particularly Fine Example of the Colonial Renaissance

By Edith Dabney

Among the many beautiful state buildings which lend charm to the grounds of the Jamestown Exposition, some of which are faithful reproductions of early homesteads or other historic structures, there is none more noticeable for beauty and consistency than the hospitable mansion erected by Virginia.

Architects and laymen alike appreciate the fact that this Ter-Centennial has accomplished much towards the Renaissance of Colonial lines and designs, a welcome departure from the many gabled, nondescript edifices which have long been an offense to the artistic eye.

Though the Virginia building is of massive proportions and formal appearance, the effect of homelike comfort has nevertheless been attained and preserved. Built of brick, the quoins and window facings are of gray stone in pleasing contrast to the white wood work of the columns, cornices and piazzas.

The main approach from the water front is over a broad concrete walk through the thickly turfed grounds. Magnolia trees, typical of the old South, grow proudly on either side, casting a wealth of heavy fragrance when the great
blossoms unfold in June. Pink rhododendrons and white azaleas are banked close to the house, while pyramid box trees and blue blossomed hydrangeas outline the walk-way, adding charm to the whole.

The rear acre is canopied with white petalled plum bushes in early spring, and crepe myrtle trees lend the pleasaunce pink glory throughout the summer. Locusts and wild cherries, planted by nature in years gone by, stud the remainder of

The steps which lead up to the dignified portico are fully thirty feet wide in accordance with the walk-way, and the four great Corinthian columns affording it support extend the height of the two stories. An uncovered piazza adjoining this portico ends in smaller porches at either side of the mansion, thus giving four formal entrances. The flag stone

The most noticeable, as well as admired feature is the great, square entrance hall through the center of which an open well extends allowing charming and complete views of the lower and upper floors at one glance. The hall walls are paneled
with Colonial buff silk finished paper. The wainscoting, pilasters and other trim are white, and the beautiful cornice is tinted a very pale cream.

The maple floor is covered with oriental rugs, and the rare old furniture which boasts an historic age was gathered from some of the proudest homesteads in the land.

Back of this great hall, one much narrower runs the width of the house connecting the two side entrances.

On the left is the reception room with dull blue hangings and pure white trim. The handsome wrought brass chandelier, now fitted with modern incandescents, came from the celebrated Ballard House in Richmond, its sister being hung in the dining room on the opposite side of the house. A quaint and curious harpsichord graces one corner of this room; Colonial gilt and Washington mirrors reflect the light from wall to wall. Candle stands and Empire sofas, Hepplewhite tables and Chippendale chairs invite the rest of the traveler and tourist who leaves with regret the old fashioned surroundings.

On the left of the hall the generous stairway of two angles ascends, the mahogany railed white balustrade of which is repeated in that enclosing the open well. A beautiful work table stands on the first landing beneath which ticks a grandfathers clock. The upper hall is furnished with antique high boys and Cheraton desks; roomy old sofas and chests of drawers, a refuge for the stranger guest who revels in this old time grandeur, the inheritance of an age long dead.

Those who have seen this mansion, who have known its hospitality and appreciated its charm, are loud in their praise of the architects who achieved the greatest triumph of any who played a part towards the beauty of the Ter-Centennial celebration.
EAR the Country Club may be found many of the newer homes and some diversity in the style of architecture. Denver home-builders have always been handicapped by the great expense of building. The unions have a firm grip, and the lumber, brick and mill trusts are more deadly still. It has grown to be the custom for hundred houses have this "chicken coop"—as irreverent tourists call it.

Clustering around Congress Park are many pleasing varieties of handsome homes and many medium cost artistic homes. Seven blocks south we come to Country Club, where the individual home builder is supposed to reign supreme. The following are a few examples.

**AN INTERESTING COMBINATION OF RED BRICK AND ROUGH PLASTER**

The first illustration is of craftsman-like simplicity and utility, built of red pressed brick with timber and plaster for second story. There is a uniformity in the windows which adds to the appearance. The chimneys at either end are a good feature, and the entrance porch is another.

Entering the center hall a large living room runs across the entire south end. Instead of the usual open staircase doors of leaded glass cut off the stairs making it practical to have but one stairway.

In omitting all the exterior superfluities in the matter of trim and finish, the builder has saved enough to enable him to use leaded glass quite freely throughout the house. The use, too, of hardwood was permissible. The exterior trim is painted a dull green; a red roof and ecru tinted rough cast plaster with the red brick complete a serviceable yet harmonious exterior. Altogether one feels here
is a house with no objectionable features and with many good ones.

The brick and shingle house is greatly admired. Soon after its completion the erection of shingle second stories was prohibited by ordinance, with the result that next door is a red brick box, with an almost flat cover called a roof, and that near by may be counted dozens more of these square boxes.

A shingle house is so unusual in Denver that to see one affords infinite delight. In this artistic house vitrified brick is used for the first story, with roof and gable of brown stained shingles and cream trim. The grouping of mullioned windows and the projection of the entrance with balcony above, are architectural features worthy of note.

The living room, which occupies the entire south end, is exquisite in white enamel and mahogany. Altogether it is
a house artistic in conception, in harmony both inside and out.

One of our latest houses, in modified bungalow style is here illustrated. By our drastic building ordinances we are compelled to build a thirteen inch brick wall up to window sills, or to confine our aspirations to about a fourteen foot height of nine inch wall above the foundation. The difficulties were overcome here by introducing a capping of red brick at the termination of the thirteen inch wall. The red is again introduced near the roof. Common brick is used with gray plaster over. No plaster on metal lath may be used until we come to the second story. Dull green is used for the roof and a brown stain for the trim. The heavy plaster pillars and cement floor are in keeping with the rest of the exterior. The brackets and projections are supposed to be ornamental. Windows of many small lights are used throughout. One enters directly into the living room which extends across the entire east front. A great brick chimney fire place with deep seats is at the north end while the south end is filled with mullioned windows.
The living room ceiling is beamed, the rafters of the floor above being dressed and stained. A ceiling is used, then a deadening paper and the floor above.

The roof over hangs so far that one thinks there is no room on the second floor but we find three chambers with a bath. With the exception of the east room which is provided with a sort of dormer window the roof prevents the chambers from getting any direct sun rays. Deep overhanging eaves may be artistic but they are far from practical. Another undesirable feature is that the second floor windows are placed so high that a person sitting down cannot see his own ground.

Stained woods are fittingly used for this house, also rough plaster.

The home of Mr. Melrose of Park Club Place is built of cream brick with foundation of dull green brick, brown stained shingles for second story, dull green roof and trim of cream paint, and is an example of good taste and quiet refinement.

Fortunately Country Club vicinity secured three of these second story shingle homes before the obnoxious ordinance before alluded to went into effect.

The dormer with its Palladian window is one of the effective features and is in harmony with the circular porch of the front entrance. The south balcony offers a sheltered and sunny retreat on a chilly day.

Number five is an example of the happy use of white plaster with brick and the dark brown stain of the heavy bracketing in design or floor plan. One wonders that a house at once so simple and so artistic had not been built before. White brick is here used with black roof and brown trim.

The grouping of windows is one of the new ideas happily executed. These windows offer a change for the man who doesn’t care for the mullioned window and still is too artistic to submit to the plate glass store front variety.

The steps and floor of the front terrace seem to be the only points to criticise; they are wood with the ordinary gray paint. The owner could well have afforded anything his fancy selected. Certainly his architect should have insisted on cement or tile to correspond with the general stable appearance of the house.

The interior is fully as pleasing and substantial as the exterior. Weathered oak being used for the hall and living-room.
S the chalet is in danger of disappearing from the face of the earth, being crushed out of its proper sphere by stone buildings, we will say a few words about its individual merits and the most effective means to set it off to advantage.

In the first place it will be necessary to adhere as strictly as possible to the old traditions, which gave to the Swiss wood style its individuality and its simple charm. Thus it is resorted to with advantage for country residences with their dependencies. The chief care of the builder ought to be to apply the old traditional forms to modern requirements, and it will soon appear, how charmingly such a combination of ancient form and modern comfort can be made to harmonize.

The more strictly the elevation adheres to the practical and comfortable division of the ground plan, the more picturesque will be the grouping and disposition of the outer walls.

Thus occasional irregularities are produced, which please the eye far better than an all pervading regularity, that is never found in nature. Thus a chalet will harmonize much better with the surrounding landscape in its idyllic simplicity, than would a stone construction however artistic its style may be.

The building, of which we give a view in our magazine today, represents the farm house of some rural residence. The ground floor contains stabling, coachhouse and byre. It is therefore built in masonry, whereas the upper story, serving as hay loft, is constructed in wood. If the stone walls are washed white or very light buff, the woodwork may be stained (not painted) dark and finished by a varnish of boiled linseed oil; the two
will form an agreeable contrast, which may still be heightened by the planting of creepers or vines. A suitable inscription in Latin or Gothic letters is characteristic of such a building. The one proposed for this house is:

Gelobet sei der Bauernstand,
Er hat sein Brod aus erster hand.
Praised be the tiller of the ground,
He has his bread first hand.

As for the size of such a farmhouse, it will depend on the requirements of the family which occupies the rural residence. Three horses’ stalls, harness room and coachhouse, two divisions in the byre and space for the manure as well as the staircase occupy the ground floor. In the upper story there is the coachman’s room, an oat bin, the hay loft, etc. The ground-floor is planned three meters in height, whereas the hay loft occupies all the space up to the roof, as the cross section shows. This hay loft ought to be as open as possible; constructing timber to support the roof ought not to interfere with the compact deposition of the hay.

The stricter this rule is adhered to, the less danger is incurred from spontaneous ignition of the hay.

This loft must get as much through draught as possible, wherefore the boards of the outer walls are perforated as the drawing shows.

The Summer Rose Garden

By Ida D. Bennett

“Gather ye rose-buds while ye may, old time is still a-flying.
And this same flower that blooms today, tomorrow may be dying.”

O gather rose buds in June is no novelty, it belongs to the spring-time and the natural order of things and we take it simply as one of the gifts of the season and are scarcely sensible of any special feeling of gratitude. But roses in mid-summer, ah! that’s a different story.

Roses which bloom through the hot days of July and August and prolong their blooming well into the sere days of Autumn, come as a benediction of the summer’s aftermath.

To possess them is not impossible or indeed difficult, given the knowledge to grow them, and the will to labor persistently and well.

Unlike the majority of summer flowers the rose much resents the presence of other plants in close proximity and not even a weed or blade of grass should be allowed to invade the ground allotted to its use.

The best soil for the rose garden is a mellow, fibrous loam, mixed with clay and well enriched with old decayed manure. This should be well drained and spaded deep and thoroughly. It should occupy as sunny a position as possible as sunshine is an important factor in drawing out the blossoms from the plants.

Only those roses which bloom continuously are really satisfactory in the general garden. The June roses have a sweetness of their own and I am far from decrying them, but their season of bloom once past, they are far from ornamental and unless they occupy an inconspicuous position it is far better to reserve the ground for more satisfactory varieties. For this reason the teas and hybrid teas which bloom continuously from June till frost, should be selected.

So greatly has the propagation of this class of roses increased in the past few years, that really good roses of blooming size may be bought for so small a sum that it even pays to grow them as annuals.

There is an impression that to have roses do well the first year it is necessary to purchase two-year-old roses or even field grown clumps. This is an error as most of the small mailing size plants,
many of which may be bought as low as a dozen or fifteen for a dollar, and good varieties at that, will bloom profusely all summer if given good care. Indeed, I have on the whole, had rather better success with this size plants than with the larger, as they seem to mind the transplanting less. Of course, I always have these smaller plants shipped by express, with the ball of earth about the roots as nearly intact as possible, which makes a great difference in successful culture.

Plants sent by mail with all the earth removed from the roots should never be placed at once in the ground, but be potted off in small three-inch pots and placed in a shady place for a day or two and then grown on in house or greenhouse until they show signs of new growth of top and root when they may be slipped from the pot into the earth without disturbing the roots; treated in this way they will do well from the start.

The selection of varieties will be much a matter of choice. Where one is unacquainted with the different varieties the selection may safely be left to the florist. There are certain old and well tried varieties, however, which should find a place in every collection. Among these may be cited that fine whit-Keiserine Augusta, Francis Willard, the pink La France, than which no more beautiful rose exists, Meteor, Jacquimonot, Liberty, Papa Gontier, Madam Baden, Admiral Schley, Maman Cochet and a score of others.

Roses require abundant moisture and frequent cultivation. If water is applied freely every evening and the beds cultivated every day the result will, doubtless, be notable flowers, especially will this be the case if a generous drink of liquid manure is applied to the earth about the plants twice a week. For the rose is a gross feeder and once vigorous growth has commenced one can scarcely overfeed them, but fertilizers—except that which was placed in the beds in the spring—should never be applied to dormant or sickly plants but should be withheld until they give evidence of being able to assimilate it. Ashes and soot worked into the ground is a valuable fertilizer and may be applied at any time after growth begins in the spring.

It is not, however, always convenient to work over the rose bed every day or even two or three times a week but the daily watering must not be neglected and the cultivation may be supplemented by a liberal dressing of lawn clippings. These when applied evenly over the ground to the depth of three or four inches and allowed to form a close mat make a very good substitute for cultivation, but to be effective must not be disturbed or broken up in any way. For this reason water must be applied from the nose of the watering pot, never from the spout or, if hose is used, it should be set so that the spray descends upon the bed in the form of rain. The value of a mulch thus applied is great. The ground beneath its protecting screen remaining cool, moist and comparatively free from weeds, as few, if any, will force their way through.

It is advisable to be generous in the picking of roses and to cut them with long stems wherever this may be done without sacrificing too many buds. This induces a stronger growth of the new wood which produces the blooms. If one would have fine florist's sized flowers, one should allow but one bud to mature on a stem and no flowers should be allowed to remain on the plant until they fade and droop.

Many insect enemies afflict the rose and must be dealt with early and late. It is the one drawback to the thorough enjoyment of the rose-garden, this constant warfare with insects which crawl and fly and sting.

One of the first to appear in spring is the green plant louse. There are several ways of annihilating this, all of which must be used with discretion, as the rose is one of the most easily injured of plants. Hot water, if carefully applied, either as a bath in which to immerse the afflicted branches by bending and dipping them, or as a fine spray, which must reach every part of the plant, is one of the safest and most effectual. When used to immerse the plant it should be not hotter than 130 degrees, used as a spray, it may be ten or fifteen degrees hotter, as it loses much in contact with the air and in passing through the force pump. This has the advantage over insecticides as it leaves the plants clean and invigorated. Tobacco smoke for indoor plants, which may be confined in a small space, as a closed room, a large packing box, etc., where they can remain exposed to the fumes of the tobacco for an hour or more, is excellent, but is rather difficult to apply, but may be managed by placing a covered frame over the plants intro-
ducing a shallow pan with a few coals covered with wet tobacco stems—which will make a dense smudge, but no blaze, underneath.

Kerosene emulsion is very effectual but must be used with great caution and it is much better to go over the plants two or three times with a weak solution rather than to run any chances with too strong a preparation.

Small green caterpillars are usually the day. The remedy here is Paris green applied either in solution—one teaspoonful to a four-gallon watering pot of water, or stronger, if a fine insecticide spray pump is used, applied to the flowers at evening or Paris green mixed with fine air-slaked lime may be used, but renders the flowers unsightly and is not to be recommended.

Roses treated with any poisonous solution should be labeled, as many people have a penchant for lunching on rose petals and there is always more or less danger in the application of any poison unless such precaution is taken.

A safer way is to go over the bushes early in the morning and pick off all the bugs, which is not so difficult a matter as at that time they are chilled and wet with dew and very sluggish.

Many of the teas and especially the Hybrid teas will winter fairly well if given careful protection. The Jacks are almost
iron clad and that most beautiful crimson rose, Virginia R. Coxe, is equally robust but even these are much improved in size and bloom by judicious winter protection. The most practical form of protection is found in the garden frame. These may be obtained in span roof of almost any size and so constructed that they may be taken apart in the spring and stored away until another winter. Failing these, a rough frame of boards may be constructed around the bed and filled with leaves or better still with evergreen boughs and the whole covered with oiled cloth or duck. Such a bed should be higher in the middle or at one side so that there may be sufficient slant to the cover to shed water freely and the cover should be stretched as tightly as possible so there may be no sagged spots to form pockets for water to settle and eventually drip through. Winter protection for roses and many other classes of plants is only of value when it remains dry, where it becomes wet and freezes it is likely to do more harm than good.

Single rose bushes may be wrapped in straw or burlaps and so be wintered successfully, or long rows of roses may be protected with evergreen boughs, but for the solid beds a frame and dry filling as of leaves or evergreen twigs, covered with glass or waterproof material is essential to success.

Some Interesting Stairway Effects
HEAVY, PLAIN VELOUR CURTAINS BETWEEN HALL AND LIVING ROOM

STAIRWAY LEADING DIRECTLY FROM LIVING ROOM
Very Artistic Use of Art Glass
Unusual Characteristics

FOR those who admire a home having considerable originality in its design, and many unusual characteristics which deferentiate it from the majority of homes, this design will prove especially attractive. Its general style is that of the gambrel roofed house with a general colonial treatment. The walls, porch piers and foundation are of rough cast cement which makes a pleasing contrast with the white trim used throughout. The main cornice with its succession of little coves is both original and attractive. The floor plan is out of the ordinary as much as the exterior. The reception room is a perfect octagon, the dining room an ellipse. The living room also has its special features. On the second floor are five chambers and two bath rooms, with servants’ quarters on the third story. This house, as designed by Harry W. Jones, architect, is estimated to cost $10,000, including heating and plumbing.

A Cottage With Character

THE designing of cottages is to an architect always a pleasure. They give him an unlimited field in which to use his strong imagination and the greater opportunity to design homes both original and with individual character. This attractive little home by A. L. Dorr, architect, is a cottage decidedly out of the ordinary run of inexpensive homes, and shows that careful attention has been given to all matters of detail. The upper story is rough cast cement on metal lath, all of the second story windows projecting through the roof corners as dormers, in a very picturesque manner. The living room is very large, being 13 feet by 23 feet in size. Out of this, at one end the stairway ascends gracefully to the second floor, and just beside the stairway is a cozy ingle nook with a fire place in the center and seats on both sides. The estimated cost of this home is $2,800.00.

Just for Two

HERE is a considerable demand nowadays for homes built “just for two.” This does not necessarily mean homes for a man and wife. It is becoming quite the thing for two business women, or two school teachers, to build little homes which they can call their own and fix up to their own taste. Such homes are, of course, especially attractive to young married people who do not wish to burden themselves with the cares of building or work of keeping up a large house. This little bungalow is very complete, having every convenience of a large home, including a bath room and heating plant. Its estimated cost is $1,000.00, not including heating and plumbing, which would vary according to kind and quality.

A Splendid Brick Residence

THE next design is a splendid house, somewhat English in its style, belonging to the Georgian period of English architecture rather more than the Gothic. The exterior walls are solid brick and the Flemish bond of the face brick is especially noticeable and beautiful, the entrance being a darker color than the standard face. As this house is somewhat severe in outline, a few vines over its walls and border planting about the home will greatly improve it. The floor plan shows all the appointments required by a family of means and social standing. One of the attractions of the large living room is a splendid window seat on the south side. Just off the living room is a large library, apparently the principal room of the house. The pantry arrangements are very complete, and there is a lavatory on the first floor, and a separate rear stairway from the first story to the attic. On the second floor are five chambers, each with a good sized closet. One of these rooms has a private bath and another a fireplace. The estimated cost of this beautiful home, as designed by William C. Whitney, is $11,000, including heating and plumbing, but not decorations.

A Bungalow of the Western Type

AS THE bungalow craze so called increases, there are fast coming to the front, certain styles which are characteristic of various parts of the country. The southern California bungalow is very different from that of Texas or Okla-
homa, and there is a very marked difference between the eastern and western part of the country. This very attractive design comes from the western part of the country, and is a good example of the type which is most popular in our western cities. The general plan of the western bungalow is to obtain a second story, but, at the same time, give the house a low appearance. Knapp & West, architects, have been most successful in obtaining this effect in this bungalow. The second story chambers are full height, there being no slant cut-off at the ceiling line. The first floor arrangement is very homelike and complete. That cozy den with the fireplace in it and broad seat, would be the delight of any man. This attractive bungalow is estimated to cost about $4,000.00.

**A House for All the Year Round**

It is becoming quite a popular custom to sleep outdoors as much as possible during the summer time, and to this end, this attractive home has been designed with a large screened balcony on the second floor made to look like a dormer in which there is ample room for two beds. The first floor porch is also screened, and being of good size, is furnished like an outdoor living room. The plan arrangement is quite complete. There is a combination cellar-way with a door to the kitchen, and outdoors as well, which is always a convenience. The ice box is in the outside entry, which is also a good arrangement. The lower story is sided with narrow siding; the upper story or gables are shingled. The estimated cost is $2,900.00.

**A Good Old English Style**

There is something about a combination of trailing vines and English half timber walls, that always makes a house look hospitable and homelike, whether it be a small, inexpensive home or one of pretentious dimensions. The lower story of this picturesque home is of red brick, laid regular bond. The upper story is half timber with rough cast cement panels. The upper story overhangs the first story almost a foot, making a break in the wall, which is a pleasing departure from what one usually sees. The porch is to one side, giving a free outlook from the large living room through a row of casement windows. This living room is unusually attractive, having a heavy beamed ceiling, splendid wall spaces for bookcases and piano, and just adjoining it, through an opening of generous size, is the picturesque ingle nook. The dining room also has a beamed ceiling. On the second floor are four bed rooms and a bath. The estimated cost of this home is $7,800.00.

**Having Individual Character**

This is a home with individual character. A home built on the square house principle, but with the walls broken by windows and bays in an artistic manner, which entirely removes the usual box-like appearance of the English square house. The porch is a pretty affair of ample size. The entrance is directly into a large living room, 13 ft. by 20 ft., on one side of which is a pretty bay. At the end of the living room is a fireplace. The stairway is practically enclosed, which reduces its cost. The plan shows but three chambers on the second floor, but by a careful rearrangement of these rooms on the original drawings, another chamber has been added without increasing the size of the house, making 4 chambers and a bath room on the second floor. The estimated cost of this house in yellow pine finish throughout, is $2,900.00, not including heating and plumbing.
Unusual Characteristics

HARRY W. JONES, Architect
A Cottage With Character

ADAM L. DORR, Architect
Just for Two

JOURNAL OF MODERN CONSTRUCTION SERIES
A Splendid Brick Residence

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Good Old English Style

FOLTZ & PARKER, Architects
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Making the Best of the Bathroom

The really modern bathroom is an enchanting place, with its tiled walls, its fixtures of nickel and glass, possibly its exquisite frieze of gulls floating against a blue sky. But not all of us live in new houses with superior fittings, and those of us who do not must either reconcile ourselves to the shabbiness of an old fashioned bathroom, or institute some process of renovation.

Luckily for the amateur, the superficial area of the bathroom is apt to be small. It is no great undertaking to treat all the cracks in the woodwork with a filler and to give it three coats of white paint. If the woodwork has been varnished, it will be necessary to treat it with a varnish remover. Then a couple of coats of good varnish, the first allowed to harden thoroughly before the second is applied.

With a wainscoting, such as most bathrooms have, the wall surface is comparatively small. If it is in good condition, paint and varnish, in some light color, pale yellow, light green, or blue, is advisable. If it is broken or bulged, the mason may be called in to apply a coat of cement to the smoothed off walls. A merely broken wall can be pointed up with plaster of Paris and covered with burlap, or with a wall oilcloth, at a cost respectively of fifty and twenty cents a square yard. The latter can be applied by the amateur, but the burlap requires a professional. The oilcloth comes in tile patterns, but the burlap, for a bath room, should be painted. The prettiest thing for the purpose is white, to match the color in the room, and with a white warp, is the best kind, and two should be provided so that they can be washed frequently.

The ceiling must have its coats of paint and varnish, as well. The most satisfactory covering for the floor is inlaid linoleum. Polished floors do not take kindly to the splashing which is unavoidable in a bathroom, cement is horribly cold to the inadvertent foot. A thin rag rug, woven of cotton rags dyed to match the color in the room, and with a white warp, is the best kind, and two should be provided so that they can be washed frequently.

The painting should extend to the fixtures, towel racks, shelves, plumbing pipes and mirror frame. The best sort of a towel rack for the bathroom is a curtain pole attached to the wainscoting with brackets. A mirror is quite indispensable. Sometimes one can be spared from a chest of drawers, and its frame can be painted and varnished.

The renovation of the bathroom which does not include the bathtub is like leaving Hamlet out of the play. It sounds very heretical to say that the tub should not be enameled, but where people use a great deal of very hot water, often with ammonia, borax, or soda, white enamel is very short-lived. It is far better to reduce the tub to the original zinc and scour it thoroughly, once a week, wiping it dry after each using. If the enamel seems a necessity, give the tub three coats of white paint, to begin with, at intervals of forty-eight hours. After the third is dry, plug up the overflow pipe and fill the tub with cold water, letting it stand twenty-four hours. Finish with two coats of the best bath enamel.

The man who first used nickel for bathroom faucets is responsible for a great deal of shabbiness. After nickel is once discolored, nothing restores it to even a semblance of its former brilliance. Silver-plated faucets are still worse. This being the case, the best thing to do is to replace the faucets with brass ones, which can be satisfactorily cleaned in half a dozen different ways. People who live in cities can acquire such fixtures from the men who deal in second-hand building materials. But the expense of buying new faucets is not great and is amply repaid.

As a finishing touch, one will of course
Decoration and Furnishing—Continued

have china to harmonize in color, possibly blue or yellow initials worked upon the towels, and sash curtains of some material with a colored figure. If the bathroom is large enough, it should have a white enameled chair and a chest of drawers for towels. Large brass hooks for bath gowns are indispensable. As few bathrooms are independently heated, a double bracket should be attached to the gas pipe, one of its arms supplied with some sort of a heater.

A Use of a Recessed Doorway

The party walls of many old houses are exceedingly thick, so that on one side of a doorway there is often a recess six or eight inches deep. This recess can be utilized for a bookcase, by nailing cleats to its sides and fitting shelves to it. The shelves will not, of course, be deep enough to hold large books, but will accommodate the ordinary duodecimo comfortably. A shelf or two may be reserved for bits of bric-a-brac, possibly a square compartment made, lined with some material which will be a good background.

A rather good arrangement for such a doorway is to set two wooden curtain pole brackets at the very top of the door frame, painting them to match it. These brackets will support comfortably a nine-inch shelf, holding some ornaments which will look well at a height. Below the brackets will support a pole from which hangs a curtain parting in the middle and drawn back to show the books.

The same sort of thing can be done with the set basin in an arched recess, common in city houses, when the room containing it is to be used as a sitting room. This recess is usually in the centre of the rear wall of the room. The faucets should be removed and the basin boarded over. The first shelf will rest safely on the marble facing at the sides and back of the slab. It will probably be necessary to fit boards to the sides of the recess to hold the cleats for the other shelves. Unless one chooses to have a curving moulding fitted to the outline of the recess, a curtain is a necessity with this arrangement. A long, high-backed couch standing against the wall will conceal the lower part of the set basin.

Repairing Old Wall Paper

Occasionally the paper on a room suf-
fers some damage in a particular place but, owing to the fading of the whole room, it cannot be repaired with new paper. Under these circumstances, an ingenious woman wet the paper over the mantel-piece thoroughly, so that she was able to remove it in breadths. She ironed it with care, and repaired the damaged sections of the wall. Over the vacant space she hung a piece of softly figured tapestry which made a delightful background for a mirror and a pair of sconces. The writer has seen the same thing done with a figured silk shawl, in a quaint Persian pattern, in delicate colors. Against this was hung quite a collection of old china.

Cleaning Old Mahogany

The reader who is inspired to renovate old mahogany is warned against using any of the prepared varnish removers. The potash which is their principal ingredient destroys the beautiful brown tones of the wood, giving it a purplish cast, which is very ugly. Ammonia will soften the varnish somewhat without doing any special harm, but the bulk of the work must be done by patient scraping.

The Amateur Upholsterer

Given plenty of tacks and an upholsterer's hammer and a moderate amount of skill, it is not difficult to re-cover plainly stuffed furniture. Even the broken springs, which seem so appalling, are not really broken, only out of place, and are readily restored to their moorings with stout twine. A thorough re-webbing of chairs and couch must precede any work on the springs which are always tied from the top. It is generally worth while to put a smooth layer of new hair over the old, a couple of pounds sufficing for the purpose.

The new cover should be cut out roughly by the old one, with some leeway for turning in, as the amateur can seldom pull the material as tightly as an upholsterer. In covering a seat, attach the material at the centre back and centre front by a single tack, and fasten it at the ends in the same way. Then nail the entire front edge first. The ends should be done next, leaving the bulk of the stretching to be done in nailing the back.

In covering with a cretonne, a three-quarter-inch fold of the material, put on with brass-headed tacks, is much smarter than gimp and easier to manage. It must be cut lengthwise of the goods and pressed flat, before using. In putting on the ordinary gimp, necessary with silk or woolen materials, use the longer of the two sizes of gimp tacks.

Dyeing Old Materials

It is not often that an old upholstery fabric is worth dyeing, unless it is plain colored and of light tint. Some very delicate tapestries will take a deep red or green, and a two-toned fabric can be given a darker shade of the same color. One fabric which dyes very well is linen taffeta, printed on one side. The ground is a neutral gray or cream, which will take almost any positive color, and the weave is reversible. Some dreadfully soiled coverings of this material have been dyed olive green, with good results. With patience and a large wash boiler, one can easily do the work at home, with some of the excellent prepared dyes. It is always necessary to allow a good deal more of the dye-stuff than the directions call for. One is fairly sure of an even tint if the goods are put in carefully, piece by piece, so that every part is saturated to begin with. Also the boiler should be closely covered during the boiling. Two long granite spoons are useful in moving the goods.
A. W. H.—Boston.

Q. I enclose rough sketch of an unfinished summer cottage I am building. First floor will have 4 foot wainscot, N. C. pine, beamed ceilings and shall use burlap or plaster board on walls above wainscot. Dining room and den to have plate rail. Would like to know what colors to use in staining floors, wainscot, plate rail, walls and ceilings. Furniture to be used in dining room dark mission, and in living room brown mission. Second floor, one front chamber, furniture forest green, other front chamber weathered brown and third rear chamber golden oak. Chambers will have no wainscot but shall either put on plaster board and paint, or use burlap on walls and ceilings. Would appreciate your views.

Ans. It is suggested to stain wainscot and wood trim, including plate rails, of lower floor, except kitchen, a forest green and the floors a dark water green. To finish walls of living room above wainscot with the uncolored burlaps, which is inexpensive, about 18 cents a yard, and is of a pleasing light grayish shade. To paint the ceiling in living room the same soft gray, but in den ceil with N. C. pine in narrow strips and stain a bright orange, using orange and green in the fittings. This combination of forest green and soft gray will be found livable and agreeable for the living room, the orange in den giving tone and warmth.

The walls of the southwest dining room would be agreeable in old blue, which would harmonize both with the forest green woodwork and the dark furniture.

If natural burlaps be used on walls and ceilings of upper floor, the different rooms can be given individual character by using accessories of different color. As for instance, in one room window drap-
eries, bedspread, dresser cover, chair covers, etc., of gay, gorgeous chintz, bright flowers and birds on a light ground. There is a chintz showing deep rose colored bunches of Hydrangea with its dark green leaves, very nearly covering the white ground, which is wonderfully effective with gray walls. Another room could have a Nasturtium motif. Or plain rose or deep blue could be used. A new fancy with decorators at the moment is to treat all the walls of the upper floor in a soft gray, making the furnishings different in each room.

F. B. W.—Nanking, China.

Q. Enclosed a rough plan of house we expect to build here in Nanking. The woodwork throughout will be of hard Oregon pine, with perhaps some Singapore or Japanese ash for mantles, bookcases, etc. We hope to use Alabastine in plain tints for the walls throughout. We already have a piano for the parlor, a reddish golden brown finish. Also have golden oak sectional book cases and roll-top desk for office and study. We would like to have the reception room finished and furnished in mission, the mantle and seats at sides mission. Please give us color scheme, wood finish, draperies, for each room, etc., etc.

Ans. Space in these columns will not admit of detailed furnishings for each room of a large, twelve-room house, but general suggestions will be given which may be helpful.

Your letter implies that your house is built on American ideas and that you wish to continue these ideas in the interior treatment. Also your preference is for a different finish in each room of first floor.

In our judgment, the Japanese ash will be preferable to the Oregon pine for the woodwork where mission furniture is intended to be used, and will take a softer brown finish. In the rooms where it is used for mantels, bookcases, etc., the remaining standing woodwork should be the same wood and the same finish. The Oregon pine may be used in the office and study, where it will harmonize with the golden oak furniture; and it may be used wherever paint is to be the finish. We advise the ash for reception room, library and dining room. Your plan for white woodwork on upper floor and for halls is very good; but we advise continuing it in parlor also, with a wider opening between hall and parlor. The rich crimson for hall walls and carpet, with white ceilings, will be very good. A soft grey would be a good choice for the parlor wall facing south, and mahogany furniture would give the necessary tone and warmth. The piano should be placed in the library. Blended blues and greens should prevail in the south dining room. The plate shelf may be from five to seven feet from the floor.

The north library, which is poorly lighted, should have pale ecru walls and be warmed up with dull, soft red in the rug and curtains of cherry blossoms on a cream ground in Madras. The reception room may be in greens, and the study in golden browns. The Oregon pine will make very good floors, thoroughly shellacked, stained and waxed. In regard to the upper floor, you best send for sample card of the alabastine, and select soft, pleasing shades. White enameled furniture would only be suitable for the children's rooms. Birdseye maple looks best against a blue wall, and the woodwork should be a deep, yellowish cream, with a brass bed.

Practical House Decoration, price $1, would be of the greatest assistance to you.

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J

ULY days, when almost everyone is gasping with the heat, when the danger of draughts is at its lowest point, is the time for the formation of fresh air habits. The majority of people suffer from deficiency of oxygen. A walk, in the morning, between the hours of eight and nine, reveals an astonishing number of closed bedroom windows. In the matter of systematic ventilation, the inhabitants of the tenements are a long way ahead of the well-to-do. All this despite the fact that a few people, impelled by fear of dire disaster, have taken to sleeping out of doors.

But devote the hot weather to acquiring immunity to changes of temperature. Teach yourself and your family that a current of air is not necessarily laden with possibilities of pulmonary disease. Do not be daunted by the appearance of an occasional cold in the head. Wisdom is not acquired at one bound. All sensible progress is slow. Keep the sufferer relentlessly out of doors and the cold will succumb with a rapidity you would not have thought possible. An occupation which will keep one moving about in the open air, for hours, is worth any amount of medicine for a cold. Of course, no one should be allowed to be really chilled. An additional layer of clothing below the waist used to be the prescription for chilliness, at a famous sanatorium.

If the warm months are devoted to a systematic hardening process, the family may begin September with a fair chance of escaping the usual crop of heavy colds, to be nursed into a chronic condition, by confinement to warm rooms, nay, more, may actually be so accustomed to breathing uncontaminated air as to insist upon real ventilation during the cold months.

The Library of Home Economics

The American School of Home Economics, located at Chicago, publishes a series of handbooks, embodying the theory and practice of the profession of home-making. They are written by experts, in simple and agreeable style, and are full of valuable information for the housekeeper, of whatever circumstances.

The volume on “The House” details a number of conveniences for the kitchen of limited size and closet room. One of these is a window cupboard to be used in cold weather, obviating the necessity of ice. It consists of a box, a foot deep, eighteen inches wide, exactly the length of the outer frame of the window. It is fitted with a single shelf and fastened to the sill flush with the lower sash, in such a way that the lower half of the window shuts down upon it, instead of the sill. A sash curtain run on a brass rod, at the centre of the window protects the contents of the box. The space left open by the raising of the lower sash admits a current for the ventilation of the kitchen.

Another convenience is a double table, mounted on castors which is easily rolled about in the kitchen. This is made from a square pine washstand, of a very familiar type. The back and ends are removed, the top and shelf covered with zinc. A liberal allowance of brass hooks is fastened to the sides, just under the ledge of the top, to hold small saucepans, and other utensils. The drawer holds the kitchen cutlery. Such a table can be loaded with dishes after meals and rolled back and forth from the dining room. Still another convenience is a drop leaf screwed to the wainscot in a corner. Things like these are trifles but they save a great deal of strength.
The Kitchen Floor

The proper treatment of the kitchen floor is a good deal of a problem, when its care must come out of one's own bone and muscle. Linoleum, the most satisfactory covering of all, costs about the same as ingrain carpet, in the best inlaid grade considerably more. The average oil cloth is cheaper, but lasts a very short time in good condition. Once it begins to crack, its good looks are gone and it is worse than a bare floor. Stained and varnished floors are subjected to too much hard wear to be appropriate for the kitchen, and the painted floor requires frequent renewing. The oiled floor remains. This is a really satisfactory treatment, if the floor is a hard pine one, or if a soft pine one, the cracks are well filled. Successive coatings of hot boiled oil make the boards impervious to grease and little care is required beyond sweeping and an occasional wiping with a damp cloth. In the case of a hard pine floor, the darkened tone of the wood becomes really beautiful, after a year of regular applications.

With a good oiled floor, the kitchen becomes quite picturesque with a braided rug before the fire and another in front of the sink. Braided rugs are not difficult to make, once the inch-wide strips are cut, and really repay the effort. At auctions of antiques, they are esteemed as pearls of great price. But the intelligent student of our colonial antiquity finds them more appropriate in the kitchen, than hobnobbing with Chippendale in the drawing room.

The Elusive Pickle

The dweller in city tents, who aspires to supply her family with tiny cucumber pickles, should be on the alert for them after the middle of July. Their season is uncommonly short and too often all the available supply seems to have disappeared while one is making up one's mind as to the best time to “do them up.” A liberal addition of grated horseradish to the vinegar in which they are packed is an improvement and helps their keeping. Also the boiling of a little garlic in the

The Right and Wrong Way to Sweep

Not so much the handling of the broom. That is a knack easily acquired, a matter of strength and a certain dexterity. But half the battle in cleaning a room is in getting it ready. This is the point in which almost all servants are at fault. They sweep a full room, instead of an empty one.

Every portable article should be dusted and removed from the room. Bric-a-brac and small pictures can be shut up in drawers, the closet will contain a number of the smaller pieces of furniture. Then the larger pieces should be thoroughly dusted with a cloth and pinned up in thick covers. After that the mere sweeping is a simple matter. Allow ten minutes for the dust to settle and dust the woodwork and pictures with a brush. Another ten minutes and dust them with a cloth. Uncover the furniture and dust that and your room is ready for the smaller articles to be brought in. When they are in place everything is done, and the room has been cleansed with far less effort and more effectually than if everything had been left in it in the usual way.
Cooling Drinks for the Fourth

A PUNCH which is warranted not to intoxicate has a basis of tea. Allow two heaping teaspoonfuls of tea to two quarts of boiling water. Let it steep six minutes, strain and sweeten with a pound of sugar, stirring it well to dissolve the sugar. For two quarts of tea use the juice of ten large lemons, adding this to the tea. When the mixture is cold pour it over a mixture of three sliced oranges, a pint of hulled strawberries, a shredded and sugared pineapple and five thinly sliced bananas. Keep it in the refrigerator several hours and just before serving pour it over a block of ice in the punchbowl.

A grape juice punch is made by adding the juice of a lemon and an orange to a pint bottle of grape juice, with some thin slices of pineapple. Pour it over a lump of ice and when it is cold add a pint of Apollinaris or Vichy. Pass lump sugar and spoons and let people sweeten it for themselves, as many people dislike the addition of sugar to mineral water. In using mineral waters, it is an economy to buy the salts and mix them for one's self. The proper proportions are given on the bottles. A pleasant variety is given to ordinary lemonade by mixing it with mineral water, instead of plain. The flavor of the ordinary article is much improved by boiling the lemon juice, sugar and a small part of the water into a sort of syrup.

Our grandmothers made a refreshing drink from raspberry vinegar. They added a pint of vinegar to three quarts of fruit and let it stand three days, after which they mashed and strained it; added a pound of sugar to each pint of juice and boiled it twenty minutes. When it had been cooled and put up in bottles, it was ready for use, a tablespoonful being added to a glass of water.

Silver Deposit Punch Glasses

Not specially cheap, but excessively pretty, are the little punch glasses of clear white glass, with a pattern of silver deposit. They have standards and might be used for ices, as well. If one is the fortunate possessor of a silver punch bowl these glasses are far prettier and no more expensive than cut glass. Nor are they so much affected by changes of temperature.

The Revival of the Cake Basket

Now is the time to get out one's treasures of antiquated silver and consider what may be done with them. Silver cake baskets are having quite a vogue as centre pieces for the table. Sometimes the handle is removed, sometimes left on, and the basket is filled with flowers. They are also pretty for the morning dish of small fruit. Another antique put to practical use is the castor, the sort which had a circle of small cylinders arranged around a centre, each holding a bottle. When the silversmith has sawed off the handle each compartment is supplied with a bottom and beheld a silver fern dish.

Converting Old Plated Ware

Not everyone knows that old plated ware, probably the most hopeless sort of household rubbish, can be converted into cash. Dealers in old metal pay twenty cents a pound for it, at least in New York. In fact old metal of any kind finds a ready market, in large centres.

Colored Embroideries for the Table

Allusion was made in a recent number to the return to favor of colored silk em-
broideries. It is a fad rather to be regretted, as with every possible care, such embroideries get shabby in a very short time. Also there is almost always a lack of harmony between the centrepiece and doyleys and the coloring of the china.

Some embroideries which give a suggestion of color, but can be used with any sort of ware, are worked in white silk, in conventional designs, but shaded with pale green. Green stands washing fairly well, better than more positive colors. When such embroideries begin to get shabby, the white silk turning brown, it is said that they can be restored to their original whiteness by the use of a rinsing water with a tablespoonful of lime water to each pint.

**Substantial Summer Suppers.**

Many people find their appetites going in hot weather, and do not eat enough to keep themselves in good condition. Then comes a summer outing where sanitary conditions are not very good and the germs of typhoid are planted in the weakened system. At no time of the year is it more important to have the meals appetizing than in July and August, when the heat is apt to curtail the allowance of sleep, and the day's work done in an unnaturally high temperature.

While it is highly undesirable to clog a weakened system with heavy and undigestible food, "a soup, a salad and some fruit" is not a sufficient provision. The night meal should have as its principal feature something really nutritious. The different dishes into which cheese enters largely are at once substantial and appetizing. People who cannot digest raw cheese seldom experience any trouble with spagetti, cheese fondu, or a cheese omelette. The combination of cheese and eggs is a very good one from a nutritive standpoint, also that of cheese, which is rich in proteid, with some form of starch.

A very simple cheese dish is made by spreading thick slices of crustless bread with a mixture of creamed butter and grated cheese, and arranging them in a pudding dish. Pour over them a custard mixture, with the sugar and flavoring left out. Bake for about half an hour or, in the absence of an oven, steam in a dish of boiling water. It may be moulded in a round tin and turned out, or cooked in a casserole.

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An Italian dish, which is popular with everyone who tries it, is made by mixing thoroughly half a pound of grated cheese, three eggs and three teaspoonsful of flour in a casserole, or deep pudding dish. When quite smooth, pour over it a pint of hot stewed tomato, seasoned with pepper, salt and butter, stirring constantly. Set it over the gas, or on the range, on an asbestos plate, and stir it till it thickens like a custard. Add a teaspoonful of Worcestershire and more salt, if it seems to be needed and serve with, but not on, buttered toast.

If the summer dinner is served at night, it goes without saying that it should not be heavy and should include plenty of green vegetables, not forgetting a salad of some sort.

**Serving in Quantities**

In serving refreshments to a number of people, at any sort of social function, the proper allowance of salad, scalloped oysters, or any creamed concoction, is a quart to every ten people. A quart of ice cream will serve about seven people, a large layer cake twelve, and four small sandwiches should be allowed for each person.

In making chicken salad, allow for each quart a fowl weighing from three and a half to four pounds, half the bulk of the prepared meat in celery and a cup of mayonnaise.

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Agents at all Central Points.
A letter has been received from one of our correspondents in Cleveland, Ohio, in which mention is made of the item recently published by us on “Covering Capacity of Shingle Staining,” offering a further suggestion and we think it is a good one. Here it is:

“The workman may get far more satisfactory results by floating the staining liquid on a body of water, in a suitable vessel. In this way the stain may all be used, and the last shingle be as evenly and properly coated to the desired height as the first one. Further, if the water is heated or warm, it will help to keep the stain at the desired consistency in cool weather. I have found numerous builders and painters who were unaware of this method and gladly adopted it.”

D. P. H.—What is the right way to treat cracks and patches, if you are going to use water color?

Ans.—Well, the only way to get a good job is to bring the new plaster up with as many coats of oil color as there have been on the old part, taking care not to run over the edges. Then, when it is dry, sandpaper the edges so as to get them even with the old work, and then, when you paint over it, it will never show. Of course, when a man tries to do a cheap job, it is a good deal easier to touch up the patches with shellac, and then one coat will cover the whole thing, but his poor work will be found out later, and the owner will kick, after it is too late and he has paid his bill.

C. B. S.—I have let the contract for my house, and the house was half plastered, when I discovered the wall had been put up 8 inches without any footing. The contractor wants to insert a 16-inch by 12-inch footing laid in cement. I insist that he should tear out the corners and build 16-inch piers joined to the wall, with one set in each wall and two in side wall, all laid in cement.

Ans.—With reference to the footings, would say that slipping of footings in under the wall, with the wall resting simply on their edges, will not be of much service, as the pressure all comes on the edge and will cause the footings to tilt. Footings running square under the corners will do more than anything else to help you, and if in addition the others can be done the same way, bedding same in a layer of puttied sand or concrete, it would be much better, for in clay soil the heaving and slipping on the clay causes considerable trouble.

D. M.—“Will you please give me your idea of the overhead system of heating? It has been recommended to me.”

Ans.—The overhead system of heating with hot air is all right where you have forced ventilation by means of a fan, which drives the heat, giving positive results. I would not recommend it in a small house, where the air should be introduced into the rooms in as direct a manner as possible, taking the cold air from the outer corners of the rooms into the basement and thence into a special ventilating flue; you will be sure of the best results possible, if your piping is laid direct, without several turns or flat runs.

C. T.—“I wish to ask you whether or not a concrete foundation would not be at least as cheap and much better than the usual stone and lime mortar structure. I figure it would be better and cheaper for both foundation and cisterns.”

Ans.—As for concrete for foundations, its cheapness in comparison with stone will depend, of course, upon prices and conditions prevailing in the locality where you expect to build and at that time. In some localities, concrete is considerable cheaper than stone.

As for cisterns, if your soil is right, coarse sand or gravelly, you can plaster with cement mortar directly on the gravel, brick arching the top, making a jug shaped cistern at very little expense.

C. C. S.—“How are the supply pipes for the hot and cold water to come up from the kitchen into the bathroom?”

Ans.—The supply pipes from the kitchen follow along side of the soil pipe, then up through, the latter being the most up-to-date method of running supplies, using galvanized iron piping.
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Uses of California Redwood

The California redwood has long been the leading article of lumber used upon the coast, and its use, instead of diminishing with time, is increasing.

Speaking of shingles, time and experience have taught the builder that it is the redwood shingle that has excelled even the cedar shingle of the North in durability. In 1860 a certain house in Boston was shingled with redwood. That same house is standing today and the original shingles still cover it and are said to be nearly as good as ever; and the Boston climate is a pretty rough one on shingles, too.

Then here in California, there are thousands of houses that were shingled with redwood 30, 40 and 50 years ago, and those same shingles are almost as sound today as they were when they were put on.

Now there are very good reasons for this quality of durability. To begin with, if you will examine a piece of average redwood lumber you will find that it is very light in weight, and if you will examine it more closely with the eye you will find that it is almost absolutely free from knots, pitch or pitch seams; in fact, the redwood is composed almost wholly of what the lumberman calls "clear stuff."

"To sum up, the redwood is not "sappy"; it is free from pitch, it is straight of grain and free from blemish; it therefore makes an ideal building material.

Again, there is probably not a wood in the world that may be adapted to so many uses as the California redwood. Observe the Mission furniture and unique cabinet work that are now made of this material.

Redwood as an interior finish is now very popular in all the Coast regions, and is finding its way into the East. Chicago is at present offering an excellent market for the redwood.

A recent national assemblage in San Francisco was attended by a wealthy Chicagoan who was having built a very elegant and costly home in the "Windy City." Just before starting for the Coast he had given orders for the lumber for the interior finish, and expected to see a part of the work done upon his return from California. But he came to California and saw some of the elegant redwood finish that may be seen here. He was at once struck with its richness of color and of grain. The more he saw of it the more he liked it; in fact he was completely captivated with it. Then he hurried to the nearest telegraph office and sent a wire to Chicago countermanding the order for the lumber for the interior finish of his new mansion given before leaving for the Coast. That task performed, he went to a San Francisco lumber firm and ordered a big bill of redwood to be despatched for the East post haste, to take the place of the rejected lot of Eastern lumber.

To show that redwood lumber is in demand it is only necessary to call attention to the fact that the "clear stuff" in the San Francisco market commands from $35 to $40 per 1000 ft.

California redwood is extensively used in the manufacture of doors, windows, sash, blinds, etc. It makes very handsome panels, especially if the lumber is selected with reference to the beauty of its grain. Panels of this kind, well polished, oiled or varnished, are very ornamental indeed. The wood also makes very handsome newel posts and rails.

It is in the great engineering enterprises of the Pacific slope that the California redwood again takes a prominent place. It has been found the very best wood in the world for use in the manufacture of stave pipe for the conduct of water mining, irrigation and domestic purposes.

History of Heating

An interesting bit of history connected with this subject of ventilation and its counterpart of heating in the winter, that is worth mentioning here, is furnished by the B. F. Sturtevant Company, who say that the history of such work in this country com-
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Brief Facts

One cubic foot of crushed stone weighs approximately 85 pounds.

Portland cement weighs about 120 pounds per cubic foot.

Lake sand weighs about 100 pounds per cubic foot.

Gravel weighs about 120 pounds per cubic foot.

A cubic yard of a 1-2-4 mixture contains (allowing for voids) 11.7 cubic feet of sand, 23.4 cubic feet of crushed stone, 1.54 barrels of cement.

One barrel of cement equal 3.8 cubic feet or 3.80 cubic feet.

Two barrels sand equal 7.6 cubic feet (30 per cent voids) or 5.32 cubic feet.

Four barrels stone equal 15.2 cubic feet (45 per cent voids) or 8.36 cubic feet.

Total material required for 1,000 cubic yards 1-2-4 concrete 1,540 barrels cement, 433.3 cubic yards sand and 866.6 cubic yards stone.
Splinters and Shavings—Continued

Stoves as Destroyers

By State Fire Marshall.

Failure to protect nearby woodwork from the heat of stoves ranks next to defective flues as a cause of fire waste. This loss in our state exceeds $175,000 a year, while the cost of sparks falling on shingle roofs, as a result of carelessness in feeding or giving draft to stoves, is half as much.

Among heaters the cook stove sacrifices most property, and the gasolene stove most lives. The worst culprit is the cook stove which has no eight-hour day nor Sunday off. The gasolene stove causes a greater number of fires, but the loss is smaller by half because attention is attracted to them before they have time for a good start. The gasolene fire starting with an explosion sounds its own alarm, and, added to this, there is usually a cry of the burned which summons immediate help.

Changing Oak to Mahogany

In a case where it was desired to change oak that had been filled and varnished in the natural to mahogany, the Painters’ Magazine presents the following comments in reply to a correspondent, who says that he realizes that the best way is to clean off the old finish and then stain in imitation of mahogany, but that at the same time a good mahogany imitation cannot be had on oak, because of the difference in the grain:

The best effect could be obtained by sandpapering down the old finish, then apply mahogany ground color, and grain in imitation of mahogany, finishing with varnish. Still, if this method is too expensive and if the veining of mahogany is not an essential feature, we should say that the old finish should be well cleaned down, using various grades of sandpaper or steel wool. A fair imitation of mahogany could be obtained by using a strong stain, which may be made from Bismarck brown, dissolved in denatured alcohol, to which a little shellac varnish must be added for binder, or it may be made up as a water stain, by mixing colors ground in water, thinning same with stale ale or beer. The proportions are about 16 parts by weight of burnt sienna, 3 parts rose pink and 1 part madder lake. Still another quick drying stain may be made by mixing

What Good Paint Saves

When you paint a house, the cost and the colors have most careful consideration.

Before you figure-about, a low-price-per-gallon paint looks cheapest. But let’s see:

Suppose you were going to paint; for instance, a house like the one above. We'll estimate the total surface to be covered at 10,000 square feet. We'll compare the cost of the paint before the good paint and the cheap paint—assuming the labor to be the same in both cases.

Now good paint—Lowe Brothers "High Standard"—will cover 350 or more square feet to the gallon, two coats, and a paint made to sell at a cheap price per gallon or a "strictly pure hand-mixed by-guess" will cover approximately 200 to 250 square feet two coats. This means that it will require 30 gallons of "High Standard" Paint, and of the cheap paint 45 gallons, or 15 gallons more.

Suppose that the "High Standard" Paint costs 40 cents per gallon more than the cheap—sounds big, doesn’t it? Still the cheap paint or "hand-mixed" would really cost at current prices $8.25 more than the
Splinters and Shavings—Continued

2 lb. burnt sienna in Japan and ½ pound rose pink in Japan, thinning the mixture with pure spirits of turpentine and a few tablespoonfuls of rubbing varnish. The last named stain would perhaps work best in your case, as it would most effectively hide the oak grain and by working deftly you may be able to come closer to the mahogany effect than by any other means. Try it first at a spot of the surface that will not show the test afterwards, and select your colors so as to produce the desired effect.

Refinishing Pine Floor

In describing the manner of treating a pine floor that has been varnished and in which the boards have shrunk, producing cracks, but which otherwise is in fair shape, the Painters’ Magazine says: First have the floor thoroughly cleaned, examine it to see whether it is marred so badly by wear, that it will not look well in the natural finish, in which case it is best to stain or paint it. If it is in fair enough condition for varnishing, knock off any high gloss still remaining with sandpaper and dust. Clean out the cracks and wet the edges lightly with turpentine, then fill them with a good floor crack filler as per directions on the package. If you cannot readily obtain such an article, then prepare a filler by mixing and kneading well together to the consistency of putty, cornstarch and coach painters’ or gold size Japan. In the latter case, do not prepare more than is required and apply at once, as the preparation sets rather quickly. Press the filler firmly into the cracks, and should it shrink too much, go over the operation a second time. Smooth off any excess of filler after drying with sandpaper, dust again and apply as many coats of good floor varnish as are required to produce the desired finish. If desirable, the floor may be waxed in place of varnishing, for which purpose the floor should be well sandpapered to remove all glossy spots, and a good prepared floor wax applied according to directions.

Cause of the Cracking of Varnish

One common cause of cracking of varnish is the adding of terebin to a varnish in order to make it harden quickly, especially when exposed to sunlight. These cracks at first give the varnish a silky appearance, due to their hairlike fineness and great numbers. Subsequently many of the cracks open out wider under atmospheric variations.
Splinters and Shavings—Continued

The application of any hard, quick-drying coat of paint or varnish on a soft undercoat is liable to cause cracking, and would affect any second coat in the same way.

Another cause of cracking is the application of a coat of size upon a hard, non-porous ground prior to varnishing, such as sometimes occurs when revarnishing old work in cheap jobs, if the size be fairly strong, the cracks caused being generally of polygon shape and the edges having a tendency to curl outwards.

To avoid tendency to cracking, there is no better course than to take care that every coat prior to varnishing be thin and allowed to dry hard before applying following coat. It is important also that no quick-drying medium, such as gold-size or terebine, be used in painting over a coat mixed with ordinary linseed or boiled oil, though the reverse order may be employed without danger. A hard varnish may be used as an undercoat, and an elastic finishing over-varnish over that.

Ventilation

When steam-heat is installed, ventilation is especially needed, for the absence of flues and open fireplaces deprives the rooms of a constant source of pure air and architects are wondrously negligent in supplying efficient substitutes for them. When building a house, it is very easy to have at least one open grating communicating with the outside air placed at the highest possible point in every room, with a flap, if desired, to prevent this outlet from becoming an inlet; but, even when the house is built without these necessary ventilators, they can be easily made with very little expense or trouble. Perhaps the simplest method of providing a constant inlet for a room is to have a counterpart of the lower rail of the sash-frame made, with upper and lower surfaces parallel. When this is put in its place and the window shut down on it, air comes in readily at the junction of the upper and lower frames, and at a height which prevents those sitting in the room from feeling any draft.

Lowering the upper sash two inches will always ventilate the room better than thrusting the lower one up to the fullest extent, because in the latter case a
**Splinters and Shavings—Continued**

Stratum of foul, overheated air is left stagnant near the ceiling, and to expect to drive it out by letting in fresh air below is like attempting to pour liquid into a vessel already quite full.

When the upper sash is lowered ever so little, an outlet for this foul air is provided, through which it escapes automatically, while the space between the two sashes where they overlap provides an inlet through which fresh air rushes to fill the place of the escaping air, causing a constant up-draft and consequent renewal of the air-supply of the room. Where there is a chimney or flue of any sort in a room, openings made into it at the highest possible point, after one of the plans described above, will prove as efficacious as when made into the wall-space between the brick-courses, or inner and outer boards of a frame house.

Written by N. W. Davis in Country Life in America.

The asphyxiation of a young man in Grand Rapids, Mich., recently by the fumes of a gas heater used in warming water for bathing purposes calls renewed attention to the type of heating apparatus that, as generally installed, provides no means for carrying away the products of combustion. As stated at a recent meeting of the heating engineers, a typical apparatus of this sort, which was used for warming a house, consisted of groups of large gas burners located in the registers in the various rooms. With the rapid growth in recent years in the use of gas and oil for heating purposes, this method of installing them has become widespread and, in many cases, is working great injury to the health of those living in tightly-built houses. It is well known that such products of combustion form a poisonous gas whose effects are deadly and any agitation that can be developed to put a stop to the use of unvented gas or oil heaters would be one in the best interests of the ventilating engineers as well as of the public.

**Mexico's Hardwoods**

"I was amazed at the almost infinite variety of woods of value to woodworkers that are growing in the forests of tropical Mexico," said a timber expert who recently made a tour of that part of Mexico. "There are several varieties of mahogany, cedar, oak, rosewood, ebony, dyewoods and..."
Splinters and Shavings—Continued

endless other hardwoods with Spanish names, but corresponding to our hickory, cherry and other fine American woods that are now extremely scarce and costly.

"Many of these tropical woods are as strong as iron. While the mahogany, cedar, rosewood and dyewood are well known to us through importations from there, the unknown varieties of woods that are just as valuable are quite as plentiful.

"Among these is one called zapote, which grows to a great size. Although the wood of this tree has peculiarly valuable qualities for lumber, it is seldom used in that way, the tree being valued merely as the producer of chicle, the sap which forms the basis for most chewing gum.

"The wood of the zapote tree is dark red, and is easily worked until thoroughly seasoned, when only the finest edged tools will have any effect on it, and a sharp-pointed nail is driven into it with difficulty. The fiber of the wood is so dense that the wood sinks in water like iron.

"In the prehistoric ruins that abound in these Mexican tropics are timbers and door frames that are as perfect today as when they were first placed in position. The wood takes a magnificent finish, as do nearly all of these Mexican hardwoods, and would be a rare article for the cabinetmaker.

"There is an odd wood among these forests known as the gran tree, which when tapped yields a black sap, which is sent in large quantities to Germany, where it is used in the making of ink and dye. Another tree yields a sap that is a deep red, and Germany also takes largely of it for the manufacture of dyes.

"Besides these that abound in that part of Mexico there are vast areas of pine, a timber that resembles our poplar and different kinds of oak. Much to my surprise, more than 6,000 feet above the sea I found a big sawmill in active operation, with a Yankee from Maine at the head of it.

"And he wasn’t bothering with such commonplace logs as mahogany, ebony, cedar, rosewood or such as that, but was cutting away at the white pine and oak, for those are the woods that the native buyers and users of lumber demand. As a matter of fact, a Mexican lumber dealer would be willing to trade you mahogany for our yellow pine, log for log.”
Splinters and Shavings—Continued

Fir Tree Is Worth $423

Four fir logs, all cut from the same tree, and containing more than 42,000 feet, were shipped to the Kalb-Gilbert Lumber company's mill the first of the week from the company's camp near Raymond, Wash. Each log occupied a car. The larger was 101 inches in diameter at its small end and 36 feet in length, containing 17,000 feet. The measurements of two other logs were 80 inches in diameter and 36 feet long, 8,738 feet; 53 inches in diameter and 40 feet long, 5,900 feet.

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"Reinforced Concrete in Factory Construction" is a very practical book on the subject named, going not only into the science of well-known forms of construction in concrete, but covering other and more complicated systems and processes of construction. It gives detailed information on the cost, construction, specifications for, and the practical planning of concrete factory and office buildings, showing details of floor slabs, girders, columns, inside and outside walls, footings, etc. The book contains 250 pages. It is published by the Atlas Portland Cement Co., 30 Broad St., New York City. Price, 50 cents. It is free to architects and engineers writing on their own stationery.

"Deutsche Kunst und Dekoration" is printed in German, but that is of no consequence, for it is distinctly an art magazine of high merit. Every one of its hundred pages has a large illustration of interest to those who appreciate high art in all its branches. The opening article of the October issue is on the marble sculpture work of Auguste Rodin, Paris, a man who has mastered the soft, living flesh-like appearance of the female figure in stone. The most prominent features are the departments devoted to sculpture, paintings in oil and architecture. It also depicts the high art of Household Decoration, Furniture, Weaving, Bookcase Designing, Jewelry and Metal Work.—By Alexander Koch, Darmstadt. Price, $2.50.

Brayton Standards: A Pocket Companion for the Uniform Design of Reinforced Concrete.—There is need of more enlightenment on the part of architects, engineers and contractors; not of theory, but of scientific knowledge based upon actual practical experience with reinforced concrete. It is the aim of the Brayton Standards to furnish this information in a condensed, convenient form. The standardizing of reinforced concrete will be of the utmost value in securing intelligent bids and sound construction.—By Louis F. Brayton, Consulting Engineer, Minneapolis. Price, $3.00.

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In the Renaissance of Colonial architecture many are the unpardonable mistakes made by unenlightened beings who, founding their designs upon the lines of the earlier period, unwisely undertake improvements with a result as incongruous as it is inartistic. This is especially true of halls and stairways and the country is not lacking in otherwise noble houses sadly marred in this respect.

There is no part of the mansion deserving of more attention than the hall from which ascends the stairway, the latter being either a grotesque necessity or artistic adjunct. With these prime essentials in harmonious accord, the success of the mansion is assured, which doubtless accounts for the excellent standard of the finest Colonial structures, the early builders of which understood how to clothe them in such a way as to hold the attention by their beauty rather than as necessary factors.
One of the most notable entrance halls to be found in the country is that of Kenmore, the historic mansion where Mary Washington lived in 1749. This hall opens out of a narrower vestibule, the door-way between the two being supported on either side by pilasters and surmounted with an oval cornice.

The plaster decorations of the ceiling are remarkably fine, displaying as they do intricate ornamentation executed with untiring care by an English prisoner held at Kenmore during the Revolution. A hand carved cornice extends about the entire hall which runs a bit beyond the paneled stairway leading to the upper floor by three easy angles.

The entire trim is of white, and the furniture consists of Jacobean chairs and a marquetry table above which hangs a mahogany mirror which reflects the antique brass knocker on the wall beside the stairs.

Another interesting hall that has served as a model for many that have place in latter day buildings, is that in the manor house of Carter's Grove erected in 1772. This great hall in size measures 27 x 40 feet and gains its ample air and light from three large windows. The walls are handsomely paneled in black walnut, a dentalled cornice finishing them at the ceiling. Both the entrance doors, as well as those leading into the various rooms, are of solid mahogany boasting heavy locks and knobs of silver, the hinges being of the same metal.

The stairs which rise from beneath an arch mid-way of the hall is famous in the architectural and historic annals of America, and many have been the artists to study its beauties in the hope of gleaning new ideas from this ancient illustration. The paneled arch-way is finished at either end with Corinthian pilasters linked together near the cornice with a line of very fine hand carving.

The wood work of the stair way is also of black walnut, the hand turned rails of the balustrade showing deep scars of sabre cuts inflicted during the Revolution by Tarleton's impatient troopers, some of whom dared ride their horses up these celebrated steps.

The first and second angles are broken by an ample landing duplicated in one above the stairs, which find their end in the spacious upper hall way.

The hall and stairway of another far famed Colonial mansion, Tuckahoe, shows again the black walnut finish. This manor house has two sets of stairs, the wood work of both having been elaborately carved by workmen imported for that purpose in 1710. The north stair, which rises from the main hall, is carved exquisitely in the flower and scroll design, the details of which bear the most
critical examination. That leading upward from the entrance hall follows much the design of that at Carter's Grove, the newel post carved spirally in keeping with the banisters being ornamented with an antique bronze figure.

A heavy Colonial side board whereon the early owner brewed his toddy and mint juleps is still allowed its old time place, an interesting departure from the halls of today the majority of which are and further accentuated with a handsomely carved cornice. Pedestals of Italian marble upholding jardinières of the same are placed within the columns, toning perfectly with the Mainwaring chairs and polished floors upon which are thrown antique rugs.

But it is the stairway that is the chef d'oeuvre of the superb mansion, rising as it does from the center under the middle of a triple archway duplicating those furnished in a common or garden fashion. An entirely different style of architecture is appreciated in the hall at Hampstead, a mansion dating back to 1735. From every point of view this beautiful hall reaches the height of architectural perfection. The walls are of plaster handsomely wainscoted; the ceiling is ornamented with a plaster decoration in relief, while the cornice, so faultless in its proportion and regard for the lines of the hall, has rarely been excelled. The main hall about 18 feet wide runs from door to door, being broken twice with graceful arches supported on Corinthian columns at right angles to it in the hall. From first to second, and on up to the third floor, this slender, spiral stairway winds, its mahogany railing finally merging into that enclosing an open well. The trim throughout the hall is white, the white painted staircase bearing no ornamentation beyond a small shell like figure carved upon each step.

These few examples of genuine Colonial halls and stairways will serve to give a good idea of the lines followed by the old designers who seem to have wisely built for sterling worth rather than meretricious display. The mansions harbor-
ing these beautiful halls have lived already through two centuries, centuries in which America felt her supreme life struggle and was swept by wars and fiery blasts.

Substantial and yet artistic; heavy but still graceful; ample though never commanding too much space, the halls and stairways of Colonial days which remain unmarred by the irreverent touch of a later time, bid fair to exist through centuries still to come, as practical illustrations for a modern generation, from the beautiful age of lavender and old lace.
Mantel Book Shelves

By Margaret S. Bedell

I have no piece of furniture however old or interesting that has been more useful or more greatly admired than the little country made bookshelves resting on my mantel. They have been in active service now for over twenty years, but today every stranger who enters my room echoes the approval of yesterday, "How effective! Where did you get 'em?"

They were made by a country carpenter, costing originally five dollars, and made to simply stand on the mantel without being fastened in any way, so they could be readily moved or cleaned.

As the furniture in my room was of light wood I had the shelves made of ash, which was well rubbed down and oiled. As a contrast to the light wood I tried when arranging the shelves to select, as nearly as possible, books with dark rich bindings, provided that they did not crowd out any of my old time favorites. The pictures hanging in the middle and at the sides of the shelves were also framed in dark wood, preferably walnut or a dark grained chestnut.

Years later as piece after piece of old mahogany crept into the room and the light furniture was gradually crowded out, the shelves were stained to match the furniture, and today my ash bookshelves are masquerading as mahogany.

This change of furniture necessitated repapering the room, and I selected a two toned paper and hanging bordering on moss green, which formed a very effective background for my useful little shelves.

The pictures in dark frames were replaced by those framed in gilt, and as I was the happy possessor of many pairs of old brass candlesticks they lightened up the shelves and chimed in admirably with the mahogany and green furnishings. Two tall, slender yellow Japanese vases and a flower shaped jar with a piece of old Italian majolica and two or three plaster casts gave me a mantel, at a slight cost, which is the delight and envy of all my friends.
American Homes of English Design

Anything which appeals to an Englishman, appeals to an American. The two countries are so alike in their habits, their dress, language, ways of living and eating, marriage customs, laws of government, etc., that it is quite natural that their architecture should be quite similar in many instances. The Englishman with his centuries of development in the field of architecture and interior decoration, does not need to leave the shores of his native island to find an inspiration or a model for new work. We Americans, on the other hand, lacking ancient traditions, and having been too busy with our commercial development, produce a purely American style of architecture, and have borrowed considerable from the Mother country. Our colonial architecture which is generally accepted as the typical American style, is nothing but a modern adaptation of the Georgian architecture which had its run a century and a half ago in England. Besides the Georgian architecture, we have borrowed extensively from the Tudor or square Gothic of England, and the English half timber style which was so popular during the reign of Queen Elizabeth, and because of this, it is often referred to as the Elizabethan style. Tudor Gothic is best adapted to an exterior of stone in order to bring out the prominent character of the style. The half timber style, however, can be used in a great variety of combinations of materials. The second story, of course, is always paneled off in various designs with white plaster and stained woodwork. The lower story can appropriately be stone, brick, concrete, and in many American homes, it is shingled and sometimes sided. The latter, however, seldom looks well on a half timber house, as the unbroken horizontal lines and siding seem to clash with the somewhat vertical treatment of the half timber work above.

The several illustrations on these pages are splendid examples of the American adaptation of English domestic architecture. Because of the rambling character of homes that are patterned after the purely English styles, a house with English characteristics should never be placed on a small lot. There should always be plenty of room for winding walks, a driveway, border hedges, ornamental trees and spacious lawn, etc., for the
proper planting and arrangement of the grounds is considered as important in the arrangement of an English home as the architectural treatment of its walls. Trailing vines are much in evidence in all English work, but here one must use good judgment. It never looks well to cover the entire side of the house with vines, entirely hiding all of its architectural features. Vines should enhance, not hide the beauties robbed by man, and they should never be permitted on anything but masonry walls for they are very destructive to woodwork and stucco. One of the great advantages of the English style is that its rambling character makes it adaptable to any kind of a lot. It matters little whether an English house is placed upon a hillside or level lot as long as there is plenty of room around it. A colonial style, on the other hand, calls for a level treatment of the grounds, and looks best when the foundation is all one height around the house. This, and many other reasons make the English styles popular throughout the country.
The Garden in the Temporary Home

By Ida D. Bennett

The garden in the temporary home differs materially from that which may be enjoyed where possession is a thing of generations or even of a few consecutive years. Here the planting will necessarily, or of choice, take a permanent form; hardy shrubs and perennials and vines of a permanent nature will be much in evidence, and the annual flowers will be more or less restricted to those which are desired for use as cut flowers or for some particular effect.

It is always well worth while, however, to create a garden of however temporary character as the mere fact of getting out in the open air and delving in the fresh earth has its recompense in increased health and vitality, and the fact that where no flowers grow weeds are quite likely to preempt the land, and as it is better to be distinguished by beautiful flowers than unsightly weeds and neglected corners, the most transient garden has reasons both ethical and sanitary for its existence.

Fortunately, the field of annual plants and flowers is a generous one, and one may gratify their love of color and of fragrance without stepping outside this class of plants. For cut flowers they are almost indispensable for what would a "Cosmos"

It is seldom that one finds themselves domiciled in a residence where the back yard at least is not theirs to do with as they please. Usually the owner will welcome anything that resembles improvements or cleaning up and the back yard will usually be found broken up by former tenants, whether for vegetable gardens or for flowers and a garden may be arranged to suit the individual fancy.

In the limited area of a city lot it will not be well to undertake any elaborate
system of beds, rather should the space be conserved as much as possible and as large an effect of space obtained as may be. Usually this will be secured by arranging the flower beds in the form of borders along the rear and division fence and leaving an oblong of green sod in the center. It is possible to create a charming bit of lawn in a very short time by thoroughly preparing the ground and sowing the best seed obtainable very thickly and keeping it well watered until established and then being unremitting in the use of the lawn mower—which for such tender, new grass should have an edge like a razor if a good piece of work is to result. I have in mind a piece of lawn which was created this past summer from a piece of ground which had always been in garden. It was very carefully prepared and sowed, and the sowing was followed by much rainy weather so that little, if any, care was needed and in a month's time the mower was making regular trips over as pretty a piece of sward as I ever saw.

If one prefer, a large round bed of ornamental plants may occupy the center of this bit of lawn and the remaining beds follow the lines of the fences and out-buildings. Usually it will be found desirable to mask the rear fences, out-buildings and often a division fence between undesirable neighbors or an unsightly view; in this case such tall-growing plants as ricinus, cannas, annual sun-flowers, cosmos or the robust tobacco plant—Nicotiana Sylvestris may be used; this is a most useful plant where tropical effect is desired as its great broad leaves and tall scapes of flowers are very striking and it is not easily injured by frost. It is very easily raised from seed and when planted in conjunction with N. Affinis and the scarlet salvia, makes a striking bed.

The various ricinus are some of the most valuable plants for masking undesirable portions of the premises and should always be used as a background, never brought forward; they combine well with the cannas and with dahlias, all of which may be raised from seed sown in the house or in hot beds early in spring.

In favorable climates there is no more desirable flower for the garden or for cutting than the cosmos, unfortunately it blooms too late to be very successful at the north except in the older, smaller flowered varieties which will bloom fairly early and very profusely, but the larger flowered must be given an early start in green-house or hot-beds to be of any success. In the crowded confines of the hot-bed they frequently come into bud before time to plant out in the open ground but lose their inclination for early blooming when given the greater latitude of the out door beds and I fancy that if planted in large pots or other receptacles and plunged in the ground and given good care as to watering, they might be forced into satisfactory bloom at the north. They are certainly beautiful enough to warrant the experiment.

Where pansies are wanted for early blooming it will be necessary to secure plants of the florist, but for late flowers the seed may be sown in a semi-sheltered place in the open ground in April or May and transplanted where they are wanted when large enough to handle. Sweet peas, however, should be gotten into the ground while yet it is cool in the spring—the earlier the better.

The single dahlia makes an excellent substitute for the cosmos and may be brought into flower quite as early from seed as from the tubers; a packet of mixed seed of the best sorts will give an infinite variety of color and form, but the cactus varieties are rather to be preferred. The single dahlia is one of the most effective of cut flowers—both for vase or corsage wear, that it is possible to grow, and as the plants are large and robust they are excellent for screens or hedges.

No summer garden will be complete without its beds of asters and these are the most easily grown of annuals, they may be started early in spring in the house, in the hot-beds or later in cold-frames or the open ground. All the varieties are attractive and desirable but the comet and paeony flowered varieties are about the best. The comets, however, are so light and fluffy that they are greatly injured by heavy rains. My own beds of white and shell pink comets had just come into bloom this past summer when several days of wet weather intervened and at its close every blossom on the comets was ruined while the paeony flowered were little injured and continued to give quantities of lovely blooms for weeks, but the comets never recovered. In a dry season they do well and are too exquisite to be cut out, even if one must take their chances of losing them by excessive rainfall.

Asters are best in beds by themselves
and should be set from one foot to eighteen inches apart according to the variety—the branching asters requiring the latter space.

For low-growing plants to border and edge beds of taller varieties there are many good things. The various colored phlox Drummondii are charming, low-growing plants which may be raised from seed sown, where they are to remain, any time after the tenth of May. Ageratums, dwarf nasturtiums and the dwarf morning-glory are both desirable. The latter is little known but is a desirable plant in every way, easily grown from seed and a profuse bloomer. Candy tuft and the dwarf zinnia-firefly or red riding hood are fine when grown together and the zinnia is most excellent for bordering beds of canna; sow the seed where it is to remain after May tenth, scattering the seeds two or three inches apart and thinning out after they are up to stand six inches apart in the row. They bloom profusely until cut down by frost and have the most uniform little flowers of the most intense cardinal.

The various celosias make very effective beds of tall plants and combine well with the ricinus used as a center. Thompson's Superb and Magnifica are especially fine as they make fine, pyramidal plants covered with fine spikes of brilliant crimson in the one case and varying shades of yellow and of red in the latter. The spikes of flowers may be cut and dried for winter bouquets.

For annual vines there are the Cobaeas, the wild cucumber, the various morning glories, especially the delicate Cypress vine with its lovely, starry flowers, the Mina Lobat and Sanguinea and the various ornamental gourds many of which have exceedingly elegant foliage especially the Momordicas and the Bryonopsis. All these are as easily raised from seed as a cabbage or radish and will give quick returns for the care expended. It must be remembered, however, that all vines are rank feeders and require much water so if notable results are desired neither should be stinted or withheld.

Then to all this wealth of resource may be added all the summer flowering bulbs such as the gladiolas, montbrettias, ismenes and the like and the such summer bedders as geraniums, heliotropes, coleus (which may be grown from seed), justicias, vincas, tuberous begonias, sultanas—but really, there is no end to the good things available for the garden in the temporary home.
Suggestions on House Painting

It has often been noticed that in perhaps a majority of cases, painters when at work upon a house, paint the body, or at least a course of it, before they begin to put on the trimming color. It is proper to trim some parts of a house last, but on other parts it is more convenient to put on the trimming color before the body color is applied.

As a general rule, in putting a coat of more than one color on a house at one operation, paint the cornice first, the body next, and lastly the corner strips and frames. This is a small matter and seems to be not worth mentioning; still there are many who put on all the finishing coat before they do any trimming. Many allow the body coat to dry before trimming. In either case it requires moving and placing the ladders and scaffolds twice where once would do if they finished as they went.

A coat of paint is a coat of paint to the majority. It is scarcely to be believed, nevertheless it is a fact, that most of them cannot understand why one coat will not cover the same as another. If black covers white, they cannot understand why white will not cover black. The painter tells such a man he cannot do him a good job with less than three coats. The man concludes that the painter is only trying to get more money out of him, for don't he know of a dozen different jobs in the neighborhood that have been done with two coats. The outcome is that the customer demands that it must be done as he desires. In such a case the only way the painter can do is to adopt heroic measures, mix his paint heavy and flow it on thick.

The majority of property owners in the country are advocates of two-coat work in repainting. They believe it takes far less paint for two coats than for three, and that if the wood be well covered two coats will last as long and look as well as three. And there is the extra cost of putting on the third coat. It has been my experience that three thin coats are far better than two heavy ones and will last a third longer. This should be evident to all, as there is more oil to withstand the elements, protecting the pigment. I have repeatedly noticed that three-coat work will show gloss longer than two.

I have a couple of customers who believe in one coat of paint every two years. They have followed this method for several years. I have never tried to argue the matter with them, for if they are satisfied I certainly should be. But it is wrong both in theory and practice. It would be much better did they repaint every four years instead and use two coats. No one can get a first-class job with one coat over paint which has been exposed for two years. It will show brush marks, particularly close to the frames and corner strips, where there is no chance to brush them out. Other objections are, the old paint underneath absorbs the oil and the gloss soon fades. There must be a certain amount of oil in the last coat. If there is not, the pigment soon begins to chalk and wear off. Considering the time that paint should look well, I do not believe that two coats, applied two years apart, will look as well for as long a time as three coats applied every four years.

Painting a brick house is a job the country painter does not like to run up against. The owner is nearly always dissatisfied because of the larger amount of material it takes as compared to a frame house of the same size. As it generally happens, too, the painter underestimates the amount of material required. Then there is more dissatisfaction. The painter thinks he ought to be paid for the extra material while the owner thinks he has used more than he should. If the brick is painted for looks only one coat well brushed in will do fair work. Two is better. While if the intention be to keep out moisture, a coat of cold water paint, followed with a coat of oil paint, is all that is required.—The Painter Magazine.
Putting in a Hot Air Furnace

Every furnace job is a problem in itself, and no rule or set of rules can be set down as being infallible. Good judgment must be used in connection with all rules, but even with the most careful thought a certain pipe, or sometimes the whole job, will refuse to equal the expectations of either the owner or the contractor.

1st. The upward motion of heated air is caused by the lifting power or pressure of cold air. Cold air being a denser, heavier body than warm air, it does not mix with the warm air, but simply pushes the warm air out of the way and takes its place. The result of the operation of this natural law in the confines of a furnace jacket must be a lifting of the heated air into the upper part or bonnet of the casing, thence through the pipes and registers into the room connected with the furnace.

2nd. As the natural movement of heated air is upward, it follows that the greater the elevation of the warm air pipe the more rapid the flow of air.

3rd. Air, like water, will always flow toward the point of the least resistance.

4th. Two bodies cannot occupy the same space at the same time. As cold air and warm air are two separate and distinct bodies, the warm air from the furnace cannot occupy the space of the cold air, already in the room to be heated, without displacing the cold air.

5th. The velocity of the air movements through a warm air pipe depends, first, upon the excess of temperature of air in this pipe and the air in the cold air duct; second, on the height of the outlet above the furnace; third, on the amount of frictional resistance in the pipe itself; and fourth, the pressure resistance in the room in which the outlet is placed.

6th. Air at 32 degrees Fahr. or less is practically without moisture, and when heated above 32 degrees Fahr. doubles its capacity for moisture with each 27 degrees of heat added. It increases its capacity for moisture very nearly four times from 32 degrees to 72 degrees.

7th. Ventilation and furnace heating should always go together; as the warm air from the furnace must displace the cold air in the room, provision should always be made for cold air ducts from the rooms heated.

8th. Unless a furnace flue is large enough and the draft good it is useless to expect satisfactory results from a furnace, for experience shows that though with a poor flue fuel will burn, it will fail to give forth heat sufficient to raise a furnace or heater to the requisite temperature to warm a house. For a seven or eight room dwelling a flue 8 x 10 on the inside is as small as should be used for hard coal and 8 x 12 for soft coal, and these are the smallest dimensions at which fair success can be hoped for. For a ten-room house, an 8 x 12 hard coal or a 10 x 12 for soft coal should be the minimum, while for larger houses these dimensions should be increased. All flues should be plastered smooth on the inside, and before connecting a heater the flue should be examined to see if the masons have left same stopped up in any place or filled with rubbish at the bottom. No dealer should guarantee a job in which the flue for heater is defective, and should state in his guarantee that said guarantee shall be null and void unless the flue in house is found to be a good one.

Bearing the above facts in mind, let us see how they would apply to the practical solution of a job of furnace work.

First in importance is the location of the furnace and registers, and considering rule 3, we learn that air, like water, will always flow towards the point of least resistance. It naturally follows therefore, in locating a register in a room, great care should be taken in favoring that location which will give the least resistance to the incoming flow of air. Cold air being heavier and denser than warm air, it follows that the proper location of a register in a room should be the warmest place in that room, or in other words, on the side of the room furthest from outside influences. After locating the registers, locate the furnace with reference to the registers in accordance with rules 2, 3 and 5. Rule 2 teaches us that the greater the elevation of a warm air pipe, the more rapid the flow of air; rule 3,
that air will more readily flow toward the point of least resistance; rule 5, that the velocity of the air is dependent on the height of the outlet above the furnace, on the amount of frictional resistance in the pipe, or in other words, the length of the run, and the pressure resistance in the room in which the register is placed. In accordance with these rules, rooms having the greatest exposure in the direction of the prevailing winds, on the first floor, naturally will have the greatest pressure resistance in the rooms themselves, because of the wind; have slow velocity on account of lack of elevation, and should therefore be favored by nearness to the furnace and a larger pipe and register. Rooms which are remote from the furnace, necessitating a long horizontal run of pipe, should be favored by larger pipes. Aim to minimize the frictional resistance in all pipes by avoiding all square turns or abrupt angles. Insist on having at least one inch rise to the running foot of pipe from the furnace to the register. Long runs of pipe, especially when going through cold rooms, should be wrapped with asbestos paper; pipes going through stone or brick walls should have thimbles of one-inch larger diameter than the pipe. In the adjustment of the pipe work, bear in mind that according to rule 1 the pressure of the air is equal on all pipes at the furnace. If, therefore, some of the pipes do not flow as freely as others, the cause of that trouble may be looked for either in the frictional resistance in the pipes, pressure resistance in the rooms into which these pipes lead, or that an adjacent pipe, having the advantage of elevation, is taking more than its proportion of the heated air. Should the trouble be caused by frictional resistance, look for obstructions to the free and natural flow of air, such as abrupt angles, etc., and remove them. If this does not furnish the remedy, then increase the size of pipe. If the trouble is caused by pressure resistance in the room itself, this resistance is caused by air pressure in the room, and some outlet must be provided before satisfactory results can be obtained. A very satisfactory solution to this difficulty can be had by cutting an opening in the baseboard of an inside partition between two studs, and utilizing the space between two studs and plaster walls for the vent duct. The plates on top of the studs must be cut, and the duct be unobstructed to the attic. Generally speaking the air will find its way out of the attic, but in case it does not readily clear itself, an opening can be made in some unused chimney or otherwise. When inside air is used all doors must be left open and chimneys or fireplaces must be closed.

Color Schemes

In selecting a color scheme, the thing to be desired is complete harmony between house and surroundings. When tasteful harmony is accomplished, the most humble cottage may look as attractive and homelike as the pretentious mansion. The painter is responsible in this respect and should not fail to give the house owner advice on the subject. In discussing this matter with a successful painter of national reputation, he had the following to say which we think will benefit every one of our readers:

"Thirty years' experience in the painting business proves that a majority of house owners have few ideas and much less taste in the selection of an outside color scheme. I'm often called on to use a combination that I know will not give satisfaction. When a pronounced scheme is suggested—when colors are chosen that are not durable, I make it a point to plainly tell the house owner the difficulties that stand in the way of that particular combination and I find that nine times out of ten any advice I may give on the subject is cheerfully accepted. Not many people can afford to paint every year, and when I tell them that they are going to get tired of a pronounced combination they quickly accede to the point.

"Where a harmonious and durable combination is desired and my advice is asked, I usually recommend the grays. Beautiful combinations can be effected with grays and nothing is more durable—nothing wears so well, both on the house and in the mind of the house owner. Gray trimmed with pure white are always tasteful and harmonious. Buff, colonial yellow, ivory white, terra cotta, drabs are all good colors for outside painting. I try as much as possible to avoid greens and any tint that is produced with Prussian blue."
An Interesting Cottage Home

The bungalow herewith illustrated is for a 5-room modern home on the ground floor with space for two fine rooms on the second floor.

In the living room is a large fire-place of pressed brick, at each side of which are casement windows.

Back of the living room is the dining room, which has a row of casement windows and plate rail extending around the room.

Both chambers are on the east—these are large airy rooms with roomy closets. The front chamber is finished in a light green stain and varnished wood. The rear chamber and bath are finished in white.

The living room and hall and dining room wood work is stained green and varnished.

The kitchen is fully equipped with built in cupboards, drawers and bins.

The floors are narrow fir, stained and waxed. Finish is also fir.

The house is piped for furnace and wired for electric lights.

The exterior walls are of wide rough siding, stained a woody brown, the outside trimmings are of white. The outside brick work of chimney is of clinker brick. The stone of foundation is of split boulders giving many variations of color and sparkling of the quartz in the sunlight.

The porch has open beam roof and trellis for growing vines. The cost complete, including plumbing, was $2,200.

A Splendid English Half-Timbered Home

Here is a great deal of comfort in owning and living in a dignified, well designed and well planned home of the English style. A great deal of latitude is always allowed in the plans of an English home, in fact, more variety in plan and design can be obtained in this style of domestic architecture than in any other. The lower story of this house is walled with dark reddish-brown brick of varying shades and a rough surface. The upper story is of so-called half-timbered construction with dark-brown stained woodwork and rough cast cement panels. The roof is dark green stained shingles. The plans show a large and very complete house. The entrance is very informal, being directly into the living room, the stair hall being beyond. Besides the dining room there is a breakfast room also a tea room. On the second floor are six chambers and several more in the attic. Estimate cost to build, $12,000.

An Interesting Four-Room Bungalow

The demand is increasing every day for one story bungalows and especially those of unique appearance. This design entirely fills these requirements. The living room, dining room, chamber, kitchen and bath room are all arranged around a small hall way, a convenient arrangement which makes easy access to all parts of the house. In one corner of the dining room, to correspond with the cut-off on the opposite side of room, is a pretty little china closet with dish passage through to the kitchen, a very convenient arrangement not fully appreciated.

This house is one of those modern homes which fulfill the specification of “a bungalow with plenty of room in it.”

The appearance of the exterior is very pleasing. If a cellar is desired it can be built along the wall between the dining room and kitchen. The house is intended, however, as planned for summer use only. Estimate cost $1,400.

“Simple Beauty Is True Beauty”

Cement exteriors are very popular. The reason for this is a tendency among homebuilders to build more substantial and more permanent homes. A cement exterior never requires repainting and very little repairing if it is properly put on. The exterior of this house is rough cast cement (two coat work) on metal lath, the cost being but little greater than siding put on and painted. The floor plans show a very well arranged, convenient, homelike home. The entrance is directly into a large reception hall having a beautiful stairway at the further end. This ascends in an easy run to the second floor with two landings. The living room is 13 ft. by 24 ft., is well ar-
An Interesting Cottage Home

DESIGN "B 1"

arranged for all furniture and has plenty of light and air through its many windows. Pantry and kitchen arrangements are very complete. On the second floor are three large chambers and bath room. Each chamber has a large closet and the owner's room a dressing room and small porch. Estimate cost $4,000.

An Unexcelled Cottage Design

THERE have been hundreds and hundreds of houses built after this same general plan, though here and there occasional slight modifications are desired. It is easy to see why the plan is such a popular one. It combines the artistic, popular gambrel roof style with well arranged and convenient floor plans.

Various treatments may be secured in the exterior finish. Probably the most pleasing would be to use narrow siding on the first story and shingles above. The foundation dimensions are 26½ ft. wide by 20½ ft. deep, and give on the first floor a good sized hall with a fine living room 15½ ft. long, containing a fire place. The dining room is also of good size and every possible convenience is included in the kitchen, pantry and entry arrangements. Combination cellar way and outside entrance are provided. Estimate cost $2,350.

KEITH & WHITEHOUSE, Architects
**FLOOR PLAN TO DESIGN "B 1"**

**An All Cement Exterior**

This beautiful design shows a very appropriate combination of materials. Cement walls, having stained wood work, cobble stone chimneys, and English architecture always makes an informal, homelike combination, especially when they are properly assembled into a well proportioned design. The large living room is a splendid well arranged room. The beam ceiling, broad window seat, sun boy fireplace and double French doors onto the porch all go to make it an ideal room for home comfort and pleasure the year round. The stair hall is through the center of the house which always makes a convenient arrangement on both floors. There are five chambers and nine rooms altogether. Cost to build complete $7,500.
A Splendid English Half-Timbered House

DESIGN "B 2"

FOLTZ & PARKER, Architects
An Interesting Four-Room Bungalow

DESIGN "B 3"

JOURNAL OF MODERN CONSTRUCTION SERIES
"Simple Beauty Is True Beauty"

DESIGN "B 4"

ARTHUR C. CLAUSEN, Architect
An Unexcelled Cottage Design

DESIGN "B 5"

JOURNAL OF MODERN CONSTRUCTION SERIES
A Beautiful Home---All Cement Exterior

DESIGN "B 6"

FOLTZ & PARKER, Architects
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The Value of Simplicity

Too few people realize the value of restraint and simplicity, in interior decoration. They do not esteem sufficiently the pleasure afforded by the one good picture against an expanse of soft-toned wall, or by the fine lines or beautiful color of vase or cast, when no other object distracts the attention from it. Almost everyone confuses space and bareness, and the effort seems to get as much as possible, in the way of ornament, into a given space. In this respect we can learn a lesson from the Japanese. Their charming rooms, aside from the necessities of seats and tables, seldom contain more than one piece of fine porcelain or bronze, or a single painting.

William Morris' Opinion

Right here it is in order to quote the master of modern decoration, who said: "Don't have anything in your house which you don't know to be useful, or believe to be beautiful." Conformed to this standard, how empty most of our houses would become. But think for a moment of the things which are at once useful and ornamental. Candlesticks, flower holders, a tray or two and possibly photograph frames, although the taste for photographs of one's intimates in the public rooms of the house is rather a dubious one. Then from these few objects, rule out those which are out of harmony with the color or style of the room and dusting will be very much simplified.

The Color Key

The most satisfactory way to harmonize one's small belongings is according to color. For instance, blue china, English or Oriental, needs a place to itself. The room may be just the right shade of grayish blue, or golden brown, or green, but you mustn't have any other colored china. China whose prevalent tone is pink is out of tune in a dark colored room. It is at its best in a light tinted room, with flowered hangings and coverings. Vice versa, almost all the products of the modern art potter require a background of low tones of green or brown, or modified yellow. The terra cotta shades have fallen into disuse of late years, but they are the most perfect of backgrounds for ivory-tinted plaster casts and for some cool grayish green wares, likewise for wrought iron and warm brown potteries, like Doulton. But they are not propitious to blue.

For the room which must house objects of many different colors old gold, or the brownish yellow called mustard, is the best choice. That sort of a wall needs a good deal of dark woodwork to tone it up, but it is as nearly neutral as any strong-toned color can be.

It is attention to this sort of things which makes rooms restful and saves them from spottness. This quality seems to be a distinctly modern failing. One finds no traces of it in the pictures of old artists, who must have reflected contemporary life. Be that as it may, its modernity does not save it, and it is the one thing of all others to be avoided in decoration.

A Plaster Frieze

A New York decorator has recently had arranged a very beautiful interior, a room with panelled walls and beamed ceiling, the single window of cool green glass, in a geometrical pattern. The side wall, of dark oak, in a warm brown tone, in rather small panels, was carried up to a deep frieze of plaster, in an elaborate design of acanthus scrolls in high relief. This had been given an ivory finish and was immensely effective, in association with the dark wood.

A Use for the Poinsettia Wall Paper

Everyone, who notices wall papers, has seen the product of one of the leading firms, a realistic copy of poinsettias and
Decoration and Furnishing—Continued

Their foliage, the flowers at least six inches across and vivid scarlet. It seemed to the writer to be in the category of beautiful but impossible things, until she saw it used for a cut out border, at the top of a rather dull green buckram paper, very nearly the shade of the leaves. At the top of the wall, the blossoms receded to their proper position and were really pleasing. Be it remarked, in passing, that a cut out border is rarely satisfactory above a side wall of positive color. Far better to use it in a bedroom, where a light colored side wall is desirable, carrying out the color of the blossoms in the furnishings.

Drapers a Dressing Table
In manufacturing a toilette table, it pays to have the carpenter make a top of some curving shape. The kidney shape is the best, as one can sit in the hollow at the front. The shaped top can be screwed to the top of a packing box, which will form a secure base, and can be fitted with shelves to hold shoes and other unsightly objects.

Italian Terra Cotta
Italian terra cotta is quite unlike our native, brick-colored article. It is cream-colored, to begin with, beautifully wrought, and baked to a deep golden tan. The decorations of the jardinieres, piazza seats and porch boxes which are made from it are generally in Renaissance style, in high relief. It is not too expensive and is unusual and effective. It seems specially in keeping with the formally trimmed privet bushes and bay trees, so much in use. Also, the deep green foliage of rubber plants contrasts beautifully with it.

Nothing could be more ideal, for the corner of an inclosed piazza, than boxes of this terra cotta and one fine plant, in a large jardiniere of perfectly plain, highly polished brass.

Papering a Narrow Hall
It is very well to talk about the proper furnishing of a hall, but furnishing implies room and, in many city houses, the hall is so narrow as to admit of nothing standing upon the floor, except an umbrella stand and possibly a chair. In such a hall, with nothing to distract the eye, a plain paper is a mistake. One of the papers which have the effect of flowers worked in cross-stitch on a tan colored...
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Decoration and Furnishing—Continued

ground will not detract appreciably from the size of the hall and will do something toward making it interesting.

A good-sized mirror, nearly square, hung with its lower edge four and a half feet from the floor, with a long bracketed shelf beneath it, will give an illusion of additional space. An effective way of treating it is to stand a plant of good outline, whose reflection will be interesting, in a jardiniere, at one end of the shelf, balancing it by a brass candlestick (and candle) and a match receiver and tray. The square, or slightly arched mirror from a disused bureau is often available for this purpose.

The Day of the Sofa Pillow

It would seem as if the cult of the sofa pillow were passing. The proud owner of sixty is less numerous than she was once. The idea now is not have so many, but to have each one interesting in itself, also to have all the pillows on a couch harmonize with each other. To illustrate: On a divan covered with green mercerized tapestry there may be five pillows. One of them is a very large one covered to match the divan; a second is rather long and narrow, of gray Russia crash with a cross stitch border at either end, embroidered in grayish green; a third is of figured silk, in several shades of green, with touches of blue; another is of silk rag carpeting, finely woven, with blue and green stripes on a neutral ground, while the fifth, smaller than any of the others, is of gray-green linen embroidered with the owner's monogram in blue.

Regilding Frames

Regilding old frames is very expensive, if done by a professional. It may be done at home with gold powder mixed with banana oil, buying both in bulk at a paint store, much the cheapest way. The tone of the gilding can be much improved by the addition of a little coloring matter, red, brown, or green to the oil. When it is thoroughly dry, apply a second coat, finishing with a coat of varnish.

What to Do with a Highboy

Not a burning question, it would seem, so few people have the article. The ideal place for it is in the long, wide upstairs hall of a house of Colonial style, that hall whose dignity is so often sacri-
Decoration and Furnishing—Continued

ficed to the fancied necessity of making a bedroom at its front end. Failing that, use it in the small room which is somebody's den, the guest chamber in an emergency. Associate with it a draped cot and a work table, with two leaves and two drawers, hanging a mirror above the latter. With a tripod washstand behind a screen, the room will be complete for the comfort of the casual guest, and exceedingly pretty in itself.

The lowboy was foreordained to be someone's dressing table, in these latter days. Indeed, with a mirror standing upon it, it so serves in many an old picture. People with a hobby for antique furniture find in it the nearest approach to a modern serving table, using its many small drawers for silver. With a brocade writing set and an inkstand of flowered china, it is rather a good writing table, for a corner of the drawing room.

A Use for Old Cashmere Shawls

One hopes that no one would lay sacred religious hands upon a camelshair shawl. A succeeding generation may awake to the beauty and becomingness of an India shawl, on a woman with a fine figure. But there are innumerable French cashmere and Paisley shawls folded away in idleness, inviting the ravages of moths.

The wide, patterned ends of a French cashmere shawl are effective covers for sofa cushions. Another use is as a sort of dado for a door hanging of plain color. The dark rose or mahogany shades of broadcloth or mohair damask, blend beautifully with the low tones of the border. A narrower strip can be edged with a fringe made by drawing in and knotting long strands of silk in the different colors of the design, and laid across the front of a hard wood mantel.

Again the narrow borders of what was called a Stella shawl can be used across the ends of one of the long narrow cushions so much in vogue.

In combining these borders with a plain fabric, care must be taken to choose a low tone of color. The average fabric of western looms looks garish beside the oriental colorings. But with care excellent effects can be achieved.

Before using the old fabric, pour boiling water over it to kill any possible moth lurking in its folds. Dipping it in a weak solution of ox gall will freshen the colors.
G. M. T. "Kindly inform me if it is not advisable to paper a new house until it has settled, and if so, what is the length of time necessary to wait. The house will be started April first and completed July first.

With weathered oak woodwork and furniture, would a grey paper be suitable in living room where oriental rugs are used? If so, could a good shade be obtained in tinting in case paper is not advised?

Ans.—There are many dainty patterns in all-over figured lace nets for curtains, and personally, I much prefer them to the regulation lace curtain, except for formal drawing rooms. Cream Madras also comes in beautiful designs and makes a charming curtain. Either of these materials should come to the window sill only. A figured tapestry, introducing both blues and greens with a possible touch of red would be the best choice for upholstering the pieces mentioned.

G. H. A. desires suggestions for living room 17x24 ft.; southeast exposure; walls tinted olive green; cream ceiling; green and tan rug: curtains, ecru net. The mantle is mahogany set with green tile, and the furniture mahogany. The woodwork in room is birch, and the floors oak. The ceiling is about 9½ ft. high and is frescoed a deep cream. Now the room lacks tone, and I want your advice as to how to remedy this. The window seat is not upholstered. Should it be, and if so, what material and what color should be used for same? Would double curtains—that is, silk curtains over the net be an improvement, and if so, please advise me as to what color and material they should be, etc.

Ans.—Your room is conventionally correct. As you say, it lacks character. This must be given by minor touches. A piece of burnished copper, for instance, on the mantel, a "Winged Victory"—crowning low book shelves, a bit of gorgeous color in a picture against the dull green wall, a jardiniere stand of green wicker and another of brown wood holding palm or plants, at different points in the room. No, do not upholster the long window seat, but instead, stand a very large, tall Boston fern in the center. Pile your bright pillows in the ends, and if there is enough bare floor space, lay a black fur rug in front of it. Hang Japanese wall vases for flowers inside the frame, a brown wicker on one side, a blue and white pottery on the other, with vines or flowers in them, thus making the window a feature. It doesn’t need the double curtains. Either heavy rep or velour makes a satisfactory portiere. They should be olive green on room side with a terra cotta facing on hall side.

"A Subscriber" asks suggestions as to interior finish of cottage now building. Living and dining rooms finished in oak; all other rooms to have pine woodwork painted, except kitchen, which is to be stained and varnished. Our living room, facing southeast, will be lived in, so want it for service and comfort. Rather like browns and tans for dominating color in carpet and walls, with possibly a bit of red somewhere. What color for tile in fireplace? Dining room furniture rather dark oak. For the nine-foot ceilings, shall I use drop ceilings or place moulding in angle? Do not care for fancy dadoes. Do not want plate rail in dining room. Would you advise using a chair rail? If so, where place moulding? Do not care for long curtains anywhere. Like simple sash curtains wherever suitable. Advise as to living and dining room curtains. Thought to have south room, second floor, papered in blue grey and silver stripe, with white enamel woodwork."

Ans.—It is suggested for the two principal rooms with oak furniture and woodwork, to tint the living room walls a light cigar brown, with cream ceiling; rugs or carpet in brown tones; fireplace tile, dull red; curtains, cream net, coming to window sill. Mouldings placed in ceiling angle. Use green shades, and green seat cushion and pillows, green vases, jardinières and ferns, for relief notes. Carry the green tones into the dining room, on wall and in carpet, with sash curtains of
white cotton voile, simply hemstitched on edge and bottom. Place chair rail about 3½ or 4 ft. from floor. In northeast bedroom, with brown carpet, use chintz wall paper, small field flowers on cream ground. In east room and alcove, second floor, use wall paper, a small check in two tones grey, with dark wood furniture, and curtains and bedspread of gay flowered chintz. North room, use a deep cream paper with stripe of green leaves, green carpet, and furniture painted a chrome yellow.

T. E. H.—I have matting that has been used and faded. Would like to know if it could be stained some desirable color to look nice with the paper also what to use for staining. I have read many of your magazines and find them very instructing in house decoration.

Ans.—If the matting is in good condition except for the fading, it could be made serviceable by rubbing it over with a floor varnish.

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The Latch Key Question

UCH sentiment gathers about this tiny bit of steel. Its possession is regarded as a substantial evidence of maturity and, in the case of young women, of emancipation. As a mere matter of convenience, it is responsible for a great deal of ill temper between mistress and maid.

Looking at the matter from a theoretical standpoint, it would seem as if the right to live in the house carried with it the right to enter it at will. Looking at it practically, all the arguments seem to be on the side of each member of the family being supplied with the means of easy, speedy and independent entrance. Not that one supplies the baby just big enough to toddle with a key, but that each child who has attained to the age of reason, which theologians fix at seven years, should have the key to his house securely fastened to his person; that older members of the family shall have latch keys and be made to use them and that this privilege shall extend to the maid, as well as to her mistress.

Many people who see the propriety of their young sons and daughters having keys are aghast at the idea of allowing a servant to have a key. “Why she might bring a thief into the house,” some woman more timid than wise exclaims. So she might, but my dear lady, what business have you to place the household at the mercy of a person of whom you know so little that you can conceive of her as the companion of thieves?

The feeling about the latch key is one of the relics of that antiquated sentiment of paternalism, which is at the root of so many of our difficulties with the problem of domestic service. Giving the maid a latch key increases her sense of responsibility and self respect. Insisting upon each member of your family having and using one lightens the labors of the maid and sensibly diminishes that domestic friction which is so much more wearing than work.

Buying in Quantities

Is it worth while to buy household supplies in large quantities? Yes and no. Laundry and cleaning supplies are best bought in quantities and kept on hand considerably in advance of the need for them. Soap by the box, castile soap several bars at a time, toilet paper by the dozen packages, candles by the box, matches by the gross, reserve brooms and brushes, these are all desirable purchases, and it is easy to keep them in some store closet and give them out as needed. Soap improves so with age that it should always be bought in quantities. Much annoyance is saved by having extra lamp wicks and chimneys to fall back upon.

But ordinary food supplies, especially those articles whose price fluctuates, should be purchased from hand to mouth. Unless indeed one is the only person to use them and can keep constant track of the diminutions. Even so, it seldom pays to buy a barrel of flour, or a tub of butter. The slight saving is apt to be more than balanced by the almost certain waste. It is hardly worth while to be obliged to make pound cake to use up a tub of butter, and a barrel of flour, in a family which eats baker’s bread is almost sure to “sweat.”

Another aspect of buying in quantities is that, with most servants, an abundant supply leads to waste. The presence of a barrel of sugar is a great stimulation to consumption. And so with other things in large quantities. In a well managed household the average weekly consumption of staple groceries should be uniform. It is almost impossible to secure this
Household Economics—Continued

when things are bought in large quantities, and the average servant does not take kindly to having supplies dealt out.

Meat must perforce be bought from day to day, except in the case of bacon and ham. But most people can improve upon their way of ordering. One must of course buy roasts in bulk, so to speak. But most people have a haphazard way of ordering chops, cutlets and steak by the pound, leaving the cutting to the butcher. And he—well butchers are human like the rest of us and he naturally has an eye to his own advantage and makes up his weight as he can most conveniently, and in accordance with his fixed ideas. One of them is that a customer thinks she is getting more with five thin chops than with three thick ones. This is the reason for the average very thin and tasteless mutton chop, the porter house steak cut in two thin slices instead of one thick one, and of numerous other misadventures. All this is changed when one orders such things by number instead of weight. A butcher who will make no difficulty of sending a definite number of thick chops, when it is specified. Left to himself he follows out his own notions. Of course, the best way is to order one’s meat in person, and see it cut, but this is not possible for everyone.

Everyone His Own Plumber

The plumber has his uses, for large jobs, but it is not always necessary to call him in for small ones. With a pair of pliers and a monkey wrench, almost anyone can attend to a dripping faucet by putting on a new washer. Oftentimes a persistent dripping is caused by the uneven wearing of the faucet, at the point where it unscrews. In this case the washer must be reinforced at that side by a section of an old one. If the screw of the faucet is worn, it too can be replaced with little trouble.

Another common affliction is the obstruction of the waste pipe of the kitchen sink with accumulated grease. Clearing this out is an easy matter. The last thing at night bale out any water that may have accumulated. You can finish the process with a scrubbing cloth, wringing it out into a pail after each application, until the sink is quite dry. Then take half a can of potash and make a mound of it over the holes leading into the waste pipe, pressing it into them with a knife. Leave it all night. The first thing in the morn-

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Household Economics—Continued

ing heat a kettle full of water to boiling point and pour it slowly over the potash. In any ordinary obstruction, this treatment works like a charm. In a very obstinate case it may need repeating. This method was given by a plumber who was retiring from business, to a valued customer who had contributed largely to his enrichment. Really, with the labor unions refusing to allow their members to work less than half a day, and at the present rate of wages, it is worth while to learn to tinker for one's self.

The Care of a Porcelain Sink

It never ought to be allowed to get stained, but when it happens an application of potash will restore the sink to its original state. Sink should be dampened at night and a thin coat of potash applied to its surface. In the morning the stains will have disappeared. The greatest care must be taken not to allow the potash to touch one's hand, as it makes a painful burn.

The Nutritive Value of Bananas

Every one knows that bananas are of high nutritive value. Why not then live on bananas, equal in nutrition to beef, at a sixth of its cost? Principally because their digestion gives rise to considerable intestinal irritation. Another reason is that their use, in quantities, causes a distention of the abdomen anything but beautiful. Authorities on dietetics recommend cooling bananas in some way. Baking them in their skins seems to be the most practical method. They are served as a vegetable and are much like a parsnip, but of more delicate flavor.
Table Decorations of Fruit and Flowers

The abundance of flowers for table decoration in summer ought not to make us forget the picturesque possibilities of the different fruits. An effective table centre combines fruit and flowers. For the base use either a shallow circular dish, a chop dish for instance, or a silver cake basket. Set in it a slender flower holder of clear glass for a few blossoms of some vivid color. Then at its base arrange the fruit, massing it about so as to conceal the foot of the vase, interspersing it with ferns or vine leaves. Lovely combinations of color are pale, purplish pink flowers, green grapes and rosy cheeked peaches, pale yellow flowers, grapes and green plums, or the oranges, reds and yellows of coreopsis with red apples.

Another effective arrangement is a slender vase, in the centre of the table, holding buff carnations, flanked by low glass dishes of white and red currants. For a table in green and white, white flowers would be used and green grapes and plums of as many different shades as possible massed in fern-edged dishes. Indeed there is no limit to the variations on the theme. Arrangements of a central vase and flanking dishes are adapted to a table long rather than square or round. For a very long table, not "tis true usual in these days of small families, a graceful arrangement is that of three tall vases, the central one the higher, connected by a rope of leaves or ferns, with low silver dishes of fruit between.

Some Details of Table Service

The writer knows a woman who was brought up amid the pomp and circumstance of a great house abroad. A marriage, entirely out of her own circle, brought her to America, to live, in a very ordinary way, on a limited income. One would think that she would have brought with her enough of the habits of her old life to achieve a certain refinement of living, in her changed circumstances. Not a bit of it. Her housekeeping is of such a character that the husband, for whom she sacrificed so much, lives at his club, boiled eggs and toast being the only articles which he consents to consume in his own house, and those only because he finds it inconvenient to go out before breakfast. The lady is deficient in observation. In her former state, she never noticed enough of what was going on about her to carry away a definite impression. Therefore, she is quite unable to instruct a maid as to the simplest matters.

There are many people like her, women who never know just how a table should be set, just how food should be served, or any of the other little details which make the difference between refined living and mere existence. Sometimes, like the lady in question, they are quite contented in their ignorance, sometimes they greatly regret it. If there is one such woman who reads this page, she may be glad of a little definite information as to the proper mode of setting a dinner table.

The presumption is that a table cloth is used at dinner, even if the bare table is used for lunch and breakfast. It should be folded carefully, longitudinally, with as few crosswise folds as possible. The most elegant way is to have it laundered with no folds at all, ironed till absolutely dry and rolled upon a pole but this is only practicable with a professional laundress. In laying the cloth, the fold should be straight down the centre.
of the table and be smoothed out with
the hand, so that the cloth lies quite flat.
All the small silver should be laid at
the places, when the table is set, spoons
and knives at the right of the cover, forks
at the left. If table space is limited, the
dessert spoon and fruit knife may be laid
in front of the cover. The soup spoon
is placed farthest to the right, or if oys-
ters or clams are served the oyster fork
occupies that position. Next the soup
spoon comes the knife for the principal
course, inside of that the butter spreader,
next that the dessert spoon. The napkin
is laid between the silver, if the place is
left vacant, or at the left of the forks.
In arranging the forks the first one to be
used is at the right, the dessert fork far-
thest to the left.

The water tumbler is placed at the
right of the spoons, the bread and but-
ter plate, with its butter ball, at the left,
above the forks. Small dishes of celery,
olives, salted almonds, or pickles are
grouped about the centre piece. When
the table is cleared for dessert, everything
should be removed except the centre piece
and the necessary silver. The hostess
serves the dessert, which is set in front
of her with the necessary plates. The
maid stands at her left, with her tray,
receives the plates and passes them, hand-
ing them, as everything else except tea
and coffee, at the left.

Whether the coffee shall be served
after the dessert or in the living room,
immediately after, is a matter of taste.
Either way is correct, the latter perhaps
more elegant. It has its advantages, as
the maid can clear the table more quick-
ly, and men like to smoke with their
coffee.

A New Salad Dressing
A recent book on dietetics, of the sort
to which vegetarians are addicted, gives
a salad dressing which is certainly novel,
and which might be liked by people who
think they cannot eat oil. Beat the yolks
of two eggs, and the juice of half a
lemon, and a teaspoonful of dry mustard,
whipping thoroughly with an egg beater.
Salt to taste, adding a trifle of sugar if
liked, and whip in a cup of nut cream,
made by diluting peanut butter to the
consistency of thick cream with water.

A Nut Sandwich Filling
This is especially good with brown or
whole wheat bread. It is made by mix-
ing walnut, or pecan, meats run through
a grinding machine, with an equal quan-
tity of peanut butter, moistening the mix-
ture with mayonnaise. A more highly
seasoned filling is made by using tomato
catsup instead of the mayonnaise.

Exit the Oyster
In the Eastern cities, at least, self re-
specting people look askance at oysters. So
the clam is enjoying a brief season of pop-
ularity, but the wise eschew even it and
begin a formal dinner with grape fruit.
A fair substitute is found in large oranges
cut in half. The pulp is scooped out,
freed from inner skin and pith, mixed
with white grapes seeded and sliced,
slightly sweetened and thoroughly chilled.
Just before serving, the prepared pulp is
put into the shells and given a dash of
lemon juice and of brandy, rum, or some
liquor.

A New Salad
A very decorative salad is made from
string beans, boiled whole. A bed of
heart leaves of lettuce is arranged, and
the beans laid on it in bunches of eight
or ten, each bunch being passed through
a ring cut from a small green pepper.
The beans should be marinated in vinegar
and oil for an hour before serving, and
mayonnaise passed with the salad.
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F. B. M.

Q.—As I have read in your columns that plasterboard is superior to the old-fashioned lath, will you say why it is to be recommended?

Ans.—There are so many advantages in Plaster Board, over the old-fashioned wood lath, that it would be hard for me to enumerate them all. Some of the principle advantages are that it makes a warmer wall in winter and cooler in summer, is a non-conductor of sound and by the use of it you avoid cracks and any discoloration which may come from the lath and this, where you are tinting your walls, would be readily seen to be a great advantage.

E. H. P.—Rockland.

Q.—Is there a material for wall sheathing that is better to keep out cold than regular building paper? I would greatly appreciate your advice on this question.

Ans.—There is other sheathing than paper, but the paper you use makes a difference. In using paper satisfaction is secured by using a high grade waterproof paper that will not crack in handling. A cheap tarred felt is not advised, but the best sheathing paper is all right. An extra warm wall may be had by using a quilt or flax fibre insulating blanket. It is made of the same fibres as linen, save that the bleaching process is left out. The manufacturers claim that many tests show it has the effectiveness of several thicknesses of ordinary standard building paper for keeping out cold and noise. It is favorably known to the building trade and architects. No back plastering is required, and when properly used it makes the house very warm, depending, of course, upon how well it is built otherwise.

W. & B.—Terre Haute.

Q.—I received your sample magazine and am pleased to tell you that I take it regularly. I get it at the book store, and think it the best of its kind. I would like you to answer a question that has bothered me considerably. We have just finished the first house, plastered on the outside, but there are five or six hair cracks. I want to know how to close them without disfiguring the walls.

Ans.—If you can get a thin mortar mixed up, having exactly the same proportion of cement, water and sand, also the same manufacture of cement that was used on the wall originally, the cracks can then be filled with cement mortar, and be given a light dash in the same manner that the original work was done. Be sure and wet the wall first. To do the job right will require very careful work by the best mason obtainable, otherwise the work will look "patchy."

O. W. D.—Paulding.

Q.—I am building me a house, and have constructed a cement cistern in the basement. This cistern is rectangular in shape, being six feet wide, ten feet long and four feet deep from the bottom up to the overflow pipe. The cistern is constructed in a corner of my basement so that the basement walls, which are also of cement, form two sides of the cistern. The walls of the cistern are perpendicular and are ten inches thick. The cistern is constructed of one part of cement to three parts sand. The sand and cement were thoroughly mixed together, then wet into a mortar and the mixture was dumped into the forms which were built to receive the cistern walls. At each of the four corners of the cistern an iron buggy axle was placed upright in the center of the wall and three rounds of iron barn door track which consists of a piece of strap iron of about the width and thickness of a buggy tire, which has attached to it about every foot a cross piece of the same material about four inches long, used in attaching the track to a building, were placed entirely around the cistern, outside the four iron axles, all thoroughly imbedded in the center of the walls of the cistern. The bottom of the cistern rests on the ground and consists of about six inches of the same cement mixture. This cistern will hold about 50 to 55 bbls. of water.

I would like to know whether a cistern built in this manner is strong enough to hold the water when full, and also whether there is any likelihood of the water leaking out through the walls, and if it does leak, what is the best manner to stop it.

I have been advised that a cistern of
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this kind should be coated or painted inside with paraffin wax, the wax to be melted and applied while hot and thin with a brush. Can you tell me whether or not this method is proper?

Ans.—You have asked a number of questions about that cistern you have built. From the description you have given, I should say that the cistern walls are plenty strong enough. If you do not use some kind of waterproofing on the inside, the cistern will probably leak at the bottom where the water pressure is the greatest. I have heard something about the use of paraffin wax, but have no practical knowledge of its merit. I think you would find it much more satisfactory to use one of the high grade water proofings.

A. S.—Fort Dodge.

Q.—How many coats of wood fibre plaster over plaster board when sand float is desired?

Ans.—Two coats, one base coat and one finish coat sanded.

Q.—Can plaster be placed directly onto inside tile partitions?

Ans.—Yes, two coats required, base coat and finish coat.

Q.—Are such walls more expensive than wood frame construction?

Ans.—Yes, cost about one-third more.

Q.—The best method to use for outside plastering in gables?

Ans.—If wall is brick or tile, plaster directly onto it. If of wood frame construction, use rib metal lath.
Wood Preservation

One of the significant signs of the times is the awakening of the American people to the dangerous destruction of their forest wealth, and the necessity of a wise use of what remains of it. Undoubtedly, in the future the nation must utilize its forest crop less wastefully, both in the woods and in the mill, and must make provision for future crops; but that is not the only way to prolong the timber supply. If, the service of the wood which is used can be lengthened, it will largely decrease the amount of timber which must be cut. And this can be done, by treating the wood with chemicals which will poison the low forms of plant life which attack it and cause it to decay. The growth of timber is slow, and when the dearth of it becomes pressing, a new crop can not be grown quickly enough to prevent a time of severe shortage. Preservative treatment of timber has the advantage, as a remedy, that it can be applied immediately. Its importance is therefore attracting increasing attention.

Many chemicals have been used for the preservation of timber, among them being blue vitriol, corrosive sublimate and chloride of zinc. The most effective preservative is the substance called "creosote oil," or "creosote."

To obtain creosote oil from coal tar the tar, is in its turn, distilled. But this distillation is like that used for other liquids instead of that employed for the coal. The still is heated, and as the heat increases the "light oils" first pass over. Among these is the familiar carbolic acid. This is a powerful antiseptic, but it is not desirable in a wood preservative, for it evaporates so readily that it soon becomes lost from the wood. When a temperature of about 400 degrees has been reached, the distillate is turned into another receiver, and from this point on to 600 or 700 degrees creosote oil is produced. One of the substances which is contained in this mixture is "naphthalene," from which common moth balls are made. Coal tar creosote, thus produced, is the great wood preservative.

The residue remaining in the still after the distillation is "pitch," which is used chiefly in the preparation of roofing felt.

In America roofing pitch is the chief end for which tar is distilled. In Europe this is not so true. Now pitch for roofing must be rather soft. Therefore tar distillation is not carried so far in this country as it is in Europe. For creosote oil it would be better if it were carried farther, since the substances which distill at the higher temperatures, in most cases neither evaporate in the air nor dissolve in water as readily as those which distill more easily. Consequently they stay in the wood for a longer time, and protect it correspondingly longer from decay. Much study is being devoted by the United States Forest Service to creosote oil, to determine what its composition should be to give the best results in preserving timber, under different conditions, and how the most desirable creosotes may be obtained. The reports of these studies, together with detailed description of the more economical processes of applying the preservatives to wood have been worked into circulars which the government has placed at the disposal of all users of timber and which will be furnished to all who make the request of the Forester at Washington.

Treatment of a Stained Ceiling

Just why a stain acts as it does on a water color that is applied over it, I never could tell, and it does no particular good that I can see to ascertain the cause of the stain. Most all stains are caused by the action of water, no matter how it got there. If it is not treated in some efficient way it will come through the water color. In the first place, the wall must be perfectly dry. Whatever will keep back the stain, just as a pine knot or sap is killed by shellac varnish, will answer, no matter what it is. There are several liquids that will do this. Shellac will do it, but it is too expensive for a large surface. A varnish, and a cheap one at that, will do it. Oil and turpentine paint will answer. If the ceiling is badly stained, it will be well to coat it all over with a thin cheap varnish. Nothing makes as good a foundation for water color work, and by this I mean all kalsomines, as a painted surface, or a varnished one. It is not well to have a very porous surface to water color over. I have been asked, many a time, will water color cover over
Splinters and Shavings—Continued

Paint? Sure, it is the very thing. The cause of many failures with ceiling that are tinted is that they have not been properly prepared for the work. Given a good, solid surface and a properly prepared water paint, it is only necessary to apply the material skillfully in order to get a satisfactory job. One coat should be sufficient.

An Opportunity for the Architect

The Boston Transcript says that New England builders for some time have shown a keen, but rather timid, interest in concrete as a building material, particularly for residential structures. Its use has grown enormously for heavy work, and it has made possible engineering triumphs on a large scale, such as bridge construction, which would have been out of the question with stone, owing to the enormous expense. But the day of the concrete residence is yet afar off in the eastern part of the United States, at least. Until architects with courage and men with money to spend, risk a few thousands in educational work,

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Splinters and Shavings—Continued

with the erection of more object lessons, the drain upon the timber supply will go on, and man will continue to house himself with the most perishable and expensive materials. Concrete, or cement, lends itself so readily to all types of design and presents so many advantages of economy that it is remarkable that experiments in cheap concrete house construction have not been more general.

Finishing Concrete Surfaces

The technical features of the various methods of finish were recently presented in a very comprehensive paper before the Boston Society of Civil Engineers by Mr. M. C. Tuttle, Secretary of the Aberthaw Construction Co., of Boston, well known as one of the pioneers of concrete work. The following abstract is given.

Granolithic Finish.—The objections to this finish lie in its flat dull color, its possible brittleness which may occur, its slipperiness under foot, and its apparent inequality of surface when light strikes it diagonally. Structurally, however, there is no real objection to this finish. When hard-trowled the surface well protects the under body of concrete from moisture.

Rough Picked Work.—By chipping off the excess mortar and cutting into the body of the concrete a surface roughening is given which breaks up the light and gives various shades of color. In Mr. Tuttle’s opinion this method gives as pleasing a surface as can be obtained economically, and when the work is properly done injury from frost is avoided.

Rough picking has the advantage of showing the masonry honestly as concrete. A pleasing surface is produced at relatively little expense. A laborer with hand pick will dress between forty and fifty feet of concrete surface two to three weeks old in one day. With a pneumatic tool he will cover fifty to sixty feet. This is the surface generally used by architects for landscape and other ornamental work.

Rub Mortar Surface.—After the forms were removed the concrete was thoroughly wet and then rubbed with coarse carborundum stone until the surface was brought to a lather. This was washed off and the surface dusted with a mixture of dry sand and cement which was thoroughly rubbed in. The final finish was given with a fine grained stone.

Surprised the Contractor

There is a wall of cement in Los An-
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Splinters and Shavings—Continued

geles which shores up one side of a building that has an artistic value never intended by the builder, says a local newspaper. He had moved his bags of cement on to the ground to be ready for work and was then called away on some other job for a day or two. In the mean time one of the very infrequent rains came and each sack turned into stone under the action of the water and the fabric of the sacks themselves was absorbed into the cement so that it was impossible to remove it. Consequently, each sack was wrought into the wall as if it had been a boulder on the line of an old stone wall. They were then chinked and bound together with worked cement, and after a time the weather disposed of the gunny sacking, but left the blocks marked with the impress of the weave. The result is a highly ornamental cement wall, resembling at a little distance a wall of some woven material.

The Strength of Structural Timber

Before putting a timber into a structure, every builder should know the strength of the timber and the maximum load it will have to carry. Building laws generally require that the material used shall be from three to six times as strong as is actually necessary.

Loblolly, longleaf, and Norway pines and tamarack are among the principal timbers of the eastern United States, and Douglas fir and western hemlock of the western. In the trade, loblolly pine is classed both as Virginia pine and as North Carolina pine. Virginia pine is made up principally of material from the northern part of the loblolly pine belt, and is inferior in quality to the North Carolina pine, so that the distinction is one of grade rather than one of locality. Longleaf yellow pine as known on the market may include the better grades of short leaf pine and Cuban pine. It has for a long time been the standard construction timber of the East. Norway pine, known as red pine, is lumbered principally in Michigan, Wisconsin, and Minnesota, where it is marketed with white pine as northern pine. Douglas fir called in different localities yellow fir, red fir, Oregon pine, and Douglas spruce, is cut most extensively in Washington and Oregon. Western hemlock, which is obtained from the same region, suffers from the reputation of the eastern hemlock, but it is far superior for structural purposes.
Splinters and Shavings—Continued

Recent tests by the Forest Service show longleaf pine to be the strongest and stiffest of all the timbers named, with Douglas fir a close second; while western hemlock, loblolly pine, tamarack and Norway pine follow in the order given. Fortunately, Douglas fir and western hemlock, of which there are comparatively large supplies, have high structural merit, as has also loblolly pine, the chief tree upon which the southern lumber companies are depending for future crops.

Much of the information hitherto available concerning the strength of timber has been secured from tests of small pieces without defects. This cannot safely be assumed to hold good large-sized timbers as found on the market, since these commonly contain such defects as checks, knots, cross grain, etc. The location of the defects varies the extent to which they lessen its strength; and the proportion of heart and sap wood, and the state of seasoning, must also be considered.

Work of One Woman

Miss Laura M. Johnson has completed and moved into a nine-room house in Kansas City which she built with her own hands, starting out with only $7, a hammer, a hatchet and a saw, which equipment was, as a matter of course, added to later on as she acquired more funds, but she has kept patiently and constantly at work since May, 1904, when she built a two-room box house, doing all the work herself and getting the lumber on easy payments.

Her start was by taking boarders to replenish her finances that were necessary to pay for the ground and furnish the material, but as to the real work of carpentry and architecture, she finished the entire interior of the house, laying the floors, lathing, plastering and papering the walls. The plans of the house were made by her and so many original ideas have entered into it. She has a large cupboard in the dining room which extends along one whole side of the room. This cupboard has compartments for all of the cooking necessities. In her sitting room she has a bay window fitted up as a conservatory, displaying many rare and beautiful plants, while the lawn is in keeping with the beauty of her home, and a stranger passing through her city would never know but that the work was done by some skilled carpenter man.

The energy and perseverance shown by
Miss Johnson in the work she undertook to do in the face of so many disadvantages, is to be commended. It shows that opportunities for industry and thrift can be made, even for those of the sterner sex, where the right determination and a love for the work in hand is behind the movement.

Concrete Fire-Proof Tile

In all discussions of fireproofing materials, no mediums have received the attention bestowed upon concrete and hollow terra cotta tiles. The concrete and the tile interests have not been altogether free from the spirit of antagonism, as concrete, as a fireproofing material, has made vast strides in the estimation of the public, which was not received with favor by the hollow tile interests. Notwithstanding the low conductivity of concrete, a most valuable attribute in fireproofing, it has been claimed by the hollow tile interests that their material was not only equally as fireproof but a more practical and economical structural medium than concrete. Therefore, it is interesting to note that there is now on the market a hollow tile of concrete, which possesses all the virtues of the terra cotta so far as design and shapes are concerned, but which is said to be far superior in strength and fire-resisting qualities.

In making the tile, the concrete mixture is prepared to the consistency of a paste, of Portland cement and a suitable granulated aggregate or crushed stone, furnace slag or gravel with sand, in proportions approximating 1 cement, 3 sand and 5 of the other aggregate, with sufficient water to give plasticity for pouring. These are thoroughly mixed together in quantities convenient for handling.

Steam-curing by means of racking the green tile in the body of a closed car into which wet steam is constantly flowing for twenty-four hours in summer and seventy-two in winter (after which they can be subjected to any climatic condition) is recommended by the inventor.

Tiles have been made using aggregates of crushed limestone, crushed trap rock, granulated slag, graded gravel and coarse sand. All of these have been thoroughly tested, and in compression all of them have been demonstrated to be fully up to the same test of the clay tiles now in use, while the tile made from trap rock and slag aggregates far exceed the tests of any other known material designed for like purposes. The breakage in manufacturing 10,000 tile amounts to less than one per cent.
Splinters and Shavings—Continued

A fire test of a floor span constructed after the present fashion of building concrete and hollow tile floors was conducted with the new concrete tile. This span when twenty-nine days old was loaded with concrete foundation blocks to the sum total of two hundred pounds to the square foot for each and every square foot of the surface of the span. The structure when tested with fire was thirty-seven days old and was still loaded as stated throughout the test, having been so loaded continuously for eight days immediately preceding and during the test. Previous to the fire test there was no perceptible deflection in either of the supporting concrete beams or in any of the joists supporting the span so loaded.

Cold water was thrown from a hose upon the hot concrete structure, flooding it from every possible approach; quenching the fire and throwing the cold water against the exposed under surface of the floor span.

At the completion of the test every one of the eighty-eight tiles used in the construction of the floor span was found to be intact, with the exception of one course at the north end of the structure, which was undoubtedly affected by the partial failure of the supporting member of the span at that point.

It is also stated that practically no heat was transmitted to the upper surface of the floor through the eight inches of concrete material, which further demonstrates the low conductivity of concrete.—Paper by A. A. Pauley, convention of Nat'l Ass'n of Cement Users.

Kindling with Kerosene

The newspaper accounts of many horrible accidents from using kerosene or gasoline to start a fire do not seem greatly to lessen the number burned in that way. Kerosene may be safely used for the purpose if the stove is cold or if the kindling is blazing. Heat without blaze converts it into gas which will explode when a blaze starts. Gasoline so used is fearfully dangerous.

A parlor or bedroom stove should always have metal under it, and if the wall is within eighteen inches it should be protected by sheet metal on one-eighth inch asbestos cloth. When covering a coal fire to keep it over night, remember that coal swells one-third while burning, so hot coals are likely to fall out of the open door or over the grate bar. Many houses were fired last year by drapery over grates and stoves igniting.
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Splinters and Shavings—Continued

A Horrible Death

From 450 to 500 mothers and children are burned to death, and three times that number seriously burned and disfigured in the United States each year by gasolene stove accidents. Last week a mother essayed with one arm to fill the tank of a lighted stove while holding her baby with the other. Both have died from burns, and another little one playing near will be disfigured for life. Stove accidents usually result from filling the tank without turning off the blaze or from spilling gasolene and then igniting the vapor of it by striking a match to light the stove. The gasolene can should be well corked.

A gasolene stove should be fixed to a permanent foundation so that it cannot be placed against wood or other inflammable material. It should have bottom and three sides closed to prevent combustible material from reaching the flame, and the main burner grates should be two feet from the floor.

Don't fail to have burners closed before filling the reservoir, for fluid leaking through them will make an explosive vapor.

Finally, don't go with a light to hunt the source of an odor of gasolene. The result of finding it by that means is always instantaneous and momentous.

An English Recipe for Coloring Rough-Cast Walls

To cover 100 square yards of surface, take a thin wash of cement or hot lime, and, for a blue-black color, add 5 pounds of lampblack; for a buff color, 5 pounds green copperas; to which add 1 pound fresh cow manure, mixed and strained. For a terra cotta color; 14 pounds red metallic oxide, 5 pounds green copperas, and 5 pounds lampblack.

Add to either of above 10 per cent alum in solution, which will give brilliant permanency.

Ochre and umber are useful colors, mixed with thin wash of cement.
Colonial Doorways
By Edith Dabney

WHAT a boon the architecture of the Colonies is to those living today, and though for some generations it was disregarded and neglected, the centennial of America has given it new life born of knowledge of latter day mistakes, and appreciation of the earlier period.

While the majority of seventeenth and eighteenth century mansions that are still standing boast pretentious exteriors, it is in the interiors that one finds most to marvel at and emulate, and though a current writer asserts misguidedly that in the Colonial houses of the South the interior trim was less carefully thought out and executed than in those of the north, it is the former section of the country that claims handsomer paneling, rarer carving, and more elaborate ceiling decoration.

After a tour of some of the old manor houses that grace plantations worthy of being called principalities, one wonders not that artist-architects north of Mason and Dixon's line have frequently offered great sums for the interior wood-work alone, wishing to transfer it to some twentieth century residence. All of this seems to prove conclusively that we have stepped backward instead of forward in one respect at least, for with all of our vaunted progress, we frankly turn to the designs followed by the worthy old builders when it comes to sheltering ourselves from the weather.

We have borrowed their massive walls and substantial appearance; their dignified entrances; their spacious halls and lofty ceilings, stairways, carving and paneled walls, so let us not forget that they knew, too, how to make doorways which to them meant far more than a place of entrance and exit. For instance, there is one old mansion built in 1710 wherein the arched doorway is paramount. One passes through it into the hall and into the drawing room through its sister, and so on throughout the entire house, the well planned, graceful arches forming a truly delightful feature.

These doorways, which extend nearly up to the ceiling, are richly paneled and painted white in contrast to the darker woodwork of the walls through which they lead. There is neither superfluous ornament nor lack of detail, the simplicity and grace commending itself in pleasing results. On entering the mansion, one immediately appreciates the charming effect, though it is sometime after this impression is created that one realizes the cause to be the series of doorways which form a veritable vista through the double fronted dwelling.

One of the most beautiful doorways of the country is seen in a rare manor house which crowns a celebrated James River plantation built in 1650 and remodeled in 1770, at which time the doorway was added. The casement of this door which leads from the dining into the drawing room is heavily moulded in keeping with the unusual pediment which is one of the finest things in the house. The pediment, entirely carved by hand, is a bit Rococo in its design which consists of a broken arch, the open space being ornamented with a finely carved pineapple indicative of the hospitality for which the mansion has always been justly famed.

It was a pretty thought of the old builders to carry throughout their manor houses these symbolic designs, which, while never glaringly apparent to the unenlightened, impress one deeply with the idea, once it is discovered.

The heavy door of solid mahogany which swings between the white painted casement,
still has the quaint old lock and handle selected in 1770, and though the hinges are but slightly visible, they swing as easily, and accomplish their purpose as they have done for nearly two hundred years.

In an old dwelling placed very far from this last, one famous in the annals of Colonial munificence, there is a very celebrated doorway which opens from the hall into the library and is duplicated in those leading out of this room into the adjoining. The casement of this handsome doorway consists of pilasters surmounted by a circular pediment decorated with very unusual hand carving, the outer rim showing a scroll design while the inner portion displays a sunburst effect. Separating the door from the pediment is a carved cornice which extends to a second casement supported upon pilasters of greater depth than the first, these, in turn, being connected by a carved arch, the whole enclosing the doorway proper.

The door itself is very heavy and beautifully paneled. The knob is of crystal, but curiously enough, there is no visible lock, a simple key hole being all that serves that purpose.

There are very few who will dispute the fact that these old doorways are far more artistic and infinitely more substantial than those which have supplanted them in the mansions of today. While on close examination they frequently show very elaborate and intricate workmanship, at a casual glance they impress one as entirely free from anything superfluous or ornate.

It is not necessary to call attention to the fact that such handsome doorways appear only in the largest and richest mansions of the Colonial period, and nothing could be more unsuitable than one of like design in an ordinary twentieth century house.

As the Colonists saw fit to use them only in their greatest residences, so now should their example be followed, and unless one is considering massive lines in a prospective home, there is one bit of advice that should not pass unheeded—beware of the Colonial doorway which, while perfect in its proper surroundings, becomes an architectural monstrosity when placed in an insignificant structure in the obvious attempt to dignify it.
A Mountain Camp for $1,600
By Helen Lukens Gaut

His mountain camp is not only comfortable, convenient and inexpensive, but it is in complete harmony with its woodland surroundings. The entire house, including roof and exterior walls, is covered with rough redwood shingles, innocent of paint or woodstain, and they are brown and shaggy like the tree trunks round about. The weathered oak pillars supporting the porch roof, or rather the front of the upper story which extends above the porch, are in reality, sturdy tree trunks, knotted, gnarled and bleached almost white from exposure to winds and rains. The lower story corners of the house, as well as door frames, as well as some of the window frames, are outlined with bark-covered slabs of pine. The front door, of pine boards and batons, shows originality of design in its ornamentation of black iron bands, studded with heavy headed bolts. Lattice windows add greatly to the appearance of this house, and the little rounded caps above the second story windows of small square lattice, give intimation of quaintness.

The house is specially constructed to withstand the winds and snows of winter. It is strong, and thoroughly "sea-worthy."

There are no eaves, just a lap of roof over the walls. The foundation is of mountain rock of irregular sizes, and cement, as are the supports for the porch pillars and the front steps. The huge stone chimney is in shape, quite out of the ordinary, spreading wide on the ground at the bottom, and diminishing to modest proportions at the top. The fireplace in the living room showing only an arch of stone over the grate. The kitchen-dining room and bath in the rear, are covered with a shed roof. The wide veranda is a constant delight in its nearness to the good-natured outdoors, the pines with their fragrance, the birds with their song.

Yellow pine boards and batons, of pretty grain are used throughout the house for panelling the interior walls. In the lower rooms, the floor joists supporting the upper rooms, form the ceiling beams with good effect. The mantel shelf is a six inch slab of pine, held up like a bracket by a brace of bark-covered branches. The stairway with rustic rail, leads up from the living room. The furniture is chiefly in rustic, much of it having been made by hand from material found in the near by woods. The body of the small round table shown in the illustra-
tion, was made from portions of two cedar stumps, and the legs from curved pine branches. There are plate shelves over each lattice window that make pleasing decoration possible. These windows swing inward, and are draped with cotton Japanese crepe in effective design of delft blue on white ground. In the kitchen-dining room, the cooking apparatus can be ostracised at will by the use of a large folding screen, which in a moment, as if by magic, turns the kitchen into an artistic dining room.
Abundance of light and health-giving air flood the upper chambers when the windows are thrown wide. Plumbing is first class, including bath, toilet, stationary bowl and sink. This house has no plaster, no paper, is simple and easy to keep in order. There is no muddle of bric-a-brac, just a few quiet ornaments. Of carpets there are none, a bright rug, or a skin here and there being quite sufficient for comfort, besides lessening the work of the housewife.

Estimate:

- Lumber ........................................ $600
- Carpenter labor ............................... 500
- Mason work ................................. 215
- Hardware ................................ 60
- Plumbing and cesspool ..................... 225

Total ..................................... $1,600

The above house is located at Squirrel Inn, San Bernardino Co., Calif.

The Modern Fencepost

The ideal fence post is one not subject to decay. The following are some capital pointers for the farmer to observe, suggestions being those of Wm. A. McCall, thru the columns of "Cement World." Mr. McCall says that as the life of wooden posts is very limited and suitable timber for posts in many localities scarce, it has become imperative to find a substitute.

A concrete post will last indefinitely, its strength increasing with age, whereas the wooden post must of course be replaced at short intervals.

In regard to strength, it must be borne in mind that it is not practicable to make concrete fence posts as strong as wooden posts of the same size; but since wooden posts, as a rule, are many times stronger than is necessary, this difference in strength should not condemn the use of reinforced concrete for this purpose. To enable concrete posts to withstand the loads they are called upon to carry, sufficient strength may be secured by means of reinforcement; and where great strength is required, this may be obtained by using a larger post with a greater pro-
portion of metal and being well braced, as is usual in such cases. In point of durability, concrete is unsurpassed by any material of construction. We know it offers a perfect protection to the metal reinforcement and is not itself affected by exposure, so that a post constructed of concrete reinforced with steel will last indefinitely and require no attention in the way of repairs.

No form of wooden reinforcement either on the surface or within the post can be recommended. If on the surface, the wood will soon decay, and if a wooden core is used it will in all probability swell by the absorption of moisture and crack the post. The use of galvanized wire is sometimes advocated, but if the post is properly constructed and a good concrete used, this precaution against rust will be unnecessary, since it has been fully demonstrated by repeated tests that concrete protects steel perfectly against rust. If plain, smooth wire or rods are used for reinforcement, they should be bent over at the ends or looped to prevent slipping in the concrete. Twisted fence wire may usually be obtained at a reasonable cost and is very well suited for this purpose. Barbed wire has been proposed and is sometimes used, although the barbs make it extremely difficult to handle. For the sake of economy the smallest amount of metal consistent with the desired strength must be used, and this requirement makes it necessary to place the reinforcement near the surface, where its strength is utilized to greatest advantage, with only enough concrete on the outside to form a protective covering. A reinforcing member in each corner of the post is probably the most efficient arrangement.

The concrete should be mixed with Portland cement in about the proportion 1-2½-5, broken stone or gravel under one-half inch being used.

**Tapering Post Preferred**

Economy points to the use of a tapering post, and wooden molds will be found most suitable. They can be easily and quickly made in any desired size and form. A simple mold that provides a capacity for four posts has been used generally with satisfactory results. It consists of two end pieces carrying lugs between which are inserted strips. The several parts are held together with hooks and eyes. Bracing also is provided to prevent any bulging. Dressed lumber at least an inch thick should be used. The post should be 6 by 6 inches at the bottom and 6 by 3 inches at the top and should be 7 feet long, having two parallel lines. If it is desired to have the post square at both ends the mold must be built accordingly. The latter form of post is not as strong as former, but requires less concrete. Great care in tamping is necessary to insure the corners of the mold being well filled, and if this detail is not carefully attended to the metal will be subject to rust.

Various devices have been suggested for attaching fence wires to the posts, the object of each being to secure a simple and permanent fastener or one admitting of easy removal. Probably nothing will answer the purpose better than a long staple embedded in the concrete, being twisted or bent at the end to prevent its becoming loose. Galvanized metal should be used for this purpose.

The molds should be placed on a flat surface. The molds when in place are given a thin coating of soft soap, the platform or cement floor serving as bottom of mold being treated in the same way. About 1½ inches of concrete is spread evenly over the bottom and carefully tamped, so as to reduce it to a thickness of about 1 inch. A piece of board will be found useful in leveling off the concrete to the desired thickness before tamping. On top of this layer two reinforcing members are placed about 1 inch from the sides of the mold. The molds are then filled and tamped in thin layers to the level of the other two reinforcing members, the fasteners for fence wires being inserted during the operation.

**Concrete Floors**

*For Residences.*

Too much care cannot be exercised in preparing the foundation for a concrete floor. This should always be well drained and firmed to a depth of from six to eight inches below the concrete.
If the soil contains a great deal of clay, it may be necessary to remove part of it and to fill in with broken stone, gravel or cinders to within four or six inches of the proposed finished surface, depending on the thickness of the floor. Blind drains of coarse gravel or tile may be laid from the lowest points in the excavation to carry off any water that may accumulate beneath the structure.

**Barns.**

For the construction of the ordinary stable or barn floor, which is not to carry any great weight, the following proportion is to be recommended for the concrete base: One part cement, two and one-half parts clean, sharp sand and five parts loose gravel or inch layer of a mixture of one part cement broken stone. This should be finished on the surface with a one to one and one-half inch layer of a mixture of one part cement and one and one-half to two parts clean, sharp sand. The total thickness of this floor must be from five to eight inches, depending upon the load it has to carry.

**Driveways.**

For engine foundations, floors or driveways over which heavy loads pass, the following proportion is to be recommended: One part cement, two parts sand and four parts broken stone or gravel.

**Large Floor Spaces.**

For all large floors it is advisable to place the concrete in sections not to exceed six feet square. This may be done by placing a two-inch plank of a width equal to the desired thickness of the floor on the edge as a box, in which the concrete is tamped until water begins to show on top. Make several of these forms, holding the plank in place by means of stakes driven into the under surface. These stakes should be driven on the outside of the form, so they may be easily removed after the concrete has set and the planks have been taken out. Fill alternate forms at first, tamping the concrete thoroughly, especially the edges. On the same day, as soon as the concrete has set, remove the crosswise plank and fill in the forms not filled at first. Mark the side plank to show exactly where the points come.

**The Finishing Coat.**

The finishing coat should be spread on before the concrete has set. To make this of uniform thickness it is best to place either one or one and one-half inch wood strips, as desired, on top of the concrete, over which a straight edge may be run. Smooth with a trowel for a smooth surface, or with a wooden float for a rough surface. Groove exactly over the points of the concrete, so as to bevel the edges of the block.

Do not trowel the surface too much until it has begun to stiffen, as it tends to separate the cement from the sand and injures the wearing surface.

The floor should be constructed with slope enough to carry all liquids to certain points from which they may be drained.

Protect the new floor from the direct rays of the sun, currents of air and frost, and keep constantly moistened for several days. Water is very important in the curing of concrete constructions and must be used liberally.

Use nothing but the best Portland cement that can be obtained. The sand should be clean, sharp, and not fine; it should be free from loam or clay, as these will tend to destroy the adhesive quality and retard the setting of the cement.

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**Vines for Porches, Pergolas and Arbors**

By Ida D. Bennett

Nature has no more kindly act to her credit than the furnishing of vines as a drapery and screen. They beautify and hide. Many of the architectural atrocities perpetrated by man are made first endurable and then lovable when half or wholly hidden by clambering vines and trailing festoons of bloom.

There are few, if any, uses to which a vine may be put that is not amply provided for among the many varieties of climbers available, and with a clear idea of what is required of a vine there should be little trouble in making a satisfactory selection.

Where a thick screen to afford protection from sun and wind and seclusion from observation is required the rapid growing annuals or one of the many clematises, the woodbines, aristolochias and ivies offer the most suitable form of vines. Most of these
are of strong, rapid growth and free from insect pest—a first consideration in a vine which is to be set under to any extent.

The honeysuckles are delightful when in bloom and their exquisite fragrance when wet with the evening dew makes odorous the entire surroundings, but unfortunately the plants are much affected by the gray aphid which, once established, are practically indestructible. I have battled with them for years and have come, at last, to the conclusion that the only remedy is to uproot the plants and consign them to a bonfire or to grow them at a distance from the house and be content with gathering the flowers when in bloom. However, I find that occasionally this vine is entirely free from the pest, at least that is the testimony of others who have grown it in perfection, and as it is well worthy an experiment I am far from condemning it.

The honeysuckles have the advantage of being about the last vine to part with its foliage in the fall, the leaves frequently remaining on the plant until Christmas. There are four varieties of this popular vine—the Chinese Evergreen—a variety having red, yellow and white variegated flowers. Haliiana, with flowers of a pure white, turning to yellow as they fade; Heckrothi, with deep red flowers with yellow throat—a continuous bloomer and variegated—a variety with foliage beautifully mottled with yellow and green. All are of the easiest culture and succeed in any situation.

For positions where a deep shade and perfect screen is desired there is nothing finer than the Aristolochia Sipho or Dutchman's pipe. Its great, clean looking leaves are extremely tropical in effect and the plant being hardy increases in beauty from year to year. It succeeds in shady as well as sunny positions, though I think a semi-shady position best. Some protection of the root during winter is advisable and something to climb on in summer is all the plant requires, but like all vines it is a good feeder and should not be starved or allowed to suffer for water.

Where a quick growing, free blooming...
annual vine is required there is nothing better than the cobaes, both the variety Scandens and the less well known San Salvador. The latter has smaller leaves of a glaucus. semi-transparent green and holds its leaves parallel to the trellis or netting on which it grows, rather than at right angles as is the habit of the Scandens. For this reason it forms a better screen and makes a neater growth. The flowers—a greenish-white are much smaller than the Scandens, but are remarkable for the enormously long stamens and conspicuous anthers. Both forms of the cobaes are free from insects and profuse bloomers, bearing the flowers and foliage until quite severe frosts have cut all the other vines in the garden.

The pergola affords a different proposition from that presented by the arbor or porch, where the idea is seclusion. Here the architectural features of the structure should, if possible, be preserved, especially if they are of stately and imposing character. Vines which make little growth near the ground but spread out and bloom profusely near the top as do the Jackmani Clematis, the Wisterias and similar climbers, should be employed. Many of the climbing roses are excellent here and should be trained directly up or around the pillars and then across the rafters or along the beams, using the growth more to decorate the upper portions of the structure than to mask the lower parts.

Many prefer to grow the vines on trellises or netting between the pillars, in this way transforming the pergola into an arbor which diverts it from its original idea and is not to be recommended unless the structure is of an inexpensive or rustic character in which latter case the more it is covered the better. Some wonderful atrocities are perpetrated in the name of pergolas and I have seen, in the east, a structure having fine Doric columns, pedestal and base and the whole surmounted with rustic rafters, than which a worse combination could not well be imagined. In such a case a vine which would completely cover the rafters would be desirable and the Clematis Paniculata could be employed with excellent results.

The climbing hydrangea—Schizophragma Hydrangeoides, is an effective hardy vine seldom seen and one which attracts attention and admiration wherever grown. It is a little slow in coming into flower but well repays the care, given it when covered with its immense heads of bloom. It blooms during July and August and when grown on rough wood brick or stone is self supporting, climbing to the rough surface as does the trumpet vine—another excellent and effective vine for pergolas.

The Polygonum Baldschuanicum is another rare climber or twining plant which bears masses of feathery flowers throughout the summer and fall. It may be grown to twine around a pillar or other support. It should be given good soil and protected with a heavy mulch of old rough manure in the fall and while the plants are young.
they should be laid down or protected by burlaps drawn across the tops during winter. Most plants, even those of a perfectly hardy character, are much benefited by this precaution.

For the summer house, the tool house or trellis there is always that fascinating annual, the Japanese morning glory. These require so much more room than the native variety and are so transitory in their character that I hesitate to recommend them unless the conditions are favorable for their perfect growth and complete enjoyment.

The colors, size and markings are so wonderful that one wishes to enjoy them all and as each plant should have at least five feet of lateral space and any amount of altitude one should not undertake their culture unless able to gratify these requirements; but if one has fifty or a hundred feet of lattice or wall to cover and if, happily, the exposure is toward the west then, indeed, one may enjoy these gifts of the Orient to the full. On a western wall the flowers remain open the greater part of the forenoon and on gray or cloudy days, all day, but on all other exposures they close as soon as the sun gets a peep at them which is as soon as he is above the horizon.

The seed of Japanese morning glories are obtainable of the seedsmen in separate colors of named sorts and should be sown separately that one may be sure of their variety. The seed should be started in flats in the house or in the hot bed in April and the plants set out where they are to remain when the earth and the nights are warm. Before planting the seeds they should be soaked over night in very warm water set in a warm place. The plants are a little hard to get established but once that is accomplished they prove as hardy, and far more vigorous in growth, than the common native variety.

No vine grown requires a greater amount of water when in flower. In fact the size of the flower depends entirely upon the amount of water received. It is not enough that the ground is kept moist all the time, it must be actually flooded at least once a day if immense flowers, five inches across, are to result. Added to this excessive water supply should be a semi-weekly drink of liquid manure, but if you have once grown as beautiful specimens of this fascinating flower as I have done you will think no trouble too great.

There are many semi-tropical vines which may be used for the adornment of the pergola in summer by lifting the roots and wintering them in the conservatory or a frost-proof cellar. Some of the tropical trumpet vines are very beautiful, the Solanums effective and easily grown. Rosa Montana or southern beauty is a beautiful vine when of sufficient age to bear its great panicles of rose colored flowers in profusion and the various passion vines are exceedingly satisfactory, blooming freely in the hottest positions and wintering exceedingly well either dormant or in a growing condition. One of the best varieties of this flower is the southern beauty—a variety with immense leaves and large flowers of white, rose and blue. The curious combination in the same flower and its beauty being always a matter of admiration whenever seen. It is one of the most easily transplanted vines and if the precaution is taken to wet the ground about it the night before lifting and to lift with the spade and transfer to the pot or tub which is to receive it without disturbing the ball of earth it will lose little, if any, of its foliage and will prove an attractive feature of the winter conservatory.

But the selection of a suitable vine for the position is not all the story. To keep it in thrifty growing condition, free from insects and dead foliage and to restrain a too luxurient growth will have much to do with its success as an ornamental feature of ones premises. A vine may be beautiful running riot in a wild ravine or aloft on a forest tree, but within the confines of the home grounds and especially about the house it needs careful grooming to be in harmony with its surroundings and the pruning shears will be in constant demand throughout the growing season, at least after the vines have attained age and size.
HERE is a fast growing demand among people who want to make their homes profitable as well as comfortable, for plans of duplex houses. We are, therefore, presenting this month for the benefit of those of our readers who are interested in this kind of a home, several very good examples of thoroughly modern duplex homes. A duplex home is a two story flat but offers many advantages which cannot be had in a flat building. To live in a duplex flat is equivalent in a degree to living in a one story bungalow. The rooms are all on one floor, but as a flat occupies the entire floor space it is easier to arrange them in a homelike convenient manner than in the regular flat building, at the same time having air and light on all sides instead of only one.

The building of a duplex house costs but a very little more than the building of a regular two story house, merely due to the duplication of the plumbing and the additional cost of heating if the individual plants are used; where but one heating plant is used, there is no additional cost on this item. One of the principle advantages in the building of a duplex house, where the owner intends to occupy one of the flats, is that the rental from the other flat yields a steady income, which pays a good dividend on the money invested.

The most common plan for the entrance of a duplex house is a single vestibule, having a door to the first floor flat and another door to the stairway ascending to the second floor. This is better than having individual outside doors for there is no advantage gained is making the house appear without, as a duplex house. The double entrance and double entrance doors indicate at once, the character of the house.

Design "B 7"

Design No. B7 illustrated on the following pages, is a very good example of a small inexpensive duplex house, having five rooms and the entrance hall on each floor. The rooms on the second floor being identical of those on the first floor. There are two good sized chambers with a bathroom between and four of the rooms are directly connected thru a little inside hall making convenient access in all directions. The kitchen is provided with sink and cupboards, with plenty of wall space for all other necessary kitchen furnishings. This neat little house has every appearance of an individual home. It was built by a man on a salary, who wanted a home which would serve as an investment, but would assist in paying off its cost. The cost to build it complete is reported to be but $3,400.

Design "B 8"

Design B8 is a somewhat larger house, allowing for some additional luxuries in the way of spacious reception hall, cloak closets, linen closets, etc. The bed rooms and bath room are off a separate hall, which is always a desirable convenience. All of the rooms are splendid size and special attention has been given to the economy in cost in plumbing by placing the bath room adjoining the kitchen, thereby keeping the plumbing all in one part of the house. The front porch is no doubt, somewhat small for what most people would require, but a larger porch could very easily be added with but slight increase of cost. The estimate cost of this house finished complete in Yellow Pine, is $5,400.

Design "B 9"

Design B9 is in very characteristic style for a duplex house. It has a two story columned front with a balcony to the second floor. In this plan, the same as the preceding ones, the arrangement
on the second floor is identical with that of the first floor. The entrance is into a large parlor which opens directly into the dining room and one of the chambers. The bath room is off a separate hall, connecting the two bed rooms, which makes a splendid arrangement. Two story columns with a balcony is an especially good arrangement for a duplex house as it gives a covered porch effect for both stories, at the same time, it is imposing, dignified, and not very expensive to construct. The estimate cost of this duplex house with Yellow Pine finishing throughout is $4,100.

**Design "B 10"**

Design B 10 shows a good arrangement for a small double house, the two sides the same in reverse order. Each house has a reception hall, parlor, dining room, kitchen and three chambers and a bath room on the second floor, several large closets, linen closets, and stairs to the attic. The estimate cost is $3,600.

**Design "B 11"**

This is a good sized cottage by Lowell A. Lamoreaux architect, and shows a splendid combination of a well arranged floor plan and a pleasing cottage exterior. There is no waste floor space; the stair goes to the second floor in the simplest manner possible and all the principle rooms are grouped together, giving a pleasing, homelike vista from one room to the other. When the doors are rolled back the living room and dining room are almost one large room, extending clear thru the house with a bay at each end. This gives a splendid opportunity to receive the full benefit of the summer breezes. There are two chambers and a bath room on the first floor, all opening into a rear hall, which is directly accessible from the living room. On the second floor are two chambers. The estimate cost is $3,900.

**Design "B 12"**

A rather unique plan for a bungalow style of home is illustrated in the design by T. J. Galbraith, Architect. The living room is full two stories and each of the chambers on the second floor has a private stairway branching from the main stairway. On the first floor, there are two more chambers and a bath room. The living room is thru the center of the house, having the main entrance at one end, the stairway at the other and a large fireplace to one side. The estimate cost of this house is $3,000.

**Design "B 13"**

A well arranged home somewhat English in its design is shown by Cecil B. Chapman, Architect. The rooms are assembled in an unusually homelike and convenient manner. The plan is very complete and calls for such things as a first floor lavatory, a built-in sideboard, a secluded screen porch in the rear, just off the living room, two balconies on the second floor, a niche for bookcases in the living room and other conveniences not provided for in every house. The exterior is rough cast cement on metal lath for the first story, shingles for the second story with half timbered gables. This house would cost to build today complete with hot water heating and plumbing, $4,800.

**Design "B 14"**

The little bungalow which closes this series, is another one of the especially well designed and planned bungalows in our collection. It is very pleasing and has a cozy homelike appearance that is hard to find. It is, of course, a home "just for two," having but one chamber, but this is of fair size. The kitchen, dining room, hall and parlor are "altogether like," making a very homelike assemblage of rooms. While not large, this house is complete in every detail. It is a splendid home for any one not requiring a large amount of room. The estimate cost is $1,600.
An Inexpensive Duplex House

DESIGN "B 7"
A Well Arranged Two-Family Apartment

DESIGN "B 8"
Combination Cement Rough Coat and Shingles
DESIGN "B 13"

CECIL B. CHAPMAN, Architect
A Double House—Up and Down

DESIGN "B 10"
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T. J. GALBRAITH, Architect
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SEPTEMBER sees in many homes, the departure of the daughter for college, perhaps only for boarding school. It is a season of trial to most mothers, the better the mother the greater the trial. It is well that so many things have to be thought of. Four years’ housekeeping stretch ahead of one, housekeeping of a sort which requires much ornamental paraphernalia. No one regrets the domestic instinct which leads a girl to wish for pretty belongings about her. The provision for her college home making is a prophecy of her bridal replenishing, a few years later. When it is wisely made, it may be quite possible for her to carry no inconsiderable part of her belongings into her permanent home.

College girls live in close quarters, also they are apt to move from year to year. Therefore the furniture chosen should be at once portable and compact. A couch which is also a box, a desk with drawers beneath and book shelves above, are desirable.

For possessions which are sure to come to hard use, delicate colorings are out of the question. A rug of soft green or brown will harmonize with anything and always look well. The rugs, variously named, which are woven from rags, with a warp of heavy cotton are a better investment than Axminster or Wilton, as they wear like cast iron.

A box couch or divan is almost indispensable. Its generous interior receives the surplus clothing, which must be provided for the change of seasons, as well as a party gown or two at full length. It is inexpensive, one covered with green denim, with a detachable mattress costing from nine to twelve dollars. As these couches were formerly made, the mattress was attached to the lid, so that it was impossible to tuck in the clothes, when the couch was used for a bed. Now a strap in the center of each side buttons to the mattress, so that it is held firmly in place. When it is to be made up, these straps are unbuttoned and the bed clothes can be tucked under its edges. If the lower space can be dispensed with, there is an effective Davenport, made in Mission style, with high back and ends, with a solid seat. The seat has a hair mattress covered with stamped burlap. It can be had in oak, weathered or green, and costs thirty-five dollars. Barring either of these an ordinary wooden or iron cot, with a cotton mattress and a fitted cover of green or brown mercerized tapestry or Craftsman canvas makes a satisfactory couch, one which answers for a bed upon occasion. Less permanent than either of the others, it can easily be sold at the end of the four years.

It is possible now to get office desks, with flap tops and many drawers, in the darker finishes of oak and they are both comfortable and convenient. Standing against a long wall, with a set of hanging shelves above them they do not suggest an office too much. Often a very good one can be picked up second-hand, rubbed down and refinished and supplied with brass handles, at very moderate expense. The Harvard table is far more expensive, costing from fifty to seventy-five dollars, but a thing of beauty and a joy forever. It is made on Mission lines, of generous dimensions, and besides capacious drawers has book shelves built in at the back. It presupposes a central position in the room but obviates the necessity of separate book shelves. Very good reproductions of what is called the Georgian desk can be had in the department stores for about thirty dollars. The wood purports to be mahogany, of the Central American variety, but may be only stained birch. In either case the color and grain are good and the finish excellent. This sort of desk has a pillared front and three large drawers, and is probably four feet wide. When closed its drop leaf slants
backward to meet a shelf above the drawers and pigeon holes of its interior. Such a desk is apt to be more permanently useful in later years than either of the others.

In a college town, one ought to be able to get a set of low book shelves built to fit a special wall space. Failing that, it is easy to find open oak bookcases at moderate prices. The college girl's books are seldom of a character to require the protection of glass doors. Except in a room with very dark furnishings, the bamboo bookcases look very well and are inexpensive. A chair and a tea table of the same wood will help to harmonize the combination.

The tea table is most important, including in its furnishings a chafing dish, and the shelved bamboo affair is quite the best sort to get. Its cover should be handsome and substantial, rather than delicate, as it will probably be entrusted to the college laundress.

In small quarters, pictures and pillows are always safe investments. No college sitting room ever had too many pillows, but they need not all be embroidered with the college insignia. It is a good plan to supply a number of washable slip covers, of cretonne, Japanese crepe, or raw silk, which an application of castile soap suds will restore to their original beauty.

A very few good pictures will suffice for wall decoration and leave room for the gradual accumulation of photographs of intimate interest sure to ensue. Such bric-a-brac as there is had better be of a useful character, handsome photograph frames for the home people's pictures, candlesticks, flower holders, a bon bon dish or two. Merely for ornament, nothing gives more pleasure, or is more appropriate than good plaster casts. Whatever is left out, or put in, avoid a confusion of useless small ornaments. Have a good reading lamp, gas or oil, a sufficiency of comfortable chairs, preferably wicker with loose cushions, and a high four-fold screen. If curtains are necessary to the student's sense of the fitness of things, have them, but not of ruffled Swiss. Get instead green lattice cloth, ecru raw silk, or softly tinted Madras, and hang them so that they will run easily and require no draping. In all your furnishings aim for such simplicity as will, as far as possible, deliver your daughter during her four years of college, from "the burden of things."

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A white matting, which has grown dirty, can be cleaned with a damp scrubbing brush.
and plenty of Indian meal. When it is quite dry, it can be stained with an alcohol stain, bought already prepared, or made from the package dyes and wood alcohol diluted with water. Then a coat of shellac is given as a finish.

The odds and ends of matting left in covering a floor can be utilized by cutting them into squares or oblongs and finishing them with a two-inch binding of green or brown denim. The ambitious have been known to stain such pieces brown or green, adorn them with a stencil design in black, and shellac them before binding. The shellac undoubtedly lengthens the life of the rug.

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J. H. D., Cleveland, O. Will you please advise me as to decorating the cottage, I am building. It is for a permanent home on shore of Lake Erie. Has large living room 15x19, with cherry brick fireplace running up to the ceiling, woodwork in mahogany—have Oriental rug, olive green predominating—for this room, doors and two French windows facing the north, dining room 14x16, casement windows facing west, woodwork and furniture in old English—have old rose color rug for that room.

Ans.—To use green on the north living room, poorly lighted would give you a gloomy room and it is hard to make a good green unless very dark or very light with tints. It is advised to tint a warm yellowish grey, in both living and dining room, with green rug and furnishings in living room and old rose rug in dining room. Short curtains of thin rose silk can be used on the casement windows. The north chamber with mahogany furniture could have an old rose wall, with white ceiling, white curtains, etc.

Mrs. F. M. N. “Have living room 14x10 having brick mantel with casement windows on either side. Thinking some of having built-in book case on one side of fireplace with built-in seat on the other. Furniture for this room consisting principally of fumed oak in Mission. Rugs for hall and living room have not yet been selected. Would you advise one large rug or several smaller ones for living room and of what colors? Would prefer tinting walls in all three rooms if advisable. Please suggest suitable curtains for living and dining room. Have heavy ecru net curtains. Would they be suitable for either of these rooms?”

Ans.—A pleasing architectural effect might be gained in living room by throwing two beams across the ceiling running from each side the chimney breast to the frame of the columned opening into hall—if, as we suppose, these are opposite each other. Further than this, it is hardly advisable to beam the ceilings in so small a house, though possibly the effect would not be too heavy in the dining room.

A wainscot is always effective in a hall, but we should not advise it in the living room. If it is desired to enrich the woodwork here, we should do it by using a heavy wood cornice in place of ordinary picture molding, at the top of the room. A unified finish of brown stain will be found most satisfactory for the standing wood of Oregon pine and for the floors as well. The book cases and seat under casement windows would be a great addition. One large rug in living room is far the better choice. In this northwest room it is suggested to tint the walls a warm but light cigar brown, much lighter than the wood work which should be rather dark. Ceiling ecru. The rug may be a Wilton in a Persian design, browns, creams, blues, old red and the blues and old red repeated in minor touches in the furnishing. The ecru net curtains would then be in harmony. In the southwest dining room, the wall above the wainscot might be a soft old blue with mingled blues and green in Madras curtains. Your hall is dark and a plain tint in a hall, unless a dark, rich color, is cheap looking. It would be better here to use a tapestry paper above the wainscot in blended tans, old blues and reds, with light tan ceiling.

R. K. J. “I am building a colonial cottage, and as it is nearing completion write you for suggestions in interior decorating. The cottage faces the west, has considerable shade, but large windows. We shall finish the hall in sycamore, living room and dining room in butternut, den in southern pine stained red, chamber and bath enamel, and chambers on second floor southern pine natural. Oak floors stained dark throughout. Ceiling below nine feet, above eight feet. Shall use wall paper throughout. Kindly suggest colors and decoration for each room. Prefer green for living room.”

Ans.—There seems to be little to suggest colonial design in the interior ar-
Answers to Questions—Continued

Arrangement of the cottage, but the low ceilings are well adapted to stripes in wall paper and Colonial stripes may be used with good effect in some of the rooms. Butternut and sycamore are delighful woods when finished natural and rubbed down as they have then a soft light brown tone. It is advised to use such a finish on those rooms. As green is preferred for the living room, a two-toned green duplex ingrain would be a good choice, with green tones carried into the hall, but in a different pattern. The dining room facing north, best be treated in golden brown, which will be charming with the butternut. The red finish of the den, is not very well adapted to the south facing with its broad windows, but if a grey paper be used on the wall, it will prevent garishness. In the south bed room a colonial stripe in green and white would be good. Southern pine finished natural, is difficult to harmonize with anything, except browns. It is advised to paint the upstairs chambers white, especially in a colonial cottage. The northwest chamber would be delightful with a grey check paper and bright flowered chintz curtains and furnishings. The north chamber, a narrow colonial yellow stripe. The south chamber in blue.

Information Service.

We are constantly receiving inquiries concerning the building and furnishing of homes, as well as questions about lighting, heating, plumbing, water systems, etc. To meet this steadily increasing demand for advice and help we have established an Information Service Dept. for readers of this magazine. This office will furnish any information at its command concerning these subjects free of cost, and give the names of persons best able to supply our readers needs.

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The Things Really Worth While

Within the last few months, there has been an animated discussion in one of the New York dailies, as to whether it was possible, or practicable, for a man and woman to marry on an income of thirty-five dollars a week. The answers to the question were about as varied as the requirements of life of the writers, but the general opinion seemed to be that though the experiment might be feasible it was rash in the extreme. Upon one point all who contributed to the discussion were unanimous: no arrangement could be contemplated which did not allow each partner to the contract five dollars a week, for personal expenses, clothing, amusements, traveling expenses and the like.

Into the case as originally stated certain elements entered which made this allowance less preposterous than it seems. But the general opinion would seem to indicate the existence of a tendency in our modern life to set personal gratification unduly high. When a larger amount of money than suffices for the food or for the shelter of the family must be set aside for this purpose, it would seem as if one's sense of comparative values needed revision. Suitable and becoming clothes and a reasonable amount of recreation and change are essential to happiness and well-being, but they are not of necessity expensive. The amount expended for them should be far below that allowed for the fundamentals of domestic life, food, heat and shelter. There is no part of the family expenditure which calls for a more judicial balancing of pros and cons than this. The situation is, of course, much simplified if the wife has an independent income, however small. That circumstance simplifies all situations, but it is the exception rather than the rule.

The Value of a Definite Social Position.—

In this connection, few women realize the advantage given by a definite social position. If a social position is worth anything at all, it ought to confer immunity from deferring constantly to the opinion of other people, in matters of dress and personal expenditure. People who have traveled abroad and mingled with the upper classes of foreign countries are always impressed with the simple habits of the women of high position. Personal extravagance is the note of the new rich and of those whose social position is not assured, the climbers so to speak.

The Force of Example.—

Still another consideration is the effect of lavish personal expenditure upon others who can ill afford it. The self restraint of the rich is direct encouragement to the economy of the poor. Not that expenditure is not the duty of the rich, but that is another story. But every well-to-do woman who limits herself in her expenditure for personal gratification makes things just so much easier for some family upon the border land between comfort and penury.

A Plea For the Plain Seamstress.—

With all the new avenues of employment which have opened to women, we still have before us the problem of the untrained woman, with no attainments beyond the ordinary feminine craft of the needle, or possibly an aptitude for nursing. It is people like these who have been driven out of occupation by the vogue for ready made garments, whose purchase is, after all, a specious economy.

Just here is the opportunity to help a large class of women and, at the same time, benefit one's self. Leave ready made garments to the homeless women, who must depend on the shops, and give the manufacture of underwear and shirt waists, at home, a fair trial. Doubtless the process will involve a certain amount of trouble but, in the long run, it will be found to pay abundantly. Not only will the domestic
product look quite as well as that bought in the shops, but the quality will be much better and its durability at least double. When garments are made at home, it is often possible to introduce some little touch, noted in the French shops, which at once gives the waist or undergarment an air of distinction. Only exceptional people look really smart in ready made clothes. As to the matter of relative expense, take the case of the ordinary tailored shirt waist. Two dollars and a half is no great price to pay for one of good material and finish. The maximum cost of material is seventy-five cents and a good seamstress, at a dollar and a half a day, ought to turn out two in a day, making a clear saving of a dollar on each waist, to say nothing of the garment being properly finished and fitted to the wearer.

The creation of a steady demand for seamstresses working from house to house, in any town, would be a great benefit to the self-supporting women of the place, keeping them out of the shops and factories by offering work under more favorable conditions.

So much trouble? Yes, but most things which are worth while are troublesome and, in one way or another, we are all of us taking trouble all the time. It seems to be the law of existence and the only thing to do is to make sure that the object is worth it.

Renovating Feather Pillows.

We hope that no reader of this magazine clings to the unsanitary featherbed, but should there be anyone so benighted, the same treatment is advised, although it must be done in detachments.

Have a number of cheesecloth bags, about the size of the pillows. Shake the feathers all into one end of a pillow and rip open the other end. Slip the open end of a cheesecloth bag over the ripped end and pin each side of the bag to the sides of the ticking cover. Then shake the feathers from the tick into the end of the cheesecloth bag, unpin the two bags and sew up the end of the cheesecloth. As each tick is emptied drop it into a tub of water. Wash the ticks thoroughly, boil, and dry wrong side out. Lay each bag of feathers in a tub and pour boiling water over it. When it is saturated remove it to a tub containing a lather of warm water and white soap and wash the feathers gently between the hands. Rinse in clear surfaces of ordinary furnaces.
water, with ammonia, a tablespoonful to a pailful, scald and hang out to dry, or prop upon a frame, turning frequently. Several days in the hot sunshine, taking them in at night and when it rains, is none too much. In returning the feathers to the ticks the process of removal is reversed. Not only pillows but the numerous cushions about the house are much benefited by the process.

A Natural Broom

The frequent use of spinach is highly recommended, by authorities on dietetics, as its action in clearing the system of impurities is quite wonderful. In a less degree, the same thing is true of the other watery green vegetables.
A Grape Luncheon

Purple and green, the grape colors, suggested the color scheme and a salad set decorated with a grape design had a hand in it. It was served on a piazza, on a bare table with a lace-edged center and d'oyleys. A tall crystal vase in the middle of the table held purplish pink cosmos and ferns. As it was an out-of-doors affair, candles were omitted and their place taken by four smaller vases of cosmos.

The first course was of white grapes, halved, seeded and chilled, with a dash of liqueur, and served in sherbet glasses. Creamed salmon, in green cocottes, as the tiny handled saucepans used by caterers are called, followed. Next came great pink slices of cold boiled ham, with hot rolls and spiced grapes. The salad was of lettuce and cheese balls, garnished with stars of beets, a bowl of mayonnaise being passed with it. The ice was a brick of pistache and raspberry and the little cakes had pink and green icing. The fruit was grapes in all shades of pink and purple and green. The color scheme embraced as well the mauve gown of the hostess and the green linen frocks and hair ribbons of her two young daughters, who served the guests.

A Natural Tonic

Every one who has studied the subject of diet at all is aware that grapes are very rich in iron, and that a plentiful use of them is recommended for people with anemic tendencies. Happily they are about the cheapest of our native fruits and, thanks to the trans-continental railroads, the Californian product is available all the year round. Even for those whose blood is perfectly normal they are a valuable tonic.

It seems a pity that so many people make hard work of eating grapes. There is a superstition about grape seeds, which has survived the medical dictum that in no known case has a fruit seed been found in the vermiform appendix after an operation. Dr. Seager, in his very valuable book on correct eating, says that the proper way to eat grapes is to swallow the pulp without displacing the seeds. The way of the precise, who is determined to eject the seeds, generally results in a minimum of pleasure and the corrosion of the mucus membrane of the mouth by the acid layer next the skin of the grape. With the Tokay, Muscat and other California grapes the case is different, as their seeds are large and few and the pulp more solid than with the eastern varieties.

The Psychological Aspect of Digestion

The same writer dwells largely upon the importance to a good digestion of an unconscious attitude. Too many people have the habit of eating and following the process by prolonged meditation upon the processes going on in the stomach. The best way, he says, to digest your food is to forget that you are doing it. This is a practical application of the principles underlying the various forms of mental healing. Nothing encourages a tendency to dyspepsia like undue anxiety. Certain forms and preparations of food are unfit for any stomach. Others may affect the individual unpleasantly. Lay down for yourself certain lines as to what you can and cannot eat and stick to them. Then dismiss the entire subject from your consideration. The other way madness lies.

The Diet of the Old

A good deal of the discomfort of old age
is caused by over feeding. The infirmities of advancing years prevent the amount of exercise necessary to digestion, with the result that the stomach and intestines are overloaded and the liver becomes torpid.

The writer knows a very aged couple, in feeble health, one of them entirely confined to the house, who have solved the problem very satisfactorily. They live almost entirely upon bread and butter and fruit, substituting cocoa for tea and coffee. Meat they dispense with altogether, supplying its place by two quarts of milk a day. Cereals and various light puddings and salads supply the needed variety. In this case the elimination of meat except in the form of soup, was a medical necessity.

If it seems best, with very old people, to adhere to the conventional routine of eating, the scope of diet should be restricted to such sorts of food as are easily digested. Fried food is out of the question for any but the robust, and highly concentrated soups and preparations of cheese and eggs are all difficult of digestion.

Our National Dish

We have often been told that the great brain of Ralph Waldo Emerson was largely nourished upon pie. Matthew Arnold commemorates the fact that, in the house of an eminent professor at a New England college, he was offered pie for breakfast. Still, despite such eminent authority, we have begun to blush for pie. It appears upon the Thanksgiving or Christmas dinner table, individualized, supplemented by cakes and ices. We seldom choose it for the dessert of the family dinner, which we invite an outsider to share. Many of us forswear it altogether, as tending to dire digestive disorders.

Which is just a little unjust. Properly made pie is no more injurious than Welsh rarebit, less so than a liberal allowance of ice cream. It must be the quality of the American product which mortifies us. If so let us consider some sort of reform which shall make the national dish a matter of pride. A concensus of cooks to the end that the thickness of the crust should be divided by two and that the filling be multiplied by the same number would seem to go far toward achieving this desirable end, with the further amendment that the crust should be confined to the top and sides and even on the top be restricted to strips or lattice-work.

A Forgotten Delicacy

Who, nowadays, remembers the dish known to the scornful of other sections of the country as Cape Cod turkey? Still here and there some back number recalls the traditional Friday dinner of a New England childhood. And uncommonly good it was. The fish out of the middle of a cod fish of generous size, was soaked to freshen it, then just brought to the boiling point and cold water substituted for the hot. This made it flake easily. Meantime a sufficient quantity of potatoes had been boiled and a rich drawn butter made, while beets had been boiling all the morning. You began with a layer of sliced potatoes, in the bottom of a deep platter. If you were of consequence it was an old blue platter, Canton or Staffordshire. You continued with a layer of flaked fish and another of sliced hard-boiled eggs and of beets. Then you poured on half your drawn butter and repeated all your layers. For further adjuncts you had a tureen of dice of salt pork fried till all the fat was extracted and floating in it and a dish of pickled peppers. Probably you finished with apple pie, warm and with a pitcher of cream, and when the meal was over you felt uncommonly pleased with yourself and the world about you.

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A. S. W.—

Q.—As a subscriber to your magazine I would like to have your advice relative to proper manner or draining cellar to sink. My house will be on a ridge. Neighbors complain of water coming up thru floor then into sink. Can tiling under cement floor be used to advantage, also outside of foundation walls? I expect to use stone for foundation walls. Is it advisable to place hot water heating pipes to radiators pass between walls or outside of same? Are cast iron boilers best?

Ans.—In regard to the draining of your cellar, I would suggest as a remedy that at the bottom of the foundation wall at the outside, lay a tile drain and connect it with a miniature cess pool located at a lower grade than the house. You have not said what the soil is but I should think that a boxed hole three or four feet square would be sufficient. The accumulated moisture will be drawn off and drip into this drain box and keep cellar walls dry. Tile can be used under the cement floor if desired, but it will only serve in place of a good rubble stone base and will not keep the water off of the floor. Under the conditions that you have there, I should certainly advise that you waterproof the outside wall, at least be sure and get a good cement coating put over the outside foundation up to the ground level.

In regard to the placing of radiator pipes, would say that they are put outside as well as between partitions, more generally however, they are placed outside. Of course if anything should happen to a pipe when it is within the partition, it would require the tearing out of the wall in order to make the repairs. Most of the high grade hot water boilers are made of cast iron.

G. P. E.—

Q.—Some time since I saw in your magazine a formula for softening paint brushes hardened with dried paint. I can not find it and I should like very much to know.

Ans.—There are a number of formulas containing acids which are sometimes used, but the brush so treated is never good because the life is taken from the bristles.

Soaking in benzine followed by thorough washing in boiling hot water with soap is as good a treatment as you can give the brushes.

A mixture of one part aniline oil and nine parts alcohol also is very good. Soak for twelve to twenty-four hours and then wash in hot water with soap.

If a brush has become very hard, it is not worth while cleaning, for it will require such heroic methods of cleaning that it would be worthless.
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Splinters and Shavings

Stains and Staining—the Advantages of the Process

That the application of stains is an important part of the house-painter's craft. Of late years the application of stains to woodwork has again come into general practice, but in a limited way. This being the case, it may be profitable, whilst considering the general trade practice, to examine further what staining is capable of, since the range of dye-stuffs is more extensive than that of pigments, and they all are more brilliant. Again, the adoption of pine and fir for interior work in wainscoting, etc., has become so prevalent, that the painter's comprehensive ability to deal with the application of color to such woodwork by means of stains instead of pigments, becomes a necessity.

The Rich Quality of Stains consists in clearness and brightness of color—a great charm in all decorative coloring, be it pigment or stain. It is this which makes stained work popular, else stained work would not cut out that solid level surface which is the result of good painting.

Various Uses for Stains

Even where real fancywoods have been used in an apartment, it is sometimes necessary to stain parts, so as to bring all the woodwork to a level color (a difficult and painstaking job). Stain, again, may be used to color the whole woodwork, so as to bring it all more into harmony with its surroundings. Darkening may be found necessary (stains will never lighten), and there are chemicals which will improve its color. Besides this, stains may be used decoratively, on a floor for instance, either plain or with a pattern, or on a dado round a room.

The Two Ways

The taste of some people leads them to require that the pattern of the grain of the natural wood should be brought out, so that the utmost diversity should show in the finished effect. The variety obtained by a distinct and differing depth of color caused by the markings of the grain by such critics is thought to be artistic. The opposite aim to this is to get the dyeing as level as possible, and carefully
Splinters and Shavings—Continued

avoid differences in depth of color, this second method being brought about by means of fillings or by preparatory sizings, etc. In the first case, water stain is used, and is applied direct so that it may sink in. In the other case, an oil or varnish stain is preferable. Even in the first style of work, extra coarse-grained parts or sappy places or knots need to be treated with a “filler,” lest they show like a blot on a clean sheet of paper.

Good Shingles

In asbestos shingles one has a roof, when properly applied, that will outlast the lifetime of the building. The simple exposure to the elements causes the cement, that has been deposited upon the asbestos fibre in the process of manufacture, to crystallize, and it then becomes better and better, in fact, more serviceable as time rolls on. Cement has been known to crystallize as long as twenty-eight years from the time it was first mixed. This is only proof of the claims made for asbestos shingles—that they improve, toughen and harden with exposure to the elements and atmospheric conditions. Another good point which these shingles have, and it is not to be overlooked by any manner of means, is the fact that they do not have to be painted to preserve them, as the elements take better care of asbestos shingles than the best paint or dressing that has ever been manufactured.

These shingles may be punched, filed or worked generally with the greatest ease, with ordinary tools such as are used for working natural slate or wooden shingles. They become very hard, particularly if exposed to the weather, or after the lapse of years. One great and desirable feature of them is that they can be successfully jointed, fitted, etc., by the work of ordinary mechanics, no unusual or special knowledge being required in handling them.

Proper Treatment of Floor

The proper treatment of floors is today a much debated question, and the dissatisfaction so often expressed on this subject is due to the lack of proper information. When finish counts for so much on a floor, it is strange, indeed, that so little thought is given to the material and methods to be employed.

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J. L. PLATE.
Splinters and Shavings—Continued

Generally, when a new floor is to be put down, great care is taken in the selection of the wood and in laying it; but when the question of finishing arises, the qualifications of the mechanic, and the material to be used, are given but little attention. The result often is disappointment and greatly increased cost, for ere long the old finish must be removed and replaced.

On the other hand, the proper method, if followed from the first, would produce not only a beautiful finish, but one that would be a pleasure for years to come. These remarks are applicable to the re-finishing of old floors also, and in view of the importance of the subject, hardware dealers who handle varnishes and floor finishers should acquaint themselves thoroughly with the various methods of finishing floors and the results obtained by the use of the various floor finishes.

Preparation Important

Too much care cannot be given to the preparation of a hardwood floor, as it has been proven beyond question that ninety-nine of every hundred complaints arise from carelessness in this most important particular.

In a new house, the floor, of course, is the very last thing to be finished, and that, which should have the greatest care and ample time for completion, is hurried most of all.

What is the result? No attention having been given to the directions of the manufacturer, to the state of the atmosphere when the finish was applied, or, in fact, to any of the several conditions attending a proper execution of the work, the owner moves in and in a few weeks discovers signs of failure in the finish of his beautiful floors. The blame for this condition is at once laid upon the material used, and the manufacturer is called on to state why he sold such inferior goods.

Some of the blunders often made in cleaning new or unfinished floors may be avoided if the following directions are followed.

Wash as little as possible; use sandpaper, where it will answer. When the floor has been well protected by covering, it will usually be found that nothing is necessary, except a good sweeping, before applying the first coat; but in case the floor is soiled, and it is necessary to
Splinters and Shavings—Continued

Wash it, use clear water if it will remove the dirt; but if obliged to use something to soften the dirt, put in about a gill of household ammonia to the pail of water and, after washing, wipe the floor dry and wash again with clear water, in order to free the wood of all ammonia that may remain. Use as little ammonia as possible to obtain the desired end, as an excessive amount darkens the wood. A better wash is made with a pint of alcohol to a pail of water, and it is not detrimental to the varnish.

Removing Stains and Grease Spots

Washing the floor with turpentine will also give good and safe results. Sandpaper will remove many spots that may seem to need washing. When a stain comes from paint, sandpaper and turpentine will generally remove it. Use alcohol to remove grease spots.

Another important step in preparing a floor is to be absolutely sure that there is no moisture in the wood. The dampness of the building is an important factor in this problem, and should be given careful consideration. All buildings are more or less damp, and the moisture in the atmosphere is rapidly absorbed by kiln-dried wood; it will not evaporate from a floor as quickly as from other parts of the structure, the temperature there being always lower than in the rest of the room.—The Hardware Trade.

To Grain a Plastered Ceiling

A plaster ceiling is easily grained, and where a room is finished in the natural wood, or grained, it presents an appearance which is superior to almost any other form of decoration. "Too little attention," says the Modern Painter, "is paid to the decoration of the ceiling in the average house of the better class. Great pains are taken to have the furniture, hangings and wall paper harmonize, while the ceiling is often left a blank white, or merely tinted, with no attempt at decoration."

One of the simplest forms of graining for the ceiling is to lay it off to represent sheathing, or a more elaborate plan is to decorate it with panels and moldings, conforming to the architecture of the room. It is a good idea, if the latter is used, to grain all the flat surfaces first,
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Splinters and Shavings—Continued

leaving the mouldings to the last, which avoids the possibility of ragged edges.

Care should be taken to keep the colors light, as a ceiling grows dark more rapidly than the side walls. Three coats of good paint, smoothly applied, are required to produce a proper foundation. After the graining color is thoroughly dry, it should be given a thin coat of varnish which has about one gill of raw linseed oil to the pint. This makes the varnish less likely to crack. The latter is only necessary to facilitate cleaning, for now the ceiling can be sponged over and washed, whereas if the graining were left unprotected it would be a difficult matter to do this.

Boilers

Many boilers for residence heating are not rated satisfactorily in the catalogues. Among twelve familiar types the hot-water rating from the same grate surface varies from 2,800 to 3,875 sq. ft. The amount of fire surface is not generally published and information is difficult to obtain. It probably varies 50 per cent among these same twelve types.

Given proper combustion and sufficient length of fire travel to prevent excessive draft the amount of heating surface is apparently not a prime factor, as boilers with large combustion chambers and comparatively small heating surface have surpassed the performances of other boilers of the same type and grate area with small combustion chambers and large heating surface.

A restricted combustion chamber is kept at rather a low temperature by the proximity of the water-cooled surfaces and the high temperature of good combustion is difficult to obtain. As a rule, the longer and higher the firebox the better the combustion. Hard coal usually gives off more heat per pound than soft coal, but on account of the more rapid combustion of soft coal the final results of the two fuels about balance. Thus, if we divide the heat given off per hour by the radiation and piping by the effective value of the coal, we have an estimate of the pounds of coal that must be burned per hour.

The grate surface to be provided depends on the rate of combustion, and this in turn depends on the attendance and draft, and on the size of the boiler. Small boilers are usually proportioned with a small amount of fire surface per unit of grate, and thus are adapted for intermittent attention and a slow rate of combustion. The larger the
Splinters and Shavings—Continued
boiler, the more attention is given to it, and
the more heating surface is provided per
square foot of grate.

Sanitation for Country Houses
Sanitation in the country is not less
important than that of the urban dwell-
ings. Perhaps it would be more precise
to say that it is of even greater im-
portance. A very large and steadily in-
creasing number of city dwellers annual-
ly, at the beginning of the warm season,
migrate to the country in search of
health.

In many localities the soil is unduly
saturated with water, the ground is im-
perfectly drained, the house is badly lo-
cated, the water supply is contaminated,
the sewerage arrangements are of the
 crudest and worst kind, and there is in
general an absence of cleanliness and
neatness.

No good reason exists why the benefits
of a good water supply, suitably installed
under a good pressure, of convenient and
time and labor saving plumbing fixtures,
of a good clean and sanitary indoor water
closet, and of good and efficient drainage,
should not be extended to the cottages as
well as to the country mansions of the
rich.

Concrete House Construction
A concrete country house can be built
in several different ways. The method
used in building the exterior walls, the
interior bearing walls, and the light par-
titions, is where the difference is found.
Among the different types of concrete
country houses is that in which the ex-
terior walls are built up of faced block;
that is, the exterior wall shows a pointed
cut or rock face. Another type is the ex-
terior formed wall; that is, made by
building forms, pouring the concrete in
those forms and plastering or otherwise
finishing the exterior face after removal
of forms. The third type is an exterior
wall of rough block; that is, a house
built of rough concrete blocks, and the
wall plastered or otherwise finished.
Then there is the veneered exterior wall;
that is, a wall built of formed or rough
block, and the exterior face veneered with
brick or other suitable material. In
houses built of formed walls, the interior
bearing walls and partitions are usually
formed, and in houses built with block
walls the interior bearing walls and par-

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304 N-Ashland Ave., Chicago
Splinters and Shavings—Continued

Deadmen Building & Material Record.

Chimney Flues

The location of the chimney flue is not of material consequence, although for convenience in installing the system it is well to arrange for it near the center of the building.

The character and size of the flue, however, are of the greatest importance, and that our readers shall fully understand this we shall speak of some of the elements necessary to a good flue. The draft in a chimney flue is spiral. This is doubtless due to the presence of the atmosphere and the friction caused by the draft in overcoming this pressure. For this reason a tile flue 12 inches in diameter, with an area of approximately 113 square inches, is just as effective as a 12x12-inch tile flue with an area of 144 square inches, and because of this fact a chimney flue should be built round, or square, or as nearly square as possible.

There must be a sufficient air supply through the grate of the apparatus to properly burn the coal, and the chimney should be of sufficient area to pass the residue of this air after it has expanded, together with the gases of the products of combustion. The following table will prove of service to our readers:

Table of Size of Chimney Flue.

<table>
<thead>
<tr>
<th>Radiation (for steam.)</th>
<th>Radiation (for hot water.)</th>
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<tbody>
<tr>
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<td>300 to 400</td>
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Chimneys 16x16 inches and larger should be at least 50 feet high; otherwise a flue of larger area should be used.

No chimney flue for the use of a heating apparatus should be less than 8x8 inches, and a flue 8x12 inches would be safer, even for a small apparatus.

A tile-lined flue is best, but if for any reason this is not practical, the flue should be smoothly plastered. It should be built straight up, without offsets of any kind, and should extend well up above the roof of the building and above the roofs of any surrounding buildings.

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After the home is built, one of the most important and interesting items to take up is the interior decoration. This is a subject which should receive a good deal of careful thought because it is surprising what a great difference in the impressions created by proper and artistic treatment of walls and the importance that wall decorations have on the general furnishings and surroundings of the room.

Education is going on all the time toward the securing of pleasing and harmonious combinations of color and correct combination and use of materials for decorative purposes. We believe that such high class productions in the shape of booklets as those just received from H. B. Wiggins' Sons Co., entitled "Artistic Possibilities of Wall Treatment in Typical Homes" and "Woven Wall Coverings for Homes of Moderate Cost" edited by Jno. Taylor of Glasgow, Scotland and illustrated by Jno. Ende will prove a great aid in accomplishing good results in house decoration. The majority of our subscribers are quite familiar with writings from Mr. Taylor's pen. We have also shown various pen and ink sketches by Mr. Ende.

Anyone interested in the subject of artistic home decorations will get some valuable ideas from these booklets. The H. B. Wiggins' Sons Co. of Bloomfield, N. J., will be pleased to mail one or the other on request. The booklet entitled "Woven Wall Coverings for Homes of Moderate Cost" contains fourteen full page illustrations of interiors in houses costing $10,000 or less, and the other booklet, "Artistic Possibilities of Wall Treatment in Typical Homes" is illustrated with interior views of rooms in houses costing above $10,000.

"Old Mr. Davenant's Money" is a new story by that clever writer, Frances Powell, who, while never attempting the eagle's flight, does her work with spirit and with an undeniable interest and charm. She is fond of a touch of mystery, and introduces it here with the same clever and ingenious touch that made "The Home on the Hudson" and the "Prisoner of Ornith Farm" good sellers.

True, the plot is highly improbable, but the reader doesn't care anything about that, because he is interested in the way it is told.
The difference in sheathing papers is the difference between a well heated and a badly heated house.

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guarantees a heating efficiency one-third greater than any other sheathing paper made. One-third greater heating protection means one-third greater economy and comfort—not for a year, but year in and year out—as long as the house or building stands.

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Makers of Paroid and Proslate Roofings, Rosal Insulating Papers and Florian Sound-Deadening Felt.

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**Book Review—Continued**

What the mystery is, it would not be fair to tell; the reader would then lose the fun of finding it out for himself. But one may say that the chief personage in the little drama is a thoroughly delightful and engaging young girl, who, having been brought up in complete isolation on a lonely New Jersey farm by a stern old Grandmother—always with a capital “G”—and a vixenish Aunt Sabrina, is suddenly transplanted, with her tender twenty years, her old fashioned ideas of right and wrong, her naturalness and unaffectedness, to the gay life of rich people in a summer colony on Long Island Sound.

What she did there and how such a personality fared in such an environment, the gentle maid herself tells us, in her confidences to “Ellen Walters,” the personified diary, to whose friendly pages, her lonely and repressed childhood has turned for comfort, as to a real person. Even the sated novel reader will rouse to a real interest in the fresh, gay little tale, though long before the last chapter the “mystery” has been solved by the reader, while never baldly put into words by the author.

Chas. Scribner’s Sons, Pubs., N. Y.
Price, $1.50.

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**Colonial Mantels $12 and Up**

**Made of Ornamental Brick**

Last longest—look best—are not too costly.
There’s no other kind so good—so pleasing.
Our Sketch Book tells all about them.
Write for it before you build or remodel.

PHILA. & BOSTON FACE BRICK CO.
P. O. Box 9618, Boston, Mass.
ONE of the greatest essentials in the embellishment of a large estate is the selection of suitable gates. For a place with small grounds one of beautiful designs is equally to be desired, but these should be restricted by acceptable form and decoration, according to the location. I recollect an ordinary dwellinghouse in Danvers, Massachusetts, which was on the electric carline from Danvers to Peabody. The house was but a few feet from the side-walk, yet it was flanked on each side by massive iron gates intended for the entrance to an immense estate. There was a short driveway to the barn in the rear of the house at the right, but the big gate at the left led nowhere, and had been put in by the owner, apparently to balance the other, so that the effect was extremely florid and ineffective.

A solution of that which is in keeping with good taste and desirability has been effected by the Thorham Iron Works at King’s Lynn, England, by the endeavors of
a woman artist, Mrs. Ames-Lyde, to whom the plant owes its existence. The products of this village industry have sprung into popularity and the town has been aided to prosperity in a comparatively short time.

About sixteen years ago, Mrs. Ames-Lyde wished to start some useful occupation for the young men in Thornham village, and ironwork in its simpler forms was undertaken. A teacher went to them from the Home Arts in London, and Italian bent ironwork was learned. The village schoolmaster, Mr. Elsum, showed taste in drawing, and practical sense, also the village blacksmith indicated intelligent possibilities, and the class soon got beyond the restricted form of the craft, launching forth into the freer and more artistic ironwork, done with the forge.

The first commission was a Royal one, which came at the very commencement. Mrs. Ames-Lyde's agent is employed by King Edward at Sandringham, also, and an order for a lamp to be executed within a certain time was suddenly received by telegraph; so Mrs. Ames-Lyde sat down in the blacksmith's shop, and made a design, the lamp being completed by the workers in the little cottage with one forge where all the first work was turned out. Now there are five forges employing twenty men at an all-day industry. The designing is all done by Mrs. Ames-Lyde and her brother-in-law, Mr. Victor Ames, and the former school-master, Mr. Elsum, is a partner in the firm.

The garden gates of the kitchen garden at Sandringham were executed at Thornham, and the King has had indoor and outdoor lamps made there, also a fence railing. Every kind of interesting work in metals is turned out, in iron, copper and steel, from the handsome massive gates to the most beautiful candlesticks and electric light fittings.

Lamps were made for Queen Victoria, (ordered by the present Princess of Wales, intended for a gift). They were sent to Balmoral, where they are now in use, and lamps and casements were constructed for the Princess Charles of Denmark. On some of the gates are elaborate and ornamental flowers, leaves and garlands, which were made separately and welded on with the greatest care and skill. Others show
a broad, bold style, in keeping with their size. Smaller ones for gardens and entrances are characteristically intended to suit the environment as well as the owner's taste.

Door hinges, reminding one of the massive studded doors of ancient castles, display beautiful curves, and are used on country houses. Artistic old-world grilles for garden walls give a peep at beautiful grounds, like a framed picture. There are large ones for deer parks and handsome grounds, and small ones for pretty gardens. Some of the caskets designed for the Lady Rothschild in silver, steel and bronze, remind one of Italian cassetti of the Renaissance period.

Mrs. Ames-Lyde possesses a library of old books dealing with artistic subjects. Some of these are full of illustrated specimens of Italian and Spanish work of ancient times, and these have assisted as motifs for the work at Thornham. Also, she has a villa at Florence, Italy, and divides her time between the two places. While abroad suitable patterns and fine old devices for use at the Works are collected.
WHEN I moved from my New England home to a new and rapidly growing Western city, I found the newness of everything oppressive rather than exhilarating. The stores, the houses, the public buildings, even the trees gave no suggestion of age.

I longed for my old home, the wide verandas with their stately fluted columns, vine covered, the low, deep-seated windows, and the box bordered walks and flower beds, the old mahogany furniture, the china, silver and brilliantly polished brass from which I had never been separated.

When I unpacked Aunt Keziah's Colonial candlesticks and the pair of copper lustre pitchers, her parting gift to me, her namesake, I was seized with an inspiration which I imagined would bridge over the distance between the East and West and bring into my new home a little of the New England atmosphere.

I began with the fireplace and mantel and had them modified and simplified in order that they should be a fitting resting place for Aunt Keziah's chubby clock, brass candlesticks and lustre pitchers. This was done to pave the way for other changes, but before the work was completed Aunt Keziah died and her wealth of china and glass and silver was sent to me. The dainty lavender sprigged tea set, the gold and white Spode, the rare black Wedgewood and silver lustre were all mine now, but no one had thought of the corner cupboard that had sheltered them for eighty odd years, and a crack or a nick in Aunt Keziah's china would have been little short of sacrilege.

I made a drawing of the cupboard, I knew it by heart, every diamond-shaped pane of glass, the round ball on top, the twin Gothic arches on the lower doors, as well as the proper shelf for each piece of china.

I spent a week in searching for a cabinetmaker; I wanted a young man, yet one who had had experience; a man who was willing to carry out my suggestions, and preferably one with little or nothing to do as I did not want the work hurried or slighted in even the smallest detail.

I had my cupboard made of mahogany, which I admit was an extra expense; I also had it adjustable so that at any time it could be transferred to another house. My friends said that my mahogany cupboard and walnut furniture were about as congenial as oil and water and that I was not living up to the splendors of my mahogany cupboard. "Not up to them only with them for a time," I replied, and resisted the temptation to tell them of the old ma-

hogany sideboard, table, and chairs that my sister had bought for me at Aunt Keziah's "sale."

You may not have an Aunt Keziah; you may not care for old mahogany furniture, but should you prefer the old time furnishings there are still treasure-houses in the East and South, farmhouses here and there where they are willing to part with a piece of old furniture or brass; junk shops where you can often discover a really good chair or table; the auction rooms of large cities where at the close of a busy day you can frequently bid in treasures for a song; the large stores where the prices are beyond
most of our purses; the small shops on the side streets where a fine old sideboard or bureau, probably out of repair but with great possibilities, can often be procured for a startlingly small price.

In ordering your cupboard have it made as wide as is consistent with the height; as to the height, that varies with the height of your room, for it must be at the highest point at least twelve inches from the ceiling.

If you are not to furnish your dining room in mahogany, or if mahogany should prove too expensive, have a light wood with a grain stained; or should you prefer other furnishings, I am sure that Aunt Keziah, were she here, would not object to your having your cupboard made of wood to correspond with your furniture, and you will find that from walnut, chestnut, ash or oak you can have a cupboard made that will not only be “a thing of beauty” but a joy for all time.
Two styles have dominated in the domestic architecture of our country. Both styles belong distinctly to the English-speaking people and represent their highest ideals. One of these is distinctly English, it being the half timbered work of old England, the other is considered typical-American in every respect, but strange to say, this style, the Colonial, is also from old England.

The Colonial style dates back to Sir Christopher Wren and the Adams Bros., of England, and while those celebrated designers lived, it was quite popular, but when they were gone the styles seemed to drop out of popular favor. It so happened, however, that the Colonial style, then called the Georgian style, after King George of England, was in the full swing of its popularity at the time the more progressive colonists emigrated to this country. It is quite natural, therefore, that they took with them the popular style of their Fatherland and since the Colonial style which it then became, is found in all of the original Colonial homes and buildings of prominence, it was only natural that the younger generation of architects growing up under the influence of this Colonial style, should continue it and improve it until it has become truly the American renaissance; bearing but a slight resemblance to the original Georgian style of England and that resemblance being found more in the details rather than in general proportions and character of the buildings.

The beautiful Colonial home illustrating this article is a splendid example of this style of domestic architecture. As can be readily seen, it is distinctly appropriate to its surroundings; being placed on a city lot, it has assumed rectangular proportions and the fact that its next door neighbor is a Colonial house with a two story portico, makes the harmony complete. The semi-circular porch with a flat roof and balustrade is one of the American features of the Colonial style. The compass bay so often used on Colonial homes is another touch of American ingenuity, intended to relieve the somewhat angular, sharp-cornered appearance of most Colonial homes.

The Colonial house always calls for a well balanced exterior; the entrance should be in the center and the windows on either side of the entrance should be of similar design and location. The
dormers on the roof should also carry out the regularity and be located with reference to space between the openings on the story below.

This house has a red brick exterior with white mortar joints which has become distinctly Colonial thru usage, red brick being the only brick obtainable in the Colonial days, except the common cream colored brick and since they had no way of coloring their mortar then, the white lime mortar was always used. Custom has also made the cream colored brick appropriate to the Colonial style and this idea has been carried into the frame buildings where rye straw, yellow white, are frequently used for Colonial exteriors.

The other beautiful home is an American adaptation of the English style. One of its most local attributes is the concrete block walls. These are perfectly smooth and look far better than the crude imitation of rock faced stone work we might expect to see. The English style, unlike the Colonial style, admits of an assemblage of irregular masses, buildings and groups of buildings which would never be tolerated in homes or buildings of classic character. For this reason, there is probably a broader field for the designer's originality in the English domestic architecture than Colonial architecture. The student soon learns that the Colonial style is developed to a point where his book knowledge of the style will guide him very well in the designing of Colonial homes but not so with the English style. Here the success of the design depends largely upon the designer's ingenuity, sentiment and susceptibility to impressions received from English architecture rather than to rules.
Paint Colors

What are Natural Earth Colors?

Colored compounds found as deposits in the earth and utilized as pigments, either in their natural state after grinding and purification, or after further treatment, such as oxidation by burning, calcination, etc. The principal varieties are the mineral browns (Prince's mineral), ochres, umbers, siennas, natural iron oxides, mineral black, and a few allied substances. Of these Prince's mineral is a natural iron oxide in which the oxidation is completed by furnacing in a current of air; raw umber is a similar natural iron oxide containing manganese and burnt umber the same similarly treated. Raw sienna is an allied mineral and burnt sienna the same further oxidized by calcining.

Allied to these are the so-called oxides produced by grinding the natural iron oxides (haematites) from various localities. They range in color from a warm brown to a brilliant scarlet, dependent upon the composition of the original mineral and the degree of oxidation.

Similar highly colored products are produced by driving off the sulphuric acid and water from sulphate of iron (green vitriol). Venetian red, an allied product, is produced by precipitating the iron oxide of green vitriol from solution with lime water and afterwards oxidizing in a furnace. The resultant product is a close combination of iron oxide with calcium sulphate. Venetian reds of similar character are also produced by grinding high grade iron oxide with inert bases, such as calcium sulphate.

Ochres are hydrated iron oxides permeating a clay base. They are produced by age long percolation of water through a body of iron ore into adjacent veins or beds of clay. They differ widely in color, tone and composition.

What are Chemical Colors?

Chemical colors are pigments produced by chemical action of one substance (usually in solution) upon another, resulting in the precipitation of a highly colored compound. Following are the principal chemical colors in common use: The various Prussian or cyanide blues (Chinese blue, Antwerp blue, etc.), made by precipitation from the ferro-cyanide or ferri-cyanide of potassium by a soluble salt of iron (Prussian blue is destroyed by lead carbonate). The chrome or chromate yellows are made by precipitating a soluble lead salt by a soluble chromate, the resultant product being a lead chromate. The various shades (light, medium, deep orange, etc.) are produced by precipitating with the chromate some modifying substance like lead sulphate or barium sulphate. There is also a very permanent zinc chrome in which the lead base is replaced by zinc.

Chrome or chromate greens are combinations of a specially prepared Prussian blue with chrome yellow, usually precipitated together and modified in the darker neutral shades by the type of chromate used. These greens in their pure state are unsatisfactory as to permanence, hence it is practically the universal custom to grind with them some inert protective pigment—barium sulphate preferably—which diffuses and reduces the pigment without materially impairing its color or opacity. A high grade of commercially pure green, therefore, usually contains about 75 per cent of barytes. These greens should never be used with a white base containing carbonate of lead, as the Prussian blue content will be bleached by it in the can. Oxide of zinc, oxy-sulphate of lead, or a leaded zinc should be used as the white base. Chromium oxide, the original "chrome green," is now but little used on account of its prohibitive cost and its dull tone. Where great permanence is required, as on railroad signals and the port-light boxes of vessels, it is still used to a limited extent.

Ultramarine and cobalt blue, English or Chinese vermilion, red lead and orange mineral, may also, in a certain sense, be termed chemical colors, in that they are the products of chemical transformation. The two blues are produced by a special method of fusing together the components of lapis lazuli (the original ultramarine). Neither of these colors should be used with any other pigment or substance containing lead. White lead, chrome yellows, chrome greens and even oils containing lead driers are therefore debarred. Oxy-sulphate of lead does not act so quickly as the carbonate in discoloring the blue, but will act surely if slowly. The preferable white bases for these colors are oxide of zinc or sub-
limed lead, with or without the addition of inert pigments.

There are two true cobalt blues, of which one is familiar as "smalts." The other is a compound oxide of cobalt and alumina. It is more familiar as an artist's color than as a pigment for house paints. The quicksilver vermilions are a sulphide of mercury, produced either by sublimation or by a precipitation process. Their color is apparently due to the form of the particles, and gradually changes, on exposure, to the natural brown or black normal sulphide of mercury. They have been largely replaced by the so-called American vermilions and vermilionettes, the latter being really a form of lake and will be described under that heading.

American vermillion, sometimes designated as Chinese red, Persian scarlet and other names, was for many years in great demand owing to its permanency, but as it loses its brilliancy by the breaking of its crystals when milled, it is now largely replaced by the aniline scarlets which are classed among the fastest of the vermillionettes. In composition it is a basic chromate of lead, requiring special treatment to develop its color.

Red lead and orange mineral, as well as litharge, are oxides of lead. The first-named is produced by further oxidation of litharge at a low heat in an open furnace. Orange mineral is similarly produced by oxidation from the carbonate of lead instead of pig lead, and is therefore amorphous in structure and not crystalline. This makes it much easier to hold in suspension, while its color is to harden in the can. Freshly mixed, they form an excellent protective coating their color.

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**Saving Money on a Heating Plant**

By a Hot Water Advocate

Have you thought how much it is going to cost each season to heat your new house? The heating plant is the only part of the building for which a new investment must be made each year.

On the average the money spent for fuel in two seasons will be more than the first cost of a hot air furnace; in four or five seasons the fuel will have cost as much as a hot water plant. In other words, in ten years the money spent for fuel will pay for five hot air furnaces or two hot water plants. Suppose the hot air furnace costs $200.00 and the hot water plant $300.00; this is a fair proportion. In ten years the fuel for the furnace will cost 5 x $200 or $1,000.00 and for the other 2 x $300 or $600.00, a saving in fuel alone of $400.00. It is evident that the amount of fuel used is far more important than the first cost of the plant. To get at the cost for fuel it is well to use a little common sense in addition to heating contractor's statements. There is a definite amount of heat in a pound of coal; all of it cannot be used; some is always wasted, but the method that wastes the least is the one to use. Every time heat changes form, or passes from one medium to another, some of it is lost. For three changes in a hot air furnace there are only two in a hot water plant. As a matter of fact, experience proves that it costs about one-third less for fuel with a hot water plant than with a furnace. In a few years this amounts to a good deal.

Generally the reason for putting in a furnace is the low first cost. Naturally the lower the price the smaller the furnace and as a result it is often too small to do the work. A heating contractor can always "get out from under" on a hot air plant. If fuel enough is burned it can be crowded and forced beyond the proper limit, in a way that is not possible with a hot water system. A first class hot water plant can be obtained for from 8 to 10 per cent of the cost of the house and a good hot air furnace for about one-third less.

Anywhere in the United States the heating plant is a very important part of the home. Physical comfort depends on the temperature more than on almost anything else. The heating apparatus is a continual source of expense under any circumstances and the subject should be investigated as fully and carefully as possible. Every house builder should get posted by reading up on both hot water plants and hot air furnaces. He should get references and either write to disinterested parties or go and see their plants.
FROM THE coming of the first killing frost until the closing in of cold winter weather the season in the garden is one of much interest and opportunity. It is at this season that one may to good advantage plan the next year's garden and plot out and relay such portions as have proved unsatisfactory or restricted. Every day's or hour's work done at this time is a distinct gain which can but be appreciated when the busy days of spring arrive and labor of all kinds are at a premium.

Where the boundaries of the garden are to be extended it will often be found necessary to break up sod land. Where this is done in the spring it will be necessary to remove the sod and so loose much fertile material; in the fall this sod may be cut out, the under soil spaded and enriched and in good mechanical condition and the sod piled or laid—sod side down on the bed to decay. Usually by spring it will have decayed sufficiently to tear apart and turn under and there will be no live grass or other growth to come up in the beds and cause trouble.

Should the garden be extended into land used for vegetables or crops there will not be the sod to deal with, but there is quite likely to be an abundant crop of weeds to subdue and with these too, the frost may be depended upon to do its part if the ground is broken up and exposed to its action.

New paths should be made as firm and level as possible and then at the thawing of the ground in the spring any places which have settled below the established level may be filled up and the roller run over the paths to smooth and harden them.

New plantings of shrubbery and perennials may be done at this season and old clumps that have become crowded and root bound may be lifted, separated and reset. In the case of shrubs this should not be done until the plants have shed their foliage and are dormant, but it should be done as soon as they arrive at this condition.

The fall is the right time for the setting of hardy lily bulbs and all spring blooming bulbs, and the tulip and hyacinth bulbs which were lifted and stored in paper sacks last spring must now be gotten into the ground with as little delay as possible that they may make some root growth before the coming of severe weather.

Iris, which do not shed their foliage in the fall may be lifted at any time now and divided and reset. In separating the roots only those parts showing live shoots should be retained. The iris makes a joint on the root with live shoots, throws up a flower stalk and matures, then a fresh joint forms and the old one dies. In this way it accumulates an amount of dead wood about the roots which eventually choke the plant. For this reason the iris, especially the German iris, requires frequent resetting. The Japanese iris does not require so frequent division.

The hibiscus will usually stand moving better at this season than in the spring and the bleeding heart may be lifted any time after the foliage dies down in August. This is also the time for lifting the hardy white garden lilies—Candidums, which should not be disturbed after new growth begins.

If any of the hardy lilies have shown signs of disease or deterioration they may be lifted in the fall and examined for the cause. Auratums and krameri lilies require this precautionary measure about every three years and when lifted should be carefully cleaned of worms, ants and all decayed tissues and replanted in a fresh spot.

The lilac-s-of-the-valley need attention at this time and if the beds have become too crowded a strip a foot wide every other foot of the length of the bed should be cut out the entire width of the bed and the space filled in with good soil. The lilies remaining in the bed will soon spread out and cover the vacant space and in a couple of years the remaining strip of old roots may be removed in the same way and so the bed be entirely renewed with the expenditure of but little time or labor. The strips cut out may be used to start new beds by simply setting them in the ground.
a foot apart without even pulling them apart. This is a very easy and practical way of renewing the lily-of-the-valley bed.

Seeds of many hardy perennials may be sown at this season; poppies, foxgloves, petunias, sweet alyssum, golden saxatile, aquilegias and the like may all be sown in the fall and will give better results than spring sown seed. Poppies sown in the spring seldom have the brilliancy of the fallsown plants and hardy perennials such as foxgloves and canterbury bells gain a year’s start by this fall or mid-summer sowing.

It will be found in the fall that many seedlings of these plants have come up in the paths. For some reason they always seem to be much sturdier in this position than in the beds and I am in the habit of leaving them undisturbed and planting them where wanted in the spring. Quite as good a way, however, would be to lift them carefully and winter in cold frames, planting out where they are wanted in the spring. Where coal ashes are used on the paths I notice that plants which come up therein do not penetrate the soil very deeply, but spread out on the surface and hence are very easily lifted. Curiously enough they seem to thrive in this arid soil and seem to feel the effects of removal far less than when growing in the richer soil of the bed, from whence the transplanting is more or less difficult.

In sowing seeds of this class of plants the ground should be made fine and level
and free from weeds, roots or rubbish of any kind and then the seed scattered as thinly over the surface as possible. Mixing the seed with fine, dry sand is a convenient way to accomplish this. About a cupful of sand to a packet of seed and this sown very thinly will be none too much as there is always danger of crowding the plants, little of affording them too much room.

After planting the soil should be pressed down firmly with a board and unless the weather is very dry and hot this will be all that is required. But if very dry the beds may be sprinkled and covered with newspapers held in place with lath or wire screens or branches of trees—anything which will prevent the papers blowing off.

At this time also, all noxious weeds about the premises should be dug up and burned, especially is this necessary in the case of those which have gone to seed—burdocks, wild lettuce, dock and the like. Ordinary weeds not in seed may be consigned to the compost heap to add their quota to the future fertility of the garden. There is no more profitable time to weed the garden than in the fall. Ground cleared of weeds now will remain clean the rest of the season and do much to dissipate the dreary look the grounds put on after the passing of the summer flowers and fragrance. This is a good time to destroy all sorts of noxious insects in their chrysalid state and those which hibernate over winter coming out in the spring ready for our tender flowers and vegetables. The cut worm is the most troublesome of early spring pests and may be found in the ground where it burrows during the day, or under boards, rubbish—anything which affords concealment. His dirty brown, fat body is familiar to all and wherever found he should be instantly dispatched.

The chrysalid of the cabbage worm is found under the siding of buildings or any projection which affords means of attaching its case and some slight shelter from wet. It is a pale green or white triangular case touched up with points of gold and, considered apart from its destructive and offensive architect, is a thing of beauty in its newness. The big, brown case of the tobacco or tomato worm is found in the newly upturned soil as is the smaller cases of various caterpillars which eat the vines and bore into the stalks of the cosmos, dahlias, and clematis. The digging up of the garden beds and exposing them to the action of the frost will destroy great numbers of these dormant pests and is labor well expended.

Hammer and nails play an important part in the fall work in the garden. Not only is there much constructive work to be done but the repairing of outbuildings, fences, trellises and cold frames, hot-beds and the like should not be deferred until spring. A little attention to a trellis post at this season may prevent a general smash up when the vines are weighted with sleet or snow in mid-winter or a fierce wind catches it at just the right angle. A board loose in the walk may mean broken bones or strained sinews later on and all neglected repairs mean additional expense, when finally attended to.

All plants which are to be kept in bloom in the house during winter should be lifted and potted before any frost is in the air. Cut around the plants a week before they are to be lifted. Water thoroughly the night before and lift the next morning with a spade, transferring them directly from the spade to the pot without any handling. There is a great difference in the way in which various plants lift. Some lift with a mass of roots holding the earth firmly and are little, if any, disturbed by the process. Others—as the geraniums, crape myrtles, coral plants and the like, in spite of the utmost care, will often come up devoid of soil and require special treatment if they are not to lose all their foliage. The best way seems to be to set the pot in a cool, shady, airy place, water thoroughly and then spray the foliage repeatedly, not allowing it to become dry. This supplies the moisture denied it by the roots which require all they can assimilate to help them recover from the violent shock of lifting. Treated in this way one may offset the effect of the loss of soil and save both bloom and foliage.

All annuals should be pulled up and consigned to the compost heap and the beds made neat for winter. Roots and bulbs of summer bloomers such as gladiolas, cannas, dahlias, and caladiums are lifted about the last thing that they may not be out of the ground longer than necessary.

Garden seats, urns and the like are better off under shelter for the winter where, in the leisure hours, they may be given fresh coats of paint and emerge in the first warm flush of spring, when the blue-bird is abroad in the land, ready for use instead of being laid up for repairs when most they would be appreciated.
A Modern English Adaptation

One of the distinct advantages of this department of our magazine, is that it publishes the best work of many different architects, thereby giving our readers a broad field in which to obtain their ideas. The designs selected this month cover a wide range for size and styles.

One of the most attractive is the first design which embodies an arrangement somewhat out of the ordinary, very complete in all its appointments and with every consideration being given towards making it as homelike as possible. There is a small reception room, and all formal reception rooms should be small as they are little used. The large library is the principal living room and it is of splendid size, being 15 feet by 25 feet. The dining room is also a well proportioned, good sized room. It is always advisable where space is not limited, to have the dining room longer than it is broad. The reason is obvious.

The exterior of the house is somewhat English in its detail. The foundation is of brick; the water table, copings and sills of stone; the first story walls are rough cast cement and the second story is shingled. The estimated cost of this house complete with heating and plumbing is $8,000.00.

A Well Studied Plan and Exterior

The next design shows a very well studied plan. All of the rooms are of good size, conveniently located and well proportioned. A house of which this can be said is without question a model one. The entrance hall has two large cloak closets, which is unusual. There is a direct passage from the kitchen to the front hall and from the kitchen to the living room, also a combination stairway from kitchen and front hall to the second floor. Such an arrangement is saving a good many steps during the course of the day. There is plenty of space in pantry for work table and ice box. On the second floor we find three fair sized chambers and one large one, the latter being the owner’s chamber, which has a fire place in it and a sleeping porch just off of it at the rear of the house. The location of the house, is such that in the summer time this arrangement is a very desirable one. The estimated cost, complete with heating and plumbing is $7,500.00.

Brick and Shingle

The brick and shingled house shows another adaptation of the semi-English style, English details being most prominent in barge boards, cornice and porch design. The first feature one notices on entering this house is the spacious vestibule. A vestibule need not be cramped in order to be practical. There should always be room enough in it for two persons to stand and still allow for the swing of the outside door, otherwise the inside door would have to be held open while the outside door is being opened. Besides the living room on the first floor is a library, and dining porch. The latter is so arranged that it can be enclosed with glass in the winter time.

Chimney and first story are of red brick; the second story shingles are stained brown. The finish of the hall and library is Dutch oak; the living room is mahogany. The woodwork on the second floor is enameled white; the ceiling of the library is beamed. The estimated cost complete with heating and plumbing, $8,000.00.

Colonial Cottage

The next design is a very pretty, rambling Colonial cottage. It has porch enough to suit the most exacting in this particular. The main roof is carried down over the porch in a manner which suggests the bungalow. On the roof are four dormers which admit light and air to the second story. There are two chambers, one on the first floor and another on the second floor, with plenty of closets, dressing rooms and store rooms. The unique and pretty feature of the first floor is the recessed fire place in the reception hall with seats on each side. It is a very cozy and pleasant place to sit on long winter evenings. Just off of the large living room is a den which contains a bay window seat and is well arranged for a room of this character. To build this cottage would cost $3,100 including the plumbing.
After the Craftsman Idea

The next house shows a very simple design somewhat after the Craftsman idea, and because of the attention given towards keeping the materials used in the construction of the house as simple as possible, it is stated that the cost complete not including heating and plumbing was but $4,000. Whether a house of this size could be reproduced again at this cost would of course depend upon local conditions at the time the contract is being let. It certainly is a very complete house for the money. The large living room, 14 feet by 26 feet in size containing a fireplace, bay window and window seat with a beamed ceiling and a screened porch just off of it in the rear, is an ideal room in every respect having everything that one could ask for in the way of home comforts. The foundation is of limestone; the chimney brick and the exterior of the house is very broad siding laid about 10 inches to the weather.

Building a Square House

We often comment on the square house as always practical and economical. More room can be obtained in a house planned and designed on the rectangle principal than any other style of house for the same amount of money. The next design is a square, well proportioned home that will always remain popular in city and country. The exterior is shown of siding but it may be shingled if desired. Parlor, sitting room and hall are combined into one large spacious living room. On the second floor are four splendid chambers, a bath room and five large closets. It is a noticeable fact that each chamber is the same size and contains two windows looking out in two different directions. The estimated cost is $2,900 with pine finish, not including heating and plumbing.
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PORCH 9' x 25'

FIRST FLOOR

CHAMBER 10' x 11'
CLOSET

CHAMBER 10' x 11'

BATH ROOM
CLOSET

CHAMBER 10' x 11'
CLOSET

CHAMBER 10' x 11'

SECOND FLOOR

26' 0"
DESIGN "B 21"
HE Other Woman was talking about the newly finished house of a common friend. "Very simple, but has such an air of high finish. Even the back staircase landing was charming."

In a woman's dress, nothing tells so much as attention to every detail, the exact correspondence of fabric, color and style to the use for which the particular gown is intended, and the same principle holds good in furnishing a house. Ruffled muslin curtains are out of place in a formal room, although plain muslin may answer very well. Conversely, one does not hang silk or woolen portieres in a bedroom any more than Madam wears a trained silk gown to the butcher's or the baker's. But not only is the well dressed woman suitably clothed, but every detail of her garments is premeditated. In furnishing our houses, we are too apt to think that the nooks and corners do not matter, to depend upon getting a good general effect, hoping that the details will escape attention. I have told before this the story of the woman whose curtains were the admiration of her neighbors, who never suspected that they were nothing but six cent cheesecloth, so beautifully were they hemstitched. You may be quite sure that that woman's house has no unsightly corners, that her backstairs are stained and polished and that the landing window is supplied with a curtain.

Neglected Opportunities

There are certain parts of the house which are almost sure to be considered of no importance, from the decorative standpoint, halls, landings, the servant's room, the bathroom, the attic and the kitchen. Two of these, the servant's room and the kitchen are really important from an ethical standpoint. Their pleasantness and comfort makes a real difference in the attitude of the maid toward her employers, and to secure them is really worth some sacrifice.

Scarlet and White for the Kitchen

We shall hope that the kitchen which we mean to beautify for Bridget (or Joanna, or Karen, or Anna) has a wainscotting of some sort, which can be stained brown and varnished, but if it has not, we shall improvise one by nailing a strip of moulding around the room, some four and a half feet from the floor. The best sort is what is called a card rack, or it may well be the heavier plate rail. This rail we shall stain brown to match the rest of the woodwork and the wall space below it we shall paint a warm tan. The upper part of the walls and the ceiling will be painted white, a frank and unabashed white, reflecting as much light as possible, and returning to its original purity with soap and water. Chimney bricks, too, will have their coat of paint, a red so subdued that it will not conflict with the brighter tone we mean to use. What shall be the floor covering is a matter decided by the individual purse. The bare floor is not more sanitary than some sort of coverings and it imposes a great deal of labor. The ideal covering is linoleum, plain or inlaid, failing that as good an oilcloth as one can afford, in a modest tile pattern.

Furnishing is a simple matter. If closet room is limited, it is a good plan to substitute a small chest of drawers, or a good sized washstand for one table. Its top will hold a gas stove and its drawers the dish towels and ironing sheet. A square, two-shelved washstand with the railing around the sides and back removed, and its top covered with zinc, standing close to the range is a great convenience. A third table should be of the settle variety, what is called an ironing table, its top swinging
Decoration and Furnishing—Continued

over to form the back of the seat. Stain and wax will give a good surface, which will resist heat, and a sheet of asbestos laid over its top, when ironing is going on, will be ample protection. Then for chairs two straight ones with slat backs and splint, or reed, seats, and two splint rockers, one for the maid and one for her friend. For Bridget's own meals a round table, not too small for a vis-a-vis, with its own tablecloths, easily enough supplied from the unworn parts of larger ones.

When the work of the day is over, a strip of bright rag carpeting comes out from the closet and goes down in front of the fire. It is followed by Turkey red cushion for settle and rocking chairs and Bridget's own Rochester or Center Draught lamp. Her work basket is at hand and there is a shelf of books in a convenient corner, and Bridget is ready for rest or for a visitor.

As far as possible, all the kitchen belongings stay in the closet. The roller towel is inside not outside the closet door, the dish towel rack swings well back against the wall. The window sills are wide enough for a plant or two, red geraniums to carry out the color scheme. Here and there, below the plate rail, are hooks for jugs and tea cups and the rail itself holds the kitchen crockery, blue willow pattern, whose color contrasts pleasantly with white and scarlet around.

Her Bedroom

Since the kitchen is so pleasant, the bedroom need hold but little beyond the necessities of comfort. In a room whose occupants are likely to change from time to time, it is well to guard against certain transient inmates. It pays to go over the maid's room filling up every crack and cranny in the woodwork with a crack filler, in the walls with plaster of Paris, finishing with two coats of paint on walls, floor and ceiling. As the taste of your maid is sure to be unsophisticated, she will probably like a pink wall better than anything else. Then the woodwork can be white and the floor a grayish olive. Green Crex rugs are cheap and clean, and so are the fibre rugs, but do not be tempted to lay down strips of old woolen carpeting. Better lengths of straw matting, bound across the ends with denim. Bridget needs a good bed. It need not

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Keith's Magazine
be a hair mattress. In any department store, they will make a cotton mattress, warranted to keep its shape, for five dollars, for the cot bed size. The best sort of a bedstead is an iron cot, with a woven wire spring. A chest of drawers—you would not care to live in a trunk permanently, were you she—and a fair sized mirror, a wash stand and a rocking chair, these are necessities. It is well to add a shirt waist box and to insist upon her trunk going into the cellar or the attic. Trunks have been known to harbor visitors not precisely angelic.

For limited quarters, the most satisfactory washstand is iron, of the tripod variety, with a bowl and pitcher of papier mache or enamel, with a swinging towel rack above it. It is well to encourage cleanliness by the liberal size of the pitcher and by a good supply of towels. It may well be that your maid will make her first acquaintance with the utility of a wash cloth by finding one on her towel rack. In the educative process even trifles have their value and a five-cent square of Turkish toweling may have a spiritual quality.

Somewhere you will pick up for a song some flowered cotton, which will wash, something largely green and white, and of this you will make a bed spread, which will cost no more than a white woven one, a cover for the bureau and a cushion for the rocking chair. If the gas jet is well away from the window, you might add curtains, but if not, content yourself with a shade in good working order.

Then give Bridget a pin cushion, some sort of a hair receiver and a basket for scraps. Have you somewhere a pair of glass cologne bottles? They will delight her soul. Then on the walls hang a few pictures. Choose one good religious picture. If your servants are usually Roman Catholics, they are sure to like Murillo's Saint Anthony of Padua, or some of Bouguereau's Madonnas. Then have some thing that suggests sentiment, a lover and his lass, and some scene of rural life, choosing above all things those pictures which tell a story. If you can get something in color, like the Christmas supplements of the English weeklies, so much the better. But leave plenty of room on the wall for
Decoration and Furnishing — Continued

her home photographs and the like, even if they offend your sensibilities.

Add if you will a hanging book shelf. Get one of the deep bowled enamel candlesticks, in pink or green and let her keep her matches in the base, where even the parlor variety will be safe, and supply the gas jet with a white glass globe, comfortable for reading or sewing.

The cost of furnishing such a room, once painting has been done, can easily be brought into twenty dollars, and it will be worth many times the outlay in the general easement of the domestic atmosphere which results, when the maid is comfortable and contented.

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R. S. F.—“I am building a new house, the living room of which is 14-6 by 18 and opens into the reception hall through a very large arch. The ceiling will be beamed and have a cornice. While our furniture is mahogany we would like the woodwork of the living room to be of oak if it can be finished a color to harmonize properly with the mahogany furniture. I am writing you to know if you can suggest an oak finish which will look well with the mahogany or if you would advise a mahogany finish for the mahogany furniture, the latter being a very dark finish.”

Ans.—The woodwork should be the same and treated the same in this living room and reception hall. A mahogany finish on oak is not practicable, and the ordinary golden or weathered oak stain does not accord with mahogany furniture. There is, however, a Cathedral Grey stain, which is very handsome upon oak and would harmonize with the mahogany. It is a rather dark grey, like oxidized silver, and is carried by only one or two wood finishers. You had best send for sample from Johnson’s Wood Dyes. If this finish were used and the walls tinted or papered a warm but not dark pretty grey, you would have an unusual and beautiful background for the mahogany furniture, which with rugs and upholstering in dark blue or rich green, would make a handsome interior.

F. M. S.—“We are building a bungalow; are now just ready for the plastering. Would you please give me some advice on finishing wood work and walls. I am enclosing a rough sketch of part of first floor. The living room and dining room are paneled up six feet, finished at top with shelf 4 or 5 inches deep. The wood is fir. I want a mission finish; the ceilings are beamed, floor and stair steps are white oak. How would you finish those to correspond with the dark woodwork. The windows are all small panes 5x5 in upper sash and we have lots of them and our rooms will be very light and pleasant: ceilings are 9 feet. For the dining room, I had thought of something on orange or yellow wall to correspond with an oriental rug I have, it being a north room could stand a warm color. The living room has east, south and north light. What color would you suggest for that room. Our furniture will be mission. What material do you advise for tinting on the rough plaster? Our chambers will all be done in white enamel, also kitchen and bath rooms with cement wainscot 5 feet and perhaps to the ceiling. The outside of our bungalow is very attractive with its low roof and very deep eaves; Swiss style of roof.”

Ans.—In reply to your request for advice on wall and wood finish, we think you would find a dull, pumpkin yellow more desirable as a wall tint above the dining room wainscot, than orange. The latter would be more striking, and for a den or a billiard room, would be an excellent choice; but for a room in which you will live so constantly as a bungalow dining room, it would perhaps get on your nerves, also a solid mass of strong color is a different proposition from a decoration in orange. As for instance, branches of oranges or pomegranates with their rich, dark foliage, used as a frieze on a wall of old ivory or deep cream, would be very charming with the dark woodwork and oriental rug.

A wall tint or soft greyish ecru is suggested for the living room as blending with the yellow or orange tones used in dining room and agreeable with rugs and upholstery of rich green.

The stair treads may have the same finish as the other woodwork or be like the floors, the latter may be lighter than the woodwork if you prefer, but not much. Burnt umber, with a dash of rosaline used in the filler, gives a good oak stain, followed by a coat of shellac and waxing for the finish. The ceiling may be a shade lighter than the walls, but the same tone. The best ready made tinting preparation is Alabastine. You had best send for a booklet showing shades and colors.
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Taking Things Easily

It MIGHT seem as though the exhortation to take things easily came with more propriety in midsummer, than in the early days of autumn, when the air begins to be crisply invigorating, when the social atmosphere presages all sorts of pleasant activities. But counsels of this sort are needed quite as much, nay more in cool weather than in warm. In summer, nature steps in and says with authority, "Thus far shalt thou go and no farther," but later she leaves us to our own devices and woe betide us if we transgress her unspoken laws.

Goethe has epitomized the ideal life in a pregnant phrase, "Ohne hast, ohne rast," unhasting, unresting, and it is well for the modern woman to ponder it. So much of our lives is spent in wearing and needless hurry, racing from one supposed duty to another, duties which too often are not worth doing at all, which are only counselled by adherence to some other person's standard, not by any real ethical compulsion. And the result? Sanatoriums for nervous invalids have something to say about it. Households whose ordinary atmosphere is friction, children highly cultivated as to manners and very elaborately adorned as to outward appearance, husbands who find the conditions of the club more agreeable than those of their homes, these also contribute their quota of information.

Setting the Pace

For, after all, it is the woman of the house who sets the pace. If she elects to be in the procession, husband and children follow on. If she chooses order and tranquility, a few real and satisfying interests, rather than a superficial stirring of the surface of many ponds, her nearest will take their cue from her. It is a great responsibility, is it not?

In its widest sense, taking things easily demands a more or less complete revolution in the ways of the household. Traditional housekeeping almost always makes for complications of all sorts. And complications always involve more or less hurrying. But the business of revolution is a serious one, demanding a courage beyond the reach of most women. The most that they can achieve is a measure of reconstruction, and the sort of reconstruction possibly varies with the sort of family to be reconstructed. In one family it may take the form of insisting upon its members waiting upon themselves and doing their own picking up. In another, the root of the housewife's difficulties may be unpunctuality or the standard of living may be of such a sort as to strain every nerve to make it at all practicable. Or the greatest difficulties may arise from the presence of hostile elements, perhaps a servant, perhaps a member of the family. One may not slaughter a member of the family, but one can get rid of a servant, and the member of the family can be reasoned with and may mend his ways.

Radical Relief

Any real easement of the housewife's burdens which shall enable her to make life easier for herself and others, must begin with a frank admission that a good deal of the routine of any household is unnecessary. Cleanliness and sufficient nutrition are necessities, but elaborately cooked and served meals and a multiplicity of fussily trimmed undergarments are not. Here and there a resolute woman has decided that it is quite consistent with health and decency to leave woven undergarments and stockings unironed, even extending the omission to nightgowns and dish towels. Others have been bold enough to serve their potatoes in their jackets and their
salads undressed, letting each individual take his share of the work.

Still when all is said and done, no lessening of burdens, no simplification of living takes the place of the quiet spirit, which refuses to be troubled if things go wrong, which will not worry and which never nags. To some extent it is a matter of temperament, but will can be made to supplement, or to counteract, temperament. And it is one of the beautiful things about the cultivation of the quiet spirit, that it reacts upon everyone else, and one’s nagging and irritating family, or one’s con
tumacious maid begin to realize that there isn’t any fun in opposition, when it meets no response.

**Essentials for the Kitchen**

A contemporary has an article on kitchen equipment illustrated by pictures of various up-to-date kitchen utensils. So far, so good, but why mention a granite lady-finger pan as indispensable, and associate with it a circular broiler? The latter is mentioned as a very useful article for broiling over a gas stove. Has the writer of the article ever tried broiling over the top of a gas stove, and how successful was she? As for lady-finger pans, who within ten miles of a baker makes the article at home? The fact is that writers on economics are apt to greatly overestimate the equipment necessary for the average kitchen. It is a great mistake to lumber up the shelves of the kitchen closet with a large number of utensils for a single use. An intelligent person can usually hit upon some sort of a makeshift for a special use. A bit of filter gauze laid upon an ordinary gridiron will enable one to broil very small articles, and a square of cheesecloth or flannel will make a hair sieve of an ordinary perforated strainer. Two common sheet iron dripping pans hinged together with bits of wire answer all the purposes of an expensive covered roasting pan. One graduated quart measure is as good as a set of three, half-pint, pint and quart. For any ordinary pudding no better mould is needed than an empty tomato can, with the cut edge hammered flat. A workman’s dinner kettle, costing a quarter, is a capital double boiler. And for all sorts of slow cooking the common earthen pipkin, costing anywhere from ten cents to twenty-five is admirable, more satisfactory than any metal vessel.

One ought to have a sufficient number of frying pans, one large one with a thick bottom for slow frying; other thinner ones
for chops and omelettes, and one reserved for bacon alone. Asbestos plates are necessary for accurate cooking, especially over gas, and the use of one under an earthen pipkin or casserole saves many a crack. There is an oval sort, which while covering a burner, also gives a surface at one side of it for keeping things hot, or even for a little supplementary cooking.

A Socle

In arranging a number of timbales, stuffed potatoes or vegetable cups, on a platter, it is often desirable to raise them above the level of the dish. Professional cooks accomplish this by the use of a socle. This is composed of rice or hominy boiled and cooled in the shape of a low oval mound. This is laid upon the platter or chop dish and covered with parsley or watercress.

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ASK FOR OUR NEW BOOKLET!

ST. PAUL HARDWOOD FLOOR CO.,
301 Rice Street, - St. Paul, Minn.

1. We are constantly receiving inquiries concerning the building and furnishing of homes, as well as questions about lighting, heating, plumbing, water systems, etc. To meet this steadily increasing demand for advice and help we have established an "Information Service Dept." for readers of this magazine. This office will furnish any information at its command concerning these subjects free of cost, and give the names of persons best able to supply our readers needs.

Address "Information Service Dept."

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are an appropriate roofing for the most costly home. Handsome, fire and stormproof, they preserve and protect its beauty. Also they are within the reach of the modest builder who must carefully consider expense. In either case they last as long as the building itself, and never need repairs. Illustrated catalog free on request.

MONTROSS METAL SHINGLES

MONTROSS METAL SHINGLE CO., CAMDEN, N. J.
Autumn Leaves for Table Decoration

In these October days, the woods are full of the most lovely decorative material. With the first frosts a wealth of leaves, scarlet, gold and crimson, is at our command. The vivid crimson of the sumac does not even wait for frost, but dons its festal robes while the air is still warm. Then there are all sorts of beauty to be found in corners of pastures and even beside the country roads, humble nameless plants, vines and grasses, each with a shy loveliness of its own.

Just for every day, a jug, blue, gray or brown, or a tall glass vase, filled with autumn leaves is the loveliest of center pieces. For more festal uses try a wreath of brilliant leaves, in the middle of the table, with a glass of flowers rising from it, cosmos, or late nasturtiums. Then, in the fireplace and in the corners of the room, have great masses of oak or maple boughs. For such use as this is worth while getting sections of drain pipe and having wooden bottoms fitted to them, painting them, if you will, in some dull tone of green or brown.

The Sugar Question

Once upon a time most Americans were thin. Now the average man, and particularly the average woman, is generously padded, which means that a large part of the population is haunted by the spectre of a possible obesity. Dieting would seem to be the appropriate thing, under the circumstances, but mighty few people are willing to diet, in any systematic way. One thing which can be done is to limit the consumption of sugar. The most obvious way to do this is to use saccharin instead of ordinary sugar, for tea and coffee.

It, by the way, should always be bought of the larger drug firms, or at the department stores. Retail druggists charge nearly double what is asked by the large concerns, and their supply is apt to be stale.

It is not sugar itself which is so injurious in diabetes and Bright's disease, but cane sugar, which, when imperfectly digested, causes an irritated condition of the digestive organs. Levulose, or fruit sugar is free from this objection and the natural craving for sugar may be satisfied by eating plentifully of sweet fruits, raisins, dried currants, figs, dates and prunes. The danger from articles of food containing cane sugar is minimized by thorough mastication, and by going without fluids at meals, a real self denial at first, but a habit easily acquired.

Another perfectly innocent form of sugar is honey, which, in its strained form, is much used by Germans and Scandinavians, but does not seem to be popular with Americans. It is best when in the comb, but the strained sort makes a delightful sauce for a simple pudding.

A Question of Looks

Every ounce of undigested cane sugar means an increase of weight, as well as a deterioration of the digestive organs. The excess of sugar also produces fatty degeneration of the heart with its accompanying pain and shortness of breath. If cancer is traceable to the excessive use of meat and white bread, so surely is sugar responsible for the diseases of corpulence. Verbum sat.

A Burning Question

It is safe to say that, with a large proportion of our readers, the burning question is how to effect a reduction in the
bills for food, and particularly for meat, the staple most affected by the general advance in prices. Few people understand using the cheaper cuts to good advantage, and indeed they are not always so economical as their prices would seem to indicate.

Some of them, however, are exceedingly good, if properly cooked, always promising that to be palatable they must be carefully prepared and cooked. Slap dash methods will not answer with chuck and the underside of the round. Now for a few helpful suggestions.

It is possible to get a very good roast out of the chuck, one whose appearance leads the uninstructed to think it porterhouse. Get two ribs, the first cut, weighing probably eight pounds. This cut is intersected by a strip of hard yellow cartilage. Have the strip of meat above it separated from it and cut into small pieces for a stew, the chine bones trimmed off and the cartilage removed. Then have the lower end of the ribs cut off, in standing roast fashion. This lower end the butcher will put in corn for you, without extra charge, and it will be ready for use in about a week. The remaining piece can be left on the bones, or it may be boned and rolled. Either way it makes an admirable roast. Its goodness depends upon the removal of the coarser meat adjoining. This mode of cutting was recommended to the writer by a German butcher. For a large family one would buy three ribs.

**The Possibilities of a Round Steak**

Here again it is largely a matter of cutting. The best cuts of the round are those near the pelvic bone, which are reached after several steaks have been taken off the whole piece. A good cut, an inch or an inch-and-a-quarter thick will weigh from two to three pounds. If one cultivates relations of special amity with the clerk in the shop, he will save you the best cut, or advise you in its selection. But beware of attempting to broil a round steak. It is certain to be tough. Instead, cook it in a hot, dry frying pan, rubbed with a bit of suet to prevent the meat sticking to it, turning it every moment, after it is once scared. Have a hot platter ready with a good lump of butter and perhaps a teaspoonful of salt and slip the steak onto it, turning it over so that both sides will be buttered. While you are doing this, have two or three tablespoonfuls of water boiling up with the drippings in the frying pan.
and pour this over the steak.

The writer confesses herself insensible to the widely advertised merits of flank steak. Considered merely as a flavoring for other cuts, it is unsurpassed, but it is hopelessly fibrous and with long cooking disintegrates entirely. A pound of it added to other meat is a great addition to a stew or soup. It is also very good, when finely chopped, for Hamburg steak.

**Hamburger Steak and Green Peppers**

This is cheap and palatable. Have the steak run through the meat chopper with two or three slices of fat salt pork. Allow a teaspoon of salt, well worked in, to each pound, and make it into small cakes. Brown a sliced onion in butter or suet, take it out of the frying pan and put in the meat. Fry the cakes, browning them well on both sides and take them out while you make the gravy, adding hot water, a little thickening and a dash of Worcestershire. Put the cakes back into the gravy and let them simmer, closely covered, at one side of the fire, for twenty minutes.

In the meantime slice half a dozen green peppers, first removing the seeds and fry them in a little oil, sprinkling them lightly with salt, and adding just at the last a little catsup or India relish. In serving, arrange the peppers around the balls of meat.

**Using Up Stale Cake**

First: Trim off the crust and cut it into thick slices. Just as dinner is served, put the pieces into a colander, or strainer over the boiling teakettle. Serve with a hard sauce with a tablespoonful of strawberry or raspberry jam beaten into it.

Second: Cut it in half inch slices and serve toasted with afternoon tea.

Third: Cut it in narrow strips, soak them half an hour in sherry, and cover with a boiled custard, for a tipsy pudding.

Fourth: Cut it into crescents, an inch thick, split them and insert a layer of sweetened, grated cocoanut and cover them with chocolate frosting.

Fifth: Arrange strips in a pudding mould, sprinkling them with candied lemon peel and nut meats, cover with custard and steam.
Municipal experts battling against the smoke nuisance all over this country of ours have set the seal of approval upon the Underfeed method of stoking. Such action is in effect a widespread official indorsement of the system which has made the Underfeed Furnace the greatest furnace factor for health and cleanliness ever dedicated to the cause of hygiene and economy. Thousands have solved the smoke problem in their own homes and places of business, and at the same time learned by profit-sharing experience, that the Peck-Williamson Underfeed Furnace saves 1/2 to 2/3 of coal bills.

The Underfeed is the only furnace which acts as smoke consumer, as well as hot-air heater. Cheapest slack yields as much clean, even heat as the highest priced anthracite. Fed from below, all the fire is on top and smoke and gases must pass thru the flames and are thus consumed and turned into heat units. Ashes are few and are removed by shaking the grate bar, as in ordinary furnaces.

Dr. E. L. Moodie, of Chatham, O., in declaring that the Underfeed is a step toward better health and hygiene, writes:

"The Underfeed is the ideal furnace; the only furnace that should be allowed to use coal for a heating substance where the smoke may be a nuisance or menace to health. If this point were properly presented to Boards of Health, I see no reason why on that score alone it should not replace all other furnaces, not to mention its heating capacity, economy and superior durability."

Let us send you a lot of letters telling of money saved—fac-simile testimonials in our Illustrated Underfeed Booklet.

Heating plans and services of our Engineering Department are yours—ALL FREE. Write to-day, giving name of local dealer with whom you prefer to deal.

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Dealers Should Write for Our Fall Proposition.

Preserve and Beautify Your Shingles by staining them with Cabot's Shingle Stains

They are made of Creosote ("the best wood preservative known"), pure linseed oil, and the best pigments, and give soft, velvety coloring effects (moss-greens, bark-browns, silver-grays, etc.) that look better and wear better than any others. 50% cheaper than paint. Send for stained wood samples and catalogue.

SAMUEL CABOT, Sole Manuf., BOSTON, MASS.
Agents at all Central Points
Cabot's Sheathing "Quilt" makes warm houses.

Cabot's Shingle Stains

Clark & Russell, Architects, Boston
E. W. M.—Q. "I got a contract for making concrete walls in a basement. The specification says that the concrete is to be made in the proportion of 3 parts sand, 3 parts gravel and 1 part cement. Now we can't get any gravel, won't it be just as strong, or even stronger, by making the concrete of 5 parts clean sharp sand and 1 part cement, and using small field stones in place of gravel, put in a layer of stones and then a layer of soft concrete, then another layer of stones well tamped; the stones being from 2 to 8 inches in diameter?"

Ans.—Wish to say in reply that experience shows that the best proportions for a concrete wall are 1 cement, 2 sand and 4 of crushed rock or gravel. The cement and sand act as a mortar to build the gravel together, one of the principal objects of the crushed rock or gravel being to save on the quantity of cement used. The real strength of the wall, however, is in the cement mortar which holds it together. Therefore to leave out the gravel will not weaken it but to increase the quantity of sand much will, as it weakens the mortar which is the binding strength of the wall. The Minneapolis city ordinance allows cement blocks to be made in proportions of 1 to 5 in all the pressure that a wall can where pressure is used. Since hand tamp-get, we advise a proportion of not greater than 1 cement to 4 parts sand. It is all right to throw in to this the small sized rocks not over 2 inches in diameter but do not use rocks of larger size unless you make the wall about 18 inches thick to insure perfect binding. If this wall is for a medium sized house, it need not be over 12 inches thick if well made.

C. F. B. "desires suggestions about wood work in new house, whether it would be better taste having it different to match the furniture or all one kind? The furniture in library will be mahogany while the rest of rooms oak. Would the mantles and stairway be same as woodwork. I don't think I want to furnish room marked parlor as a parlor; what would you suggest furnishing it for? What is the newest thing in finishing the walls for nice houses?"

Ans.—Your diagram shows center hall, with rooms opening from either side. Such a floor plan admits of some variety in treatment of woodwork if desired. It is suggested to use a birch finish with mahogany stairs or white enamel in the room to be furnished in mahogany, and the bedroom adjoining the same. The hall and other rooms in the oak with same finish in all. Bath room and kitchen in white enamel. The stairway should have the same finish as the rest of the hall and the mantels the same as the rooms they are in. The room marked "parlor" may be treated as a den or as a little formal reception room. There is no specially "newest" way of finishing walls. You best send to some good heating plant firms for catalogs and estimates.

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Tell us your requirements and we will forward large catalogue containing designs which will appeal to you most. Send postage 7 cents to cover cost of mailing.

The Heitland Grates are built for service. No. 51 will heat an entire residence. Descriptive circular free at request. Write today.

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Building a House

There are four persons, or groups of persons, concerned in the erection of the house, each of whom bears a definite relationship to it, and each of whom is vitally concerned with it. These are (1) the owner, (2) the architect, (3) the builder, and (4) the family. The order in which they are here set down may not be quite logical for the family would seem to be so close to the owner as to be inseparable from him; and the builder is comparatively unimportant, since if an architect is employed he employs the builder, and the owner has no responsible relations with him.

The owner, of course, is supreme. He is the boss. He hires every one, and even the mighty architect must submit to his will. He pays all bills, and after the house is finished it is his. It is impossible to overrate his importance to the undertaking; and yet he would be a wise man if he did not take too much upon himself because of these primary facts. There is responsibility in supreme control which is often quite as great in a house as it is in the management of a railroad or in conducting the affairs of state. As a matter of fact, the average owner, the every-day owner, has but the slightest knowledge of architecture, and quite as little of building. He will often get more satisfactory results by simply paying the bills than by introducing his personal views at all times and under all circumstances.

The owner employs the architect, and immediately finds he has hired a man who knows more of the business upon which he is about to embark than he does. This is always awkward, and sometimes leads to unpleasant complications. It is quite as true of housebuilding as it is of any other industry. A client who has definite views of his own and can express them intelligently, will be welcomed by the architect if these views are reasonable and capable of being carried out within the agreed-upon limit of cost. If unreasonable results are demanded some very unpleasant experiences may be looked for. The tendency among architects is to insist that their own views shall prevail in matters in dispute, and in face of the frightful ignorance among the greater public on architectural matters they would seem to have the better side of the argument.—American Homes and Gardens.

Put a Plumber on Board of Health

This suggestion is made by Mr. Bernhard Lyon before the annual convention of the Master Plumbers' Association. Mr. Lyon puts it this way:

"As a general rule, doctors are the only representatives on these boards, but do not plumbers come before doctors? They can prevent where doctors cure diseases.

The reasons for this are many and too numerous to mention, but the following are the main ones:

Have proper rules made and have your inspector appointed who is a practical plumber, and have him see to it that all plumbers live up to these rules, or prosecute him if he does not.

Have licenses renewed annually, a small fee to be charged for the same, and if the master plumber does his work in an irregular or unsanitary way, why, hold up his license or cancel it altogether. Such men should not run a plumbing establishment.

Have your inspector work hand in hand with the master plumbers. Invite him to your social gatherings, have blackboard talks and a public question box, and, if you can, bring forward some new idea to benefit the trade as well as the public, and you yourselves will also be benefited by it.

Change your rules every other year, so you can improve and progress with the times.

"Send in your application for all plumbing work and have it so arranged that when rough work is tested tight, an order can be made out and signed by your inspector, and when the job is finished he can give you a certificate for the same, and you can give it to the owner or builder to show that you have done honest work and he should pay you what is your due. It will also make just competition, and every plumber must do the same kind of work.

To do this you must have a master
Making the House a Home

NEXT to the design of the house no one thing has as much to do with the homelike effect as the interior decoration. No two things have so much to do with the effect of this interior decoration as the attractiveness of the finish and the durability of the finish.

The correct selection of color schemes and appropriate finishes to give these color schemes, and the harmony of furniture, hangings, rugs and other things are of utmost importance to anyone who cares for the appearance of the house in which he is going to live.

Realizing this, everyone building a new home or remodeling an old one, should accept the following offer:

How to Make the Home Beautiful

THE SHERWIN-WILLIAMS CO. has established a very complete Decorative Department with a staff of designers and decorators.

This Department is prepared to furnish complete color schemes with color sketches, and descriptions for the interior decoration of any one room, or suite or all the rooms of a house, including the outside of the house. The suggestions will also include hangings, wall decorations, rugs, furniture, etc., to go with these finishes so as to produce any desired effects.

Our plan of giving you this expert Decorative service is a very simple one and owners and prospective builders should write for full detailed information.

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In Canada to 639 Centre St., Montreal
London Address: 7 Well Court, Queen Street, E. C.
Splinters and Shavings—Continued

plumber on your representative board of health, who will work for your moral as well as your financial interests, and when you have trouble with your inspectors he can act as an arbitrator, being just to all concerned. How many times have you all estimated on work, intending to make it an honest and sanitary job complete, to be done in a workmanlike manner for a good customer of yours, and right before your eyes one of those 'fly-by-night' plumbers walks in and does the job for one-half of your price, and you all know what kind of a job he has done, and thereby you have lost a good customer who does not know what is sanitary and unsanitary, but sees the new fixtures and the nickel work and thinks he has saved money and calls you a robber.

This is what I call 'food for thought,' and, gentlemen, quick action will bring good results."

To Ascertain the Number of Rolls of Paper Required to Paper a Room

To find the number of single rolls (8 yards long) required for side walls, measure the length and breadth of the room in feet and inches and multiply by two. This will give you the entire girth around the room. Multiply this by the height from the floor to the ceiling (less 1 foot, if you use a 9-inch border, and less 2 feet if you use an 18-inch border) the result will be the total number of square feet. Deduct 20 feet from this for each usual size door and window, divide the remainder by 32 and you have the number of rolls of wall paper required.

Divide the number of feet around the room by 3 and you will have the number of yards of border required. Multiply the length of the ceiling by its width, divide by 32 and you have the number of rolls the ceiling requires.

Example for wall—Length 15 ft. 6 in.
Width 12 ft. 6 in.

\[ \text{28 ft.} \]

Multiply by \( \frac{1}{2} \)

Multiply by height 56 ft. around the room.

11 ft. Less 2 feet for 1 band border.

9 ft.

504 ft.
Splinters and Shavings—Continued

Less 2 doors, 3 windows 100 ft.
Each 20 ft. Divide by 32 404
Gives 12 2-3 rolls, say 13 rolls.

For border Divide the girth by 3 56 ft.
Gives 18 2-3 yards, say 19 yards.

For ceiling Multiply 15 ft. 6 in. By 12 ft. 6 in.
Divide by 32 193½ ft.
Gives 6 pieces and 1½ sq. ft. Say 6 rolls.

When the remainder for either wall or ceiling is less than 4 square feet it need not be considered, except by using care not to waste any part of the paper while hanging, but when the remainder is 5 square feet or over, add the extra roll to your estimate. It will save you annoyance and delay to act on this advice.

Radiator Efficiency

The effect of height upon the efficiency of a radiator has been determined in favor of short vertical cylinders, which, according to Baldwin, are presumably the best that can be devised for giving off heat. If they are increased in height, say two or three times, they will do less duty since the air in contact with the upper parts will be warmed by the lower part as it passes upward; and, therefore, is not capable of extracting as much heat.

The higher the radiator is, the lower its efficiency per square foot of surface, and 36 or 38 inches has been established as a fair limit of height.

It has been demonstrated that with radiators of the same height and same dimensions no difference could be traced, due either to material or thickness. With radiators of the same material and the same height, but of different depths, or with varying number of tubes, it was found invariably that higher results were obtained from the thinner radiator, or those with the fewest rows of tubes. In these tests it was also found that the amount of heat given off increases very much faster than the difference in temperature between the steam inside and the air outside. With

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Splinters and Shavings—Continued

radiators of the same form, but of different heights, the lower the radiator the more efficient. From these experiments it is deduced that the reason lower radiators were more efficient than taller ones was that the tubes of the latter were too closely spaced, since the air in its passage upwards reaches nearly its maximum temperature in a short distance, and from that point onward absorbs but little heat.

W. P. R. “We are just completing new home—bungalow style. We have gotten some fine ideas from your magazine, but I’ve found no help on one point, so I take the liberty of writing you and asking your advice. It is this—I want a motto over my fireplace in my bedroom, the mantel is ivory white and I want to know how and what color should the lettering be. My idea is to have it on the plain part of the wood under the shelf of the mantel. Is that right? Would gold lettering be too pronounced? The color scheme of the room is blue and white.”

Ans.—The plain part of the mantel below the shelf is the place for the motto. The gold lettering would be too obtrusive. It is advised to form a panel on the plain space about 6 in. wide by 30 in. long, according to the dimensions of the mantel, the panel having a suitable margin, say 3 in. around it. Form the panel by a sunken line or groove in the wood ½ in. in width and color this groove a creamy brown. Put the motto on the panel thus formed. The letters themselves should be done in the brown and deep yellowish creams of antique ivory casts. They may be emphasized by sunken lines in the capital letters colored deep brown and the capitals slightly illuminated with touches of blue and gold.

Such work, however, cannot be done by untrained hands. The shading of the browns and old ivory requires a skilled artist, but the result if well done would be chaste and beautiful.

About Boilers

Probably the next most important step in steam and hot water heating is the selection of the boiler. As a matter of fact, there are good boilers of several different types, any one of which would prove safe, substantial and economical, provided the right size of boiler were selected. It is of the selection of the proper size of boiler...
Splinters and Shavings—continued

that we wish more particularly to speak, although we shall briefly explain the points embodied in the construction of a good boiler.

We will suppose we have a building which requires 600 square feet of actual radiation (cast-iron radiators) to properly warm the same. The size of boiler would be determined as follows:

First let me say that the ratings of all boilers or heaters, as given by the manufacturers, are gross ratings, that is to say, they count all pipe and fittings of the work as radiation. When they say a certain size of boiler will supply a certain amount of radiation, experience has taught us that we must deduct approximately 25 per cent from this rating as an allowance for pipe and fittings.

Radiation

There is also another element to be considered, that is, friction or loss of heat between the boiler and the radiators. This approximates 10 per cent of the gross rating given the boiler; therefore, in determining the proper size of boiler, we take the actual amount of radiation to be supplied, which, in this case, is 600 square feet, and proceed as follows:

<table>
<thead>
<tr>
<th>Sq. Ft.</th>
<th>Actual amount of radiation</th>
<th>600</th>
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<tr>
<td></td>
<td>25 per cent allowance for pipe and fittings</td>
<td>150</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td>750</td>
</tr>
</tbody>
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Don't pay middlemen's profits when you can buy direct from makers at 25 to 50% less. We are first hands, buy materials lowest, employ only skilled labor, have every facility at our big plant for making best materials at lowest prices.

Lorenzen Mantels

afford widest range of choice in all styles—Colonial, Craftsman, Mission, and every historic period, or we will make to your special order. All woods, all finishes. Prices $10 to $2.

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Window Stop Adjuster.

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always gives this pleasing lustre because it is a "Quality" wax—better than other wax. Decorators call it "Quality Wax" because it never peels nor shows heel or chair marks nor becomes sticky, and most economical for Floors, Furniture and Interior Woodwork.

It brings out the grain of either natural or stained woods. Old English Floor Wax, besides being most easily applied and giving the beautiful rich subdued lustre, is the most economical.

SAMPLE FREE—if you will apply it according to directions. Please mention your dealer's name.

Write for Our Book, "BEAUTIFUL FLOORS"—sent free. It contains expert advice on the finish and care of floors, woodwork and furniture.

All dealers in paint sell Old English Floor Wax and we guarantee it to give satisfaction when used as directed, or money refunded.

A. S. BOYLE & COMPANY, Dept. "N," Cincinnati, Ohio

Largest Exclusive Manufacturers of Floor Wax in the World.
The cost of heating a house is the cost of heating the cold that enters.

**NEPONSET**

Waterproof Sheathing Paper gives the greatest protection against outside temperatures. It adds immensely to heating efficiency. It is just the difference between heating economy and heating wastefulness. When you specify Neponset and insist on its use, you insure your client the most comfortable house his money can buy.

Remember, Paroid Ready Roofing is suitable for many roofs and porches, and Florian is a sound-deadening felt which it will be to your own and your client's best interests to specify.

F. W. BIRD & SON
(Established 1817)
East Walpole, Mass.
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Just as there are exceptions to all other rules, so it is here. On good work it is customary for the heating contractor to cover the piping in the basement with sectional or plastic pipe covering, in order to prevent the radiation or loss of heat from the same. When this is done, it is unnecessary to make the 25 per cent allowance as given above; a 10 per cent allowance for piping in the risers would be sufficient. There are further allowances in the event of using semi-direct or indirect radiation, and these will be discussed later on in the articles.

**Good Points of a Heater**

The term “boiler” is usually applied to a steam generator; the term “heater” to a hot water apparatus. We enumerate below several points to be considered when selecting a boiler or heater:

(a) Character of construction.
(b) Ease of cleaning.
(c) Economy in consumption of fuel.

A careful consideration of these three points will result in the selection of a boiler or heater which will not fail to give good service.

Under “Character of construction” we would advise a heater with a large fuel and combustion chamber, an abundance of flue area to carry off the smoke and the gases of combustion, a well-constructed grate and a large and generous ash pit.

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It is a very noticeable fact that with the gradual increase of the cost of building, the average American home has been built along simpler lines each year and the tendency in this direction is at the present time in popular favor. During the earlier periods of domestic architecture in this country, it has been the universal custom to make homes which have a degree of elegance, as elaborate in detail as possible and for this reason several French styles have in the past been very popular. It was not until the high price of labor and material made it necessary to pursue a course of studied economy in the erection of homes that we came to realize the truth of Ruskin's words, when he said that "Simplicity is the terminal point of all our progress," to which the author of the simple life added, "One need not necessarily be rich to give a grace and beauty to his habitation." In making our homes simpler in construction and design, it is most natural that we should turn to the styles most appro-
appropriate for simple treatment. To take the elaborate classic or renaissance styles and try to simplify them to the extent of obtaining any great saving in cost, would be very poor policy, since the bareness of details of the designs which we have been accustomed to see elaborated would tell too plainly the reason for simplifying them.

The Mission style of architecture, however, with its studied rusticity, or a plain brick or shingled house, and sometimes a combination of these two materials, if properly designed, will make very attractive homes at no great cost, since their style calls for simple treatment, and
to make the details elaborate would not be in good taste.

One of the illustrations accompanying this article is that of a simple straightforward design of a home in the Mission style. The entrance could not be simpler in its construction. It is not intended, of course, to use this entrance for a porch, and whether or not a rough timbered feature of this character should be carried clear across the front of the house in order to provide a porch for practical use would depend entirely upon the preference of the home builder. The Englishman needs no porch, since he invariably encloses his garden and uses that for his outdoor recreation, but they are, fortunately, not annoyed by pestuous insects in England, and therefore the screened porch is not considered a necessity to comfort, as it is in this country.

Another illustration shows a very attractive, but not elaborate, brick house. The architect designed this home for his parents, and it is therefore quite natural that it should contain some unique features not found in the average home. Gray brick has been used for the exterior, with a red tile roof.

The other two illustrations are different views of the same house, showing a combination of brick and shingles. This house has no particular style. It is simply a good, well built, homelike American home. The combination of brick and shingles is always pleasing, since both of these materials come in small aggregate. There is more pleasing variety to the wall than can be obtained with straight, unbroken lines of siding.

These three homes are splendid examples of the Typical American Home as it is being built today.
A Cozy Corner
By Margaret S. Bedell

In many rooms there are corners in which no piece of furniture seems to go, and try as we may we are unable to make them look anything but stiff and unhomelike, and corners can do much toward making or maring the appearance of any room.

This little cozy corner, which looks elaborate and in reality is so simple that it can be made by even an amateur carpenter, will be found a great addition to any room, and a delight to all one's friends. The bench is made of plain pine boards and is thirty-six inches long on each side of the corner, eighteen inches high and eighteen inches wide. The two bookshelves are fastened on the wall with plain iron brackets, one at each end of the shelves and one in the middle, the corner. The shelves are made of ash or oak, thoroughly rubbed down and oiled, and are the same length as the bench; the distance between the two shelves is ten inches and their width six and one-half inches. The first shelf is placed thirty-nine inches above the bench, so that there is no danger of its interfering with the head of even the tallest person.

If this cozy corner is to be built in the library or living room, have it made of the same material, with possibly one or two odd pillows, but be sure, first of all, that they tone with your upholstery.

The ruffle extending from the bench to the floor can be made of the width of your material, and if this is wide, thirty-six inches or more, the piece cut from the width will cover the cushions for the seat or make the sofa pillows, which should be at least seventeen inches square. The ruffle can be gathered on, or still better plaited and the plaits carefully pressed on the wrong side. Finish the top with a pretty gimp tacked on with dull brass nails.

If the cozy corner is for a bedroom, the seat is very pretty upholstered in flowered cretonne to correspond with the
coloring of the room. In this case, too, the pillows should be made of the same material.

The lantern hanging from the wall over the middle of the shelves will be found a great convenience, for it gives enough light to at least read the titles of the books and throws a pretty soft light over an otherwise unlighted room.

These cozy corners are as convenient and comfortable as they are attractive, and the cost is so slight that any housewife with a little ingenuity can have a resting place that will give pleasure, and the books inspiration, I trust, to all her friends.

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Colonial Mantels

By Edith Dabney Tunis

In the building of a home the fireplace should always be considered as the very center of family life, and from there it is but a step to the mantel, which should in every way second its intention.

Thanks to the architecture of the present day, fireplaces have assumed a more conspicuous and comfortable part than they have since the old Colony times, when there was no other known means of heating the great houses. Their course since then has been a tortuous one; Franklin stoves, latrobes with their noxious vapors; furnaces; steam and hot water have all done their best to relegate to the past the practical fireplace and chimney, but the most unpardonable of-
fense of all has been the cheap, make-believe effect where a group of manufactured logs touched with asbestos are filled with gas supplied by pipes half hidden beneath. A farce and a fraud purely and simply, outraging the god of hospitality with its would-be cheerfulness.

It is a curious fact, considering their limited possibilities and the many obstacles they had to overcome, that the Colonial builders managed somehow to touch always the heart of things, and this is never more apparent than in their chimney places, which, while varying materially in design, always present an atmosphere of genuine, boundless hospitality. Take, for instance, the drawing room mantel in a very famous old mansion which has stood the test of time since 1730.

This house, being one of the handsomest in the country, all the walls are of course paneled, showing off to great advantage the elaborate hand carving of the mantel. A symbolic design is seen in this carving which is very finely executed in solid mahogany, though the bit just below the shelf is the best part of the work. The fireplace, fully eight feet wide, is unusually deep, thus securing an excellent draught, and the Italian marble entablature is set within a wooden frame carved in accordance with the decoration above.

The treatment of both mantel and fire place are beyond reproach. The logs are supported on heavy brass andirons brought from England in 1700. On the shelf are a few choice pieces of bric-a-brac while a gold Colonial mirror reflects the other beauties of the room. The three St. Memin portraits hanging above have kept the self same spots since they were done by the young French noble whom reverses sent to America to seek fortune as an artist just after our Revolution.

A totally different style of mantel, but one which boasts an equal age, may be seen in another Colonial dwelling erected by one of the wealthiest men of the day. This mantel is in the library, and placed as it is between rows of book shelves built into the wall and extending to the ceiling, accords well with the whole room, particularly the marble top antique tables. The ambitious builder of this costly mansion sent to Italy for his mantels, this one being of pure white marble handsomely carved. The piers supporting the shelf are remarkably fine standing some distance in front of the entablature and thus being in relief. This style mantel, delicately sculptured by skillful craftsmen was greatly in favor in England in the time of Queen Anne, and in that country today there is a revival of it, as is proven in the search for genuine ones of the type, and how different it is in effect from the marbleized slate atrocities of not so very many years later.

But for dignity and charm, for lack of pretention yet superior elegance of style, there is a chimney place in a pre-revolutionary manor house in the oldest section
of civilized America which is unsurpassed.

This ample fireplace capable of holding six-foot logs is not so deep as many on that order, but the chimney is so arranged as to draw perfectly and since the gayest days of old Williamsburg has been the cheeriest delight of many proud families. The white stone lintel is severely plain and the heavy oak paneling of the room is repeated in the mantel which oddly has no shelf at all.

Hand carved pilasters are placed on either side, and in the broad center paneling is the one and only ornament, the head of a deer which was shot upon the preserves of the estate. No more fitting mantel could be chosen for such a dining room where the silver and glass, antique furniture and Willow-ware decorate harmoniously the apartment.

It is plain to be seen that this mantel was built as an adjunct to the fireplace; that it was meant to serve one purpose alone, and how violently does it contrast with those which are ostensibly for decoration with no thought for real utility. A great many of the countries’ presidents have enjoyed their punch and told their stories here where ancient fire logs glowed. Still earlier a red coated captain here held nightly revels with his subalterns having forced his presence upon the Colonial proprietor in confidence of always keeping the colonies under English rule.

Troublous times have come and gone; bullets have been fired at the old mansion; much vandalism has been wrought, yet through two long centuries this mantel has remained unchanged, a monument to the early builder and his workmen.

There is a rare charm in these old chimney pieces; a feeling of cheerful appreciation comes in their contemplation and is allied to deep gratitude as one watches “the bright, ever springing fire running up them heavenward, like hope through materiality.”
A California Artist’s Home
By Henrietta P. Keith

The Californians have not only stolen from Spain the name for their range of mountains, the Sierra Nevada—Snowy Mountains—but its Moorish architecture as well. As, however, this latter possession was never really a birthright of the Spaniards, but brought to them, and indeed forced upon them by their Moorish conquerors, no protest could be made when California quietly took it over.

Perhaps the finest example of this architecture in all California is the home of the artist, Paul de Longpré, at Hollywood, a suburb of Los Angeles. “King of Flower Painters” he is called, having indeed a national reputation, and his home is thronged with an endless stream of visitors, who come partly to see and buy the artist’s work, partly to admire the artist’s home.

A visiting architect has said of it: “It is more beautiful than anything in Morocco, or among the Moorish cities of Spain.” At any rate, it embodies the most delicate and spirituelle forms of Moorish architecture. Reminiscences of the Alhambra meet one at the entrance, in the delicate, lace-like stucco decoration of the arches, the enlarged detail of one being shown in the photograph. No overly ornate capitals mar the perfection of the composition. The arches spring from simple hexagon slabs of the cement, the slightest possible intervention between their delicate grace and that of the supporting pillars below. The intricate network of stucco relief, covering the sides of the pillars, is so carried in curving, branching forms up on the crowning slab, as to form a perfectly unified whole. The beautiful loggia thus enclosed receives the noon sunshine in winter, while in summer long, cool shadows from the arches lie along the “Parian floor.”

The open work stucco of the inverted arches on the balcony above loggia is, if possible, even more delicate and lace-like. The exterior plaster of the walls is a pale pinkish cream, the stucco ornamentation is white, the only attempt at
contrasting color being a broad band of maroon above the arches, which also forms the background of the white stucco relief ornamentation on the under edge of the balcony projection.

All the forms for the stucco work were composed by the architect—an artist with ideals, whose delicate, creative fancy found in designing these beautiful forms a delightful outlet. The models were then cast in gelatine molds, the molds first thoroughly soaked in boiled linseed oil. The work was performed right on the grounds, and occupied ten months. The extent of it may be imagined when it is considered that the front facade is one hundred feet across, and that the stucco decoration of the interior is nearly as elaborate as that of the exterior.

Views are given of the living hall and of the art gallery, which are separated only by a wide arch and a descent of four steps. The hall is 50 feet long by 20 feet wide, and the art gallery is 50 by 25 feet. The architectural relief afforded to such spaces by the device of the lower level is marked, and the heavily beamed ceilings, instead of being depressing, are by this means given an effect of regal stateliness. At the intersection of the beams are electric lights in the lotus form.

The stucco decorations are extremely chaste and pleasing. In the hall and art gallery the broad frieze is white upon an old rose background. A similar ornamentation surrounds the fireplace, which is itself faced with glazed tiles—"Azulejos" is the more musical Spanish name—and these tiles might well claim a Moslem origin.

Still farther vistas open, and we catch a glimpse of the dining-room beyond, where the fanciful arabesques and fairy tracery of the white stucco is relieved against a band of sapphire blue, the favorite color of Moorish artists.

M. de Longpre has not made the mistake of too little space in his environ-
ment. Over three acres of beautiful grounds give the proper perspective for such a home. There are winding walks and drives, drooping pepper trees, golden acacias and stately palms; in the rose garden are 4,500 varieties of roses. Eight great rose trees enclose a Moorish garden house. A Moorish "kiosque," 30 feet square, is the felicitous conceit of the owner for a guest room; and there is a "fountain house" also designed by him, where orchids and other rare flowers are grown, which has a charming foreign air, and one can easily fancy the soft and musical splash of the water coming from the dark groves of Lindaraxa itself.

From this wealth of flowers and these fairylike grounds which in their bright beauty are as a jeweled casket enclosing the architectural gem of the house, the painter draws his inspiration and his models.

Such architecture needs the perfect setting of mountain background, sequestered shade and ardent climate of our western Spain. They who attempt to transplant the Moorish architecture, the cloistered gardens, the statues and the nightingales of Spain, to the bleak airs and cold, gray skies of a New England winter, make a mistake. It was Lowell, if we remember rightly, who pithily said: "Italy is the only climate where it is not inhuman to thrust a naked statue out of doors." But Lowell did not know about our Western Spain; it has been discovered since his time.

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HOME GROUNDS

Winter Protection

By Ida D. Bennett

The subject of winter protection is one of many variations and complications and it is not unusual to hear those whose experience is wide and practical, express themselves as knowing little about it. Certain it is that the more one knows about it the less confidence one feels in their own judgment or knowledge. In sections where there is a heavy and continuous blanket of snow the conditions for the successful wintering of even rather tender plants is good. In these favored localities no protection of an artificial character need be attempted except with a few plants. For it is not the cold that does the winter destruction, but the alternating cold and warmth. A cold wave following close on the heels of a thaw will do more damage, though it be but of a few hours' duration, than a week or more of zero weather. Where the garden is covered with a deep blanket of snow these sudden changes are little felt or to be dreaded.

As an initial step in protecting the garden's treasure against the action of frost and sudden changes attention to the matter of drainage is important. No plant will do well with water standing about its roots in winter, even though it may be in the form of ice. It is, therefore, necessary that the earth in the beds or about the shrubs and plants should be above the general surface of the surrounding land. Where this necessary elevation does not exist it must be produced by filling in earth in the beds to bring it to the desired elevation. The earth should slant away from the beds according to the lay of the land, so that the water may drain away as rapidly as possible after a rain or thaw.

Lilies, peonies and roses are seriously injured by standing in a low or depressed position.

Next in importance to the subject of drainage is the classification of the plants to be protected. Whether they are deciduous or evergreen will decide the nature of protection required. Deciduous shrubs, or those which shed their leaves
at the approach of cold weather, and plants which die down to the ground in the fall, as the hardy phlox, bleeding heart, monkshood, lemon lily, bocconia, and the like, offer few problems for solution. This is not the case, however, with those evergreen plants which carry their foliage through the winter, often a tender new growth very susceptible to frost and wet. Among plants of this class may be cited pansies, hollyhocks, foxgloves, candidum lilies and the like, and among shrubs the kalmias, azaleas, rhododendrons and a few others.

For such deciduous shrubs as altheas, roses, spireas and the like, a wrapping of straw, sacking or any material which will shut out light, sun, and warmth, as well as cold, and maintain the plant in a condition as uniform as possible, is all that is necessary. Most of the deciduous shrubs are entirely hardy, especially when planted in masses or along the sides of walls or buildings, but where standing alone on the lawn or in exposed positions it is the better part of wisdom to afford them more or less protection. The roots, at least, should be well protected with rough litter and manure heaped high about the stem and spread well out beyond the roots and held in place by brush or anything which will prevent it blowing away. Such straw or other material as is used to protect the tops should extend out well beyond the roots also, that the water running down it may be carried away from the plant and not allowed to sink into the ground about the roots.

For tall shrubs two or more layers of straw would be necessary and this should be arranged with the lower layer in place first and the succeeding layers overlapping, and all securely fastened. It will be well before applying the wrapping to draw the branches of the plants together within a reasonable area and secure them safely with bands of cloth or straw. If this precaution is not taken they will be likely to spring out and burst their covering.

For plants which die entirely down to the ground it will, usually, only be necessary to apply a more or less heavy mulch of leaves, and to secure these with brush or wire netting to prevent their blowing away.

The care of evergreen shrubs presents more difficulties, and of evergreen plants the greatest problem of all, as they must not only be protected with a more or less heavy covering of leaves or other material, but this covering itself must be in turn protected from wet. Where the planting is against the side of a wall, fence or building the matter is fairly simple, as that in itself is often ample protection providing water from the overhanging eaves does not drip down upon them. Where this occurs boards or other covering must be arranged to shed water, and some provision made for carrying off the surplus water—as a trench along the edge of the bed.

When obtainable evergreen boughs afford the very best form of protection for this class of plants. Along a wall they may be stood up in a slanting position over the plants, the stem resting against the wall and the needles pointing downward; a strip of wood fastened against the stems will hold them securely in place, or a strip of chicken netting may be drawn over them. Or smaller evergreen boughs or twigs may be stood upright between the plants to be protected and the whole covered with a strip of heavy canvas to shed water. This is excellent for roses, azaleas and rhododendrons.

Where canvas or boards is used in this way the ends should be left open to allow a circulation of air, making the evergreen boughs considerable heavier at the windward end, if any.

Pansies, foxgloves and the like are very susceptible to moisture in winter, but may be safely protected with evergreen twigs without other covering. When leaves are used, however, it is necessary that these are kept dry else they will freeze into a solid mass of ice about the plants and work destruction. For large beds it is a good plan to construct a rough frame of boards about the beds and fill in lightly with leaves and cover all with sash, canvas, boards or anything that will shed wet. One side of the frame should be enough higher than the opposite side to allow free passage of water down it to the ground.

While most bulbs are sufficiently protected by a mulch of rough manure or leaves the ixias require especial care if they are to come safely through the winter. Indeed, to grow ixias in the open ground is one of the floral triumphs of the amateur and the whole secret lies in
winter protection. This should be in the form of several inches of leaves or evergreen twigs or both, and the whole covered with a water-tight cover. Where only a small bed or patch of the bulbs are grown a large shallow box may be turned over them, or a shallow frame may be put around the bed, filled high with leaves and covered with boards, sash or canvas.

Tender vines and roses growing against the house are easily protected by nailing strips of sacking, burlap, matting or any protective material over them. This may first be tacked to strips of wood and these fastened with two or three nails to the house, whence it is easily removed in the spring. Vines growing on wire trellises should have the covering applied on each side. This is far better than attempting to lay the plants down and covering them on the ground. It should, however, be remembered that the roots equally need protection and that the burlap or covering should extend down onto the root covering and be securely fastened there with heavy stones or stakes tied to the material.

The evergreens will be much benefited at this season by a heavy coating of coarse manure over their roots. Evergreens, by the way, should never be trimmed up so that the trunk is exposed to the sun and wind. This is responsible for the destruction of many a fine tree. Few people seem to realize what valuable property they possess in their well grown evergreens and seem to take actual pride in mutilating and destroying them.

The lily pond which has given so much pleasure all summer must be gotten ready for winter by letting off the water and protecting with a heavy bed of leaves. After the water has run out to an inch below the surface of the soil the plug may be replaced, as the roots of the plant will need considerable moisture during the winter. I usually turn shallow boxes—open at the ends—over the crowns of the plants before filling in the leaves, though this is not absolutely necessary; on top of and around these fill in full with leaves, rounding them well up above the level of the curb, and place a water-tight, but not air-tight, cover over all. Thus protected, no frost will penetrate the lily pool in the most severe weather.

The large lily ponds are flushed with water to a depth which leaves at least a foot of water between the ice which may form and the earth in the bottom of the pond.
DESIGNS FOR THE HOME BUILDER

Wm. Kenyon, Architect.

DESIGN "B 22"
HERE is probably no country in the world which can show a greater variety of styles and combinations of styles in its domestic architecture, than this great commonwealth. When one comes to consider the homes in this country which bear no resemblance to each other whatever, either as to plan or design, it would seem as though it would be impossible to originate something, and that no matter how exacting a prospective home builder may be in regard to the arrangement and style of his home, that somewhere he would find a home which would meet his individual requirements in every particular. Many people find exactly what they want in the style and plan of a home previously built, then again many require a home designed especially to meet their individual requirements.

The editor of a home building magazine occupies this position, that like all human beings, he has his own preferences and yet his wide experience and contact with the demands of thousands of prospective home builders tells him that this or that house is going to be liked by a great number of his readers. They like a variety of homes. He is at the same time conscious of the fact that he may be criticized by some of the readers for publishing certain styles and designs. The aim of "Keith's" is to meet all demands as happily as possible.

A Home on Practical Lines

SOME prejudice has been created in the past against a square or rectangular design for a home because of the monotony of the more commonplace styles in which it is usually derived. It is not, however, true that this should be universally the case as will be seen by careful examination of the attractive home designed by Bertrand & Chamberlain. Here, very careful attention has been given to the details, making it not only artistic and original but also unique in appearance. The most attractive rooms in the house are a large living room and the owner's chamber just above it, each having a fireplace and windows on three sides. The interior finish is white enameled trim with mahogany doors; the floors are maple and the estimated cost complete at the prevailing prices is $7,000.00.

A Home With Gothic Detail

THE home previously described was somewhat classic in its details. Here we have a home of Gothic detail. Both of these homes are typically American and the two serve as splendid examples of the diversified styles of the homes built in this country.

This is a very attractive home by Lowell A. Lamereaux, being planned for Northern climate, it has a spacious vestibule at the entrance and a coat closet at one side. There is another coat closet under the stairway in the hall. The plan of the house is somewhat rectangular and sided on the exterior. The reception hall and living room are practically one, there being only a large columned opening to indicate a separation between them which is in fact, no more of a division than a repeat of this columned opening between the living room and the ingle-nook. A wide opening between living room and hall giving a pleasing vista through the rooms always adds to the attractiveness of a home and gives it that indescribable feeling which for lack of a better name, we designate as a "home-like" appearance. The cornice is very simple in its design and the porch, while plain, is dignified and has the proper solid posts for supports and not the artificial box affairs which are frequently used with unsatisfactory results. This home was built at an expense of about $7,000, a reasonable price for a nine-room house including a den, ingle-nook and four chambers.

A Good Shingled House

THERE is something about the use of shingles on the exterior of a home that gives it a cozy cottage-like appearance regardless of what the size of the home may be.

The good-sized house designed by Wm. Kenyon is a good example of the style appropriate to a shingle exterior. The details such as cornice, windows, dormers and porch treatment of such a home should always be as simple as possible.
to harmonize in good taste with the simple materials used on the exterior.

This house contains one very unique room. The reception room is 12 feet in each direction and is a perfect octagon in shape. The one corner in which the requirements of the plan did not make the octagon complete has been made so in appearance by an alcoved seat. A harmonious color scheme for this compact design, would be a deep olive for the lower story with a trim of the same color only several shades darker. The upper story to be stained a dark brown and the roof a moss green. The estimated cost of this home complete is $6,800.00.

The next home is a pleasing little gambrel-roofed cottage having a very informal home-like arrangement.

A house very much out of the usual run, one which would not be found on every street, in short a house with individuality. It has not only an unusual front but a unique plan. The two large eyes on the roof, namely the picturesque dormers, give it an unusual character. The porch, six feet wide, could be made much wider with good effect. The large dining room on the first floor is especially good and the chamber arrangements can not to be excelled, estimated cost, $3,150.

From the work of Ernest C. Haley has been selected a good practical house of rectangular shape suited to a city lot of limited size. The plan shows a practical arrangement of four rooms downstairs and four rooms upstairs occupying in each instance the four corners of the house, thereby admitting light and air to each room on two sides. The living room 14x22 ft. in size, is very large. One of the noticeable features of the second floor plan is the number of unusually large closets and the arrangement of the bath and toilet room, which on examination, the plan will be found to be a practical departure from the usual assemblage of the fixtures. The estimated cost of this house is $4,000.00.

The next design by Knapp & West is a good example of English half-timbered style as applied on the American home. The lower story is shown with siding, but here an improvement might have been made, had the original owner of this house been able to afford a brick or cement veneer up to the top of the first story windows, thereby giving a more substantial appearing foundation for the masonry in the half-timbered work of the walls above. This, of course, can be easily done without altering the plan or design in any particular. The plan is unusually well arranged and proportioned, both with reference to the proper location of the furniture and to the proper location of windows, with reference to obtaining a good view from each of the principal rooms. There is a well arranged pantry. Passage between the hall and the kitchen forms a coat closet. The living room and dining room are best appreciated by carefully examining the plan. While columns and arches have been used as a division between them, they are after all, practically one room which certainly makes it more desirable.

On the second floor are three chambers, bath room, four large closets and a linen closet. The estimated cost complete is $3,000.00.

A Popular Cottage

Without doubt, the most popular style for a cottage home is the one having the front gable extending over and supported by the front porch. The style and shape of the gables often vary but this principle of carrying the second story forward over the porch whenever it is adopted, makes an attractive and popular home. The home to which these remarks appropriately apply is selected from the collection of the Keith Co.

The upper story can either be straight gabled as shown, or of gambrel roof design. Where the latter style is adopted, a little more space can be had on the second floor, but at an increase of cost. The plan arrangement is not an unusual one but is the most practical arrangement which can be designed for a house of this size and style. That is why this general plan is adopted to such a large extent with varying exterior designs by the builders of small homes. This arrangement is both homelike and practical. The first story is built of brick but concrete block could be substituted if preferred. The gables on the roof are shingles. The estimated cost not including the heating and plumbing is $2,150.
LOWELL A. LAMOREAUX, Architect.

DESIGN "B 23"
BERTRAND & CHAMBERLAIN, Architects.

DESIGN "B 24"
DESIGN "B 25"

A Home Built on the Pacific Coast
DESIGN "B 26"

Edward C. Haley, Architect.

LIVING ROOM 14X22-0

CHAMBER 12X12-8

CHAMBER 15X13-0

CHAMBER 12X13-6

BALCONY

DINING RM. 10X15-0

KITCHEN 12X11-0

HALL

DECK 9X13-6

Porch 24X9-0

Hall

Diagon

Linen

Closet

DINING ROOM

CHAMBER

CHAMBER

MALL 12X12

DATE 9X9
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The Decorative Department of The Sherwin-Williams Co.

The Sherwin-Williams Company has established a very complete Decorative Department with a staff of designers and decorators. This department is prepared to furnish complete color schemes with color sketches, and descriptions for the interior decorations of any one room, or suite or all the rooms of a house, including the outside of the house. The suggestions will also include hangings, wall decorations, rugs, furniture, etc., to go with these finishes so as to produce any desired effects.

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Address all inquiries to Decorative Department, 425 Canal Road, N. W., Cleveland, Ohio.
Making the Most of Corners

Here are plenty of them in even the most commonplace house. The staircase landing to which chance has given a window, the space in the corner of a room between a door and a window, the recess in the long hall of an apartment, meant for a refrigerator, which is more conveniently kept in the kitchen, the front end of a long upstairs hall in a country house, or the corner nearest the door of the narrow, one windowed, city basement dining room, all these have possibilities whose utilization gives a cheerful variety and, better than anything else, differentiates the house from the one next door.

The Staircase Landing

I recall one now, in an old-fashioned house, in an eastern city, breaking the staircase into two flights, with a rather wide window, high up in the wall. The woodwork is white, with a dark hand rail, the walls papered a soft, rather light red, the carpet a plain velvet, darker than the wall. The old window has been replaced by a single piece of plate glass, swinging on pivots, and through it one sees, standing in the hall below, just the feathery top of a tree outlined against the sky. Pulled far back, on either side, are sill length curtains of red and cream Madras. Beneath the window stands a long bench, painted white, with cushions covered with different fabrics, but all in soft tones of red, and, in the corner of the landing opposite the lower flight, an immense rubber plant. With a different exposure (this window faces west), the same thing might be worked out in green, with some relief of blue.

With this type of hall, in which the staircase is thrown very far back, there is a very long landing at the foot of the staircase leading to the third story, a landing sufficiently light to admit of bookshelves being built at its side and end, a refuge for the ragged regiment of old novels and magazines whose appearance disqualifies them from polite society below stairs. A comfortable chair, a small table and a student lamp, and you have a quiet retreat for some one.

Or the long landing is just the place for the old haircloth sofa, retired from active use but still comfortable, in a cretonne cover, although too bulky for any of the bedrooms.

The Angle of the Walls

The narrow space, in the corner of the room, six or eight inches each way, is too small for pictures, but, in a dining room, or den, an ideal place in which to hang a collection of jugs or steins. Beginning at a height of five feet from the floor, carry round the corner strips of plain moulding thick enough to support a substantial brass hook, screwed to the under side, placing the last strip at the height of the door frame.

The larger corner inseparable from the narrow house, with one window in parlor and dining room, is the place for a divan, running round the corner. Not a cosy corner, with its absurd erections of drapery, but just a comfortable cushioned corner, where one may lounge for a minute while waiting for the rest, or smoke at ease.

And here comes in a use for the legs of a discarded extension table. Have two frames made of three inch stuff, securely braced and fastened together to fit the angle of the walls, whose length will determine theirs. Fill in these frames with stout upholsterer’s webbing. Cut off the table legs, to a height of nine inches, and bolt them to the corners of the divan. If you have only five, a prop must be made for the angle of the divan in the corner of the wall. Then have solid cotton cushions, which can be made...
Decoration and Furnishing—Continued

most cheaply in the bedding department of a big dry goods store, will keep their shape indefinitely and should be made in two sections. To cover these cushions with denim, burlap, or tapestry is no great affair, or you may have a cover of cretonne carefully shaped to the cushions and tacked on, its lower edge finished with a pleated frill. This is very pretty in a room with much bright china and no other upholstery.

It is simpler to stain and varnish the edges of the frame to match the legs. A few tacks along the wall side of the divan will keep the cushions from slipping. The pillows should harmonize if they do not match the other covering. An effective addition is to cover the wall of the corner with the same material as the covering, to a height of three feet, finishing it with a narrow shelf.

An Improvised Guest Chamber

At one side of the upper hall, near the window, stood a long, wide couch, beneath whose draperies one guessed a cot bed. Against the opposite wall a mahogany, leaved, work table was empty, save for a bowl of flowers, and with a long mirror hanging above it, a mirror with candles in sockets on either side of it. Across the front corner, at one side of the window, was a rather unusually tall and heavy four-fold screen. With pictures on the walls and a big chair in the wide window it seemed only a pleasant lounging place, the curtains which shut it off from the rest of the hall being widely drawn apart.

But with the coming of a guest, it was metamorphosed. The curtains were drawn, shutting it off completely, couch draperies disappeared and showed the neatest of single cots, made up with snowy linen and a dimity spread. The bowl of flowers retired to a table outside, and all the paraphernalia of the toilet came out of the drawers of the table and were spread on the outstretched leaves. Then the screen was seen to conceal a tripod enamel washstand, while its back was supplied with a liberal allowance of hooks, a shoe bag across one panel, a pocket for a nightdress across the bottom of another, a case of simple remedies on another. An hour before
breakfast time, a hand parted the curtains and thrust in a lighted oil stove, arranging on its top a can of hot water. This in winter; in summer the can alone appeared.

**The Trail of the Mathematician**

In the mathematician's house angles and spacings are laid out with the greatest accuracy, as befits the owner. The couch cover does not drag irresponsibly at the corners, but is curved so that it just touches all round. This curve is shaped by a quarter circle, whose radius is that of the height of the couch.

**Unsightly Doors**

Just what to do with the white painted door, opening into a living room and not to be dispensed with, so often found in old houses. Try a pottery wall basket, filling it with German ivy, whose long sprays will, in time, reach almost to the floor. In default of German ivy, not always easy to find, try a plant of tradescantia, or wandering Jew, of which the green sort is the most satisfactory.

**Landscape Doors**

Effective three-fold screens are high and narrow, with a covering of tapestry canvas, on which a landscape is painted, continuously across the three panels, in a sketchy style suggestive of the old landscape wall papers. The price is seventeen dollars and a half and the height about five and a half feet. The best place for such a screen seems to be across a corner in a rather dark room.

**Cretonne Accessories**

The rage for cretonne continues. It enters into the composition of all sorts of pretty things for the bedroom. There are long boxes to stand just under the mirror, as long as the bureau and six inches high and wide, to hold ties, handkerchiefs and gloves, frames for one cherished photograph, circular bags with a stiff bottom for collars, frames for hand mirrors, and writing sets of more or less elaboration. For writing sets and scrap baskets the figured material is combined with plain green or brown canvas. Almost any of these things, for which the shops charge a pretty penny, can be made by any one of ordinary skill. The cretonne is most satisfactory when of small pattern and fairly well-covered. The sprawling designs have too much back-

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**Do You Want a Fireplace in Your Home?**

Do you want the cheer, the comfort that only an open fire can give? Haven't you at least one room in your house which can be absolutely transformed by the addition of a fireplace? Or, if you are thinking of building, don't you owe it to yourself to find out all you can about fireplaces before deciding?

OUR BEAUTIFUL FREE BOOK — "HOME AND THE FIREPLACE" is a regular mine of information about fireplace construction. It tells you what to seek in a fireplace and what to avoid. It tells all about Colonial Fireplaces, the only kind in the world sold under a positive guarantee of satisfaction. It tells all about the Colonial Plan that makes building a fireplace as simple as ordering a picture. Besides, it contains a number of beautiful illustrations of the splendid Colonial Designs — just a few representative selections from the complete Colonial line with descriptions and prices.

If you have any idea of building, or if you would like to know how and where you can add a fireplace to your present home, you need this book.

WRITE TODAY A postal will do, your name and address is all we want, but we would suggest that you write at once. If you delay, you may lose this paper or forget all about it. Just drop us a line right now.

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will give more appropriate and beautiful coloring effects, wear better, cost less to buy or apply, than any other colorings. They are the only stains made of Creosote, and "Wood treated with Creosote is not subject to dry-rot or other decay."

Samples of stained wood, and color chart, sent free on request.

SAMUEL CABOT, Sole Manfr., Boston, Mass.

Agents at all Central Points.
Decoration and Furnishing — Continued

ground to look well when applied to small articles, however good the coloring.

Matched Boards and Rosettes in Oak

A New York firm shows an interior in which a six foot wainscoting is carried up to meet an upper third of tapestry. This wainscot of dark oak is of matched boards, finished at the top with a rather wide projecting moulding. On every fourth board, about six inches below the moulding, is incised a three-inch rosette of simple design, possibly a Tudor rose.

Another interior, with a beamed ceiling and a window of green bullseyes, is all wainscot and heavy wooden cornice, except for a two-foot frieze of cupids and scrollwork, in high relief in ivory tinted plaster.

Guildhall Tapestry

It is not tapestry at all, but a finely repped linen, in the natural tint and of heavy weight, so woven that its texture suggests wool rather than linen. Upon this surface are printed large and effective floral designs, in very beautiful colorings. It is fifty inches wide and costs three dollars a yard. It is a most satisfactory covering for a single large chair or sofa.

Build Stucco Houses

and Bungalows — artistic, fire-proof, inexpensive. Use Rib-Lath for exterior walls and interior partitions, and Hy-rib Sheathing for light, fire-proof cement roofs, wall siding and solid partitions without studs. Sample and Illustrated Booklet on request.

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STANLEY’S
Ball-Bearing Hinges

No creaking of doors
No need of oiling
No sagging

ATTENTION TO DETAILS
Will INSURE COMFORT in Your Home.

See that your doors are hung with

THE STANLEY WORKS
Dept. T, NEW BRITAIN, CONN.
H. B.—Columbiana, O.
Q.—We are building a new house and are undecided how to finish living room, 15x20 with reception room 10x12. As our furniture is all mahogany for living room, having a parlor grand Steinway piano, we think we will have this room finished in mahogany, but what would you advise for finish in reception hall? Would you advise mahogany for this room and columns? We had intended this to be finished in hard wood but fear it may not look as well with large piano. Also tell what you think of using glass doors between these two rooms.

Ans. In the absence of any floor plan, it is difficult to advise in regard to the use of glass doors between living and reception rooms. Much depends upon the uses of the two rooms. If the reception room is part of the hall, the columns would have the preference and unless for some special reason, we should advise an ordinary arch with draperies rather than glass doors between two rooms of this character.

As to the finish, it should be the same in both rooms, preferably a mahogany stain with so much mahogany furniture. The early English finish in dining room is an excellent choice.

A. D. J.—Wilson, Kans.
Q.—I wish you would please give me your opinion as to how I should finish the walls in the new residence which I am building. The house is a bungalow, with large living room 17x22 with beam ceilings, fireplace, dining room 15½x18 with plastered panel ceiling. A room 14x14 which we think of using as library but may use it later on as bed room. Hall in center of house and small vestibule. On second floor there are three bed rooms about 14 feet square. The first floor with exception of kitchen and pantry are to be finished in quarter-sawed oak, and second floor in hard pine with birch doors. Ceilings are 9½ feet first floor with 8-foot ceiling on second. The walls have been plastered and finished in a cement, trowled smooth finish. I herewith enclose you a stamped envelope for reply and would be pleased to have you give me your opinion how the above should be finished.

I have been a subscriber of the Home Builder for the past two or three years and enjoy the paper very much.

Ans.—Inasmuch as the walls have been hard finished in cement, it is advised to use paper or burlap hangings. Tinting upon hard finished plaster is very hard and cold, though it may be used upon the ceilings, but the effect will not be as soft and pleasing as tinting upon a sand float finish. Supposing that the quarter-sawn oak is to receive a brown stain, it is suggested to use on the living room walls a crepe paper in a putty gray color, having a surface like rough cast plaster. This paper comes at 50 cents a roll, and is well suited to a bungalow atmosphere. It is a charming background for rugs and other furnishings. All in one color, either coppery red, green or dark blue, as may be preferred. The dining room should have either a wood or a burlap wainscot and the wall above plain in old blue, for instance, if wainscot is wood, or one of the many beautiful dining room designs may be used. We should choose papers having a rough surface, such as the imported German Duplex, where plain walls are desired.

The second floor woodwork may be painted white and the birch doors stained mahogany, with any of the charming stripes or English chintz papers so pleasing for bedrooms.

Mr. F. F.—I have been a subscriber to your magazine for several years and have been much benefited. I am enclosing a cut of living room and dining room that I may have suggestions from your Home department. The living room will be stained in dark weathered brown (cypress) and the dining room dark gray weathered, both furnished in Mission style. The fireplace of gray brick with black Flemish andirons and dead black finish in electric fixtures with buff art glass shades. All my furniture is dull weathered finish except piano. It is Circassian walnut with a high gloss. What can I do with it? Could I stain it in dead black?
Dear Madam:

A SHABBY piece of furniture never looks worth sending out to be refinished—it really is worth it. You forget that it isn’t the wood that is worn—it is the finish.

Replace the finish—the piece is as good as new. When you do this yourself, the expense is slight and the labor nothing.

You must first remove the old finish. Varnishing over it looks cheap—shiny—home-made.

The old finish is a coat. Johnson’s Electric Solvo takes this off quickly, easily. The piece is then left “in the white”—new wood—to be finished as you like.

Choose one of Johnson’s Wood Dyes (14 shades). A shade to suit you. If too dark, add alcohol, if not dark enough, add our Flemish Oak Dye, No. 172. You’ll find the dye thin like water. It enters the wood pores evenly—it brings out the beauty of the grain—the lights—the darks.

JOHNSON’S
ARTISTIC WOOD FINISHES

You cannot make a “spotted” job if you try. It contains no varnish to cover the beauty of grain. It is a dye that accentuates the effect you want. Each shade is always the same.

The finishing is equally simple. Johnson’s Prepared Wax is pastelike. It is applied with a soft cloth. It dries instantly. Rubbing with a dry cloth then gives a velvety protecting finish of great beauty.

The same treatment will refinish your woodwork and floor. This is worth your consideration for Johnson’s Wood Finishes do not mar, scratch nor peel.

Every paint dealer carries these three simple necessities—Johnson’s Electric Solvo—Johnson’s Wood Dyes—14 shades—30c and 50c—Johnson’s Prepared Wax—10c and 25c.

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Our text book on “The Proper Treatment for Floors, Woodwork and Furniture,” will be sent you or your friends free for your names and addresses.

S. C. JOHNSON & SON, Racine, Wis.

“The Wood Finishing Authorities”
Ans. We would suggest reversing the wood finish and using the dark gray weathered in living room, with side wall hung in a new paper which is an excellent substitute for rough natural gray plaster without its coldness and hardness. This paper comes at $1.00 a roll and makes an extremely artistic background. Against this your coppery red cushions with the coppery red carried out in rugs and draperies, will give the warmth of color you desire. Here you can use your coppery red velvet rug and get another to match it. Lay it in the center of the long room with an oriental in warm, soft red, on either side of it. A velvet rug is not a good kind for dining room use, a short hard nap like Body Brussels is more serviceable. Tint the ceiling of the living room is grayish white. Do not use buff art glass shades except for the dining room table dome.

Since there are to be no portieres, use side draperies to the sill only at each end of the long bay of coppery red raw silk with glass curtains of one of the new lace nets. The same at the end window, but only the silk hangings at the little windows beside the fireplace.

Use brown tones in the dining room. A dado of brown burlap with wall above in design showing light and dark browns, with soft reds intermingled. Pale tan ceiling. The casement and French windows must have yellowish lace net on rods fastened to the windows themselves and not the casings.

Paint the woodwork in chamber with the mahogany furniture a pearl gray and use a gray white striped paper on the wall. Use rose colored curtains and rugs. For the oak bedroom set, paint the woodwork a soft leaf brown and use a paper well covered with a quiet figure in old blues.
The Side Issue

ITH increased prosperity, sometimes just because it does not come our way, radical changes in family life are apt to be made. The children have outgrown the old house, or the neighborhood has changed, or, commonest of all, it is decided to move from the city to the country, or at least to the suburbs. In the main, the change is a desirable one; and for a while everything is rose-colored. Then come in the unconsidered side issues and the whole aspect of things becomes drab rather than roseate.

It harks back to the old question of living up to the silver pitcher, with which Miss Martineau dealt so forcibly, before most of us were born. The move which gives so many substantial advantages in the way of really essential things, space and fresh air and the possibilities of much outdoor life, is found to involve a great many elements not fully recognized from the city flat, or the modest house in a side street. One has the choice of absolute social obscurity, or the Country Club and golf. And, if the fees of the Country Club and its many incidentals cannot be afforded, the last estate of the family is worse than the first. It is this state of affairs that lies at the root of the complaints of the social exclusiveness of many suburban settlements. It is not a social question at all, it is a question of the impossibility of satisfactory social intercourse without a common meeting place and common interests. Some form of this social disability is attendant upon limited means everywhere, but it is more keenly felt in a small community than in a large town or city. For the elders of the family, it may be borne, if not with a good grace, at least with a measure of philosophy. But it is rather more than hard on the children, whose experience is limited and whose conviction of the doctrine of compensation is non-existent.

The same state of things exists with reference to other changes. It is not the mere amount of a servant's wages that counts, but her board and the waste and breakage entailed. Nor is it the initial cost of the automobile, but the running expenses and the incidentals of travel, repairs, meals and hotel bills. So with clothes. The one elegant article, a gift or an ill-judged purchase, involves an indefinite expenditure, before the other details of the toilet are in keeping with it.

It is always worth while to sit down and count the cost of any undertaking, making a liberal allowance for extras, the unforeseen but quite inevitable expenditures, sure to arise in connection with any enterprise.

A Practical Working Dress

A good many people have found out that it is quite possible to do housework in a shirtwaist and a short skirt, with a linen collar and stiff cuffs. The plan has its manifest advantages. No matter who comes, one is always presentable, and one is in condition to go to market, by slipping on a hat and jacket. Also, if dinner is in the middle of the day, one is saved from sitting down to the formal meal of the day in disarray.

The majority cling to some sort of distinctly working dress and some one may find the dress described practical. The waist is cut by an ordinary pattern, with a little fullness gathered in at the waistline behind and a rather narrow yoke, to which the full fronts are gathered at the shoulders. The fronts are fitted very smoothly under the arm, all the fullness being confined to a space just equal to the width of the front gore of the skirt. The skirt is seven gored, fitted smoothly
over the hips, and with an in-turned pleat behind.

Now for the junction of waist and skirt. Take a double strip of the goods about four inches longer than one's waist and pin one end securely to the center of the waist line, in front, with the folded edge up. Pull this belt snugly and fasten it, arranging the fullness of the waist under it. Then stitch the folded edge to the waist, stopping short of the point where the front fullness begins. Cut away the waist below the stitching, leaving only enough to fall down, but leaving the unstitched part the ordinary length.

Finish the placket of the skirt at the left side of the front breadth, which will fit better if it is rather narrow, not more than five inches for a slight figure. Set the upper edge of the skirt between the lower edges of the folded belt, attaching the front gore to the part projecting on the right side. Shape the bottom of the skirt after it has been sewed to the waist. If cut to clear the floor by half an inch, it will be a convenient length after washing. Set an eye on the end of the belt projecting at the left side and a corresponding hook at the center of the front gore. This will confine the fullness of the waist. Or the end of the belt may be cut off and the fullness arranged with a draw string.

A bishop sleeve, with a six-inch, unlined cuff, buttoned up on the outside, is convenient and easily ironed. A long sleeve saves one's arms in various ways. The neck should be finished in regular shirtwaist fashion, but with a band of easy length. Provide a couple of Dutch collars of the material, a straight stock to button behind, and a folded belt fastened with a buckle.

Such a dress is quite as comfortable as a wrapper, is easily washed and ironed and easy to get into, as well as being very pretty. A plain chambray in blue or gray, or a pinhead check gingham, in blue or black and white, is a good selection.

Cleaning Brass

Is there anything more melancholy than dingy brass, whether it be individual pieces or the handles of old furniture? The mere rubbing up with some sort of paste is a trifling matter, but the lustre is so short lived. A few damp days and it has disappeared. Coating the cleaned and polished pieces with white of egg,
Household Economics—Continued

Put on with a brush, will give a sort of lacquer which will keep them bright for a considerable time.

Never clean metal drawer handles without removing them from the drawer. It is an easy matter to unscrew them. If they are cleaned in their places, stains on the woodwork are sure to result. If removal is impossible, paste a piece of paper on the body of the drawer, covering all the space around the handle.

Care of Porcelain Bath Tubs

One desires to keep their enameled bath room fixtures free from scratches and mars, and the housewife must be particular that she steers clear of the many solutions and preparations on the market advertised to clean bath tubs, etc. If they are not familiar with the cleaning preparation, they are very apt to use something containing grit or acidulous increments, which will spoil the glaze.

There is a new preparation on the market, which is guaranteed to positively remove all dust, dirt, grease, rust, lime, or other stain without the slightest tendency to damage the enamel. The name of the manufacturer of this preparation will be given to any reader upon request.

Tempering the Temperature of the Tub

The rigors of the porcelain bath tub, in winter are somewhat ameliorated by throwing a blanket over it, while it is filling. The confined steam heats the sides of the tub. A thick towel laid in the bottom will make it much safer, and there are rubber mats specially for this purpose. Serious sprains have resulted from an unguarded movement in a porcelain tub.

The Battle for Fresh Air

Unfailingly incident to our northern winters is the battle for fresh air. It is impossible to lay too much stress upon the necessity of a thorough daily airing of the whole house, also of sleeping, if not with open windows, at least with bedroom doors open.

A great assistance to proper ventilation is a tall screen, which can be arranged so as to shelter a specially sensitive person from a direct draught, or folded about the head of a bed.

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No. 82 "Silent" Parlor Door Hanger

“Silent” in name and in fact.

Pointers:

Roller Bearings

Wheel has vulcanized fibre tread

Flexible hinge joint

Simple in construction

Can’t get out of order

Adjustable

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STERLING, ILLINOIS
The Thanksgiving Table

While scarlet and white are the Christmas colors, nothing so well befits the Thanksgiving table as the autumnal shades of dull red, and orange, and russet with the pale pink and amber and fawn of chrysanthemums. A wise forethought saves some glowing boughs for the decoration of the chimney piece, giving them the thinnest possible coating of gum Arabic, as soon as they are dry, but not withered. Then for the center of the table have a jar of cream-colored or buff pottery, with chrysanthemums, in pale pink and buff and red and brown, with brass candlesticks, with pink or buff shades, and you have a seasonable color effect, with a sedate charm of its own.

The Stranger Within the Gates

While Thanksgiving is pre-eminently a family festival, it is well not to draw the lines so strictly as to exclude the member of some other family, whom the day finds far away from his own people. In every great city, there are many such to whom the physical cheer of the day is not lacking, but who experience a great sense of loneliness, with the coming of holidays. It may not be practicable for all of us to make such people a part of the family reunion, but at least we can invite some one to the late supper after the ball game, or to tea after the family friends have departed. One's own relations may be critical of the browning of the turkey, or regret the absence of some viand which seems to them indispensable, but your casual guest will bring an appreciative appetite and a grateful spirit.

Concerning Quinces

In the late days of October and the early part of November quinces are at their best. They are a somewhat old-fashioned fruit, and few people preserve them, as a matter of course, as they did once, but their flavor is so rich and so distinctive that it is worth the trouble to put up a few dozen. Not too much sugar, half a pound to a pound of fruit, and long slow cooking are the secrets of a good quince preserve. Six hours, in a covered kettle on the side of the range, is none too much and they should be deep red when done.

Quinces have the property of imparting their own flavor to a less positive fruit. If an equal quantity of sweet apples or of winter pears be cooked with them, it will be almost impossible to tell the two fruits apart. As quinces are seldom cheap, at least in city markets, it is a distinct economy to use either apples or pears.

A Use for Crystallized Ginger

The crystallized ginger, sold at every confectioner's, makes a really delicious preserve out of hard green pears. Some people chop the pears, but the better way is to quarter and core them and to cut each quarter into three lengthwise sections. Allow to each pound of fruit a pound of sugar, a lemon, seeded and sliced thin, and two ounces of thinly sliced crystallized ginger and a cup of water. Cook all together for several hours, on the back of the range, until the pear is dark colored and perfectly tender. Put up in jelly glasses and cover with paraffin. It is hardly to be distinguished from imported ginger, and is very good
with ice cream, or with crackers and cheese, or as a filling for sweet
wiches.

If one's taste is more than usually fiery, the quantity of ginger may be increased. If crystallized ginger is not attainable, ordinary green ginger, thinly sliced and tied up in a number of small muslin bags, may be used.

Characterless Tables

At how many tables one eats without bringing away any impression of any detail of the appointments of the table. One has a general impression of good service, of clean napery and suitable dishes, but no more. On the principle that the well dressed woman is she whose garments are unnoticeable, this may be well, but, in effect, the domestic table is about the same as that of the restaurant. The Carlsbad potteries which, in the past twenty years, must have turned out some millions of unobjectionable dinner services, may be held responsible, at least partially. The thinness of their wares, their touch of gilt appeals to the feminine instinct for the nice, makes the purchaser blind to the commonplace and colorless decorations.

The seeker for individuality does better to buy a service of one of the English stonewares, not so dainty, but far more effective. The choice is wide, but the best efforts of the designer have been expended in reproducing, in spirit at least, the almost universal blue of the eighteenth century. The lover of positive color can find a whole dinner service of English willow pattern for about twenty dollars. A Copeland service, in the onion pattern of the Dresden pottery, has a white ground, the decoration in a charming shade of blue, and costs about twenty-five dollars. Still another, the Beaufort, has a geometrical design of blue lines forming a conventional border, to which is given the blurred effect of “flowing blue.” Each of the great English potteries turns out a variety of designs in blue and white, costing no more than the continental wares and infinitely superior in artistic quality. Many of the designs can be duplicated in green.

As satisfactory a way as any is to buy the principal dishes of a service, platters, plates and vegetable dishes, of one of the open stock patterns, getting just the number of each likely to be needed, for
Table Chat—Continued

why should a family of three require twelve soup plates? Then get the smaller pieces of some nicer ware. For instance, if your large pieces are blue, get blue and white Japanese china cups and saucers, bread and butter plates, cereal bowls, or oatmeal saucers. Have a salad service of something different and use glass for the dessert. Or you may choose cups and saucers of shell-like Belleek and have sugar bowl, cream pitcher and teapot of dark blue cameo Wedgwood. Or, with a silver tea or coffee service, the cups may be of the thinnest, pure white French china.

Then for a green dinner service, whose pattern is apt to be somewhat inconspicuous, you may fall back for relief upon the Italian lettuce ware, the plain green celadon of the Oriental shops, or sage green Wedgwood. Then there is a delicate Cauldon china with borders of emerald green, turquoise, or clear yellow. In fact, there is more choice than with a blue scheme. The only thing to be remembered is that the auxiliary pieces should have either more or less pattern than the body of the service. In any case silver, of good design and simple finish, helps out wonderfully.

Asparagus Sets

These consist of a concave tray for the asparagus, generally raised on a foot, with a small tureen fixed at one end, and six or a dozen plates. The ware is some sort of a German faience, the decoration on the Art Nouveau order. The whole thing is effective rather than beautiful, intended for the service of the vegetable as a separate course. In some of them the tureen is detached. In the meantime, most of us will go on serving our asparagus from a platter, quite au naturel, except for a liberal application of butter to the green ends.

New Candle Shades

The latest thing in candle shades is of sheer lawn, with scalloped edges, embroidered with fine cotton, in a rather open design, with plenty of eyelet holes. This embroidery is fitted over a plain silk shade, pink or yellow.
New Uses for Woods

There is a constant effort to broaden the uses to which various kinds of woods can be placed. Many products of the forest that were regarded as valueless until within the past few years have now become standard commodities. Twenty years ago maple was regarded as either an incumbrance or useful only for firewood. Today it has become the standard flooring material throughout a very large portion of the United States and abroad, being used in many of the highest class structures, as well as for wagon and agricultural machinery building, etc. Hemlock, a wood despised for years as being practically worthless, is a standard building material today. Red gum, but very recently introduced as lumber, was unsalable up to within the last five years. Now the broadened demand is so active that many grades of it show a shortage in the market, says a recent issue of "Hardwood Record." The despised tupelo gum has recently become a valuable commercial product, with every prospect that within a few years it will be so appreciated as to command as much money as cypress does today.

It is the constant study of users of wood to find cheaper substitutes for certain standard commodities, by means of which they can turn out their manufactured product at a diminished cost. Some manufacturers have succeeded in substituting other wood for oak. Chestnut and red gum have been the principal kinds used for this substitution. Yellow pine and poplar have largely taken the place of white pine, and now Pacific Coast woods are substituting the pines and hemlock. Box makers who formerly used soft woods exclusively have recently learned that they can employ gum, cottonwood and a large variety of other hardwoods advantageously. Substitution is going on constantly, and probably will continue to the end of time.

The tamarack of the north has been a despised wood in the past few years in...
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Splinters and Shavings—Continued

Spit of its strength and lasting qualities, and has even been rejected as a building material. It has been but recently discovered that tamarack makes a most excellent material for tanks, and for this purpose it is coming into quite general use at much higher prices than it ever would have brought in the form of joists and scantling.

Experiments are now being made with maple for car decking. It is strange that this trial was never given the wood before, for it certainly will prove an ideal material for this purpose. It will rot no quicker than yellow pine, Norway or fir, and will stand 10 times as much wet and rough usage as any of the woods named. Both northern and southern hardwood manufacturers are creating a considerable demand of late for the coarse end of their hardwood products for sheathing purposes and some of the woods are being quite generally used in the form of ship lap and bevel siding with good results.

There is a crying need for a substitute for hickory in the wagon and carriage making trade. It seems scarcely possible that any considerable quantity of undiscovered wood suitable for this purpose will ever be located in the United States, but it is logical to prophesy that a vast quantity of material excellent for this purpose can be secured in Mexico, the West Indies and the northern portion of Southern America. The forests of these countries are all rich in minor hardwoods of very dense character, which are tough and not subject to speedy decay. Undoubtedly the wagon maker who wants to perpetuate a source of supply should cast his eyes in the direction noted.

A Concrete Greenhouse

The concrete greenhouse is not only entirely practical, but means the elimination of costs for repairs, and a material reduction in expenses for fuel. Very fine concrete greenhouses have been built at the Soldiers’ Home, Washington, and at Westwood, N. J. A method of construction recommended by good authorities is as follows: Make the foundation 10 in. broad and below frost, composed of 1 part cement, 3 parts clean, coarse sand, and 6 parts broken stone. On the foundation and at equal distance from either edge, erect a wall 7 in. thick and of 1 part cement, 2 parts clean, coarse sand, and 5 parts cinders, to the height required.
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Splinters and Shavings—Continued

for the wall. A ridge pole can be erected 6 in. wide by 8 in. deep, of concrete, consisting of 1 part cement, 2 1/2 parts clean, coarse sand, and 5 parts broken stone or gravel, not over 3/4 in. in size. The ridge pole should be reinforced with two steel bars, each 5 in., extended from ridge pole to side wall. Reinforcement with 1/2 in. bar will be sufficiently strong to support the sashes. Reinforced concrete posts, 8 in. square, should be placed at intervals of 10 ft. to support the ridge pole. Concrete tables 2 1/2 in. thick, of 1 part cement, 2 1/2 parts clean, coarse sand, and 5 parts cinders, reinforced with a woven wire fabric, can be built and supported with 4 in. posts of the same concrete. All concrete should have a coating 3/4 in. thick of 1 part cement and 1 part clean sand. This should be put on after the surface to be covered has been picked with a stone axe, and made thoroughly wet.

We would advise, however, in case you undertake this work, that you consult an engineer, architect or builder who has had experience in concrete construction. Concrete and Constructional Engineering.

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W. H. Please inform me thru your correspondence department, the method of placing and fastening wood mantels to brick fire-places.

Ans.—The usual method of fastening wooden mantels to brick fire-places is to have a metal wall plug inserted in the fire-place at the time that it is laid up, then the wooden mantel can be nailed into these plugs.

C. H. M. Please advise if there is any way of fastening a woven wire fence to gate posts or pillars made of concrete blocks.

Ques. B. Would a one-story cottage about 25x45 ground dimensions, look out of proportion if it had a hip roof on a one-third pitch?

Ans.—You can fasten your wire fence to the cement pillars made of concrete blocks by placing wood plugs between the joints, to which the fence can be attached.

Ans. B.—Your cottage would look better if the pitch of the roof was on 30 degrees instead of one-third pitch.

E. J. B. As a subscriber to your "Journal," I wish some advice. Am building a house with a porch sided up outside and sealed inside, from porch outside and ceiled inside, from porch floor to the top of the rail. I desire to know how to dispose of the water that will run to the enclosed part.

Ans.—A practical way to take care of this matter would be to leave a small opening or crack about two inches high and a couple of feet long half way between each pair of columns at the floor line. Another way, but not so good, would be to bore holes about an inch in diameter at frequent intervals right close to the balustrade. This would let the water out all right.
An Attractive Bungalow Home

By Helen Lukins Gaut

To make a happy fireside clime
To weans and wife,
That's the true pathos and sublime,
Of human life.

—Burns.

ARTISTIC, of excellent construction, and entirely satisfying in comfort and convenience, is the bungalow shown in accompanying illustrations. Southern California abounds in this type of home, and this is but one of thousands of designs, all of which are fascinating, each and every one showing individuality, until it seems as if all schemes and ideas must be exhausted, yet these charming little houses continue springing up over the landscape—wild flowers of architecture, after abundant rains of thought. It is astonishing how boards and shingles, plaster and brick and stones can be fashioned into so many shapes. These houses differ in expression as much as faces, and almost all are delightfully cheery and inviting.

Exteriors are more attractive when banked with bright flowers, softened by graceful vines, and shaded by over-arching trees. The bungalow shown herein, is too young to have acquired all the luxuries of the garden, and imagination
will be needed to picture it in its proper floral setting. In spite of its garden poverty, however, it attracts. The roof lines are admirable, the wide eaves giving intimation of comfort. The two large windows at the front of the house are of heavy French plate and as is the manner of fine glass, they give distinction and elegance. The cemented front porch is of goodly dimension. The cobblestone foundation, support posts and pedestal, common glass, less painstaking workmanship, etc., the style could be duplicated for considerable less. As it stands, the house is suitable for use in either warm or cold climates. It is not only substantially built, but it is elegant and complete in every detail. It is built on a lot 50 by 150, and faces the east.

The front door has a heavy frame of oak, set with squares of beveled plate glass. It opens directly into the living-

set off the front elevation to splendid advantage. Sidings are of clapboards, the roof of shingles. The latter is painted white, as are window and door casings. The body of the building is dark brown. It is like a brown bird with a white breast. Harmonious color schemes in house painting are eminently essential. The sober shaded tints of greens and browns found in the nature woods, blend best with almost any environment.

This bungalow is exceptionally well built, the materials used, having been of the best. By using smaller timbers, room, and with the first step forward, the visitor has a delightful and comprehensive view of almost the entire house, including living room, dining room, and bed rooms, all of which open together by means of square arches. There is only a suggestion of separation between living room and dining room. Two wooden pedestals, each connected to the side walls by means of a low slatted arrangement, form the only division. Jardinieres holding growing ferns cap the pedestals. The ten foot fireplace is in the southwest corner of the living room,
and in co-operation with a connecting built-in window-seat, makes a warm, cozy rest place. Fireplace and chimney are of rough jagged klinker brick, light grey pebbles of irregular sizes showing conspicuously among the red masses. The bricks are cemented together with dull blue mortar. The wide hearth is of grey cement, marked off in twelve-inch squares. There are three mantle shelves of six-inch pine, one on either side of the chimney, and one in the center, half way between the top of the fireplace and the ceiling.

Woodwork in both living room and dining room is stained a rich dark brown, so dark it is almost black. Above doors and windows, casings project outwards, making a four-inch shelf on which to rest plates, flat baskets, pictures or bric-a-brac. This simple scheme for ornamentation is most attractive. The picture mold is placed close against the ceiling, and makes a pleasing finish where wall and ceiling meet. The living room is abundantly lighted. The entire south exposure is given up to swinging windows with lattice tops, while a large plate window attracts your face to the east, and the smile of the morning sun. Curtains are of heavy cream net with applique of Honiton lace. Furniture is chiefly of mission design—in dark wood with leather upholstery.

Instead of the rough-plastered tinted walls so frequent in bungalows, this house is papered and rich effects have been obtained by tasteful selection. The living room walls are in mottled greens—huge leaves interwoven. The ceiling is in white.

The dining room is rich in artistic touches. A wall paper, striking and most appropriate for use, in this, the "land of wine and honey," has been chosen for this room. On a ground of delicate tan color are graceful clusters of purple grapes and green leaves and tendrils, natural enough to have just been brought in from the vineyard. The
Plan of the "Attractive Bungalow Home"
entire west end of the room is filled in by a low built-in buffet of beautiful design and finish. In it is a long narrow plate glass mirror, many convenient drawers, and two cupboards with leaded glass doors. Above this buffet are four square lattice windows. Two sides of this room are paneled to the plate rail, the paneling consisting of twelve-inch boards and two-inch batons.

Woodwork in bedrooms, kitchen and bath is finished in white enamel. A large plate window and two swinging lattice, make the front bedroom always cheery with sunlight and fresh air. The wall paper also helps to give brightness. The ground is light, with just a suggestion of creamy sunshine in it, while scattered carelessly over it are long-stemmed white cherokee roses with centers of gold. The back bedroom is daintily papered in a flower design. The bath, all in white enamel, is equipped with first class plumbing. The kitchen is supplied with the usual number of conveniences, cupboards, flour bins, sink, spice cabinet, cooler, etc. On the screen porch are two stationary wash tubs. The cemented brick-walled cellar is 10 by 15.

When this house was built, the price of lumber was at high tide, dimension lumber bringing on an average of $35.00 per thousand.

**Itemized Expenses**

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</table>

Designed by owner, Fleeta Emmert Lippincott.
OMMANDING a magnificent mountain view and overlooking the beautiful new Country Club, this home is advantageously situated, built of white brick with heavy bracketing, softened by Elizabethan gables of cement with broad wood panels, it makes a pleasing contrast to the ordinary city dwelling.

The architect, Mr. Bettcher, has a reputation for substantial quality in the homes he designs. This house is well-built from basement to chimney tops. The contract was let for $6,500, but the owner put in the buffet, also the porch floor, which is tiled instead of cemented as the plans specify, and a few other extras.

The bay window treatment is specially good, the curved bay of the music room is really an inspiration point with its unbroken mountain view. This combining of living and music room is a good feature, though unusual.

The dining-room decorations are a bit unusual, but so simple one wonders it were not thought of before. The color is a delicate soft tan with conventional vine in dull green. The vine runs up and down below the plate rail and around the room above it. The wood trim and furniture are of weathered oak. The use of the same paper for both wall sections obviates the necessity of spending many long hours in a search for harmonious papers.

A servants' living-room in the basement makes a capital room for just every thing. This private living-room is rapidly gaining favor. The extra cost is almost nothing, and when the main floor is three and a half feet above ground, the lighting is an easy problem. In this cheerful room, with its open fireplace, one may put those comfortable, but a trifle worn pieces of furniture. It makes an ideal study-room or a playroom, if not needed for servants.

The room marked "Den" is the Jap's room, and as he has the privilege of sitting in the adjoining living-room, he feels he has a private suite.
The kitchen arrangement is especially convenient, with gas range between sink and dresser. The refrigerator can be filled from the outside. A closet completes this well-equipped kitchen.

The pantry was well designed, just enough space for the required shelving and plenty of light. So many times space in a pantry is an inconvenience. It is always more convenient to place bins and moulding board near the range, yet many times they are fully fifteen feet away.

The stairs are economically placed. A hot water heating plant is one of the comforts here provided.

Beamed ceilings are used in dining, living and music rooms.

The bed-rooms above are all dainty in white enamel and delicate papers.

To those who appreciate a home well-built in all its details, this house will make a strong appeal.

The most appealing characteristic of our second illustration is simplicity of line and treatment. True beauty of form is ever simple, even when decorative to a degree. The most beautiful buildings in the world are simple in outline. Splendor of color, rich inlays, extreme refinement of workmanship may glorify them
and enhance their charm, but the lines of true beauty remain free from fussiness or exaggeration.

In the present instance, simplicity becomes interesting and decorative even, from the harmony of proportions, the careful placing of the windows, the low pitched roof and the pleasing color treatment. The slight overhang of the second story, covering the projecting bays on either side of the entrance which it thus shelters, does much to break what might otherwise approach a too severely plain front. The recessed entrance thus formed with its little terrace and steps flanked by brick railing, supporting potted shrubs, the perfectly plain but graceful arch above, and group of low windows centered over it—these are small details, but they play important parts in the whole effect. We could find it in our hearts to wish that the architect had managed his pantry and china closets without the extension on the left, which looks like what it is—a kitchen wing brought into prominence. A pergola porch at either side would have perfectly rounded out the symmetry. The wide siding of the lower story and the exterior trim are stained a leaf brown. The shingling of the second story and roof is of red cedar simply oiled, thus bringing out varied soft brown shades which mellow and deepen with age into still softer tones. The window shutters are a leaf green and the sash cream color.

The third illustration is a modified type of bungalow. We are fast going bungalow mad, for every third dwelling seems to be modeled on the bungalow idea. Where the environment is in tune with it and the style itself is adhered to with some conscientiousness, nothing is more pleasing than the bungalow home. The trouble is, people build a mongrel house, a cross between a cottage and a two story house, and call it a bungalow. In the type before us it is evident that the desire for full second story chambers has overcome the feeling of unity in design. The roof is fussy and the general feeling one of unrest. Even the shingles and the porch roof projection fail to impress us with the bungalow motif. To compensate for this the design admits of an exceedingly comfortable and commodious interior arrangement, while many of the exterior details are in themselves very attractive.

The shingles of the exterior are stained a dark, olive green; the chimney and foundation are of dull red klinker brick and the trim is white.
Inexpensive Bed Room Furnishings

By Margaret S. Bedell

If one possesses the true spirit of hospitality the guest-room will be made one of the most attractive as well as one of the most convenient rooms in the house.

In referring to guests a lady of the old school once quaintly said to me, “I call nothing trouble that does not make the heart ache,” and in that remark lies the perfection of hospitality.

I practically furnished a room for friends of mine for twenty-five dollars, and a mere skeleton of a guest-room it was in the beginning,—carpetless, paintless, paperless, and furnitureless with the exception of a low four poster bed badly scratched and maimed but still capable of becoming a useful and dignified member of the household.

Our first outlay was for white paint, one dollar, and we were our own workmen and did what we considered a very creditable piece of work. As the floor was smooth and well laid we filled in the cracks and stained it a rich dark brown the stain costing the same as the paint, one dollar. In the meantime and between times we scraped and rubbed down, glued and polished the old mahogany bed until it was coveted by all our friends.

We selected a paper with a cream colored ground on which was a trellis of a much deeper shade over which twined a graceful green vine. As the paper was well covered the effect was not too light for a room with three sunny windows, and as the leaves were small we could use it nicely for the ceiling as well as the side walls. It required five double rolls of paper at forty cents a roll, as we papered and painted the closet as well. I paid a woman one dollar and twenty-five cents for papering and a basket of our garden vegetables, which she seemed to appreciate more than the money.

I had the village carpenter for a day, and as there was plenty of lumber in the stable he soon made the frames for the couch, dressing stand and work table, roughly made to be sure, but perfectly...
strong and trustworthy. I paid the carpenter two dollars for his work, and had there been a man in the family this expense could have been avoided.

The cretonne for the curtains, couch, tables and chairs matched the paper as nearly as possible, a cream colored ground with green leaves. The cretonne was thirty inches wide and cost twenty cents a yard; we used in all fifty yards.

As there were three windows in the room and each curtain with the heading required three and a quarter yards in length we used nineteen and a half yards material, allowing six yards extra for the ruffles in all twenty-five and a half yards. For ruffling I cut the width of the material in six strips of five inches, as this allowed not only for the ruffles but for both straps and bows in looping the curtains back.

The couch was six feet long, twenty-two inches wide and fourteen high. Springs make it much more luxurious, but as our twenty-five dollars did not admit of that luxury we made a mattress four inches thick, which answered our purpose very nicely and was really comfortable. We covered the mattress with the cretonne; the width of the material formed the flounce and we set it on with a three-quarter inch heading. What we cut off the width of the flounce was used for ruffles on the five pillows. As the couch rested against the wall we used the flounce only on three sides. The amount required for both couch and pillows was twelve yards.

I found in town for seventy-five cents a crosslegged table with a plain board top. I used three yards of cretonne for the cover; a square of the material twenty-four inches wide formed the centre; the remaining two and a third yards I cut in three strips of ten inches and ruffled around my centre, this time without a heading.

The work table was two round pieces of wood thirteen inches across the centre fastened to each end of a pole thirty-five inches high—the pole about the thickness of a broom handle. This little table required three and a half yards of cretonne.

We found four bottomless chairs so scratched and stained that it was impossible to do anything with them in that state. We painted them white to match the woodwork, put slats where the seats had been, and then made cushions of the cretonne, ruffling them around with five inch ruffles. If the chairs seem hopeless
cover them entirely with the cretonne. For four chairs with ruffled cushions five yards of material are required.

For the dressing stand we bought eight yards of green cambric, matching in color the paper and cretonne, at ten cents a yard, and twelve yards of dotted swiss at fifteen cents a yard. We put three widths of cambric around the front of the dressing table, without much fullness and opening in the middle so the two shelves beneath would be easy to reach without crumpling our drapery. These shelves, which we had stained to match the floor, were to be used for dresses and shirt waists, as we had no bureau. We used four widths of the swiss over the cambric, fulling it on with a three-quarter inch heading. The table was thirty-three inches high, the top shelf thirty-two inches long and nineteen wide through the centre. The two lower shelves have adjusted to suit your own convenience. From the shelf to the top part of the dressing table is fifty inches, its entire height being six feet eleven inches. Our curtains were one and three-quarters yards long, drape over the green cambric and tied back at the lower shelf with big bows of the swiss; the material left after draping the table was used for ruffling.

Our room by this time was really charming, but we were obliged to acknowledge that our floor looked a little bare without any covering. I found in town a five yard remnant of plain green carpet which harmonized perfectly with the paper and furniture covering. I bought the remnant including the fringe for three dollars. From this I made three rugs, two two yards long, the third one yard. I sewed the fringe across the ends, and used the small rug in front of the washstand.

Unfortunately there was no washstand and very little money left so I drove into the country inquiring from house to house for an old mahogany stand,
which I thought would correspond better with our now really handsome bed. I found it after a long search and bought it for one dollar and twenty-five cents, as one leg was broken and it was sadly out of repair. We treated it as we had treated the bed, and the result was equally satisfactory.

I discovered a really beautiful old samples I had framed for seventy-five cents and hung over the mantel; on it I put a pair of old silver candlesticks, two old time green and white plates and a pair of wide low vases around which twined a vine of raised grape leaves. These mantel ornaments the house contributed and my gift was a low window box which I had filled with pansies for summer and pink primroses for the winter months.

By careful planning and cutting we saved enough cretonne to cover a chubby little old-time rocking chair and at a junk shop I bought a quaint little mirror for forty cents, which, after gilding the frame, was hung on our dainty Swiss dressing table.

Our room was such a success that it has been copied many times; pink roses, nasturtiums, violets and cornflowers (the Delft blues always make an effective room), but none so pretty we think as our original green bower.
O be debarred by sickness or delicate health or any condition which militates against active occupation in the open air, need not necessarily shut one out from the plants possible. It has none of the drawbacks incident to caring for plants in the house, as no matter how much litter one may create there is no muss to clean up, no soiled or water drabbled floors, enjoyment of plant life and a more or less intimate participation in their culture.

There are many forms of plant culture within reach of the invalid’s chair that are full of interest and possibilities. To those who can be wheeled out on pleasant days to a sunny nook or shady corner the sand box offers one of the most fascinating methods of growing nothing but what the good clean earth will absorb and a rake remove.

The sand box is merely a shallow box of any convenient size, filled with clean, white sand—lake sand is best, elevated upon substantial supports to a height convenient for working at when seated in a chair, and placed in a position most favorable for the plants and the worker. A position on the east side of a building
will usually be found preferable as the plants will have the morning sun and be spared the heat of the day, while it will be shady there in the afternoon and at that time the grass will have become dry and warm and safe for the most delicate invalid to tread upon.

Here then in this snug harbor one may plan and work, growing potted bulbs, seedlings, starting cuttings and bringing to perfection all sort of things for winter blooming. Plants plunged into the sand, which is kept constantly wet, have an even temperature and uniform degree of moisture impossible on plant shelves or in the open ground. Cuttings thrust into the sand root quickly and grow rapidly and may be potted off at any time.

Underneath the box will be found room for all the various appliances necessary in the care of plants—empty pots, heaps of potting soil and drainage material; boxes of sphagnum moss, labels, strings, sticks, trowel and the like and everything within easy reach without the necessity of calling on any one to find or assist in procuring what is wanted from operation to operation. Such a box may be established under the protecting roof of a porch or in a vacant room or any available place where fresh air and morning sun is available.

For indoor gardening there is nothing more convenient than a wide shelf which lets down when not in use. This should be as wide as can be reached across easily and as long as the window casing and if the window is an oriole so much the better. It should be supported from above rather than from below as these under supports are liable to be knocked away unexpectedly with disastrous results. The best form of support for this purpose and one which I have had in use for various purposes for several years with entirely satisfactory results, consists of two strips of thin iron or steel long enough to reach from a little forward of the middle of the side of the shelf, to a point on the window casing above and supplied with a hole in one end through which to insert a stout screw, into the side of the window casing, and a slot cut in the opposite end—on the side, to hook over a screwhead on the edge of the shelf.

On this convenient table the window plants may be drawn out to water, inspect and enjoy and here many operations of starting seeds in flats, cuttings in sand and potting off seedlings may be carried on. Many bulbs for summer blooming may be started in moss in grape or tomato baskets, indeed they seem to do exceptionally well when started in moss and the round tomato baskets are ideal for the purpose. Canna roots, Caladium roots, gladiolas and the like may all be handled in this way and in the fall these same baskets may be used for growing the Chinese sacred lily or the crocus which will bloom quite as well in moss as in water. Then the material is so light and clean to handle and a paper spread on the shelf and on the floor will do away with much after cleaning up.

Narrow window boxes which will hold one row of pots make the most attractive form of window gardens for winter as the pots may be lifted and turned daily if desired and when the flowers have faded the pot may be removed and others substituted. All the fine array of winter flowering bulbs may be housed in these boxes and will be far more attractive than if left with the pots exposed. Packing sphagnum moss under and around the pots will serve to maintain a moist atmosphere and will be found a great help in growing plants which do best in a moist atmosphere as the begonia rex and the like.

Outside window boxes will be a constant source of pleasure to the shut-ins if the window screens are arranged to slide up so that their care from the inside is made possible. There is no end to the delightful things which may be grown in window boxes and the flower lover whose garden is restricted to this form
A Window Garden of Ferns and Trailers

of culture is not at all to be pitied as it includes almost everything from a kitchen salad of cress and lettuce, peppers and parsley to pansies at the north and geraniums at the south and west windows.

Hanging baskets—the least available form of gardening for the invalid—may be made accessible by hanging the baskets from a stout cord or wire run over a pulley in the porch or room ceiling and so down to a point on the wall within easy reach of a person seated in a chair. A table or stand on casters should be provided which may be easily rolled underneath the basket and this should be supplied with a drawer containing scissors, trowel, fork or anything likely to be needed in the care of the basket. When the basket is lowered onto this table the care of it may proceed at leisure. If it is a wire basket lined with moss, it may be lowered into a pail of water and the plants groomed while the earth is drinking in the moisture in the pail. Or if an earthen basket it may be lowered into a shallow pan which will receive any surplus water which a thorough watering will produce and a shortening of the supporting cord will elevate it to a position where it will shed all loose drops before being restored to its permanent place above.

The various air plants—orchids, tillandsias and the like—form a most interesting study and their culture involves as little labor as any form of plants grown. Though many of the orchid family are sensitive to conditions and require special green-house culture, there are many forms which may be grown in an ordinary bay window. Our native orchids are so inexpensive that if failure should ensue one would not feel that any special harm had resulted and the pleasure obtained in merely trying to grow them is worth while. One of the prettiest of these is the Epidendrum or butterfly orchid, a delicate flowered plant which produces its many flowered sprays in spring. The blossoms—an inch or more across are in shades of pink, of
chocolate and green and last a long time in perfection. The leaves are thick and leathery and spring from an oblong bulb. The plants may be grown on blocks of wood, on pieces of oak bark, in wire baskets or the ordinary orchid baskets, a little sphagnum moss being supplied for the roots, to work through. These should be suspended against the side of the bay or the window casing and be watered occasionally and that is about all the care they require. When resting after their period of growth little water is required.

The tillandsias, or wild pines, are other native Florida plants of similar culture which have attractive leaf bracts rather than flowers. T.bracteata has crimson leaf bracts and purple flowers and requires only to be kept clean by occasional spraying and to have a little water turned into the leaves which retain it. T.utriculata is the largest native species having leaves two feet or more in length and very long flower stems—sometimes five feet in length, but the flowers are not so handsome as T.bracteata. The Spanish moss so well known belongs to this family of air plants and may be kept in growth in the living room by an occasional shower bath, and as it retains its silvery grey when growing the difference between it and the usual dusty specimens is obvious.

Invaluable advice can be given to property owners by the painter who has been observing and who possesses reliable information in reference to the character of paint that is needed to protect exposed wood and sheet metal work from the ravages of weather and time. There is no better season to bring this information to the attention of property owners than before the winter sets in and while the weather will permit outside work to be done with comfort and safety. Invariably where exterior work, including roofs, gutters, eaves trough and such equipment are to be painted there is necessary also the services of an expert workman to make needed repairs before the painting is done. It is not enough to merely make the inquiry whether painting is needed; it is necessary that the owner be impressed with the importance not only of putting his property in good order, but with the fact that the tradesman has that invaluable knowledge which affords him the best possible qualifications to do the work for the customer so that it will be effective and lasting. This is a matter of confidence, and the man who has the real facts in his possession should be able to so impress his customer as to secure not only the present order but to insure that those in future will be sent to him. Doubtless many men have canvassed for work only to find that their enterprise has driven the customer to protect his interests, but through the agency of some other tradesman who at some earlier period had secured the customer's confidence. This should not be a discouragement, but rather the occasion for that self-preparation which will transfer the confidence from the other tradesmen to himself. It is the ability to do this which brings a larger measure of success to some men than to others, and the cultivation of such an ability should be the ambition of every enterprising tradesman. There is no want of evidence that some of the paints that are used on outdoor work instead of being a protection from the elements are an active agent of destruction. Possessed of these facts as well as information of cases where the right material applied at the right time has prolonged the service of some roofs or gutters within the knowledge of the customer should be very helpful in the canvass for business.

Five Good Reasons for Fall Painting

1. In the fall, the surface is thoroughly dry. During the spring a surface which needs repainting is sure to contain moisture and dampness or frost, and it
cannot be successfully painted until it has thoroughly dried out.

2. When the wood is dry, it absorbs more of the paint; the paint penetrates deeper into the wood, therefore gets a firmer hold on it, giving the paint coating greater tenacity or holding qualities.

3. Paint cannot be as successfully applied in damp, cloudy or unsettled weather as in warm, sunny weather. In the fall the weather is more settled and uniform and is warmer, therefore it is an excellent time for painting.

4. A house needs its protecting coat of paint more in the winter months than at any other time. A house in need of painting should never be allowed to go over the winter without this protection.

5. It is easier to keep the winter's moisture and dampness out by applying a coat of paint in the fall, when the surface is dry, than it is to get moisture or dampness out of the wood if you want to apply a coat of paint in the spring.

Every practical painter ought to know that a house painted in the fall will last longer than one painted in the spring or summer because the paint dries slower, has less tendency to blister, and is less likely to be damaged by flies or gnats. The vines and shrubbery are down, or can be taken down without injury, and all conditions seem to have been just made to fit the painters' requirements.

Curiously enough, a good many people have the idea that spring is the only time to paint, and, if they neglect it one year, will put off the work until next spring. This is one reason that the painting business is so unsatisfactory, and the journeymen find themselves idle for so long a period each year. As a matter of fact good painting can be done at any time of the year—not, perhaps, by the amateur paint spreader—but by the skilled mechanic who knows how to adapt his paint to weather conditions.

But you can't expect the public at large to recognize this fact, unless you make some effort to teach them. Go see the men whose houses need painting; tell them why it will be to their advantage to give you the contract now. Take all the work you can get, even though you cannot finish it before cold weather sets in, and, if necessary, giving a guarantee that you will repaint the work in the spring if it proves unsatisfactory. You can safely do that—no matter if you do the painting in zero weather—provided you will be careful to work only on dry days, and not begin work in the morning until after every sign of dew, dampness or frost has disappeared from the surface, and stop work at night before it begins to grow damp.—Paint and Oil Dealer.
Fireplace Treatments

A Splendid Living Hall with Recessed Fireplace
Design "B 29"
A home of striking originality. The porch balustrade and piers are of a picturesquely rough brick laid with very wide joints. The entire house is shingled with the exception of the central dormer which has a cement and timber treatment. This is just enough to give a pleasant relief.

The entrance is made directly into the living room, there being no hall, the main stairs starting from the end of living room directly opposite entrance. A feature to this room is the large sweeping bay in the front with five windows.

The house is of good size and finished with hardwood, with heating plant would probably cost $6,500.00.

Design "B 30"
Here we have another rectangular design with central hall. The illustration is taken from a photograph showing that the owner used narrow siding for the exterior. The home is of medium size, being practically 34 feet square and permits on the ground floor of a good sized living room and splendid dining room on one side with library, stairway and kitchen on the other. A little beamed ceiling work is used in the hall; just enough to give a pleasing touch to the interior finish.

The second floor gives us a bedroom of exactly the same dimensions in each corner and a splendid bathroom 8x10. There is only limited storage space in the attic, reached by scuttle from the hall. This is a plan recommended for its practical and convenient arrangement. Finished throughout with fir and fir flooring, the estimated cost is $4,700.

Design "B 31"
A design for a full two-story modern house of frame construction, the entire exterior may be shingled. The design is well adapted however to clapboards or drop-siding, as it is called in some localities. The wide porch and overhanging cornice give considerable character to the design.

The floor plan is especially desirable, as it is well arranged and passageway from kitchen to front door is secured without passing through any other rooms. It will be noticed that dining room is placed at front part of house, this position being much favored nowadays. Dining room, living room, kitchen, pantry and all modern conveniences are provided on first floor.

A full basement, hot air heating apparatus, plumbing, etc., are also included.

Finished in pine with yellow pine floors, the estimated cost today is $3,400.

Design "B 32"
Denver, Colo., has set an example to the country in not allowing any homes to be built within the city limits whose outside walls are not of incombustible material. This works some hardships, of course, among those who desire to build cheap homes, but reduces the possibility of one of those horrible holocausts to a minimum. The first design illustrated is that of an attractive Denver home, designed by Fisher & Huntington, architects. The outside walls are of cement and the whole bungalow is designed in the quaint southern style with odd shaped dormers and far projecting eaves. The floor plan shows a very homelike and convenient arrangement. One whole wing of the building is taken up for the beautiful living room, with fireplace at one end. This room is designed for both summer and winter comfort and pleasure.

The arrangement of the bed rooms on the ground floor is very convenient and sensible. All three bed rooms and bath rooms are connected by a separate hall. This is a feature which is often overlooked in the planning of this style of a home, and the value of it is never appreciated fully until one has lived in a home in which this arrangement has not been provided. Even though the loss of space is felt it is always advisable to have the bath room and the bed rooms connected with a common hall so as not to make passage through the living room a necessity. On the second floor of this home are three bed rooms, two for the servants and one for emergency. The inside woodwork is pine stained in dark brown. The fireplace is faced with red tile. The estimated cost being $5,000.00.

The most appropriate colors for the exterior is a tan colored rough cast cement, mission brown trim and dark red stained roof, giving it a very decided southern aspect.

Design "B 33"
Trailing vines have done much to give this pretty little home its picturesque appearance, but they merely enhance the permanent beauty of the home as it is built. This
An All-Shingled House with Rustic Stone Porch

DESIGN "B 29"
Knapp & West, Architects.

A Rectangular House Well Proportioned

DESIGN "B 30"
A Design Popular with Today's Home-Builders

DESIGN "B 31"
is a typical gambrel roofed house and, like all houses of this character, has more room in it than it appears to have. The living room is large and is connected to hall, dining room and kitchen. On the second floor are four chambers, each with two closets. The estimated cost, $2,410 does not provide for heating plant.

**Design "B 32"**

Here is a home with a quiet, restful air about it. View is given from photograph, showing a home with large surrounding grounds. There is a variety in the roof lines and this, with the combination of clapboards and shingle effect and the low sweep of roof on the north, gives a most characteristic individuality to the house. We estimate that it would cost to build, $5,500 to $6,000 today.
A Modest Cottage Home
DESIGN "B 33"
A Home with an Air of Quiet Dignity

DESIGN "B 34"
There is a fascination in seeing the inside of other peoples houses, particularly where taste and the artistic atmosphere prevail. We have examined hundreds of interior views and selected from them 120 of the best, each one of which has some special feature of interest and merit. A group of modern Halls, Stairways, Living Rooms, Dens, Fireplaces, Dining Rooms, Bed Rooms. Be sure to order this book and add to your ideas for interior treatment, style of fireplaces, cozy seats, wall decorations, price $1.00.

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Either Volume With Keith's For One Year $2.00.

MAX L. KEITH, Lumber Exchange Bldg., Minneapolis, Minn.
Getting a Cool Effect in Decoration

Here are certain rooms, suffused with sunshine, in which it seems to be necessary to neutralize the warmth of the light to get any sort of a restful effect. For while some people revel in unlimited sunshine, there are others in whom it produces the effect known as "getting on one's nerves."

The problem more often occurs in the bedrooms. The average detached house has roofed piazzas, on the first floor, on the sunny side of the house, but the continuation of these piazzas on the upper story is seldom practicable or desirable. So the sunshine, broken below by the projecting roofs of the piazza, has full play above.

Manifestly yellow, red and all the golden brown tones are out of the question. There remain blue, violet, gray, and green, which seems to be as nearly the via media in decoration as anything.

Unhappily for the amateur, neither of these colors, if we except green, is particularly easy to manage. When blue is in question, nine rooms out of ten are hideous failures, as it seems to require a specially trained eye to distinguish the different tones.

The Use of a Child's Paint Box

In working out any color scheme, it is a great help to experiment with a box of watercolors till you get a tone of color which pleases you. You may evolve the tone from your own consciousness, or you may approximate it as nearly as possible to a tone already existing, in china or wall paper. In a blue scheme the ordinary blue Japanese china is a good guide, as the tone is a medium one, and the color of such purity that it is unchanged by artificial light.

Having chosen the foundation tone, get the modifications, mixing it with black for darker shades, with white for lighter ones. On a long strip of watercolor paper, paint a band of each shade you make, securing a gamut of color, and shop with this in hand. You will find your choice sensibly restricted by its use, but you will have the satisfaction of knowing that there are no jarring notes in your composition.

A Typical Blue Room

When you choose blue for a bedroom scheme, resist the temptation to have a brass bedstead. Save that for the room on the shady side of the house, where you have a chintz with all the colors of the rainbow, and are trying to create an effect of modest splendor. That and your gilt picture frames and your brass andirons will be perfectly happy there, but are wofully out of place in company with the most austere color in the spectrum.

Our blue room will have white woodwork and some sort of a wainscoted effect. This may be a paneled one painted white, or it may be of blue cartridge paper, laid to a height of five feet, and finished with a molding of some sort with a projecting ledge, what they call a card rack at the mill.

The character of the paper above the wainscoting must depend somewhat upon the things in the room. If the room is a bedroom and no more, pictures and ornaments may well be confined to the wainscoted space, in this case covering two-thirds of the wall. Then above lay a blue and white paper, of bold design, one in which the structural lines are well concealed. The ideal thing is one of the Morris papers, whose tones can be matched in a reversible cretonne, for hangings and covers.

If, on the other hand, many pictures and much bric-a-brac must find places, it is well to use an upper paper of incon-
Decoration and Furnishing—Continued

spicuous pattern, not very much lighter than the lower wall, carrying it well below the eye line. With a white wainscoting, a striped paper looks well, and there are numerous small designs in two shades of blue. A blue and white paper, no matter how small the design, is a poor background.

There are worse things for a blue room than a white matting, but the blue and white ones are hopeless, and so are the blue grass mattings. It is possible to stain a white matting blue, but there is such a thing as having too much unrelied blue. The most satisfactory thing is a dark polished floor, with blue and white rag rugs. These should be woven to order, from new rags of the exact tone of the room. A less expensive treatment is to have a made rug of plain blue terry carpeting, with hemmed ends, stretching it with rug fasteners sewed to the under side. Or a soiled light-colored moquette or velvet carpet can be dyed to any given shade. Most of the Japanese cotton rugs are out of harmony with any but Oriental blues. Very occasionally one finds a Turkish or Persian rug which fits into a blue scheme, but always in combination with other colors, rose or yellow in the Cashmere rugs, red or orange in the Turkish ones. If it seems desirable to use such a rug, the blue of the room must be kept to dark and medium shades.

The curtains are an efficient help in modifying the light. Use thin curtains next the pane and heavy ones hanging straight to the floor. If the windows are low and recessed, dispense with the thin curtains and have sill length hangings of raw silk, linen or cotton, in plain blue. As a compromise, colored Madras is excellent for such windows. Or unbleached muslin, of sleeky texture, can be hemstitched and dyed.

White Enameled Furniture

The best choice for the blue bedroom is white enameled furniture, unless the wainscoting is white. In that case mahogany is a better choice, as white does not look well against white. But it is well to have the wood of the furniture show as little as possible. Have a large patterned cretonne in blue and white.
Decoration and Furnishing—Continued

for bedspread, couch cover, table covers and scarfs for bureau and chiffonier. Among the pillows have some covered with plain blue, to give the eye relief from so much pattern.

Requiring Courage

It requires a certain amount of courage to attempt it, but the combination of black enameled furniture with medium shades of not too bright blue is most effective. If you doubt it, try the effect of a blue and white bowl or jar against a piece of black satin. Not all the furniture should be black. The bed and some of the chairs, as well as the woodwork of the room, should be white, but have a high chest of drawers, a dressing table, a round table and one chair of polished black. Have blue china and wrought iron candlesticks for dressing table and chimney piece and avoid anything fluffy or fanciful, in color or outline, and you will have an effective interior and one quite out of the common.

Blue and Green

Blue and green is another good combination for a very sunny room, best for a living room or for a man’s bedroom. The green should be confined to the woodwork and the furniture, and it should be rather lighter than the ordinary forest green, while the blue should have a grayish tone, something like the blue of Canton china. It is easy to find good combinations of blue and green in wall papers and in cretonnes and tapistries, while a green rug is always attainable.

The combination of blue and green has this advantage, that it can be used in combination with golden oak, which is generally hopelessly ugly, but gains considerable dignity from the association. In this case the green should predominate, the blue being merely an accessory, while the furniture and woodwork are oak. Not that, with all one’s skill, it is as satisfactory as the room whose contents are uncompromisingly confined to the two colors.

Novelties in Screens

Effective screens have panels of solid wood at the top of each fold, with large holes bored to form a geometrical pattern. The body of the screen is covered with red or green burlap, the finish

USES 60% LESS FUEL — Gives 4 times the Heat

(only 15% wasted) by the Guaranteed, Ventilating, Economical and Handsome

Aldine Fireplace

the only genuine and practical return draft base burning open fireplace.

It gives four times the heat of any other fireplace, because it has no direct connection with the chimney; all the gases of combustion having to pass downward through the back of the grate underneath and up on the opposite side before reaching the chimney, thus utilizing 85% of the heat to thoroughly heat the surface of the grate, which radiates the heat out into the room, and where the grate is piped to adjoining rooms, to those rooms also. All other grates being directly connected with the chimney and depending on the suction of the chimney flute to give life to the fire, lose 85% of the heat up the chimney, just in proportion to the suction and the force with which the fire burns.

The Aldine requires 3/6 scuttle of hard coal each 12 hours. The patent wheel shaker makes it impossible to shake out anything but ashes and fine particles, which are of no benefit to the fire, leaving all the good fuel to be entirely consumed.

It can be set with less trouble than any other grate, because it is built in one piece like a stove and needs simply to be set into the opening of the chimney, and connected with the line by a short piece of stove pipe. Any stove man can do it or you can set it yourself.

PERFECT VENTILATION. The Aldine draws the cold air from the floor, purifies it and returns it even to the furthest corner of the room.

ECONOMY. Saves 60% of fuel (Burns hard or soft coal, gas, coke). Saves the use of the furnace, etc., six weeks in the fall and spring, almost enough to pay for the Aldine; can also be used in connection with furnace in very cold weather, the fuel used in the Aldine is more than saved from the furnace. By using our "top damper" attachment ordinary furnace heating pipes may be run to one, two or three other rooms to heat them in mild weather and to heat one extra room in the coldest weather.

Aldines are made in seven different designs finished in copper, brass and black, or in special finishes to match hardware trimmings in the house. 45,000 of the Aldine Fireplaces now in use—in almost every home in the United States. You must get our booklet to know the latest and greatest progress in fireplaces, and should see our big grate and mantel portfolio at dealers stores. Beware of imitations—there is only one Aldine, and that is guaranteed by us. Write today for booklet, etc., and give us a chance to prove to you that we will make you this saving in fuel and heat.

RATHBONE & PANIGOT CO.
(Successors to Aldine Grate & Mantel Co.)
56 Clyde Park Ave., Grand Rapids, Mich.
Decoration and Furnishing — Continued

weathered oak. Other screens have panels of pyrography let in at the top of each fold, the whole screen being of solid oak, fumed.

For seventy-five dollars are leather screens, for library or dining room, the whole surface of the screen painted to represent a vista of forest trees. The panels are high and wide and the frame is entirely concealed by the leather, which is secured by large nails set in the edge of the screen.

Printed Velvets

A sumptuous covering, used with gilded furniture, is a velvet of smooth surface and high lustre, printed in elaborate designs, in self color. It is most effective in red, shading from old rose to crimson. It is distinctly a full dress material, while the dull surfaced Liberty and Morris velvets are adapted to every day use.

Glazed Chintzes

For delicate bedroom furnishings, the old-fashioned glazed chintzes are popular. The floral designs have the finish of paintings, against the dead white of the ground, and are delightfully quaint, combining all sorts of old-fashioned flowers. Others show all over designs of green foliage, still others a pattern of festooned bow-knots. They are not exactly cheap, a dollar and a dollar and a quarter a yard, thirty inches wide. They do not get as dirty as goods with a softer surface, and can be dry cleaned, or sponged off with gasoline.

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"New Jersey"—I came to you for advice in the spring and it has been of great help. I want to ask your help again.

Our living room, 15x24, has beamed ceiling and a cobble-stone fireplace reaching to ceiling. Southwest exposure. The cypress woodwork has been stained brown to match the beams, and the furniture, as you suggested, is of fumed oak, mission style. The oriental rugs have blue predominant. Ecru curtains at casement windows. What I want to ask is, what color to have above plate-rail. The wall is now a grayish tan, above a faint buff. I believe I need a more decided coloring somewhere and have thought that a canary color above rail might help matters.

In the library adjoining would I be safe in having a Yale blue in cushions and could I have rough brick fireplace painted buff color? There is also a large blue oriental rug there and fumed oak furniture.

It is a very difficult set of rooms to furnish. I also have roomy wicker chairs and copper electric fixtures, blue and gold portieres, brass lamp (Damascene).

Ans.—Beginning with the library—pale blue does not seem appropriate with fumed oak and mission furniture in a library. We should advise confining the blue furnishings to the living room and let it be a rich, strong blue rather than pale. It is not necessary that the pillows, chair covers, portieres, etc., should all be the same exact shade of this blue; they may differ in strength, but they must harmonize. For instance, you cannot use a peacock blue with a purplish or navy blue or French blue. The wicker chairs could have seat cushions of blue, and so be brought into harmony. With these rich tones of blue, your wall of grayish tan is an excellent background, only have it the same above as below the plate rail. Probably one of the oriental rugs has a good deal of soft old red combined with the blue. If so, use that one in the library and emphasize the old red in cushions, chair covers, etc., painting the fireplace brick a warm, dull red. Your black and gold Japanese screen and Damascene brass lamp will be fine notes of color.

E. F. J., Alameda, Cal. I am building a small bungalow in the country near Sacramento. The inside finish is of redwood or spruce. Outside green with white trimmings. Shall I finish the inside work in natural finish or paint it? If painted, what color, and how shall the walls and ceiling be papered? The whole inside will be lined with T. & G. ceiling building paper pasted on, and afterward the fancy or outside paper. The finishing inside will be plain—no mouldings. Shelves for books. Window seats and plate rails, all plain picture mouliding.

Ans.—If redwood be used for inside work we should advise finishing natural for the living rooms, only deepening the natural pinkish red of the wood slightly with stain in those portions that have a faded, yellowish look. If spruce be used, we should apply a brown stain before varnishing or waxing. As to the papers for the walls, plain colors in the rough surfaced, imported Duplex papers are best adapted to the living rooms of a house in bungalow style. More fanciful papers may be used on the bedroom walls and the woodwork painted white or light gray.

J. G. B.—In the April number, 1907, of your magazine, page 229, is given a decorative treatment for a dining room. I have a large living hall, English style, with beam ceiling, walls wood paneled to tops of doors, inglenook, fireplace and broad stairway. Woodwork stained dark brown and rubbed a dull finish. Do you think this same frieze would be appropriate for this room? Is it paper or was it hand work? If the former, will you kindly give me the manufacturer's name? I have enjoyed your magazine very much—got some good ideas for my home.

Ans.—The frieze would be entirely appropriate for the living hall you describe.
Answers to Questions—Continued

It is a paper frieze, but I cannot give you the name of the manufacturer of that particular decoration. Similar landscape friezes are to be had at the best decorating establishments in the large cities. They have several times been described and illustrated in Keith's Magazine. A frieze decoration called "The Elms" was illustrated in the October, 1907, number, which would be well adapted to your hall.

Mrs. L. L. D.—I am a subscriber to "Journal of Modern Construction" and preparing to build a house. The house will be of pine finish, perhaps maple floors for hall and living room. I would like to ask what finish would be desirable for dining room, living room and hall. Color scheme of wall paper and rugs. I want beamed ceilings.

Ans.—There are several stains adapted to pine woodwork for interiors. The light brown weathered is satisfactory generally. Also a greenish stain, which might be pleasing in the dining room. These stains are for inexpensive houses and only one coat is needed to stain and finish. Should you use the dull green stain for dining room, then the brown weathered for living room and hall would be a good choice. If the dining room has a warm, sunny outlook, then use cool greens and white; but if a north or east facing, then soft yellows and tans. It is impossible to tell you just what to use with so little to go by. As to choice of paint or varnish finish, those suggested are preferable for lower floor, but white paint is a good choice for upper floor.

J. N. R.—We have a brand new eight-room bungalow to furnish, and we want some specific information from your bureau regarding it. The woodwork in the dining room is green, in the den adjoining the woodwork is already painted white. In the halls it is stained a cherry—in the library weathered oak. Now, we had thought of green and buff paper for dining room, something to harmonize in den. Had thought of blue paper for living room and tan or brown for library. We have weathered oak mission furniture in living room and want to know if we should buy a mantel to match. Also if we should buy a green mantel for dining room. Want mantel also for den.

Ans.—It is rather a pity for so many different wood finishes to be employed in the interior of a small house. The best that can be done to bring the rooms into some sort of relation to each other is to treat dining room and den together, and library and living room. In the case of the two last named, the weathered oak finish and furnishing helps to unify this part of the house, and it is advised to treat the walls of both rooms with either a golden brown or soft tan, carrying brown shades into the rugs and the furnishings of the library, and using blue only in the accessories of the living room. For the dining room use plain green burlap or crash or a metalized Japanese paper below plate rail, and a blue and green foliage or mixed design above with white ceiling. The den adjoining, with its white woodwork, is better suited to the uses of a music room, and a rather delicate paper—white ground with scattered, stiff little bouquets of green leaves, pink and yellow roses, with a mossy green rug and wicker furniture—chairs, settee, etc., cushioned in flowered chintz. The wall paper in hall best be in gray tones, which will go well with the cherry woodwork and be inoffensive with the other rooms.

R. R. H.—Kindly advise regarding interior as follows: Living room, 13x22. South, west and north exposure; height 8½ feet. Opens off small hall with south exposure. I wish the scheme of color to be as light as is consistent with good taste and general effect. Had thought of white or cream woodwork with light green walls. In that case would beamed ceilings look out of harmony? If not should they also be white, and what be used for contrasting paneling? Should hall also be finished in white? Is a gambrel roof suitable for a bungalow? Will greatly appreciate any suggestion. The house is a modest little country bungalow.

Ans.—For the simple bungalow described we should advise brown stained woodwork rather than white, especially if a beamed ceiling is used. Very light gray walls, with a white ceiling between the beams will give the light color scheme desired; at the same time the brown woodwork will give more character. The rugs, draperies and furnishings may then have a uniform color tone of soft green. In any case the ceiling beams must correspond with the standing woodwork. Yes, the hall should have the same finish. A gambrel roof is not at all in harmony with the bungalow idea.
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A Plea for Solitude

E Americans are certainly gregarious. Where the foreigner has a closable door to every room and keeps it shut, we are quite satisfied with the nominal privacy of portieres. The European deems a garden wall, or at least a hedge, necessary for his comfort, while nothing but a stone coping separates our lawns from the street. How much of this is due to the national character and how much to environment is a debatable question, but there is very little doubt that our aversion to privacy may be carried too far.

For, after all, one must occasionally possess his soul, and solitude, at least relative, is a necessity to the process. The why and the wherefore of the need of solitude belong to psychology, just as the reasons for the need of food and rest are the province of science, but it is a part of the duty of the housewife to provide opportunities for a certain amount of isolation, just as she superintends the preparation of food and the making of beds.

The house which has one living room, however luxurious it may be, and all of whose bedrooms have two or three occupants, is not favorable to mental or spiritual growth. Unless its occupants are unusually stolid, it is a mighty good place in which to cultivate the bacillus of nervous prostration. The essential lack of privacy is one of the best arguments against life in our larger cities, where all but the rich must hive in apartments.

The matter of space for the individual, rather than for the whole family, is one that ought to engage the attention of people who are building houses in which they expect to live for a number of years. Far better to sacrifice ground space and make the living rooms smaller, putting on an extra story for bedrooms, so that each child can have a room to himself, in which he is undisputed master of himself and his possessions, than to pursue the usual plan of few and large rooms. A survey of the average detached suburban house makes one sigh for the old-fashioned brick house in a city block, with its twelve rooms, its permanent doors, even its basement dining room.

It may be asked what possible connection exists between household economics and the needs of the individual for intellectual and moral development. On the surface, none, but the mental and moral states of each individual in the family react upon the whole and influence the general condition. Whatever improves the one improves the other.

The Value of Fruit as Food

A pamphlet, published by the Department of Agriculture, gives an exhaustive description of the various fruits, native and exotic, with tables showing their relative value as foods. Ten cents expended for apples, plums, dates, prunes, or raisins, or in apple butter, will supply about twice the amount of energy secured by the same sum spent for porterhouse steak, leg of mutton, whole or skim milk. The table shows that the dried fruits are the cheapest of the fruit products, the fruit juices being the most expensive. Of the ordinary fruits, apples supply the most energy, with plums a close second.

Apropos of recent experiments and of much discussion, the official decision as to a diet composed exclusively of fruits and nuts is of interest. From the data collected from various sources, the conclusion is drawn that while life may be supported for long periods of time upon fruit and nuts, without sensible loss of energy, yet the investigations are incom-
Household Economics—Continued

plete upon such points as resistance to disease and hardship and the probable effect upon the children of those living upon this diet. The consensus of physiological opinion is stated to be that for the average individual and circumstances the ordinary mixed diet is preferable. The various experiments, however, have established the fact that fruits and nuts are to be regarded not as mere accessories but as an economical source of nutritive material.

When, for special reasons and limited periods, the diet is limited to fruits and nuts, stress is laid upon the importance of varying it. The weak point of all special diets is their monotony, and this is more noticeable and objectionable with a vegetarian diet than with one containing flesh foods.

Farmers' Bulletins

Not everyone is aware of the extent to which the United States Department of Agriculture publishes. It has in print over two hundred bulletins, embodying the latest information upon the various subjects of practical interest to the farmer and to the housewife. Some of the subjects are: "Weeds and How to Kill Them," "Meats, Composition and Cooking," "Facts About Milk," "Some Common Birds," "Milk as Food," "Fish as Food," "Insect Enemies of Shade Trees," "Bread and Bread Making," "Eggs and Their Uses as Food," " Beautifying the Home Grounds," "The School Garden," "The Home Vegetable Garden."

Any of these bulletins will be sent free, on application directly to the Department of Agriculture, or through one's own Congressman. The style is simple and the information conveyed accurate and up to date.

Crusty Pie Dishes

In the importations of French stone ware, are square pie dishes, so deep as to be nearly cubical, intended to give the very largest area of crust to a given amount of filling. They come in several sizes, the largest about seven inches square, and are intended for meat pies.

Piecrust Tables

The piecrust table dates back to the eighteenth century, but its connection
with piecrust is only a suggestive one. The name is derived from the ledge of wood surrounding the circular top of the table, designed to prevent things set upon it from falling off. Reproductions are to be had in the shops devoted to such things. They are small, not more than eighteen inches in diameter, and except for the ledge almost exactly like the common light stand, except that the top is stationary, instead of tilting.

The Savory Pastry

As a change from the everlasting fried, roasted and boiled, try a meat pie. The crust should be piecrust, not a biscuit dough, and well shortened, with equal parts of lard and butter. It should line the walls and cover the top of the dish, but a bottom crust is sure to be sodden.

The easiest way of making it is to use the odds and ends of a cold roast, slicing the meat very thin, rejecting all the fat. Then arrange it in the crust-lined dish, with alternate layers of very thinly sliced cold boiled potatoes, sprinkling each layer with salt, pepper and bits of butter. Cover the pie, cut a hole in the center and pour in a cupful of gravy. If you have no gravy, use half a can of prepared soup, preferably consomme. The prepared soups, sold for ten cents a can, are excellent for meat jellies or for improvising gravies. Consomme, mock turtle, ox tail, or Mulligatawney, are all available for the purpose.

For a richer pie, one prepares the filling the day before, by stewing together two pounds of flank steak, a pound and a half of stewing veal and a small piece of lean ham, with salt, pepper and a couple of sliced onions, and the layers of potato are omitted. A dozen oysters arranged on top, just under the crust, are a piquant addition, and the pie is equally good, cold or hot.

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A Simple Menu for the Christmas Dinner

For the maidless household, unless it is largely or entirely grown up, the getting of the holiday meals is something of a bondage. Yet we must eat and tradition demands some sort of a feast on Christmas. It is possible to achieve a dinner which need not be unduly burdensome, being largely made ready the day before, and leaving ample time for church going and for merrymaking.

The soup, and a very good one it is, is made the day before by simmering a pound of flank steak, cut into bits an inch square, in a quart of water, with an onion, pepper and salt and a bay leaf. Let it cook all the afternoon on the side of the range covered closely in an earthen pipkin. Strain it, cool it and remove the fat. A little before serving add a small can of tomato soup and bring it to the boil. Serve with hot wafers and pass grated cheese.

For the traditional roast turkey substitute a boiled one which will cook itself, once it is in the kettle. Boil the giblets the day before, chop them fine and save the liquor in which they were cooked. Thicken it with butter and flour, browning the butter, add the chopped giblets and half a small can of mushrooms and simmer twenty minutes. When needed re-heat.

For vegetables have boiled onions, or cauliflower, in a cream sauce, either of which can be prepared the day before and warmed up, spaghetti with cheese, also prepared the day before, except for browning the cheese, and celery, with olives and currant jelly. If a salad course is desired plain lettuce with a bowl of mayonnaise dressing is good and easy.

Plum pudding and its sauce may be made days beforehand. A substitute is made with a pint of milk, four eggs, a little salt, four tablespoonsful of dark brown sugar, six tablespoonsful of cocoa or grated chocolate, a cup of raisins, one of currants, and half a cup of citron and a flavoring of brandy, steamed in a round mould and turned out when cold. It is very rich and solid and perhaps a trifle more digestible than a real plum pudding.

In addition to its being an agreeable variation from the customary roast, a boiled turkey has a peculiar and delicate flavor of its own. The liquor in which it is boiled supplies an admirable soup, and the remains of the bird itself a salad.

Laurel and Poinsettias

An effective and not expensive decoration for the Christmas dining room is made by festooning the walls with laurel, covering the over-mantel space with a solid panel of greenery, for which whole boughs should be used. In the middle of the shelf set a tall flower holder filled with scarlet poinsettas. If real ones are to be had, so much the better. If not, get a piece of the well known poinsettia wall paper and cut out the requisite number of blossoms, coating the backs with photo paste and bending the petals naturally while the paste is still damp, so that they will dry in the curves. Attach them to long stems of green wire and let them rise from an abundance of natural leaves.

These same poinsettas mounted on
bristol board make effective place cards for a large dinner table, though rather overpowering for a table for four or six.

**Red for the Christmas Table**

Scarlet seems to be the most appropriate color for Christmas table decorations. One pretty way to introduce it is to serve the salad in large red apples, cutting a slice off the top and scooping out the pulp. Fill the shells with a mixture of diced apple, celery, nuts and mayonnaise and cover with the cut off slice.

These same apple cups are pretty for a first course of grape fruit and candied cherries, or for ices.

**The Use of Uncooked Cereals**

The uncooked cereals are so nutritious and economical that it is a pity so many people dislike them. The aversion to them seems to be to their texture rather than to their taste. There are ways of overcoming this objection.

When used for breakfast, their grittiness can usually be neutralized by letting them soak in milk or cream for ten minutes before serving. This course, to be sure, subtracts something from the advantage claimed for them that they compel thorough mastication, but half a loaf is better than no bread. This loss is balanced by the fact that with the soaking process more milk is absorbed than when the cereal is eaten in its crisp state.

Another modification, this most practicable with shredded wheat or Apitezo, consists in heating the cereal and pouring over it some sort of a sauce, toast cream, meat gravy, or melted cheese. A mixture of tomatoes, cheese and eggs is very good, so is a highly flavored meat soup.

Still another way is to use the cereal as a foundation for individual moulds of jelly or blanc mange, laying a biscuit in a buttered mould and pouring the liquid over it boiling hot.

As a top layer for scalloped oysters, or any of the numerous things served au gratin, uncooked cereal rolled fine and sifted, is far better than cracker crumbs, giving a delightfully crisp crust when browned.

**Composite Christmas Gifts**

It seems a pity that the members of a family do not more often combine their resources at Christmas time, and buy some large article really worth having, instead of a multitude of trifles. Especially is this so in the case of the housemother, who is apt to prefer something for the house or the table, rather than for personal use.

Here are some suggestions for united offerings, which someone may find helpful: a dozen, or half dozen fingerbowls, of French or Bohemian crystal, engraved with the recipient's initial, in the new fashion of having the letters run up and down and intersecting each other; a salted almond dish of china, in an irregular hexagon shape, with smaller individual dishes. These can be used for olives, as well; a chop, salad, or fish set, to which each giver contributes a plate, the cost of the platter being divided equally among all; a set of wine glasses, those of each sort being given by one individual. There is a very considerable saving in purchasing the glass which comes in sets: matching cruets for vinegar and oil, with a tray of glass fitted to them and salad plates of glass: a table set of heavy linen, center and doilies, with scalloped edges and initials, each giver adding her own initials to the pieces she embroiders.

Another pretty fancy is for the members of the family to collect all their old gold and silver, exchange the gold for its equivalent in silver, and have the whole melted up and fashioned by the silversmith into a single article, a pitcher, a sugar bowl, or a ladle. Such an article has a sentimental value far above its weight or artistic beauty.
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Splinters and Shavings

Modern Wall Covering

CUSTODIANS of office buildings as well as of large public buildings in the past have been obliged to use a large amount of labor in washing off old tinting materials from walls before new could be applied.

This expense of labor is a considerable item.

There is also involved much discomfort to the occupant of the office and much annoyance to every one concerned.

Now that a material can be secured for tinting walls that does not require washing off, and of which an infinite number of coats can be added—one over the other, with no trouble and no embarrassment to the preceding coat, it is fair to assume that all persons concerned in this kind of work will be very glad to take advantage of and use of such a material.

The alabastined wall is not only a wall that never requires washing, but it never rubs off, checks nor peels. It can always be recoated with little labor and no expense for washing, which is a valuable consideration.

Writing concerning this, the custodian of the Continental Trust building, of Baltimore, Md., says:

"We are pleased to advise you that cold water Alabastine meets all that is required of it to keep the offices, halls, etc., in the Continental Trust building in perfect and sanitary condition. We find that after using it for several years, we can safely say that it is as represented in every particular.

"We have recoated our walls several times without any appearance of its scaling off. We are pleased to recommend it to any one who may have use for an article of this kind."

Saving the Forests

ONE of the most important economic movements of the day about which the general public has yet learned little is the concerted action of owners of timber in different parts of the country in organizing associations to protect their holdings from fire. In the Pacific Northwest, the Washington Forest Fire Association has just elected officers at Seattle and begun work for the year with 3,000,000 acres under its care. The plans include a system of patrol by rangers resembling the work done by the United States Forest Service in guarding against and extinguishing fires.

Organizations of similar kind and for a like purpose are at work in Oregon and Idaho. In the latter state, a portion of the expense is borne by taxation and paid from the state treasury. A western railroad company which holds large tracts of timber has taken steps to guard its property from fire, and during the short time that its plans have been in operation, it has met with encouraging success.

Similar work is being done on the other side of the continent. Forest owners in Maine have gone to work in the same systematic way to control the forests' great enemy, fire. Like organizations are found in other parts of the country, showing how fully it is now realized that protection against fire is of the greatest importance.

It is safe to say that fires in this country have destroyed more timber than lumbermen have cut. When timber was abundant, the waste passed almost unnoticed, but now that a scarcity is at hand and an actual wood famine threatens in the near future, the owners of forest lands are waking up and taking action to save what is left.

The Passing of the "Parlor"

ONE of the welcome changes during recent years," said a noted decorator, "is the passing of the parlor. In times past no home was complete without this prim, chill place. It consisted of stiff furniture that was rarely used, pictures that were seldom seen and an atmosphere that was conducive to discomfort and discouraging to hospitality. To be invited to go into the parlor was to be bidden into a grim chamber where formality reigned and wherein no one would care to linger long. It was to label the caller 'company.' Instead of this nightmare we have now the reception room or the living room.

"Instead of putting a room into cold storage for special occasions, the plan is
Splinters and Shavings—Continued

to make the entire home cheerful and warm with life. If the visitor is shown into the living room he sees a place bearing the marks of use, enjoyment, comfort, human presence. It is not terrifying in its preciseness. On the other hand, its certain amount of disorder gives it charm and the touch of life. At once the visitor is put at ease by his environment. And as for the members of the household, they do not, as they did before, walk on tiptoe, speak in whispers, and move in dread, nor spend their time in out of the way quarters of the house. They have the use of an attractive room themselves, and thus their home is made more pleasant for them. A home ought to be more attractive to the persons living in it than to anyone else. That is the essence of the home idea.

“Comfort — ‘Liveableness’ — taste — these are the great qualities desired in a home. They are opposed to the ‘parlor’ and the ‘parlor’s’ thousand and one knick-knacks, gewgaws, vases and thingum-dodgers, massed in studied profusion and wearing a forbidden aspect. They are found in the simply furnished living room. Now that the ‘parlor’ is going, let us pray that it will be soon wholly gone, and, gone, that it will stay away. Its departure indicates the ascendancy of good sense and an improvement in the art of living.”—Furniture.

Hanging Japanese Leather

Japanese leather, like ordinary pressed or embossed paper, can't be satisfactorily laid on hard walls without they are first lined with brown paper, which gives the paste an absorbent surface and a surface to stick to. Use ordinary wheat flour for the lining paper, but for the Japanese leather paper, as well as for all the heavy papers, use a stiffer paste, which sets quicker, and lessens the risk of soaking into and softening the relief work and in-

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Splinters and Shavings—Continued

...juring the colors. Carefully trim each piece of Japanese paper with the knife and by the straight edge. Apply the paste quickly and get the paper onto the wall as soon as you can. When you have the paper in its place on the wall, go over it with a very soft brush, though some think that even a soft brush is wrong, and that the fingers only should be used. When the paper has become very nearly dry, go over the seams with the seam roller, very carefully. Be very careful not to stretch the paper while it is wet. Remove at once any paste that may press out from the seams.

Cleansing Brick Fronts of Smoke Stains

It very often happens that the brickwork of a building is stained with smoke from fire, and the question naturally arises as to the best method of cleansing the brick so that it will appear as much as possible like the original. A question of this character came up recently, to which the following method was suggested:

To 1 gallon of good soap, not too watery, add 2 pounds of powdered pumice, 00 or F., and 1 pint of liquid ammonia. The article sold as household ammonia will answer, though it will be all the more effective if a little stronger. First remove as much of the soot and dust as possible with a stiff broom or fiber brush, then apply the soap and ammonia mixture with an ordinary fiber wall brush or common whitewash dip, let it remain for about 20 to 30 minutes, then with a good scrubbing brush rub it briskly dipping the brush into clear water once in a while. Have a few pails of clear water handy and a large carriage sponge to go over the scrubbed surface and finally rinse with clear water. If convenient, use a hose with spray nozzle for rinsing. This will remove the most stubborn case of staining from fire and smoke.

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“Mr. Edison’s announcement, while paralyzing the building trades, has stimulated activity in other quarters. “The more extravagant party in the London County Council talk of laying liquid cement mains in suburban London. It would be a great boon, they argue, to the rate-payer to be able to turn
Splinters and Shavings—Continued

on the cement, just as nowadays he turns on the water for the garden hose. If unexpected guests come, for whom there is no room in the house, if a fowl house or dog kennel should be required, if the householder has ambitions towards a billiard room, if a porch or conservatory, or even a summer house, should need to be built, if the roof begins to leak in a storm, or (as in some cases it has done) becomes restless, if the garden wall must be raised to keep next-door from staring—in fifty different emergencies a ratepayer would find an ever-ready supply of liquid cement most useful. All he would have to do would be to send down to the local ironmonger for the molds, stick them up, and then leave the tap running into them, with perhaps the youngest boy to keep an eye on it.

“We would like to suggest that the cement tap ought to be colored red, so that it be not confused with the water tap.

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Mr. Max L. Keith,

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MAX L. KEITH, Publisher, MINNEAPOLIS

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### SPECIAL SUBJECTS IN BUILDING AND DECORATING

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MAX L. KEITH, Publisher, MINNEAPOLIS

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