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ONE'S first impressions of places or people are usually clearer, better defined, than after familiarity has accustomed us to the strange or unusual. My first impression on returning to California was the increased number of little cottages—small, box-like structures with the inevitable awkward hip roof, that besprinkled not only the new "subdivisions" but the older streets. They seemed to have sprung up like mushrooms everywhere.

This is a natural enough consequence of course of the flood of health seekers pouring into the southwest, most of them people of small means. Such semi-tent like structures are possible in a kindly climate where foundations and furnaces are not imperative.

Now even a one story box cottage with
a hip roof, the whole thing about 14 ft. square, may be so covered up and embowered in rose vines and shrubbery as to be pleasant to look upon, and some of them do display a certain amount of taste. But many more just squat forlornly in the center of a "lot," with nothing but hard lumps of earth around them or perhaps an embryo fan palm—for all the world like a bunch of brooms on end—in the middle of the bareness.

My next impression was of the increasing use of distinctly Eastern types, among the more pretentious houses, and the apparent decay of the Mission or distinctive California type.

This Mission influence which once pervaded almost every structure, public or private, now seems retired to the background, and the new homes are more often stone and shingle or timber combinations than plaster or concrete. This is by no means universally the case, but enough so to arrest the attention.

It seems a pity; for the stone and timber combinations, the great, sheltering roofs which are so fitting to their eastern environment are less in harmony with this warmth and glow, than the broad simple masses, plain wall surfaces and low lines of the plaster houses. Their color tone, too, of deep cream or warm grey has a quality which is in harmony with the ardent atmosphere.

But our business is to record things as they are; a pleasing task indeed as will be seen from the interesting examples here presented of new homes in California. Unquestionably here is a most satisfactory eastern type of house, one that might be built upon a handsome street with well kept lawn anywhere from Maine to Minnesota. Nothing betrays its location but the drooping branches of pepper trees and the palms just starting on the lawn. This beautiful home, completed within the year, is the work of Messrs. Hunt and Grey, noted Los Angeles architects, with more than a local reputation.

Here is a well marked type of English domestic architecture adapted to a shingle treatment. It is true that its English pro-
The prototype would commonly be of brick, but the shingle treatment is charming. The whole exterior is a mass of soft greyish-brown tones, the wall shingle merely brushed with oil and the roof left to weather. Even the window and door framing are a somewhat deeper brown.

It is in fact noticeable, that so many of the handsome new homes and the smaller but artistic ones are self-toned masses of soft brown color. Even the contrast of stone with wood seems to be less sought for.

Here is a beautiful home just completed in Santa Ana, the principal town in Orange Co., Calif. Its owner, Mr. G. H. Hull, brought with him recollections of a house that had taken his fancy in Colorado Springs, Neb., and embodied them here. Certainly the protecting sweep of the home-like gambrel roof gathering all the inmates snugly beneath its shelter, takes our thoughts at once to eastern prototypes. The solid masonry of the porch parapet and tall columns strengthen this impression, built as it is of clinker brick burned a dark purplish red, thickly embedded in a dark grey mortar. The resulting color effect tones in admirably with the weathered brown of both wall and roof shingle, all the trim being painted the same color. Any somberness is relieved by the wide dormer, which breaks so admirably into the roofside, and is of rough cast plaster with timber ornamentation. The enclosed space filled with flowers and vines lends charm to the dwelling. The rather severe outlines are broken by many groups of small-paned windows and further color relief afforded by the deep orange tone of the Oregon pine which is used to face the under side of the roof cornices and to ceil the porch. An interesting bit of detail is the wood ornamentation applied on the front face of the porch columns at the top. A magnifying glass will reveal it in the picture. A Maltese cross of light colored and highly polished wood is partly embedded in the brick and mortar.

Another piece of detail is the hardware used on the front door of quartered, polished oak. This is of verde copper, the door handle set between two lily pads of greenish copper, a larger leaf forming the knocker in the center of the door, while the electric button at the side is set in a
tiny pad. The porch light is enclosed in a handsome hanging lantern of the same verde copper. One view is given of the interior, which is all finished in quartered oak with quartered oak floors. The fireplace in the living hall, which is 35 ft. in length—is enriched by a hood of hammered brass, with massive dogs to match. The fireplace opening is faced with large square, vitrified brick. The stairs are of white maple, hard as flint, and slightly darkened in tone. The window upon the landing is filled with traceried glass. Soft, low tones shades; but the mistress is most proud of her own devices for the sewing room, where a built-in cutting table with open space beneath for her stool, is flanked on one side by long drawers for garments in course of completion and on the other by smaller drawers for materials of all sorts. Our readers may be interested to know that the cost of this handsome complete house in this section, was only about $13,000.

Another handsome and substantial home just built in Santa Ana, shows lines al-

characterize the decorative treatment of walls and ceiling, all the ceilings being first canvassed before tinting.

All the exquisite detail of the woodwork was gotten out by the local mill.

Many conveniences were introduced into the plans by the owners, such as a space behind the bookshelves to hold wall maps, and a wall pocket to receive the large window in the hall while the screen sash comes down from another pocket.

The sleeping rooms are daintily decorated in free hand fresco, in soft pastel most craftsman-like for simplicity, and indeed this idea appears to pervade both exterior and interior.

Such a roof is certainly equal to any eastern storm. The window grouping, the projections of cornices and string courses afford pleasing relief.

The grey stone of foundation and porch is extended in the porte cochere which supports a broad upper gallery and terrace. These wide upper galleries are indeed a feature of the house, appearing upon its rear also which we do not see. Every
sleeping room is arranged to open out upon them and the chambers are large and many. Finer provision for open air sleeping could not be made.

The interior is characterized by the same dignified and generous spirit as the exterior. The woodwork is all Oregon pine, finished with old English oak stain, paneled high in the living hall with a heavy wood cornice and ceiling beams, and ecru tinted plaster between. The plaster spaces below are covered with a bronze-brown leatherette having heraldic designs in red, green and blue at intervals. Sliding panels in the high wainscot beneath, disclosed shelves and catch-all closets. A large stained glass window on the stair landing has a beautiful design of bluish water lilies with dull green pads and long twisting stems.

One finds much the same style of interior treatment and decoration as in the East. The parlor of this house for instance, is hung with a silk finished paper in a brocade design in a soft grey, such as was illustrated in the October Keith's Magazine. One sees the same electric light fixtures, with round and square iridescent glass shades and the inevitable fringe of beads.

The dominating feature of this interior is the great chimney breast of brown, sand molded brick standing out in the center of the immense living hall and rising to the ceiling. This fine fireplace design was taken from an illustration appearing in Keith's some time ago, and incorporated into the plans. Innocent of the commonplace mirror, its strength and simplicity are wholly in keeping with the inclosed seats beside it like high backed, old fashioned church pews, and with the other furniture most of which—including a deep craftsman davenport and massive library tables—was turned out by the local mill which furnished the standing woodwork. These furnishings gave a coherency and unity of treatment rather unusual.

Not the least interesting portion of this admirable house, was the kitchen. The difficulty of obtaining house servants is almost unsurmountable in the far west, and everything possible had been done in this kitchen to lighten the house mother's burden. One novel convenience was a wood-box concealed in the wainscoting, which tipped outward much like a pantry flour bin, upon pressing a button. This was filled from the back entry on the other side of the wall. Much thought had been given to the attractiveness of the kitchen. It was a large room, and at one end was a swelling bay, filled with windows and a seat beneath them running all round the half circle. In this pleasant nook stood a small dining table, so that often the labor of serving a meal in the regular dining room was thus eliminated. A wise and sensible application of the principles of The Simple Life.

The cost of this admirable home was about $10,000.
ARDLY an architect can be named today who confines his mode of expression to that of a single period of architectural style. The most consistent of American architects feel free to follow the precedents now of one period and now of another of classic architecture or of any period of English domestic architecture or to adapt a combination of any two periods of architecture to an exterior. The result is that there exists no well-defined type of American home. We must call our homes English, German, French or Italian renaissance, Mission or colonial, but we cannot call them distinctly American. Even colonial architecture so often thought to be the American renaissance is but an adaptation of the Georgian style of England. These facts naturally result in a great variety of styles along a single fashionable line of a modern American city. So varied are the styles and periods of the homes and entrances used here as illustrations that one can hardly realize that they were all built within a few years of
each other and that all are to be found in a single part of one of our large cities.

"My door is wide, my heart is wider." This ancient legend carved in Latin over the entrance to an English chateau, strikes the key-note in the designing of an entrance, namely, that the entrance expresses the ideals of the owner. Have you ever passed a rose bowered cottage door? Wouldn't you expect if you dropped the knocker to have the door swung wide by a kindly faced man holding in his hand with his finger for a bookmark, John Burrow's works or Audubon's or a book on gardening, and wouldn't you find all the window sills on the sunny side of the house lined with flowers planted in tin cans, old cups and every other kind of flower pot? Nature triumphant at the door, wouldn't you also expect to see it in true sublimity in the heart of the man? So, our portals tell the tale of our lives.

From the cottage door we will turn to the classic portals of the rich. Here we find the beauty and character of home life depending upon the arts of man for outward expression. In one the chaste and beautiful classic: Italian renaissance is used to express the owner's ideals and incidentally the architects technique. Here we find the entrance emphasized by a stone balustrade marking a terrace out on the lawn. Thru this we see the beautiful entrance porch, the vista being artistically broken by the presence of a vase of ancient Italian pattern. It appears that the vase contains some favorite flowers which the lady of the house is trying to protect from the frost but at the same time defeating the object of its existence by hiding it from human eyes. A well meant inconsistency. The corner pieces to the entrance give it a solid substantial appearance which is quite necessary when building with stone. The stone used is Bedford gray with gray brick to match. "When in doubt, wear gray" is a dressmaker's advise. It is a rule that can be applied equally well
to brick and stone houses. The entrance doors to this residence show a tasty elaboration in the way of an ornamental iron grill over the plate glass. It breaks that gaunt appearance so prevalent in full length plate panels. The distinct style of the house is Ionic and true Ionic it is to a fault.

The large portico entrance with its great columns two stories high gives the feeling of hospitality and welcome characteristic of the southern colonial houses, nothing new is shown in the design of this entails which have been rendered in a true and artistic manner, proving unselfishness on the part of the designer in following classic ideals at the sacrifice of the personal emolument of originality. The entrance with its crowning pediment, side light and mahogany door is a gem of colonial detail. The details of the Corinthian column caps here used are so perfect that they will well illustrate the story of their origin. Callimachus, the famous architect of ancient Greece, was resting in a cemetery one morning when he noticed that a basket of

trance. It follows in every respect an old and well established scheme but succeeds where enumerable others fail, because the architects have a keen sense of subtle proportion and an understanding of the principles of the style in which they have worked. This is distinctly an entrance, not a porch, and it can not help but flatter the visitor as he pauses between its towering pillars and realizes that this monument on the facade has been erected to honor and welcome him. It is colonial in all its de-
restraint. There is always a feeling about an Elizabethian home that there are things far more beautiful to see within. The house appears to have been built for the interior alone and the beauty spots on the facade seem to be but the bubbling over of the unbounded beauties of the home. To overcome this severity of design, there has been applied to it by successive degrees considerable renaissance detail and as a reaction this liberty of the designer has sometimes been carried to wanton fastidiousness of design. This is not true however, in the beautiful Elizabethian entrance we are presenting. One previous example was a porch, the other a portico. This is neither. It is merely an entrance thru triple dignified arches to a country home. The details are splendid and show careful designing. The approach is characteristic of English ways which are never along well defined lines. To arrive at the entrance of an English manor you are apt to be led from the main road most anywhere and from there you tack from one point to another until you get there.

There is some charm in an "ivy covered wall" but to my thinking, there is more charm when the wall is only partly covered. This point is admirably emphasized in the last illustration. The beauties of nature should enhance, not hide, the artificial beauties wrought by man. In this beautiful English half-timbered hillside home we have three entrances prominently in view, prominent, yet secluded. There is the porch entrance for pedestrians, the basement entrance below it and the porte cochere. It is a beautiful home enthroned on the sublimity of nature. Its serene dignity, its air of protecting seclusion, its cozy homeliness, its quiet and restrained beauty, its close sympathy with the surrounding landscape, its simplicity, are the very best expressions of all that is best in English domestic architecture.
Fireproofing Our Homes.

A Chat With The Ladies.

By F. W. Fitzpatrick.

“Every wise woman buildeth her house *
* a wide house and large chambers, and
cutteth out windows; and it is ceiled
with cedar and painted with vermilion.”

You see that even in the time of
Jeremiah the women wanted big
rooms and many windows, and,
undoubtedly, innumerable closets
and cubbyholes, and cosy corners, probably
more than some of their good husbands
might well pay for. In a great many
respects the women of those days
differed not from those of our own time. In
building a house to-day the average woman
wants just about three times as many rooms
as she can possibly get for the money the
family has set aside to build the home, but
in this particular chat I will have no quar
rel with her as to the number of rooms she
wants and thinks she ought to have, where
the flagpole ought to be and the particular
location of the kitchen sink, or, for that
matter, even the painting of her house with
vermilion, but I am going to scold about
the “ceiling of that house with cedar;” in
other words, this is going to be a little ser
mon on fireproofing.

The Hebrews of old built almost ex
clusively of wood, even Solomon built his
magnificent temple of cedar and other
costly timbers, and as a result we have abs
olutely nothing in the way of historical
remains of those days. Our fathers, at
least those who dwelt in this country, also
built of wood, for the same reason that the
Hebrews did—it was the most available
material—and we have clung to that habit,
without rhyme or reason. True, clap-boarding
and shingles can be very artistically combined, and
there are indeed some very tasty frame
homes wherever we may turn our eyes.
But none of these homes so built is safe.
In the hearts of large cities and within
certain zones outside of those hearts even,
they are not permitted, because of the dan
gerous character of their construction; in
the suburbs they are exposed to the dan
gers of fire from within and innumerable
dangers from adjacent fires, though the fire
departments in most cities are so well or
organized that total loss is far less frequent
than formerly. When once a house so con
structed caught fire there was small hope
for it. Few country places have any sem
blance of fire protection, and the result is
total loss. Something like 80,000 houses
burned down last year in this country.
True, 42,000 of those were insured, and
the people got some balm with which to
soothe their lacerated-purses, but remember,
for every dollar a community gets from the
insurance companies it has paid in to those
companies three dollars in premiums. In
other words, we pay out every year some
thing like $500,000,000 in insurance pre
miums!

Men have learned, by hard experience,
the folly of flimsy building. It used to be
one of our national crimes. Apart from
the Chinese and Japanese few peoples on
earth have built as poorly as we did some
years ago—and as many of us do still. Busi
ness men have come to realize the tremen
dous loss the country incurs every year—
absolute is the fire loss. Many things
that are deemed losses are really but ex
changes, a disadvantage to one, a gain to
another, but with fire there is something
like $150,000,000 of property that is swept
away, absolutely, and without advantage to
any community every year. That figure
represents the average loss for a good
many years. It has been $170,000,000 or
thereabout for the past few years, and in
1904 it reached the appalling sum of $200,-
000,000! Our men have seen this and the
result is a general demand for better build
ings, more fireproof construction. Some
cities have advanced far enough along the
lines of progress so that they will not per
mit any but fireproof construction within
rather wide limits. But our women still
insist on having wooden houses, with their
more or less elaborate wood trimmings in
side, wooden porches outside, shingle roofs,
“ceiled with cedar” in the fullest sense of
the term and made just about as inflam-
mable as is possible for an ingenious architect to devise—and our houses, therefore, contribute very largely to the annual ash heap. Just think of it, the bonnets and sealskin sacques and other pretty things that could be purchased with that wasted $150,000,000!

Until comparatively recent years one excuse for building of wood was that it cost so much less than any other material, and, in fact, even moderately fireproof dwellings were beyond the reach of any but the wealthy. It is no longer so. There is really no object for building of wood to-day. Most of us keep on doing it simply and solely because we have gotten into the habit of it, and that there are large sections of country where we have not yet been prohibited from using it. Lumber is growing scarcer every day, it has gone far above 100 per cent over its cost twenty years ago, while brick, and tile, and cement, and other incombustible and indestructible materials are cheaper by far than they were at that same period.

I am not contending for merely the elimination of wood in the exterior finish and construction of houses. Many people believe that the moment they have their outside walls of brick or stone, and the roof of slate or tile, their homes are fire-proof. The floor joists, the partitions, all the interior framing and finish are of wood and become as dry as tinder in the course of a few years. The spaces between the rafters and floor joists, and partition studdings are just so many flues. No sooner is there a little fire in the cellar or kitchen, or some out-of-the-way corner, then—psst! there it is in the roof and all over the house. Lives are endangered and much that the good housewife holds dear is destroyed, though the house itself may possibly be repaired. On that account do I aim my bolt at everything that is wood or inflammable or destructible by fire in a house.

The exterior walls should be of brick and terra cotta—stone is all right under ordinary circumstances, but if there is ever a good, hot fire anywhere near it, stone is destroyed almost as effectively as is wood—while the floors and partitions and roof, all the construction in fact, should be of absolutely non-inflammable materials. The la-

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First Floor

Second Floor

Floor plans of a fireproof house, showing as attractive an arrangement of rooms as in ordinary construction.
dies will say: "But that will cost four or five times what we have to spend on our houses." Excuse me, but it does not. Conditions, of course, differ in the various parts of the country, but as a general average I may say that a thoroughly fireproof house will not cost (in its initial expenditure) more than 7 per cent over the cost of the usual wooden construction with wood joists and stud partitions, and lath, while, taking into consideration the fewer repairs required to keep such a house in condition, its far longer life, the lessened insurance—if, indeed, any need be carried—the investment in a fireproof house is no greater anywhere in the country than is that in an ordinary structure. Many times, in fact, the initial cost of the better mode is even less than that of the poor one. I have bids before me now for both modes of construction of a very modest house here in Washington. The lowest figure for the old-fashioned wood framing is $5,875, while the bid for hollow tile fireproof construction is but $5,186. A number of fireproof houses have just been completed in Pittsburg. They have cost (ready for occupancy) $4,500 each, and that includes some few little extras that have been thought of as the building went on. The lowest bids on those houses for wood construction were $4,000 and $4,125. Why, anyone can figure it up for herself. In the ordinary city house the wide span floors have twelve-inch joists; between those joists there is laid a couple of inches of cinder concrete, or other noise-deadening material, in the vain endeavor to lessen the noise from overhead; there is a rough flooring on top, with a finished maple, narrow-strip flooring covering that, and plastering on the under side forming the ceiling of the story below. Now such a floor and ceiling in the completed stage costs here in Washington 40 cents a square foot. There will be a variation of two or three cents in different localities. Eliminating the maple floor and taking out the deadening, using a finished pine floor, as is done in the cheapest kind of dwellings, and you have an expenditure of at least 28 cents a square foot. Partitions built of two-by-four wood stud, wood lathing both sides and plastered both sides will average 20 cents a square foot pretty much all over the country. So much for the wood. In fireproof construction the Johnson system of heavy tile flooring, suitable for spans up to twenty feet, is about the cheapest and best thing that can be used. Built in the most substantial manner, finished with an asbestolithic or granolithic, or other incombustible plastic flooring, under the side of the floor plastered and all finished in good shape—fireproof, soundproof and verminproof—costs from 26 to 28 cents a square foot in almost any section of the country not too remote from the large centers, while a four-inch hollow tile partition, plastered both sides, will cost not to exceed 18 to 20 cents a square foot. You see that in spite of the general supposition that fireproof construction is exceedingly costly, it is not.

I am not advocating anything startlingly new, nor a great reform in building material, nor anything of that sort, but am simply urging the adoption of as sensible a mode of construction in our houses as we have gotten into the way of using in our larger buildings. Building fireproof houses has become as necessary as the building of fireproof stores, hotels, apartment houses and other places "where humans do congregate." It is not sensible, it is positively indecent to keep on building with the old flimsy methods, exposing life and property to the dangers that we know are ever present, as we have done in the past from motives of alleged economy, that have in reality proven to be the rankest extravagance. All that I am advocating or urging is that the ladies forego the little pleasure they may derive from their dainty minarets of shingles, scroll-saw ornaments, beautiful green-stained shingle sides to their houses and the endless wood—wood—wood trimmings and finishing that is simply pretty because we have grown used to it, and substitute in the place of all this highly combustible material other materials that will not burn and that are not damaged if an incipient fire does occur in the house furnishings, carpets, etc. Brick and tile are the two materials that fulfill that requirement, but if they are used almost exclusively in the structural parts of a house, slate and stone and metal, that are damageable by fire, may be used with more or less generosity, because the possibility of their being damaged is virtually eliminated by the use of brick and tile construction.

Don't imagine for a moment, ladies, that brick and tile and stone are the unyielding materials that you have perhaps heretofore thought them to be, believing that a wooden house was the only one that could be made "pretty." If our space permitted we could show you many charming designs in fireproof construction.—Fireproof Magazine.
HERE are so many commonplace homes about, belonging to commonplace people, that when one comes across a house with an unmistakable stamp of originality, attention is at once arrested.

The whole training and association of the professional upholsterer and decorator makes it extremely improbable that unconventionality can come from that quarter, hence you find the early English, the various French and the Mission styles, or a medley of these and others, served up whenever a demand for a home is made, and according to the ability of the professional home builder, the result is satisfactory in degree or otherwise. Now we are a practical people, we figure that our homes should afford to ourselves and our friends a certain amount of pleasure; do we adopt the right method to secure this?

That "A man is known by the company he keeps." may be right enough; quite as certain is it, that a fair estimate of a man's tastes and habits may be formed by a look at his house. Visit the home of an artist friend and you will observe something different to that to be met with in the abodes of your ordinary acquaintances. In the one case there is an individuality of arrangement, and a charm of color to be expected in the environment of one who thinks along original lines; in the other, a familiarity of aspect inseparable in schemes that come from a common inspiration. If we can assume anything from this it is that art and beauty will only visit the homes of those who understand and can appreciate these twin sisters, a condition of mind and temperament only to be acquired by education.

The artistic temperament is well worth cultivating; having it, a man should be better socially and morally, and one of the best things the state could do would be to see that every opportunity is given to the
youth of both sexes of becoming thoroughly acquainted with the principles of form and color, the basis of every home, artistic or otherwise.

There is a psychology of color, capable of exact definitions, and when the importance of a sensible, suitable environment is understood, the professor of color harmony will divide popularity with the professor of sound harmony.

The effect of color on the temperament is more permanent that that of music, the vibrations of the one are constant, of the other spasmodic. Now a home to be artistic requires not to be sumptuous, a delightful room may have brown paper as a wall covering, while Aulission tapestry may be associated in another with vulgarity. In a little parlor, fixed up by one of the ablest artists of the modern school, a dark grey paper was adopted for the filling, the deep frieze had a white Fabrikona, all the wood work was tinted a dull dark grey corresponding with the paper, the frames of a choice collection of black and white pictures were of a similar color, the whole idea being to concentrate the attention on a lot of valuable engravings for which the owner would not have taken $60,000.

This was clever decoration, although utterly simple; to see it, was to recognize that no other scheme would have served so well.

When selecting a scheme of color for her parlor, a lady of taste rejects every suggestion that would prove incongruous with the color of her hair; those who study not harmony may laugh at this—what would they say then of the man so fastidious that he dyed a skin rug to suit the color of a long haired dog that loved to rest beside it.

The keynote of an artistic home should be harmony with simplicity. Try the effect of plain surfaces; if you have good furniture, excellent pictures, or restrained skillful decoration, the value of each will be enhanced, as a jewel is, by a correct setting. In America "The Mission Style" is more appropriate to the time and the characteristics of the people, than an imitation of old French chateaux and salons, and half a dozen artistic designers of the first work would give it such a national stamp that it would become universal, except with millionaires who could not spend enough money on it, or give it that exclusiveness that can hold a trust in the hollow of his hand.

In Europe that is exactly what has happened and although much that passes by the name of modern art, has little claim to be classed as modern, decorative, or artistic, earnest artists and craftsmen by virtue of strong individuality are quickly revolutionizing the character of the modern home.

Architecture, furniture, decoration, are all changing in style; in place of labored imitation of voluptuous periods with which we have little sympathy, there is a seeking after a natural simplicity, in keeping with the spirit of the time in which we live.

Shall we say that an ideal dining or living room might have a high panelled dado, a filling hung with burlap to the level of the raftered ceiling, with a wood block floor as an appropriate foundation for such solidity?

Furniture and fixed wood work stained a rich brown oak color, would find a pleasing contrast in a fresh green wall covering, while rugs in which a darker green was blended with a rich red would help to complete a pleasing scheme.

For modern parlor, in a country with so much sunshine as America enjoys, what could equal an arrangement of heliotrope, green and white,—or ivory color—a favorite combination of the modern British school?

This would act and react on the temperament like a draught from Niagara's cooling spring on a hot summer day. You cannot get away from the natural effect of your surroundings, whether intelligently interested, or apparently indifferent to them. The influence is there in some degree; study the matter then, and draw all the good you may from a rational environment.

Stray thoughts of an idle moment are these; by permission of Mr. Editor they may be followed by some practical schemes, interesting and useful to those who seek to strike a higher note of beauty in the twentieth century home.
The Piano and Its Place.

By John Burt.

The day of the miscellaneous musician is passing. We are beginning to recognize that a fine art like music demands more qualifications for its successful pursuit than the ability to stretch four fingers and a thumb over an octave. The serious small girl, who falls behind in school, because she has to practise three hours a day, is not often encountered. Even among those with real musical talent, there is a disposition to stop with the acquisition of facile rag-time, and "Every man his own vaudeville."

The piano, however, is still a part of the well appointed house, even though it stands unopened from one year's end to another, or is only used for Sunday night hymn singing. Too often, it is an ineffective or unpleasing addition to the furniture of the room in which it is placed. Its color is apt to be inharmonious, its size inconveniently large, or its style out of keeping with the decoration of the room.

The ideal place, for a piano, is in a room by itself, even if it is only an alcove one - ing off a larger room. So placed, it can have the bare floor and freedom from heavy folds of drapery, which are essential to the best development of its tone, and, with its accompanying branch and music rack or cabinet, furnish the room sufficiently. A small space like this can be finished with a panelled wainscoting, stained and polished to match the case of the piano, at no great expense, treating the walls in a color contrasting with that of the adjoining room, or else in a lighter or darker tone of the same color. In either case, the music alcove is a pleasing feature in a large room, and the wainscoting will supply an amount of resonant surface impossible in a room devoted to other purposes. An arrangement of this sort applies necessarily only to an upright, or to a small sized grand piano. By carrying the wainscoting to the exact height of the piano, the latter may be given a built-in look, which will be increased by running a seat around the wainscoting.

The grand piano is a really stately and beautiful article of furniture, at home only in a large and lofty room. The ideal position for it is, with its straight side against a long wall space, its keyboard facing a window, with no furniture very near it. When, as often happens, it must stand in the square back parlor of a city house, the best position is with its straight side parallel to the windows, at some distance from them, with the light at the player's left. If it must stand in a long and narrow room, it should be placed with its length across one end of the room, the remaining space being arranged like any square room. Under to circumstances should a rug be placed under the piano. The grand piano makes large demands upon space and will not be denied.

The foreign fashion, of placing an upright piano with its back to the room, is not often seen here but merits adoption, not only because the tone is much improved, but because it has distinct esthetic advantages, in hiding the often ugly front of the instrument, while players like the isolation from their audience which is afforded.

When the piano stands in this position, something must be done with the back. A light frame of stained wood, divided into several compartments, the sections filled in with burlap or mercerized tapestry, is one device. It may be concealed by silk or other thin material, shirred on a rod at top and bottom or a piece of embroidery may be used. When it is thought best not to fasten anything to the piano, a high four or six-fold screen may be folded around it, affording a background for a settee or short couch and a table holding flowers.

The case of the ordinary piano is a relic of the early Victorian period, with its graceless curves, its machine made carvings, and its faith in the beauty of rosewood. With all the admitted perfection of the American instrument, from the mechanical standpoint, it has, until within a very few years, been necessary to go abroad to secure anything like an artistic case, or even to get one in the woods ordinarily used in interior decorations.

Happily the last few years have seen a
step in advance, and the traditional rosewood has retired to the background. The mahogany piano is popular and there are cases to be had in the various fumed and weathered and green tones of oak. A light colored piano still seems a little incongruous, but we shall probably get used to them before long. When white enamel came into fashion a few years ago some people had their pianos enameled to correspond with white and gold furnishings and the effect was rather good.

As only the costlier foreign pianos are imported, one can hardly generalize as to the average product. Great attention is given to accurate reproductions of pianos of different French periods. A Louis XVI piano, with its plain mahogany surface broken by a line of inlay and its straight lines, might have been made by Chippendale, while the Louis XIV. and Louis XV are elaborately carved in the style of each period. The Louis XIII piano is a grand of quaint shape, with fluted legs and applied ornament, in carved brass, the wood being maple in a grayish brown tint. A magnificent grand piano, which would seem out of place anywhere but in a palace, is in the finish called Verius Martin, the outside and the inside of the lid being almost entirely covered with paintings of figures and landscapes.

In this country the best cases are those made on Colonial lines. The shape of the upright piano lends itself to arrangements of fluted pilasters, festoons and wreaths, and the effect is very dainty. There are, too, severely plain Mission pianos in various colored oak.

It is possible to have the case of a piano refinished and some of the surplus and stuck-on ornament might be removed, to the improvement of the whole. The original color of the piano can be modified by stain, and the high polish replaced by a dull rubbed finish. Sometimes a piano is painted in two tones of old ivory, to harmonize with the wood work and furniture of a drawing room and panels of old brocade are inserted in the front.

It is not unusual to have piano cases made to order, from designs furnished by an architect or decorator. The average additional cost is in the neighborhood of a hundred dollars, greatly increased when unusual woods are used, or when marquetry or brass incrustations are supplied.

The decoration of the piano affords a field for the amateur artist. In old pianos, one often sees the inner side of the lid entirely covered by a landscape, generally introducing figures, and in the style of Watteau. The paintings, usually processions mediaeval garb, which are seen on Italian marriage chests, suggest decorations for the front of an upright piano and classic figures with lyres and trumpets are specially appropriate. Paintings like these, in the clear light tones affected by Alma Tadema are best suited to a light colored piano, while polychrome work in burnt wood can be applied to oak or mahogany.

An upright piano designed and painted by Will Bradley deserves description. The case, of absolutely plain weathered oak, is carried out to the front line of the keyboard. Above this line, it is closed in by doors with heavy hinges of roughened and gilded metal, which are opened when the instrument is in use. The insides of these doors, the lower side of the lid and the panel above the keyboard, are painted in flat tints, in a rather high key of color, in the style peculiar to Mr. Bradley, introducing many figures and a crowded mediaeval landscape. The whole effect is quaint and charming as well as suggestive.

While the piano ought to be an ornamental feature, the habit of considering it as a bric-a-brac cabinet should be deprecated. The only thing which ought to be tolerated is a pair of branched candlesticks to light the keyboard. Where the jingle of metal is an addition to a piece of music, the composer writes it for an orchestra and indicates the use of triangles and a pianist's tour de force is hardly appreciated when it endangers china or glass.
A January Night in Town.
Designs for the Homebuilder.

DESIGN A 207.
Description Design A 207.

A MOST artistic and attractive cottage designed especially for a warm climate.

The broad porches suggest coolness and comfort and lend an inviting appearance to the house.

A small cellar is provided, but has no heating plant as the many fireplaces are generally ample provision for heating in a warm country, although a furnace could readily be installed if desired.

The floor plan shows an excellent arrangement of rooms for a house of this kind with the two principal chambers and bath on the ground floor.

Two good rooms could be finished off in the attic if desired.

The house has hardwood floors throughout and hardwood finish in principal rooms.

Size 35 feet 6 inches; depth 58 feet. Height of first story 10 feet 6 inches. Estimated cost $2,500.

Color Scheme Design A 207.

A COOL gray for the first story siding would be appropriate here, with porch columns and trim in white. The dormers are to be shingled and for these and roof shingles a green stain could be used.

The living room and hall are in weathered oak, parlor mahogany stained, and dining room in green Antwerp stain. Chambers and bath in white enamel on pine.
Designs for the Homebuilder.

DESIGN A 208

W. C. Whitney, Arch't.
HERE is an attractive design in the English half-timbered style, with brick for the first story and plaster between trim for the second.

The steps and entrance lead directly to the front door and the porch space at right is screened off.

* But one course of foundation stone appears above grade. Native limestone was used. Hot water heater in basement, also complete laundry facilities, etc.

The floor plan shows a fine central hall with living room at left and den and dining room at right. A feature not shown in the photograph is the enclosed porch off the dining room. This is screened for summer and by the use of removable sash can be used as a sun-bath parlor or conservatory in winter. The kitchen and pantry facilities shown here will appeal strongly to the housekeeper.

The stairway is made much of in this plan, the first flight ending at a broad landing, from which a double second flight ascends at both right and left to the second floor. Four windows at the landing level afford a flood of light for both upper and lower halls.

The upper floor arrangement is plainly shown in the plan, and includes 5 rooms besides large hall space and two bath rooms. Height of first story, 9 feet 6 inches; second story, 8 feet 9 inches. Size of house about 44 feet 8 inches square. Estimated cost $15,000.

Color Scheme Design A 208.

The first story brick are the hard red paving brick. Porch trim and exposed wood trim of second story, is a dull reddish brown stain, with gray cement plaster between timbers. Roof shingles stained moss green.

Den is finished in weathered oak. Dining room in mahogany. Hall and living room, birch. Kitchen norway pine, second story is in white enamel paint.
Designs for the Homebuilder.

DESIGN A 209.
Description Design A 209.

THIS is a modern home that will appeal to many of our readers. The first story is sided and second story is shingled. With but little departure from the compact square form, it presents attractive features in the projecting eaves, outside chimney, and, as an adjunct—the pergola extending from the screened rear porch to the garden.

The foundation is blue limestone, basement under whole house, laundry portion plastered. Hot water heating plant.

The front entrance with coat closet next to vestibule opens into living room. This is a good sized room with drop beam ceiling, as has also the adjoining dining room. The stairway at the rear of the house has a broad window on the landing. At the left of the stair is the library with built-in book shelves at one side, opposite which is a glazed door leading to the screened porch. From this porch extends the pergola.

The kitchen arrangements are good and the dining room has a large built-in sideboard.

The second floor plan shows a good arrangement of chambers. A noteworthy feature is the balcony over the kitchen porch. This is reached by a door from the bath room and is a fine provision for the airing of clothes and bedding, while the door into bathroom will admit of the most thorough ventilation at anytime. Hardwood floors.

Height of first story 9 feet 6 inches; second story 8 feet 3 inches. Size 34x42½ feet over all. Estimated cost $4,500.

Color Scheme Design A 209.

FIRST story white; second story shingles stained brown; roof shingles stained green. Chimney of dark clinker brick. Pergola white. Porch floor and steps dark brown.

Interior finish first floor except kitchen is in oak. Living room and hall Antwerp finish, dining room in Green Antwerp and library weathered. Second floor rooms in birch, in a variety of lighter finishes.

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Designs for the Homebuilder.

DESIGN A 210.
Description Design A 210.

A DOUBLE residence, two stories, basement and attic; brick veneered, with solid brick dividing or party wall.

One residence contains six large rooms, reception hall and bath room; the other contains seven rooms, reception hall and bath room.

The left hand residence contains on first floor, parlor, reception hall, dining room, kitchen and pantries. Second floor contains three large chambers and bath, all well supplied with closets. Front and rear inside stairs. There is a columned opening between parlor and reception hall, and a large open fire place in reception hall. Pantries are complete with dressers, drawers and shelves. Entry is provided with suitable space for refrigerator.

Interior finish in first story, except kitchen and pantries, is oak, with oak floors; kitchen and pantries Georgia pine trim, with maple floors. The chambers and bath room finished in birch, with Georgia pine floors. Modern plumbing.

Attic has no finish other than pine floor.

Basement contains laundry, with stationary trays; vegetable cellar, furnace room and coal bins—all of which have cement floor.

Total width, 40 feet; depth 53 feet, not including bay window or entry.

Height of basement 7 feet; first story 9 feet 6 inches; second story 9 feet.

Estimated cost $6,400.

Color Scheme Design A 210.

The red brick is pointed with white and all wood trim including porch is painted white. Shingles on roof and dormers are stained moss green. Porch steps and floors painted dark brown.

The reception halls and parlors are in fumed oak, dining rooms in golden oak. The second floor is in birch finish mahogany stained in hall ways and lighter finishes for the chambers and bath rooms.

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is a very handsome collection of the very latest architecture; each house is shown by large photo plates 4½ x 6½, accompanied by floor plans and architect's name. Some 35 of these homes range in cost from $4,000 to $12,000. Others more expensive, all offer the best to be had. Country Concrete Residences is 96 pages, size 10 x 12, printed on highest grade of enameled paper and is artistically bound with silk cord. Sent postpaid, $1.00.

The Atlas Portland Cement Company,
30 BROAD ST., NEW YORK.
Designs for the Homebuilder.

DESIGN A 211.

Lowell A. Lamoreaux, Arch't.
Description Design A 211.

A design of great simplicity is shown in this illustration. A compact house for a city lot, yet maintaining an individuality that is not common along our avenues.

Exterior siding is carried without a break from foundation to eaves. The dormer design is pleasing and corresponds in pitch with the roof on which it is placed.

Foundation, native blue limestone; basement under whole house, laundry part has cement floor. Hot-air furnace.

The first-floor plan shows several attractive features, notably the big living room with ample fire-place, and opening into the dining room, affording a pleasant vista. The opening into hall with columns at either side, stairway landing and windows, afford another pleasing view in that direction. The kitchen, pantry and butlery arrangements are especially good. A door and steps from kitchen communicate with stair landing. Both inside and outside cellar stairs are provided.

The second floor space is well utilized and the two communicating chambers on the left are of advantage with small children in the family. The high attic admits of a servant's room being finished off if desired.

Height of first floor 9 feet; second floor 8 feet 6 inches. Size 28x30 feet. Estimated cost $3,000.

Color Scheme Design A 211.

As indicated in the illustration, which is from a photograph of the house, solid white was used for the entire house, including window trim and sash. Roof shingles stained light green. Living room and hall are finished in birch, stained mahogany. Dining room in oak, weathered. Second floor pine finish in white enamel and light tints.

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Designs for the Homebuilder.

DESIGN A 212

First Floor

Second Floor

F. D. Orff, Archt
Description Design A 212.

Quite an unusual design is presented in this house, the effect being that of ample room and genial hospitality.

The first floor is sided, second story shingled. Roof shingled. Basement under whole house; combination furnace, laundry, vegetable cellar, etc.

The entrance is through a roomy porch and vestibule into a large hall with fire-place and stairway at the left and bay windows at right. Broad windows at the stair landing also aid in making a bright and cheerful hall. At the front of the house, opening off the hall are the library with corner windows on two sides, and parlor with a bay. At the rear of the hall are the dining-room, kitchen and pantry.

The upper floor plan shows a fine arrangement of good-sized chambers, also a large hall and linen closet. The back-stairs communicates with a back hall-way, also the garret stairs, leading to the third floor where servants' room and storage space are provided.

First floor finish is birch; second floor pine. Height of first floor 9 ft.; second floor 8 ft. 6 in. Size over all 34 x 38 feet. Estimated cost $4,850.

Color Scheme Design A 212.

Foundation faced above grade with blocks, above which the siding is painted brown sand-stone, or brown cement yellow. Second story shingles on gables and bays stained brown. Roof shingles vermillion stain. Window trim, porch columns and sash in white. Chimney faced with red brick.

First floor interior finish in birch stained mahogany in parlor and library, weathered in hall and green in dining-room. Upper rooms

An Honest Fireplace

not only burns well and looks attractive, but also sends the heat into the room instead of up the chimney.

The Jackson Ventilating Grates have heat-saving chambers, so that one open fire will warm several rooms on one or different floors in coldest weather. They can be set in any fireplace, and the economy of fuel will soon repay the cost. As health-preservers in the home their value is beyond computation.

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We manufacture, import and sell all kinds of fireplaces, and can reproduce any style, or give new and odd effects. Send today for Catalogue "K." It contains many valuable suggestions on economical and sanitary house-heating.
Description Design A 213.

A house of simple lines, plain, almost, but suggesting utility and comfort. Frame construction, weather boarding exterior and shingle roof. The grouped porch pillars, broad porch with railed balcony, and attic dormers are all noteworthy features.

The floor plans show rather an unusual arrangement, with bath-room on first floor, also one bedroom. The stairway construction between walls of dining room and bathroom saves considerable expense and leaves a clear hallway.

This stairway is lighted by a window at the turn, and from second floor continues up to the attic. This stair takes up but little of the second floor space, allowing good sized chambers and ample closet room including a big linen closet.

House has full basement and attic. Second floor does not extend over kitchen.

Height of stories, cellar 7 feet, first floor 9 feet 6 inches, second floor 8 feet. Size 27 feet 6 inches by 48 feet. Estimated cost $3,000.

Color Scheme Design A 213.

Colonial yellow with porch pillars, rails and trim in white, roof shingles stained brown, window sash black.

Interior finish first floor, hall and dining room birch stained forest green, sitting room in plain sawed oak, stained weathered green, parlor in birch stained dark mahogany. Chambers in painted pine, white and light tints.
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SUPPOSE,” inquires a troubled lady, “that I need, and want, a formal drawing room, but do not care for the delicate color and formal lines of the French style so generally recommended. What else can I have?”

There is no reason in the world, except the custom of decorators, why a formal drawing room should be furnished in the formal French style, in fact, with ordinary people, a good many reasons why it should not. A cheerful room is half the battle in entertaining one’s friends and, unless a drawing room is flooded with sunshine, its light times look cheerless enough. Even with a sunny exposure, in all the eastern section of the United States, the winter climate is decidedly gray. So there is every reason for the use of warmer colors aside from the tendency of light fabrics to get faded and of white paint to become dingy. In fact, I am inclined to think that very light schemes of color are only adapted to country or suburban houses, where surrounding lawns protect the rooms from the dust of the street.

Having a formal drawing room, at all, implies a certain financial standing, so I apologize in advance, if my suggestions appear extravagant.

We’ll assume a hard wood finish of some sort, or at least white enameled wood work, which combines beautifully with some deep colorings. I fear we must rule out golden oak which is so popular with builders. Mahogany is the drawing room wood, par excellence, whether white or brown or only birch stained. The floor will, of course, be bare, waxed and polished.

Nothing, probably, tells quite as much as a fabric covered wall. If the room is wainscoted, the expense is not very great, comparatively, and there are other materials than brocade. Burlap, artistic and beautiful as it is, is not precisely the thing for a drawing room, but Japanese grass cloth at the same price is exquisite. Laid below one of the wide light-toned landscape friezes it makes a wall as decorative as brocade. The mercerized fabrics are a great temptation, but their color is uncertain, beautiful as it is at first. It is humiliating to our national pride to confess it, but we must go abroad for really permanent dyes. Nor will the jute fabrics stand strong lights. But there is a wide range of imported wall fabrics mostly self-toned and, although it is quite possible to pay a great price for them, there is a fair choice at about a dollar and a half a yard, double width, less than the brocade papers, which sell for ten dollars a roll, and far more elegant in effect. Four dollars and a half a yard will buy a very decorative, all silk brocade which will last a lifetime and be more beautiful every year. And between these prices, there is a wide range of choice. These goods are carried in any variety, only by the importers of upholstery goods in the larger cities, and would hardly be found in the general shops.

Failing the fabric covered wall, one may have a brocade paper, the more elegant ones costing as much as ten dollars a roll, although very satisfactory ones may be had as low as a dollar a roll. While most of the tapestry papers are more suitable for halls or libraries, occasionally one runs
Decoration and Furnishing—Continued

across an English or German one, which would look well in a drawing room, above a ‘wainscoting. They furnish wonderfully and are most effective in a room with self-colored upholstery. Brocade and tapestry papers should be carried straight up to the moulding, although the height of the room may render a dropped ceiling desirable, in which case it should be tinted to match the general tone of the paper.

A fireplace with a hearth, on which a wood fire may flicker, with brass andirons, and a mantel shelf surmounted by a low wide mirror, is desirable, if not essential. The mirror makes the best possible background for a handsome set of clock and vases, in bronze or porcelain.

Never was there a time when there was so much beautiful mahogany furniture in the market, and at such reasonable prices. Sets of furniture are rather out but it is desirable to have a couch and two easy chairs, upholstered alike supplementing them by a mahogany settle and small chairs with rush seats. One of the high-backed winged chairs, standing at one side of the fire place, is most effective, as well as comfortable, but anything which suggests lounging is distinctly out of place.

With fabric covered walls, or with a brocade paper, a plain colored rug is most suitable, or if not plain at least exceedingly unobtrusive. In that case, the upholstery fabric should be figured, while, with a tapestry papered wall, an Oriental rug should be used and the chairs and couches upholstered in a plain color.

The lace curtains, which are so dear to some of us, are out of place in a room of this sort which should have fabric curtains hanging to the floor from poles, with thin curtains of Brussels or Arabian net next the pane.

Old red, the different shades of olive or sage, and warm browns are all admirable, for a room of this sort. In a room with white wainscoting one can paper with an old red brocade, have a Persian rug v'ti much rose red in it and use, for upholstery, a Morris or Liberty velvet combining many shades of soft old red. With a green fabric-covered wall, one may have a Wilton rug in low tones of green, and couch covered with a French tapestry in different tones of green, and use for curtains a plain green velour or cotton velvet. A single large chair, covered with sage green Morris velvet, with a pattern of orange red

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nasturtiums will give a strong note of color. A brown scheme enables one to introduce blue. The brocade paper may be a warm brownish buff, the rug in brown tones, the upholstery partly in golden brown velours, partly in Louis XV. blue silk brocade, with a single chair, or perhaps only a cushion, in a Morris velvet in tones of blue brown and orange.

Into the drawing room, one should introduce only pictures and bric-a-brac, which are above the common level. It is no place for a jumble of trifling ornaments. In a room of rich coloring, good oil paintings find an appropriate setting. Failing them, old prints are desirable, but walls which are a beautiful feature in themselves should never be wholly hidden. A cabinet of good china is always interesting, and palms or ferns give a pleasant suggestion of out of doors.

A cheese box has been utilized by the home craftsman, for a most effective workbasket. The outside of both box and cover were stained green and waxed, and both were lined with flowered cretonne, with pockets all around the sides of the box, and a gathered edge to the side lining of the tray. Three uprights, of stuff an inch square, pointed off at the top, stained and waxed, were fastened to the box, at equal intervals, and the cover was fastened between them lower down, making a workbasket in two stories.

Sometimes one has to face the problem of an immensely high opening, with sliding doors. Builders, of twenty or thirty years ago, had a special fancy for door openings reaching almost to the ceiling. We know better now, but the openings remain to vex us. To remedy this, a light framework of wood, the width of the opening, and perhaps two feet high is made and filled in with tapestry or other material to match the hangings below it, and fitted into the top of the opening, just above the curtain pole. It is, of course, a makeshift, but breaks the tremendous length of the opening.

The very grandiose arrangement of pillars and arches, with which long parlors in city houses are sometimes broken, can be

---

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Decoration and Furnishing—Continued

improved by inserting book shelves, in the two narrow openings, setting some large piece of bric-a-brac, with a good outline, on the upper shelf in each.

* * *

While the exhibition rooms, in department stores, are usually hopeless, occasionally one gets an idea from one of them. A music room recently seen had a bare polished floor, an old pink wall and furniture of gilded cane with frames enameled in the palest olive. The piano and its bench were also enameled green and there were hangings of pale sage silk. It ought to have been completed by one of the tall Teplitz jars with pale pink and buff roses clinging to its sage green sides.

* * *

A beautiful booklet, illustrated in colors showing results to be had with various wood finishes, stains, fillers and polishes.

The booklet covers the selection of woods, describing plain and quarter sawing and the effects to be obtained with the various woods available for interior finishing and flooring. The care of floors is given thorough explanation, also the re-finishing of furniture. The book is sent free on request by S. C. Johnson & Son, Racine, Wis.

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MINNEAPOLIS, M.N.
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.

D. M. K.—"Please give some advice as to inside finish and decoration for our house. House faces west. Height of first floor 12 ft., second floor, 10 ft. Front room 16x16, two windows north, one west, entrance door west. Have for this room in furniture, baby grand piano, ebony case, parlor cabinet, water-color pictures. What shall I add in way of furniture?"

"The room back of this I want to use for hall, and have open stairway; what would you build this stairway of, size of room, 16x16. Shall I have an opening cut from front room to hall and use draperies or have columns. Want an opening of some kind. Room has one window north, one door north leading to veranda. Library is directly south of front room and hall. I want an opening of some kind between front room and library.

"Size of library, 18x16; two windows west, two south, door south leading to driveway. Have for library furnishings, walnut bookcases, four library chairs, upholstered in green and brown.

"Dining room is east of hall and library. Want an opening cut from hall and library to dining room. Dining room size, 18x24. Window north, one south, door south. I want this room wainscoted, a plate rail, and three china closets built in corners. Have for furniture, round mahogany table, chairs and serving table.

"Second floor room 16x16, also a room east of it, for both of these I have furniture, one brass bed with canopy, four-post mahogany bed, mahogany dresser and mahogany toilet table. Hall is north of these rooms, on north window. One room east, furnishing in white enamel, bed, dressing table, rattan chairs. Would like to know what to use for rugs, window curtains, also wall decoration."

Ans.—A good combination for your parlor would be to make the woodwork ivory enamel with the walls colored in tapestry paper in soft reseda greens. A colonial settee and one or two fairly good sized chairs with the furniture you now have would probably be enough in this room in the way of furniture. We would advise the cutting of the doorways to the next room, but without columns, which you are going to use as a hall.

The woodwork in this hall-living room could be in the mahogany stain with the stair-way made of birch and stained the same color. We would recommend having the opening from the front room to the hall without columns but suitable hangings in the way of straight draperies.

A suitable finish for the library would be the fumed or light weathered oak stain. The fumed oak is very much the color of walnut and as you have a number of walnut pieces in this room the effect would be very desirable. The picture which you speak of would be well in this room, with the oil painting in the hall. The double opening leading from the dining room into the hall, the same size as the other, would be desirable.

This room with wainscoting and the plate rail with fruit pattern of tapestry above the rail would be very desirable. Having the mahogany dining room furniture this room should be stained in the mahogany as well.

Cluny, Antwerp, or duchess curtains are suitable for window hangings in living rooms; Scotch or French nets for the din-
ing room. Suitable over-hangings for the parlor should be used in harmony with the walls and floor covering.

Velour or tapestry portieres, hanging straight, should be used in the door ways, the different sides to be in harmony with the different rooms.

The wall in the hall could be in shades of dull old red or a darker shade of green than the parlor and in the library dull blue with conventional design in the paper.

Oriental rugs would be suitable for the various rooms outside of the parlor, although good imitations of these can be had in the domestic rugs which are very effective.

The window hangings for your bed rooms could be in muslin, Swiss or grenade and over-hangings of cretonnes can be used if you wish to treat the windows in this way.

B. A. F. “I enclose a rough sketch of first floor plan of house now building and would be pleased to have you inform me as to some points in decoration.

The parlor to be in mahogany or white enamel, with mahogany furniture, do you think old rose paper a good selection, and what colors should be in rug. Floors in oak. Which do you think the better, mahogany or white enamel?

“Hall and sitting room in dark oak, will use rug in sitting room mostly of green, and think paper of same shade. What color rug and paper should hall be to harmonize? Furniture weathered and golden oak.

“Dining room in quartered sycamore, what would you suggest in paper to blend with sitting room? We have a rug that would go with nearly any color. Plate rail in room. Furniture golden oak.”

Ans.—Cream white enamel woodwork is advised for the northeast parlor with old rose walls and cream ceiling. For so small a room, an oriental rug in the beautiful tones of rose and cream with slight admixture of green, blue or yellow would be the choice. For the hall between this room and green living room, a paper with design in terra cotta shades upon a green ground is suggested, with mahogany tones in rugs.

In the southwest dining room with its golden brown sycamore trim and golden oak furniture, a soft wood-brown burlap below plate rail with a landscape paper in dull blues and greens with brown tree trunks, would be a good choice. Ceiling tinted a light shade of the greens in paper. The built-in bookcases and ingle-nook in living room should match balance of wood trim.

J. H.

Q.—“I enclose a rough sketch of our new home.

“All wood work downstairs (except kitchen) is red oak, floors and all stained brown and waxed. The walls are to be tinted.

“Living room has rug like enclosed sample, mission furniture (mostly) seat built in and panelled from fire-place to bay, seat around bay. Fire-place faced with red brick.

“I thought to have the dining room brown and yellow. Could I have a touch of old blue? Have brown rug here and net curtains with cluny insertion and lace. They don’t seem right at the casement windows.

“In the living room I will have the walls tinted to carry out the curtain suggestion, but think the tint should be a soft green.
Is there anything better than madras at about the same cost?

“What colors should portieres be? How would copper andirons look?”

Ans.—Yes, a soft, dull green wall will be the best choice for living room and alcove-library. There is a greenish-gray craftsman-like scrim, which is suggested for curtains at all windows in living room, as in harmony with Mission furnishings. The ceiling could be tinted the greenish-gray of these curtains. It is a soft, flexible material though heavy mesh. Simple hemstitched or fagotted edges. For portieres, a green, craftsman canvas. While the walls and woodwork of library alcove should be uniform with large room, the casement draperies would be pleasing of green silk and a rug of plain green filling. In the living room the seat cushions in bay and ingle should be a dull red, for a relief note and to bear out the mantel and rug. Should prefer wrought iron andirons, with red brick facings. The ideas for the northwest dining room are very good; there is a foliage tapestry paper which introduces some blue and yellow, that might be used as a wide frieze. The net and cluny curtains should be replaced with some of the inexpensive, fancy nets in a simple all-over block pattern.

Edison Park:

Q.—I would like an idea on how to fix the interior of my house which I am about to build. Entrance is into a large reception hall with a 6-foot opening, from hall to parlor; double doors from parlor to library, double doors from library to dining room and a 4-foot opening from library to den, which will be 10x12 ft. There are to be oak floors in all the rooms downstairs. I have been figuring on finishing the woodwork in the different rooms as following: Parlor, mahogany finish; library, golden oak to match furniture which I have; dining room, weathered oak with beam ceiling; hall, golden oak; and den, weathered oak. I would like to have your opinion on the finish of the woodwork also on the furnishing and the color scheme for the different rooms.

Ans.—With the mahogany finished woodwork in the parlor, a soft shade of green would make a restful wall color with which any of the furnishings will blend. The library being in golden oak with furniture to match I think that...
shades of blues in the wall paper with a touch of golden brown would be very pleasing. Many of the English and German papers now are made in combinations of this kind which are very pleasing. The dining room walls would best be treated above the plate rail with some fruit pattern of tapestry effect in paper, shades of old red in the hall and the den in a dark, warm golden brown. With this combination for the various rooms a very pleasing harmony can be carried out. Draperies can be made up to match the different rooms, and with window laces with over-draperies in proper harmony. The rugs for the various rooms would be as follows: Self-toned plain color rug with shaded border for the parlor, Oriental rugs for the hall, and very suitable Wilton rugs can be had for the other rooms with Oriental or Art Nouveau effects.

Orangeville:—
Q.—Will you please answer the following in your magazine and oblige. I enclose a rough sketch of the rooms mentioned.
I want to know what colors to use for walls and ceilings, also what colors for rugs. I am going to have tinted-walls. The hall, woodwork mahogany; library, white and sectional book case, quartered oak, Antwerp finish; double room, parlor and dining-room, divided by grillwork. Both rooms finished in light oak.
Hardwood floors, stained rather dark. These rooms open off hall by large square openings, no doors.
Ans.—With woodwork in the double rooms of light oak and the hardwood floors rather dark I would consider a medium shade of light brown as being very suitable for these rooms. With this a rich shade of blue can be used in the hall, and in the library a shade of old red for the wall covering. Something in soft toned browns in the way of a rug would be suitable, in library, hall and dining-room rugs in modest Oriental patterns can be used.

One of the most effective interior features of the home is a mantel. It gives an atmosphere of hospitality and cheer that is most attractive. The beautiful designs in Modern Mission, Craftsman, Colonial and numerous other styles are well shown in Lorenzen Mantels. Our wood is kiln-dried stock, thoroughly seasoned—our workmen the most skillful and experienced obtainable. The truest conceptions of architectural beauty are expressed in Lorenzen Mantels. Write for our catalogue. We send it Free.

Chas. F. Lorenzen & Co., Inc.
281 N. Ashland Ave., CHICAGO
The first of January is a good time at which to take account of stock, to go over the doings of the past year, with reference to possible improvements, in the one to come.

One, that may suggest itself to some people, is the desirability of changing, from the credit system, to cash payments, for household expenses.

The credit system is generally supposed to be good for trade. In estimating the cost of setting up in business, the shopkeeper allows the first month's supplies, as part of his initial expenses. If he is reasonably successful, he recoups himself in the first few months, out of the increased prices which the entire system allows him to charge. He may also reckon on increased orders due to the fact that the customer, not having to pay cash, will order more liberally.

That is the tradesman's side of it and, for the customer, there is this to be said, that credit is a great convenience in cases of temporary financial embarrassment and that it saves an immense amount of trouble both to dealer and consumer.

But, as an offset, there is the continual temptation to order more than is really needed, to get the more expensive article, when a cheaper one would answer as well, the difference in cost not being so apparent as when hard cash must be counted out, and the increased cost of all articles sold on credit. Fifteen percent is not too large an estimate for this last.

A concomitant of the credit system is the other fashion, of having the grocer or butcher call for orders. There are cases, where this is an absolute necessity, where it is an impossibility for the housekeeper to go to market herself. Indeed the economist has been in small places where going to market was considered very much beneath the dignity of people of social position. With staple groceries, at fixed prices, a written order may be as good as a personal one, but, with meats and vegetables, there is always a wide range of choice, and it is safe to say that, in any case, where a doubt arises, the customer only gets the benefit of it by being present to insist upon her rights. When ordering is left to servants, the case is worse. Unless a maid is exceptionally devoted to her mistress's interests, she is almost certain to consult those of the tradesman, and, if she has relatives or friends living near, she is sometimes not proof against the temptation to keep large supplies on hand for their benefit.

There is an impression abroad that grocers and butchers discriminate in favor of their credit customers. If it is the fact, it is probably so only in respect to saving their most expensive articles for them, knowing that, at the end of a month, they will be unlikely to dispute about their price. But anyone who uses eyes and ears, while waiting in a retail shop, will observe that the clerks in making up orders from the books, invariably send the highest priced articles. When it comes to meat, the case is worse than with groceries. The woman, who sees her meat cut, gets what she pays for; the one, who merely orders, pays for what she gets and gets a great deal of fat and bone, into the bargain.

* * * *

Apropos of servants' relations, it is sometimes desirable to scrutinize the washing, as it hangs on the lines, or the clothes horse. A woman, of the writer's acquaintance...
Private Water Supply Plants for Country or City.

YOU can live without artificial heat in the summer and artificial light is needed only at night. But, you cannot possibly exist without water during any season—day or night.

The water supply problem is therefore vitally important; and it is for the correct solution of this problem that the KEWANEE WATER SYSTEM has been perfected.

With a Kewanee private water supply plant, you may enjoy all the conveniences and comforts offered by the best city water works. You may have an abundant supply of water delivered under strong pressure to the plumbing fixtures in the house, outside hydrants, stable, anywhere. Besides, your buildings will be protected from loss by fire.

You will not need to have a leaky and unsatisfactory tank in your attic. An unsightly and dangerous elevated tank will not be required. You can get a better supply and your service will last indefinitely, if you place a KEWANEE PNEUMATIC TANK in the cellar or bury it in the ground. The water from your own well or cistern will be delivered from this tank to the faucets and hydrants by air pressure.

The above illustration shows the home of Mr. C. E. Lane of Lombard, Ill., who has had a Kewanee Outfit installed in the cellar of his residence for eight years. He says:

"I can only repeat what I have said constantly since the plant was installed. It works perfectly and gives complete satisfaction."

There are over five thousand other Kewanee Outfits in operation. Write for Catalog No. 2 which explains everything and tells where Kewanee Outfits may be found in your state.

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Household Economics—Continued

ance, recently discovered that her maid, who seemed to wash and iron all the week, was in the habit of doing up the greater part of her sister's clothes, for a family of several children.

* * *

The fact, that some domestic pests cease their activity, in the winter, is no reason for suspending operations against them. Water bugs, indeed, are independent of time, and may be furnished with Fatal Food Roach Saute, borax and sugar, or cucumber peelings at anytime. Probably a weekly swabbing of their haunts, with carbolic acid, is as effectual as anything, and much cleaner than any of the various powders, sold for the purpose.

The other parasites are dormant in winter, but a small pitcher full of benzine poured into the crevices of a bed, and especially along the crack at the head and foot of the wire spring, about once a week, will be apt to discourage them so that they will not appear with warm weather.

Of course many people never have this difficulty to contend with. Others, living in rented houses, exposed in city crowds to all sorts of undesirable contact, acquire them without any neglect or carelessness of their own. A liberal use of benzine is really as good as anything, as it is efficient and much cheaper than anything else, and does not injure paper or woodwork. It is possible to paint the entire inner surface of a room with it, and the benzine evaporates so quickly that the smell will have disappeared by night. Carbolic acid, equally efficient, is not always easy to get and is much more expensive. In exterminating any pest, eternal vigilance is the price of safety.

* * *

Most careful housekeepers will admit that books are more or less of a trial. One enjoys having them, and yet they will gather dust, and they will become dilapidated more readily than any other article of common use. Once a month is none too often to dust books systematically, clapping the leaves together vigorously to dislodge the dust, which may have got between them. It is not a difficult task, and one that may be committed to children better than some others.

Dilapidations should be attended to, at once. No book ought to be replaced on the shelves, with a loose or torn leaf. A special sort of “mending,” for loose leaves, is supplied by the Library Bureau, in any large city, and the tissue, sold for repairing bank notes, is equally effectual for torn pages.

Pulling an old book to pieces will suggest, to the ingenious, ways of rebinding. If the sewing of a book is intact, it is not a difficult art to put on a new cover. Binders board and a knife, such as the manual training people use, will supply the sides, stout muslin the back, and the boards can be covered with paper. The best possible paper for the purpose is the French charcoal paper generally called Michelet, although that name really applies only to the heavier grade. It comes in a variety of shades of gray blue, and is very strong. For labels use hot pressed Whatman paper, printed in library hand with very black ink.

* * *

The Fireless Cookstove.

The article on this subject in the Household Economics department in our November number has created so much interest and inquiry that we decided some further information on the subject would be appreciated.

The fireless cooking idea has assumed a position of sufficient importance to warrant the manufacture and sale of a specially designed “stove” as shown in our illustration.

The principle involved is based on the scientific fact that except in hermetically sealed vessels it is impossible to raise the temperature of boiling foods above 212 de-
Household Economics—Continued

degrees Fahrenheit, no matter how much gas or fuel is consumed under the vessel.

The idea in the "fireless" stove is to retain the heat generated in cooking foods over an ordinary wood, coal, gas or oil stove, in a properly insulated cabinet, box or "cooking stove" such as are now on the market.

In a scientifically constructed "fireless" stove, the cooking vessels are provided with air-tight covers which are clamped down with a locking bar after the food has been brought to a boil for a few minutes over your ordinary stove. These vessels fit snugly in their receptacles in the cabinet, and are surrounded on all sides with at least two inches of the best non-heat-conducting material known to science.

Ambrose L. Thomas.

It is with sorrow that we announce to the legion of friends of Ambrose L. Thomas his untimely demise.

Mr. Thomas was one of the originators and, for years, an active member of the firm of Lord & Thomas, advertising agents, Chicago.

Mr. Thomas was born at Thomaston, Maine, January 10th, 1831. He died in Chicago, November 10th, 1906.

The firm of Lord & Thomas transacts a large volume of business in the building-trades line and Mr. Thomas was doubtless personally known to a large number of our advertisers and readers, who will learn with regret of his death.

Character In Doors

The doors of your house should be chosen for their character and should be in harmony with the architectural motif.

Doors should so combine good design with good construction as to become an integral and permanent part of the building.

Morgan Doors

meet these specifications as no other doors do, because they are produced under a perfect system of manufacture, and by artists and artisans whose sole aim has been to identify the name "Morgan" with all that is best in door design and construction. The products of the Morgan shops, as a consequence, not only prove their superiority to the discriminating eye, but are sold under an agreement that is an unconditional guarantee of satisfactory service. They cost no more than other doors.

Write today for our illustrated booklet "The Door Beautiful" telling you more about them. Sent free on request.

Morgan Company, Dept. F, Oshkosh, Wis.

Architects and builders are urged to write for our 64-page catalogue entitled "The Perfect Door," sent free where the request is written on business stationery.

Morgan Company, Dept. F, Oshkosh, Wis.

WO women, one American, the other English, were talking the other day, and the English one remarked:

"I have received a great deal of kindness at the hands of individuals, but I shall always insist that Americans, generally, are not hospitable as English people are." To which the American replied:

"You are perfectly right, but the deficiency is not due to any lack of good will, but largely results from the small supply and poor quality of domestic service, a condition which has always existed in this country."

This condition, be it observed, is likely to be the portion of almost all families of moderate means. The general houseworker is almost disappearing. All the better class of servants are specializing and wages are constantly rising. In New York, it is not unusual to read advertisements, offering twenty-five dollars a month to a woman who will do the housework for a family of two.

How to be hospitable, without a servant, is a question, which vexes the soul of many a kindly woman, with social instincts. Let it be admitted, to begin with, that hospitality of any sort, except to her very intimate friends, is one of the questions with the mother of little children. She is out of it, as much as the woman in deep mourning is out of formal society. But for most other women, something in the shape of entertaining is as possible as pleasant. Not the formal dinner, which is apt to be rather melancholy, even with a maid, but there remain the chafing dish supper, the luncheon and the high tea, any one of which may be made a pleasant and not burdensome function.

For a luncheon, bouillon or a cream soup, in cups, a course of something creamed or curried, which can be served from a chafing dish, or a casserole, a simple salad and a dessert, which may be nothing more than crackers and cheese with some rich preserve, is a good menu, and can be prepared before the guests set foot in the house, while its service can be made simple in the extreme.

And, speaking of lunches, why don't people study variety more? So often one's guests are people, who live in hotels, or boarding houses, and seldom get outside the beaten track in the way of food. French rolls are very good but how much better are muffins or hot corn bread, and lettuce is not to be compared to good home made chicken salad. Which reminds the writer of a lunch she heard of sometime ago to which a woman invited half a dozen other women, whose antecedents she happened to know.

She began with cups of old fashioned beef soup, the sort that is made by simmering a shank of beef all day, seasoning it and adding the vegetables and cooking longer, straining it and removing the fat, the sort of soup which all the notable cooks of the last century made to perfection. Then came a mound of beautifully browned corned beef hash, made of absolutely lean meat, moistened with cream and enriched with butter, with which went sweet potatoes, fried raw, stuffed pickled peppers and rye muffins. Chicken salad followed with bread and butter sandwiches and for dessert a moulded baked custard and pound-
cakes. Coffee was served with the second course, and through the meal, and the guests voted this excursion into the past a great success.

A high tea is, practically, a lunch given at night, to which men are invited. It is permissible to have everything on the table at once and to make the service very informal. Bouillon in cups, a hot course from the chafing dish, either cold meat or a salad, hot rolls and a hot dessert are the proper things to serve.

The chafing dish supper is, of course, great fun, when there are several cooks and several chafing dishes, but it may be very simple. It should be served on the bare dining table and be as informal as possible. There should be a very liberal supply of sandwiches, and the hot dish may be any one of a dozen things in a cream or Newburg sauce. When that has been disposed of, the appropriate finish is a Welsh rarebit made on the table, in a second chafing dish. The toast for this must have been made previously and kept hot, in the kitchen. If a second chafing dish is lacking, its place may be economically supplied by a Bunsen burner, attached to the gas, and provided with an asbestos plate and an earthen casserole. Ale or beer, or ginger ale or Apollinaris are the proper liquids for a chafing dish supper, to which may be added hot Scotch.

The essence of hospitality was indicated by a literary man who said to another:

"When are you going to ask me and my wife to eat a chop and a mealy potato, with you and your wife?"

Only one thing is necessary to informal hospitality, aside from the kindly thought, that is to be certain of your guests. The meekest of women objects to having her efforts compared with those of her richer neighbor. But why, after all, should we bother to entertain people who care so little for us that they criticize our hospitality?

** * * *

Dietetic specialists discourage the eating of large quantities of bread. Bread and butter is a fat forming food, and does not result in any great amount of muscular strength. There is less objection to the coarse breads, which are rich in mineral elements, but, as a general thing, starchy foods in excess tend to the production of the dreaded uric acid.
In England, some years since, an investigation as to the conditions resulting in the great prevalence of cancer, among the women of the lower middle class, resulted in the discovery that, in the great number of cases, the patients had lived almost wholly upon white bread.

* * * *

Apropos of diet, one of the methods of reducing flesh consists largely in thorough mastication. Food, which forms muscle rather than fat is selected, and each mouthful is so thoroughly chewed, that it is practically disintegrated, before it reaches the stomach. The process requires so much time, and the food is so perfectly assimilated, that a comparatively small quantity is required. People who have tried it report a gratifying decrease of weight and a great improvement in their general health.

* * * *

In baking a loaf of plain cake, use a long narrow tin, line it with waxed paper and divide it across the center with a strip of cardboard. Then divide the cake dough into two portions. Leave one-half plain and put it into one end of the tin. Into the other half stir a vanilla flavoring and enough cocoa to make it dark brown, and turn it into the other division. Pull out the card board and bake. Result two kinds of cake, with a slice of marbled cake in the middle. The two halves of the cake may be varied indefinitely.

* * * *

We are happy to note a decadence of the one color idea in table decoration. The day of the pink tea and the yellow dinner has largely passed. Still it is well to achieve a certain harmony, between dishes and their contents. Sliced oranges in a purple bowl are more startling than enticing and a lobster, in all this scarlet glory, spread out on a blue platter, may have a patriotic suggestion but lacks any other charm.
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Questions on construction and specifications will be answered promptly here.

Mrs. M. R. B., Watertown, S. D.
Q.—After reading your magazine for November I wondered if in any of the past numbers you had articles on Modern Domestic Architecture, that would help me in the study of this subject. Perhaps you could suggest some book that would help me.

Ans.—You can obtain the following books and many others along these lines from W. T. Comstock, 23 Warren St., N. Y. City.
Colonial Houses for Modern Homes, Child, $2.00.
Domestic Colonial Architecture in New England, Corner & Soderholtz, $12.00.
Stately Homes in America, Desmond & Croly, $7.50.
Beautiful Homes, L. H. Gibson, $3.00.
American Estates and Gardens, Ferrel, $10.00.
Notes on the Art of Home Planning, Osborne, $1.00.

McC. Sisters, Duquoin, Ill.
Q.—We find on one of your cuts where columns are used, and we like them. The living room is to be 14 x 17, reception hall 14 x 15 x 91/2 ft. high, how large ought the columns to be and how far below ceiling should the casing around opening be? No one here has an opening fixed that way, so thought best to ask some one who knows. The columns are to be of quarter sawed oak.

Ans.—The height of the columned opening should be the height of the doors in the room. Assuming that they are 7 ft. 6 in. high, the dado or pedestal should be 18 inches high, leaving the columns 6 ft. high. If the Ionic order is used, the columns will be 8 inches diameter at the base and 61/2 inches diameter at the cap. The base

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to shaft will be 4 inches high and the cap, if Scamozzi, 3 1/4 inches high and if Ereththeum Ionic, 5 5/8 inches high. The lower third of column shaft should be straight. The upper two-thirds to diminish on a curve to smallest diameter at cap. It will be necessary to have a draughtsman draw the details if you want them correct.

Mr. J. S., Greencastle, Pa.

Q.—I have been a reader of Keith's Magazine for some time and have gotten much valuable information. Now I would like to get a little more information in reference to ventilating a solid glass front grocery store to prevent sweating. Any information you can give me on this subject will be appreciated very much.

Ans.—The practical way to prevent moisture from congealing and freezing on the show windows in the winter time is to build up a partition, which is usually made of glass, at the back of the show window from bulk head to the ceiling; and through the frame of the outside glass bore holes about one-half to three-quarters of an inch in diameter and six inches (6 in.) on center, extending these holes all around each light of glass. This allows a free circulation of the outside air in the window. The temperature being the same on both sides of the glass, the moisture will not congeal.

The Kewanee store front window construction while expensive is the best thing to use to obtain this result.

E begin in this number of Keith's Magazine the publication of complete architectural specifications, of the standard form as in use by leading architects. This will run thru several numbers of the magazine.

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Of the labor and materials to be furnished in the erection of a residence to be constructed for ........... in accordance with the accompanying drawings

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CONTRACTOR—The contractor shall furnish all materials, labor, transportation, scaffolding, utensils, etc., of every description required for the full performance of the work herein specified, except as otherwise particularly noted. He shall lay out his work and be responsible for its correctness; shall keep a competent foreman on the premises; shall not sublet any part of his work without the written consent of the owner; shall obtain all necessary permits to properly carry out his work, paying the lawful fees therefor; shall give to the proper authorities all requisite notices relating to the work in his charge, shall be responsible for all violations of law or damage to persons or property caused by him or his employees and shall properly protect his work during its progress.

IT is especially understood and agreed that the drawings herein referred to and these specifications are intended to cover a complete and finished job in every respect and the contractor is to furnish all items of labor and materials in accordance with the true intent and meaning of said drawings and specifications that may be necessary to prepare the building in all its details ready for occupancy, notwithstanding each item be not specially mentioned in either or both of said drawings and specifications. The contractor will keep the building insured against a fire and be responsible for all loss or damage until the completion of his contract.

Excavate as shown to be necessary by

**Mason Work.**

the drawings for cellar, etc., and after masonry is thoroughly set and dry, neatly point up and fill in around the building. At finish remove all surplus earth and rubbish from the premises.

FOOTINGS—Select large flat stone for the footings of all posts or piers, chimneys and walls. All footings are to start on solid original soil and to be of

---

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Architect's Corner—Continued

Size shown upon the drawings and all wall footings are to run clear through from inside to outside of wall.

STONE FOUNDATION—Lay up foundation walls as required by the drawings, with good, sound, native stone, that showing above grade to be selected rubble of uniform color and as marked on the drawings. No stone is to be less than 4x8 in size or less than 4 inches thick. The joints are to be plumb and level and the whole work well bonded and bedded with well filled joints. Window sills to be as shown, well dressed and 4 inches thick and of ample width to run under wood sills 2 inches and to project from face of wall and to be set in wall with proper inclination to drain water off. Point up entire inside of foundation walls and outside below grade with cement mortar. Point up outside above grade with cement mortar of a color a little darker than the stone, drawing a bead on same. Also beam-fill all first floor joists.

GROUTING—The entire cellar floor is to be grouted with three inches of broken stone or gravel, sand and Milwaukee cement and finished with one-half inch of pure Portland cement mortar, mixed in proportions of half and half. If marked wood floor in basement, bed in concrete 2x4 pieces for joist.

BRICK WORK—All the brick used to be good, hard and well burned. Well wet if laid in warm, dry weather and must be kept dry if laid in damp or freezing weather. All joints must be flushed solid. For thickness of walls, see plans.

BRICK FOUNDATION—In case a brick foundation is desired, in place of stone lay up a solid 12 inch wall, starting same on three courses of footings of brick, laid flatwise, width of bottom to be 20 inches.

CISTERN—Build a forty barrel cistern of 4 inch brick walls and provide same with a double 2 inch plank cover with hinged man-hole lid. At convenient point outside of house, build overflow for cistern and connect same with 4 inch tile drain pipe. Also connect down spouts with cistern in same manner. Cement the entire inside of cistern in a thorough manner, using pure Portland cement mortar, mixed in proportions of half and half.

(TO BE CONTINUED.)
NOTES ON PRICES.

Cost Estimate.

We ask our readers to bear in mind that the published cost prices accompanying our descriptions, are not close estimates, but estimated costs furnished by the architects. Also, that conditions frequently add or lessen the cost to a large degree. With a large amount of building under way, contractors will want a good big profit on any additional job they take. Reversed, contractors all looking for work, you get close figures. These facts account for the frequent wide difference in actual cost of building in different localities, from published prices. We likewise publish information concerning the different costs of material and labor throughout the country, as furnished by our correspondents, and request that those who have built or have secured such figures will send them in to Keith's Magazine for publication.

The Following are Prices Sent Us by Correspondents:

**Sidney, Mont.**

- Carpenters, per hour $ .35 to $ .40
- Common labor, per hour $ .20 to $ .30
- Teaming or hauling, per hour $ .50
- Masons, per hour $ .65
- Plasterers, per hour $ .65
- Dimension lumber, per M. $ 32.00
- Shiplap, per M. $ 35.00 to 37.50
- Common boards, per M. $ 29.00 to 35.00
- Ceiling, per M. $ 36.00
- Shingles, 6-2, per M. $ 3.05
- Lath, per M. $ 8.00
- Lap siding, per M. $ 33.00
- Cement, per bbl. $ 5.60

As reported by Wm. M. Combe.

**Tarpon Springs, Fla.**

- Lumber, yellow pine, rough framing, sized, per M. $ 14.00 to $ 18.00
- Extra lengths and sizes, additional, per M. $ 2.00 to 5.00
- Sized, 4 sides, per M. $ 18.00 to 22.00
- Siding, per M. $ 16.00 to 20.00
- Flooring, T. & G., No. 1, heart face, 3½ inch face, per M. $ 18.00 to 22.00
- Flooring, 2½ inch face, per M. $ 20.00 to 30.00
- Flooring, No. 2, per M. $ 16.00 to 20.00
- Boards, per M. $ 10.00 to 22.00
- Casing jams and outside finish, per M. $ 20.00 to 22.00
- Inside finish, per M. $ 20.00 to 22.00
- Inside finish and trim for oil finish, per M. $ 25.00 to 35.00
- Turned work, governed by Chicago prices.
- Moulding stock, sizes, same as Chicago prices.
- Cypress, not used, only Black Cypress for inside trim and finish in special cases, per M. $ 16.00 to 60.00
- Curly Pine, per M. $ 25.00 to 100.00
- Cypress shingles, No. 1, 5x18, per M. $ 5.00 to 5.50
- Cypress shingles, No. 2, 5x18, per M. $ 4.00 to 4.50
- Brick, per M. $ 10.75 to 22.00
- Lime, per bbl. $ 1.50 to 1.55
- Cement, per bbl. $ 4.25 to 4.75
- Hair Plaster, per yard $ .25 to .30
- Patent Plaster, per yard $ .28 to .35
- Laborers, ($1.50 is standard), per day $ 1.25 to 1.75
- Carpenters, ($2.50 is standard), per day $ 175 to 3.50
- Painters, ($3.00 is standard), per day $ 175 to 3.50
- Bricklayers, per hour $ .50
- Plumbers, per day $ 5.00 to 6.00
- Tinters, per day $ 3.50 to 3.75
- Gas Fitters, per day $ 3.50

As reported for Keith's Magazine by Willis Castaing, Contractor.

**Altus, Okla.**

- Lumber, No. 1, Dim., per M $ 28.00 to 29.00
- B. Flooring, per M. $ 38.00
- B. Siding, per M. $ 38.00
- B. Finish, per M. $ 50.00
- Shingles, per M. $ 4.00 to 4.50
- No. 1 Builders' Brick, per M. $ 11.00 to 11.25
- No. 1 Face Brick, per M. $ 15.00 to 18.00
- Lime, per bbl. $ 1.80
- Sand, per yard $ 1.50
- Bricklayers, per 8 hours $ 6.40 to 8.00
- Carpenters, per 10 hours $ 2.50 to 4.00
- Common labor, per 10 hours $ 2.00 to 2.50

As reported for Keith's Magazine by Jno. W. Lofland, Contractor.

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A Maid in Arcady
The pleasure of reading "A Maid in Arcady," a charming love story by Ralph Henry Barbour, is enhanced by the delight in handling a beautiful book. The heavy enameled paper, wide margins and dainty illustrations running through the pages are a feast for the eye, while the story told with Mr. Barbour's well-known facility for bright repartee and interesting situations, holds the reader with its charm.

This is a companion volume to Mr. Barbour's previous books—"Kitty of the Roses" and "An Orchard Princess"—all being gift-books that would be greatly appreciated by the recipient. Pub., J. B. Lippincott Co., Phila., Pa., price $2.00.

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A handy little volume of 140 pages by E. P. Powell, being a treatise on the planting, growth, and management of hedge plants for country and suburban homes.

The readers of Keith's are familiar with Mr. Powell's writings which have appeared frequently in our pages and he is recognized as an authority on the subjects he covers.

The present book is fully illustrated and forms a valuable manual of practical instruction on the planting and care of shrubbery. As such it will appeal to our readers who have either small or large grounds to beautify. Orange Judd Co., New York, Pub., price 50 cents.

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The book is well illustrated from photographs, two or three young people in the story serve to make it interesting and dry detail and botanizing is omitted. Pub., Fred’k A. Stokes Co., New York, price $1.50.

A neat little booklet, fully illustrated, is received from the Manlove Gate Co. of Chicago. For the country and suburban home where gates are used at the driveway entrance, the Manlove device would seem to be the ultima thule of convenience.

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The love stories of two dominating figures in the story are carried through the many trials and hardships of the rough mountain country in lawless days. Situations of absorbing interest move rapidly through the chapters, and there is not a dull page in the book. Pubs., Chas. Scribner's Sons, New York, price, $1.50.

The field covered by this book of Mrs. Frank Learned's is, perhaps, best shown by a partial list of its forty-two chapters. These include Invitations and Answers, Luncheons, Teas, Informal Card Parties, Cotillions, Dinner Dances, Theatre Parties, The Table and its Appointments, Customs at the Table, Wedding Preparation, Hostess in a Country House, The Employees in a Household. Suggestions in detail are given on note-writing, conversation, travelling, dress for all occasions for men and women and numerous similar topics. The book is a complete compendium of "what to do, and how to do it" for all social occasions, and "affairs," and as it is just out, is up-to-the-minute on these matters as approved in the metropolis. Pubs., F. A. Stokes Co., New York, price $1.25.

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(See Page 102.)
From the early days of our ancestors in “Old New England” in the eighteenth century, down to the present beginning of the twentieth century the methods of construction and the designing of houses has seen many evolutions, and the character of the work and designing from decade to decade is a good indication of general conditions as they existed.

We are wont to speak of the work done in those early days as “primitive” but we may learn much from their methods; they were at least honest and faithful in their work as many of the old buildings remaining will attest. The timbers used in construction were hewn, the principal sills, girders and posts, being often of elm, and in many instances are apparently as good today as when first cut.
The construction of frame houses like the barns, was with heavy sills, dovetailed at the angles, draw-bored and pinned, and the upright walls framed together in bents with tenons and held with wood pins. The outside of the frame was covered with boards much the same as now and in many instances sea grass was used as a covering or as a filling in the wall, this material was found in great quantities on the sea shore, and served the double purpose of warmth and protection from fire. Of recent years the value of this sea grass has come to be known and is made into a building paper or “quilt” and is unexcelled for deadening between floors or for warmth in outside walls.

The simplicity of the “Colonial” home was not alone a necessity for economy’s sake, but was entirely in keeping with the strong and rugged character of the people. Those simple types of houses were not entirely without attempt at architectural effect. The architects and builders of those days were even more familiar with Grecian history and the five leading orders of Architecture than are we of the present day.

The different members of the cornice or entablature were always studied and must be “laid out by rule,” for to go contrary to those rules required more independence and freedom of ideas than those Puritan days would sanction. There were two striking characteristics, one was plainness and the other symmetry. The entrance was usually in the center through a small porch, the piazza belonging to a later date, and usually the broad side of the house fronting the street, and a chimney on each side, an equal number of windows on each side of the door-way and similar windows above. The openings were square and small with the sash divided into small lights, this plainness
was occasionally broken by an arched doorway with side lights and ornamental transom lights. The main hall extended from front to rear of house with staircase at one side, double parlors on one side of hall and sitting room, with dining room back of same on the opposite side, and a fire place on each side of the house. The rear parlor was often used for family bed room. The main front parlor was the dignified room, generally kept closed and opened only on state occasions. The cornice was made snug, with small members and slight projection and usually bracketed: so much for the early New England Colonial Home, its memories are sacred and its lasting effects are our heritage, the influence of which has been greatly felt and appreciated of late by people of the “plain common sense” type.

The Georgian period of which so much has been said and written, held sway mainly through the southern states, and many of the homes of rich southern planters that have been held in the families nearly two hundred years are still pointed to with pride.

These types of colonial homes differed somewhat from the plainer houses of the New Englanders, and indicated more influence and wealth. The most noticeable feature being the greater height of stories and roof and the large porticoes with the columns extended up to the roof, always keeping close within the rules of the “or-
The roofs were high pitched and the upper stories lighted with dormer windows. Until 1876 this peculiar style of building and treatment of roofs was employed in all kinds of public buildings as well as in houses. In no locality did it become more common than through Massachusetts. At the time of the centennial celebration the variety of styles of buildings that were introduced in Philadelphia, from foreign countries resulted in a marked change, and the young enthusiasts through the country vied with each other in producing all kinds of vagaries, the result being the so-called "Queen Anne" craze. It cannot be said that we have gotten entirely over this yet, but fortune favored us with the "World's Fair" of 1893, when competent architects who felt the necessity of "getting back to the first principles" designed and built for us the "White City" which will be remembered by most of us of the present generation with admiration. Those buildings were designed mainly along classic lines, and undoubtedly had great effect on the character of our present day building. Our three illustrations are types of modern "Colonial" homes, and although the plan and arrangement of these houses might not in any way remind one of the earlier homes of which we have been writing, yet the plain and simple treatment of the exteriors with the careful thought that has been given to the study in the detail of the cornices, columns, windows, entrances, etc., show very plainly the colonial feeling. In these homes the more modern ideas of higher foundations and higher prices are very apparent. To criticise these designs is not the intention of the writer, as it would only serve to show his own failings, it is rather to show their good qualities and point out the improvements in our home building of today as a help to those who would build for themselves.

The foundations with the stone piazza floors is a great advance over the old style of wood floors, carrying with it the idea of solidity and permanence. These houses are suited according to their outline and general character, to different locations. All houses are enhanced by trees and foliage, but some seem to require these surroundings more than others; it is apparent that the symmetrical front house with gable end to the street is better suited than either of the others to a city lot. The one with the piazza extended around the corner and with the dormer windows in the roof is well adapted to a corner lot and would look still better with more liberal grounds and tree foliage.

The third design with the Georgian Colonial treatment, is far less adapted than either of the others to a city lot. It is the judgment of the writer that a house of this type that certainly has dignity and character, requires "grounds," large trees and plenty of foliage, without which and being placed near the street on a city lot, it becomes cold and forbidding in its look, carrying with it the idea of publicity rather than the home feeling that is so much to be desired. With proper setting a home of this type is in many ways ideal, has dignity, and always attracts attention; it may also be said to be pretentious which makes it the more necessary that it should have proper surroundings. These three houses are fair samples of typical American homes that are being built at the present time for our business men, and reflect much credit upon the taste and refinement of the owners themselves as well as the architects, and they also speak plainly of the rapid improvement of the common sense ideas in residence architecture.
Hints for the Modern House.

By J. Taylor.

I.—THE LIVING ROOM.

The new century has brought with it many reforms, and great changes, in no respect is the altered condition more interesting and important than in matters relating to the home.

I have recently examined the plans of a series of houses erected in America. They reveal the modern spirit in many particulars, in none more so than in the attention bestowed on the living room.

In the case alluded to there is besides, a commodious dining room, the two divided by a heavy curtain only, and capable on occasion of being used together. I visited some time ago at an artist's house that was designed on a somewhat novel plan. The main section of the ground floor was occupied by a great central living room with convenient recesses at two sides, in one of which stood a long narrow dining table with a bench on one side and end; at the other end a door communicated with a passage leading to the kitchen.

Across the front of the recess there was fixed a heavy curtain, which when dinner was being set was drawn close.

The other recess was arranged for writing purposes; and beyond the living room and separated again by a conveniently worked curtain was the artist's studio.

The house was just one of those that gave the impression of uniqueness, and both architecturally and decoratively it stood alone.

The artist was his own architect, for he was an architect before he became an artist.

Now the living room in a modern house should have some distinctive features not likely to be met with elsewhere; the best way to secure this is to interest the young people in the construction and decoration of the house, and to get them set a thinking on the subject.

Then with the diversity of human nature there will be infinite variety, and in so far as a man's house is a reflection of himself it will be interesting.
Now artists have unconventional ideas on decoration. They approach the subject free from the use and wont methods that sometimes make it as difficult for a decorator to be original as for the proverbial camel to go through the eye of a needle. The artist stained all the woodwork a fresh green, covered the walls to the height of the doors with ordinary "brown paper" of a dark grey shade, Above this a deep white frieze showed, a restrained stencil, a rich note of color being introduced at the hearth where an unconventional chimney piece was built of dull red brick.

The artist knew the value of a neutral tint as a background for pictures.

Shades of grey, biscuit color and white make ideal foundations for a collection of water colors, or black and white drawings, with either of these the ordinary gilded frame would be out of place, a dark grey will be found suitable in such cases, both for walls and pictures.

In the living room illustrated a quaint and unconventional note is struck, and the whole scheme is one of great simplicity.

The drawing shows a corner chimney piece, but with the fire place on one of the side walls the treatment will do equally well.

The chimney piece is built of freestone, the arched niche being both useful and ornamental.

The fender is framed in wood, and covered over with dark copper, the idea being to form a base for the chimney piece and to afford a convenient seat by the fire. The grate is of wrought iron.

The floor is stained green; the walls are covered with a grey burlap from baseboard to picture moulding, beyond this, and on the ceiling the tint is white; and the squares on the frieze are painted a dull black. The absence of cornice is quite in keeping with the spirit of modern decorative art, which is as much opposed to uncleanliness as to that which is commonplace, and anything that encourages it is tabooed.

In the rug by the fire there is a bright note of color, green and blue and ruby being combined, while in the casement window the small hearts at the intersection of the lead lines are also ruby.

The hangings are of green linen, fixed under a box cornice stained green. They are made to pull with cords, thus avoiding the soiling and stretching of the front edges. The furniture and wood work are of oak in natural color; oiled, waxed and rubbed, and always rubbed, a process that improves oak as time goes on.

The metal fittings on furniture and casement are wrought iron; the hanging lamp is of the same metal, with leaded panels in green and ruby colored glass. The Japanese prints are in narrow black frames that contrast finely with the light colored walls.

The vases are purple and ruby, and the furniture is upholstered in a green and purple tapestry.

There may be those to whom such a room will appear altogether too extreme, because they may never have given a serious thought to modern decorative art, but the effect of association with a carefully arranged scheme of this description is, that it becomes impossible to live with the old style of decoration, in which the paper is generally so fussy as to engage the attention exclusively.

In looking at a fine portrait one should be quite unconscious of the background, the same should apply in a skillfully decorated room.

This is recognized by all the leading men of the new school, but it is difficult to wean the people from the old idea. Note the simple lines and construction of the sideboard and table, the inlaying on the panels in the upper part of the first named is in green and yellow, the colors of the daffodil.

A common mistake made in the furnishing and decorating of a living room is to overcrowd in the one case and over-elaborate in the other.

This is quite as vulgar as overdressing, and those who would have an artistic home must not err in this direction.

The living room illustrated might be varied by placing a cozy bench under the window, or a narrow writing table between the windows, with a seat on either side.

When furnishing a living room do not calculate to complete it right off, leave something for experience to add, and do not hesitate to remove that which may be found useless; in this way, with carefully arranged decoration you will attain to a real living room, consistent with your ideas, and equal to your requirements.
SIMPLICITY does not mean barrenness. Make simplicity as beautiful as you please or can. But be sure it be done for beauty’s sake and not for show.”

William Morris.

In a recent article on “entrances” the writer pointed out in some detail the advisability of adorning that feature of a home. The subject was dwelt upon purely from a standpoint of beauty, as an entrance has, strictly speaking, no further utility than to mark the principal door to the house. This month a subject closely allied to it but of far more import will be handled, namely, porches.

A home has two centers around which the family gathers and about which remain the fondest recollection after leaving it: They are the front porch and the fireplace. As the one is the center of family life in winter, the other is the beginning and end of it in summer. “Everyone loves a lover” and the lovers’ chief delight is to sit before a blazing fireplace or linger at eventide on the porch. There is something about the cozy firelights of the former or the pale moon light on the latter that brings out those intimate sentiments which the sun with all its brightness and majesty fails to bring forth.

There is a class of architects in the country that ridicule the appearance and utility of our modern piazza or porch. Without denying, as a designer, that it is much easier to design a house in good proportion without a porch than with one, and that the porch is often the ruination of a house from an architectural
The criticism is not well taken. Call it an American fad, if you please; admitted that the porch or piazza is seldom found in Europe, even in the warm climates where the loggia takes its place. It is not the only luxury created for Americans by Americans and not known in Europe or elsewhere, and if the American home-builder wants a porch on which to rest on summer afternoon or sit in the cool of the evening breeze, it is “up to the architect” to provide one and make it at once beautiful, home-like, and of good proportion first in itself and in its relation to the house.

Among other American creations in home building is the country home. To build a country home without a porch is as much an anomaly as “Romeo and Juliet” without a Romeo.

This month we are taking up the subject of porches in the city, in another article will be taken up the proper adornment and design of porches on suburban or country houses and their relation to a life in nature’s realm.

In considering the porch, the illustrations here used to show in concrete form the following comments and criticisms, should not necessarily be taken as a complete standard of porch designs. They are not; but are examples handy at the moment. “Consult modern work, as it may serve to suggest to you the course of study to be pursued, as it may establish a standard of merit you are to attain, as it illustrates the modus operandi of the house builder’s craft, and lastly, as it shows you mistakes you are to avoid; but do not copy it—that is architectural plagiarism.”

The porch designated as “Colonial in Ionic” is a good example of the modern city porch. The size of a city lot usually decides the location of the porch. If the lot is very broad, the porch may be placed on the side of the house where it has more seclusion and does not precipitate
one in the public’s gaze. As a rule, however, the lot is not much wider than the house and the porch is placed on the front. In this position it serves the double purpose of porch and entrance. The porch referred to is well designed in details and general proportion, placing the steps to one side of the opening between the columns gently breaks the monotony, without destroying the beauty of the otherwise symmetrical proportions. It also affords an opportunity for a newel which as a pedestal has been adorned in artistic fashion. The balustrade of “bottle” balusters looks well and the columns are properly proportioned. This last feature is where the builder too often makes an unpardonable mistake in making them too small, or perfectly straight without tapering them. It is poor economy to go astray from the well known classic standards for columns to reduce their cost. There is but one proper way, to build the columns of each order of architecture,—make them so. Columns are sometimes placed singly and sometimes double. If the open spaces between the columns are to be very wide it is best to plan the columns double as shown in another illustration, also a colonial porch with Ionic columns. This porch has a stone foundation, cement floor and wrought iron railings, all of which add materially to the original cost but save the constant repairs of an all wood porch.

“The modern piazza” is presented as an example of an inharmony of good details. I can see no reason why the upper and lower porch rails were not made alike, both are of good detail and design but they do not harmonize. Then there is that old monotonous false economy of only three columns on the front, making but two open spaces. In grouping windows, dormers or porch spaces,
an odd number always looks the best. It will be noticed that the window groups on the side walls and dormer of this house are odd numbers, or three in a row, which is right. The house with a porch and portico solves the problem for a corner lot. The portico is the public entrance and has a decided air of stateliness about it, conveying the impression to a passerby that the owner is a frequent entertainer and has erected this monument as a fitting welcome for his guests. The family porch is more retired and is placed on the side. It is strictly for the family use and has no steps leading down, or outside entrance of any kind through which the public, guests or strangers, can intrude. If more seclusion is desired than the average porch affords, a screen of climbing vines can be soon grown and serves the purpose admirably as well as enhancing the beauty of the porch, provided it is not over-grown and hid completely, thus adding a forsaken and gloomy appearance to it. For this purpose nothing is better than the ivy. The clematis, wisteria, honey-suckle, climbing rose or even the old fashioned morning glory or wild-cucumber vines can also be used with varying effect.
PLANNING THE GARDEN.

By Ida D. Bennett.

PLANNING the garden is not strictly a definitive term as it may aptly apply both to the planning of the garden as related to what shall be grown therein or to the laying out of the beds, their size and scenic effect—the chiaroscuro of form and color which shall ensue.

Where a definite idea of what is to be grown, and the amount of space required is possessed, both operations may be included in the term and the happiest results follow. This is the form of gardening much affected during the long months of winter and which blossoms into greater activity about the first of February or the time of the coming of the spring catalogues. It has its delights, scarcely excelled by those which come in more material form in May and June and continue throughout the season's calendar.

In planning a garden of any considerable size it is well to begin the work with pencil and paper and to lay out the ground to be platted by scale, using an eighth or quarter of an inch to represent feet and keeping the scale uniform throughout. In this way most of the obstacles to be overcome may be met and grappled with before a spade is put into the ground, and much time and labor saved.

It will be generally supposed that the beds are the first matter of importance, but this is not strictly so. Paths which shall reach all parts of the garden in the most convenient way and that shall be easily accessible from all parts of the surrounding grounds are really the first and only important matter as any one who has cared for an ill-arranged and approached garden will vouch for.

The most prominent thought in connection with a garden is the amount of pleasure we shall derive from its bloom and beauty and rightly so, but all this bloom and beauty is purchased at the expense of much labor, and paths wide enough for the easy wheeling of wheelbarrow or cart are an important consideration. It is also important that the paths should merge into each other without any awkward bends or acute angles and that they should be sufficient in number and extent to make all parts of the garden easily accessible: a path which ends in a cul-de-sac invites to a short cut across the beds and should be avoided.

Another point which may be considered in connection with the path, is that of seats. There is always some one point from which the garden is seen at its best, let this vantage point be the site of a comfortable seat where one may rest and enjoy the work of heart and brain and hands and find that it is good. If more than one such point occurs so much the better.

As to what shape the beds shall be and with what they shall be filled, well the paths will largely decide the first and the conditions of soil, of light and shade and position the latter.

I have recently relaid my own garden in a manner that is in many respects highly satisfactory and may furnish useful hints for the planning of other gardens. The most noticeable feature of the old garden to be replatted and the one which could not be changed, the lily pond, was made the central feature of the new, and all paths made to radiate from this to the extreme limits of the garden; this gives
long triangular beds of various sizes and most spacious paths extending to all parts, with narrower paths skirting the rear portion and affording easy transit from path to path. There is now no reasonable part of the lawn from which the center of the garden may not be easily reached by direct paths, and the view when the various flowers are in bloom promises to be all that can be desired. The east side of the garden is somewhat shaded on the south and there, in their season, great beds of Iris-German and Japanese—two score varieties, make a wonderful mass of color, while on the western side the roses, teas and hybrid teas, will give bloom and fragrance all through the summer, while in early spring row after row of gorgeous tulips brighten all the paths and in the older garden which is as yet unchanged, the lilies and paeonies hold sway, and hardy perennial shrubs bring up the rear.

It is always well in planning the garden to consult the calendar of bloom and arrange that there shall be an abundance of bloom for each month in the year, or rather the floral year. For this reason one should plant freely of spring blooming bulbs which may be used to border the beds leaving the main part of the bed for later blooming plants. Tulips, crocus and scillas may be used for these borders while in spaces between the hardy shrubs may be planted clumps of the camassias, lilies of many kinds and many summer blooming bulbs such as the montbretia, gladiola, ismene and the like.
Foxgloves may be planted among the iris and the hardy anemone—whirlwind will give its exquisite snowy blossoms in profusion late in September and October and the hardy chrysanthemum will be a blaze of color at a time when all the rest of the flowers are laid low by frost.

After the early tulips and crocus have passed, the ground may be covered with pansies, forget-me-nots and other low-growing plants. The verbena, where it can be held somewhat in check is always beautiful and so also is the phlox-subulata which blooms in May, and I am of the opinion that the covering this last plant affords is highly beneficial to the bulbs, as it affords protection from the heat of the sun at a time when the bulbs are resting up for another year's work.

It is well in planning the garden to relegated to the rear those hardy plants which have but a brief season of bloom early in the year and whose foliage does not possess sufficient beauty to entitle them to a conspicuous place when out of flower, such as the spireas, monkshood, and the like. Study the grouping of shrubs and see how much may be accomplished to increase the garden's beauty by simply planting the right things together. There is, for instance, a lovely pink lychnis-D., plenissima semperflorens which when grouped with the deutzia-D.gracilis is exquisitely beautiful, and the more common lychnis-L. chalcedonica is most effective when grown against a background of feathery-white clematis or the polygonum baldschuanicum. There is a beautiful fern-leaved spirea-S. filipendula, which has beautiful fern-like foliage which is attractive at all stages of its growth and may be used to border beds of other perennials with excellent effect. In fact the use of border, or edging plants, nearly doubles the capacity of the beds and is especially valuable as prolonging their florescence.

Above all in planning the garden one must realize at the start that they cannot have everything and select those plants best calculated to succeed in the climate, soil, exposure and with the care that it will be possible to give them. Take it all in all the hardy garden of old-fashioned flowers offers the greatest promise of success and one can not go far astray in planting liberally of the best of these and interspersing between them such annuals as one desires and has room for.

The accompanying plan will furnish a good, practical model for the laying out of a small or an extensive flower garden of the all-the-year-around variety as the arrangements of paths will be found very convenient and the beds give a large amount of space for flowers and are, at the same time, convenient to care for. They are also effective as they allow of the planting of plants in long, continuous rows—the most effective arrangement.

The Georgian Style in Furniture.

By John Burt.

Three names are indelibly associated with what we somewhat loosely call the colonial style of furniture, but which is really Georgian. They were all of them London master craftsmen, all of them with a special genius for design, and each the originator of a style bearing his name. They were Chippendale, Heppelwhite and Sheraton.

Chippendale, the earliest of the three, flourished in the middle of the eighteenth century. For sixty years before that most furniture had been what is called Queen Anne, generally of mahogany and constructed on Dutch lines. To this style belong the fiddleback chair, bandy legged tables, tall clocks, curving cabriole legs and ball and claw feet. The larger part of the furniture in this country dating back to colonial times is of this style. The wood is almost invariably mahogany. Most of it was of course imported from England, as arts and crafts were but little developed before the Revolution. In the south, some oak Jacobean furniture of the previous century has survived.

Chippendale is erroneously associated
in the minds of many people with furniture of fine construction and extreme simplicity. Nothing can be further from the fact. Chippendale's designs are of extreme elaboration and enriched with much carving. He made great use of ribbon ornament, which he borrowed from French decorators, some of his chairs having backs which are almost wholly made up of waved and twisted ribbons carved in high relief. He used the Dutch ball-and-claw foot and so enriched it with carving that it was almost unrecognizable. Acanthus scrolls, shells and ribbons run riot in his work. He published books of designs, and many of the more elaborate ones were never executed.

It is as a maker of chairs that Chippendale is preeminent. Their substantial construction has never been excelled. One noticeable feature is the insertion of the ends of the splay, the pierced or carved central piece of the back, into the seat, while the legs, generally curving, are substantially braced. Although the backs are angular rather than curved they widen toward the top. Some of Chippendale's chairs introduce the Gothic arch, others lattice work borrowed from the Chinese, but most of his work is distinctly French in character.

Chippendale originated a number of new pieces of furniture. The short settle, made by putting two chairs together and adding an arm at either side, which is so familiar now, was his. It was called a Darby and Joan seat. He made the fire screen which consists of a tall standard with a circular panel adjusted midway, at the right height to screen the face. I remember to have seen in my childhood one of these screens with candle sockets and snuffers hanging from it. His sofa was over stuffed, but not tufted and had four legs across the front. His shaving tables were wonders of convenience, the mirror folding down behind when not in use, a basin concealed in the top, and trays slipping out of cleverly contrived apertures. Another small article of which he made many was a tea chest of small size to stand upon a side table and hold the precious bohea.

Chippendale had been influenced by
French, Chinese and Gothic ideas. Heppelwhite, the next of the trio, was under classic influence. He discarded entirely the elaborate ornamentation of Chippendale, and he was less careful for strength of construction. He made great use of inlays of satin or tulip wood, and some of his most characteristic work was painted with bright colored flowers, on a ground of black lacquer, a fashion largely copied in this country. He discarded the curved leg for a straight one, and tapered it down toward the foot. He was the originator of the shield-shaped chair back, of the long low sideboard raised on slender legs and with capacious closets beneath, and the card table with a single leaf which could be folded back over the table top, raised to rest against the wall or, when the table was in use, supported by a movable leg. The ornament on most of these pieces was merely a line of inlay in satin wood, but sometimes there are little panels of inlaid ornament, always classic in character.

The Heppelwhite sofa is long, square backed with wooden arm pieces, and the back has two frames, the inner one to which the upholstery is attached, and an outer frame work of wood with little inlaid or painted panels, with a space between it and the upholstery. There are small circular bolsters at each end. The confidante sofa was perhaps the original of our conversation chairs, a not very long stuffed sofa, with curving back and spreading arms, to each of which is joined a small arm chair at an angle with the body of the sofa. The duchesse, which one sometimes meets in eighteenth century novels, is an arrangement of two small easy chairs, with a square stool between, in which two people sat facing each other with their feet stretched out on the stool. This piece of furniture, by the way, made its appearance this summer in wicker, with cretonne cushions. French cabinet makers named the easy chairs bergères which their English brethren rendered "burjaie," and one cabinet maker's manual speaks of a duchesse as "composed of two burjaies with a stool between." The large square ottomans one sometimes sees may have been part of a duchesse. Of all Heppelwhite's inventions none appeals more to modern
"MANY HAD A BRASS RAILING AT THE BACK." 

Small square stools with straight legs, upholstered with tapestry were made to stand in the embrasures of the long windows. Another piece of drawing room furniture was the commode, a low chest of drawers with circular ends containing cupboards, and drawers in the middle. Hepplewhite, too, tried his hand at tea chests and he made the little oval or shield-shaped dressing glasses, swung on standards and mounted on two small drawers, which stood on muslin-draped dressing tables.

Sheraton came later. He lived well on into the days of the Regency and worked along the same lines as Hepplewhite, with whom he shared a tremendous contempt for Chippendale and all his works and ways. Practically he was less successful than either of the other men. He was known not only as a cabinet maker and designer but also as a local preacher of eminence in the Baptist denomination, and a writer of religious books. There is a strange contrast between his sombre theology and the light and brilliant character of much of his work, for Sheraton delighted in brilliant color, and was much addicted to white and gold.

Sheraton also used marquetry, usually in what is called the bell flower and husk design. Like Hepplewhite, he carved festoons and draperies. He fluted the legs of his pieces and surrounded the flutings with bands of fillets, either carved or fluted, and he made considerable use of brass ornament, either applied or inlaid. His brass handles were often elaborately carved.

The distinctive Sheraton chair has legs which often spread outward a trifle. Sometimes the seat is rectangular, sometimes it rounds out at the sides and forms a double curve in front. The back is square with a cross-wise strip inserted between the uprights near the seat and between this seat and the top some sort of arrangement of carved or painted splats or spindles. The seats are upholstered, although in some of his later chairs he used cane.

One decorative form which Sheraton employed largely was the lyre, which one sees supporting the ends of tables and used for the arms of sofas. The swan-neck pediment surmounting cabinets and book cases is his. He devoted a great deal of attention to these pieces of furniture. His desks, bureaus as they were called, were marvels of convenience and elegance, and were generally surmounted by shelves inclosed in glass doors, whose sashes were arranged in more or less elaborate designs. The china closet, with shelves and two small drawers, mounted on slender legs nearly three feet high and glazed with tiny panes, is of his designing.

Sheraton's sideboards are rather heavier in appearance than Hepplewhite's, with more cupboard room, although the general structure is the same. Many of them had a brass railing at least at the back and sometimes this was quite high and supported candle branches. The urn shaped knife cases, made of satin wood, occasionally seen in this country, were made both by Hepplewhite and Sheraton. Sheraton made toilet tables for all the London great ladies, among them one for Mrs. Siddons. They were miracles of ingenuity, with sliding trays and complicated arrangements of mirrors. These and the washstands, with their devices for concealing their contents, are of interest to people who must make one room answer many purposes. One thing was noticeable in all the eminent English cabinet makers, the mechanical perfection of their work. Their springs always worked, their drawers ran easily, their doors shut smoothly, details in which they differed from their present day imitators.
Sheraton was also responsible for the Pembroke table, with two leaves and a single long, narrow drawer, which, when open, is circular and for the kidney writing table, with curved fronted drawers down to the floor on either side, also for the sofa table rather long and narrow with leaves, not hinged, but pulling out at either end.

All three were master workmen and the probability is that comparatively little furniture bearing their names was their individual work. It would be more correct to speak of it as belonging to the school of Chippendale, of Heppelwhite, or of Sheraton. Even so, the greater part of it is treasured in private houses in England, or in museums. But the beauty of their work, in material and design, is largely attainable through good reproductions and aside from its real merit, the furniture of the Georgian style is valuable as being associated with a very interesting period of English history.

Modern Designs for the Homebuilder.

(ILLUSTRATED ON FOLLOWING PAGES).

The illustrations herewith are of a Minneapolis residence of brick veneer construction and the use of cement plaster on metal lath in the gables. The brick are of a deep red color, laid up with a whitish gray mortar, the joints being wide and set back about an eighth of an inch from the face of the brick, the intention being to emphasize the jointing by the contrasting color of the mortar. The trimmings, such as window and door sills, copings, etc., are of Bedford stone and the roofs are covered with a sea green slate. It will be noticed that the masonry is extended out for all porches and projections so that the same are very solid and substantial in character, requiring the minimum for repairs such as painting or rotting of wood as is necessary where frame porches are used. The outside woodwork is painted a very dark shade of green.

It will also be noticed that in carrying out the detail that the general character of the house is quite heavy and massive, there being triple posts at the corners of the front porch and brick piers on the sun porch. The entrance steps and buttress coping are of Bedford stone, and the porch floors are of eight inch square, by one inch thick cement tile.

The window treatment throughout the house generally is grouped, the large lights being of plate and the smaller ones of best quality double strength glass. The meeting rail is placed a little above the center line, thus coming above the eye of the average person standing inside the room.

All of the metal work such as valleys, gutters and flashings are of galvanized iron.

The openings of the interior are carried out on main axis lines, thus giving pleasant vistas through the various rooms. This is especially true of the axis line through the living and dining rooms where a view is had clear through to the sun porch and garden, and toward the front across the lawn onto the street.

There is a side entrance with large closet and lavatory. The rear entrance is arranged as a combination at practically ground level, four steps up taking you to the kitchen, or you may descend to the basement. Provision is made in the kitchen for a built-in refrigerator, iced from the outside. The butler's closet is fitted up with bins, drawers and cupboards, also rack for table leaves and one small cupboard with wire screened doors, where freshly cooked food may be placed to cool or for such articles of food as are to be put on the table in a short time.

The dining room is wainscoted and has a beamed ceiling and frieze. Pilasters are
Residence of Clarence L. Brown, Minneapolis.

used under each beam end, extending up to the frieze, and the openings are so arranged as to give a symmetrical treatment to the room. The shallow Dutch bay has a three-panel art study with a shelf of marble, thus affording a convenient place for setting a potted plant. China closets are built in at the rear of the dining room and the sideboard in the side opposite the bay. Two casement doors give access from the dining room onto the sun porch, thus allowing the dining table to be readily moved out when it is desired to serve there. The sun porch is entirely enclosed with glazed sash, both the upper and lower lights of which slide into pockets. The sash are hung on weights and are therefore as easily handled as the ordinary balanced sash. A complete set of storm sash and screens is also provided and the sun porch is further equipped with a radiator so that this part of the house is comfortable and designed to be used as much in winter as summer.

The second floor is arranged as the owner's requirements commanded with fairly large, well lighted and ventilated chambers with the convenience of private bath and dressing room. There is a clothes chute extending from the general bath room to the laundry in the basement. The rear stairway is shut off entirely from the main part of the house.

The third floor is devoted to a large billiard room with card alcove and two large chambers. The billiard room is over the main stairway with the chambers on the opposite side of the house.

There is a basement under the entire house, including the sun porch, where there are fuel and ash rooms with brick partitions, vegetable room, laundry and servant's toilet. The floor of the basement is concreted and cemented. The house is heated by a steam plant and provision is also made
for a considerable amount of indirect radiation.

The woodwork throughout the first story is quartered oak, with the exception of the service portion, which is of birch. The entire second and third stories are also finished in birch, which was bought unselected and when put on, the foreman on the job selecting it, using the best for rooms which were to be stained and waxed and
the balance for rooms to be finished in white enamel. The oak was finished in brown mission. The vestibule and private bath have tile floors. Polished hardwood floors are used throughout the rest of the house.

The cost, complete, was about twelve thousand dollars. The height of the basement is eight feet; the first story nine feet, six inches; second story, nine feet; third story, eight feet.
HE second house we present in our design series this month shows distinct individuality in treatment, both in the design, exterior finish and in the floor planning.

The first story exterior is in plaster, applied over expanded metal lath, and colored a light brown. Siding is used for the second story and is stained a dark brown. Roof shingles are stained a dull, dark green and the general effect is most harmonious and pleasing.

A unique entrance is shown in the photograph, which is by no means to be considered the "family" porch. The latter is at the side and rear, not shown to advantage, but is indicated on the plan, and its position insures the privacy and seclusion so much to be desired in a porch, but so seldom attained.

Passing thru the vestibule we are in the large living hall extending the full width of the house, with fireplace opposite the entrance, built in book cases at its left and the opening into dining-room at its right.

The circular bay on the front, with seat, the big side window at left of entrance and window seat in that corner, also the stair, all are attractive features of the living hall. A door from the dining room communicates with the side porch. Kitchen and pantry facilities are seen by the plan to be very complete.

Basement is furnished with cement floor for laundry portion, hot air furnace, coal bin, vegetable cellar, etc.
Foundation is stone.
Birch finish is used in living hall and
dining room and is stained to a rich, warm
brown. Kitchen is in pine, natural finish,
and upstairs rooms are in pine painted
white.
The second floor plan shows three good
sized chambers, servant's room and bath,
as well as ample closet room. The upper hall is well lighted by the window on the stair landing.

The combination stairway economizes space and provides all the "back stairs" feature that is really necessary.

Ample attic space for storage or a possible room, is provided.

The house is 30 by 36 feet in size, with first story, 9 feet in height and second story 8½ feet. Estimated cost to build $4,000.
A Lake Bungalow.
A Lake Bungalow.

Description.

A CHARMING lake cottage is illustrated on the opposite page, which, while possessing all the features of a summer bungalow, is designed for an all-the-year-round home.

The attention is attracted to this cottage on account of the rough beach-stone porch pillars and chimney, the broad sweep of the roof and projecting eaves, all noteworthy features.

The house has full basement with hot-air furnace and laundry. A hot and cold water supply and modern plumbing is included.

Exterior is sided below and shingles on gables and roof. House is back-plastered and complete in every respect. The porch is twenty feet longer than the house, projecting ten feet at each end, being sixty feet in length and ten feet wide—the real summer living-room.

The plan below shows a complete and well-thought-out arrangement of rooms, and the attic has space and height enough for three additional bedrooms.

Size exclusive of porch is 40 feet by 35½ feet. Height of basement 7 feet, first story 8½ feet. Estimated cost $4,000.

Color Scheme.

WHITE painted siding for body of house and inter spaces between porch pillars, also white window trim in dormers and gables. Roof and gable shingles stained green. Foundation and porch stonework is in vari-colored field and beach stones, roughly cut to lay up well, and is set off to good advantage by the white background.

Living room and dining room are in stained Washington fir. Bedrooms and bath in white enamel, kitchen natural pine.
A Southern Cottage.
A Southern Cottage.

Description.

We present in this design another of those typically southern or summer homes. The cottage is of frame construction with clapboards for first story finish and shingles in the gables. Here is a porch to "live" on at any hour of the day, spacious and inviting and presenting excellent architectural details as well.

The first floor plan shows a large living-room with circular bay and a reception room opposite, separated by a columned opening.

The plan permits of several variations from the arrangement shown, for instance, the chamber back of living-room could be made a very pleasant library and the bath-room could be located on the second floor, making a pantry of the space now assigned to it. The second floor is divided into four bedrooms with ample closet space under the roof.

Basement extends under the entire house and has cement floor, hot-air heater, laundry trays, etc.

Size of house 34 feet 6 inches, by 45 feet 6 inches. Height of first story 10 feet, second story 9 feet, with lowest part of second story rooms 6 feet 6 inches. Estimated cost $3,325.

Color Scheme.

A SUGGESTION for the exterior would be olive green for siding and lower part of porch, with gable and roof shingles stained moss-green. Window and door trim, porch rail and columns to be cream color or old ivory.

The principal rooms are finished in birch and may be finished in various stains to best agree with one's furniture. Upper chambers and hall will be cooler in white, ivory and light tints.
A Spokane, Wash., Home.

Alfred Jones, Arch't.
A Spokane, Wash., Home.

Description.

This is a striking house as built in a western city, presenting many attractive features. The effect of great solidity is obtained in the porch columns and buttress-like supports.

The use of leaded window transoms lends another distinctive touch, and the dormers are especially well proportioned.

A stone foundation is provided, basement under whole house, with hot-water heating plant.

The exterior is narrow siding and all millwork such as porch brackets, pilasters, etc., are of simple lines and in good taste.

The plan for first floor is interesting and gives one a fund of ideas for decoration and furnishing. The entrance, through commodious vestibule, is into the living room, but at one end, not interfering with the room, and at the left is a small room designated as a "den," which might be a formal reception room should such be desired. Both living room and dining room have drop-beam ceilings.

A generous fireplace with window seats at each side is a feature of the living-room, and the dining room has a cheery bay window as well as windows at either side of the built-in sideboard, with seats beneath.

The stairway is worthy of mention, with its broad landing and paneled side and rail as part of the living room, while a sliding-door cuts off the rise beyond the landing—an excellent feature in cold climates by which the heat may be more confined to the lower floor.

By reference to the second floor plan it will be seen that ample light is provided for the upper stairway by the group of three windows at the upper landing level. One of the smaller of these lights the back stairs. Four good-sized chambers and a bath-room are shown. The latter room has a clothes-chute to the basement.

Height of first story 9½ feet, second story 8½ feet. Size of house 34 by 40 feet. Estimated cost $7,500.00.

Color scheme.

Solid white has been used for the exterior, with roof shingles stained dark green. Washington fir has been made use of exclusively for the interior finish, and in various stains in the several rooms, makes a beautiful finish. Kitchen and pantry white enamel.

Upper floor fir stained finish.

The Plan of Your New Home

may be safely left in the hands of your architect, but your own taste should be reflected in matters of important decorative detail. One of these is the selection of the Hardware Trimmings. Because they are permanent and prominent they are hardly less important than pictures and tapestries.

SARGENT’S Artistic Hardware

offers a wide range of decorative possibility, and the real economy of life long wear. Sargent’s Easy Spring Locks are most positive in action; most permanent in service. "Sargent’s Book of Designs" enables you to select with surety and satisfaction hardware trimmings in keeping with any style of architecture or any character of interior finish. It is sent complimentary.

SARGENT & CO., 151 Leonard Street, New York.
In Cement Blocks and Plaster.
In Cement Blocks and Plaster.

Description.

A HOUSE in concrete block construction for basement and first story, with plaster or "stucco" finish in second story, and shingled roof. This shows one of the many possibilities of concrete block construction, giving an artistic effect without the usual monotony of an all block house. Noteworthy features are the broad porch, central entrance, large windows and graceful dormer.

As shown on plans, the space is well utilized, a feature being made of the living-room and connecting dining room which on special occasions could be used as one large room. Ordinarily, the use of folding screens will afford the desired privacy for the dining room during meal time.

The inside stair to basement lands at a grade entrance to back hall and kitchen, while the stair to second floor has an attractive bay projecting at the landing level, furnished with a seat.

The arrangement of chambers and bath is particularly good.

Size of house 26x30 feet or can be varied to accommodate any special size of building blocks. Height of basement 7 feet, first story 9 feet, second story 8 feet. Estimated cost, not including heating plant, $3,100.

Color Scheme.

NATURAL gray cement blocks and stucco with wood trim unplaned and stained a dark green, as are also the shingles.

Porch columns may be a lighter green, porch floor dark slate color and porch ceilings light green. Chimney has a smooth plastered surface.

Interior finish throughout is Georgia pine, with floors of same except in kitchen, pantry and bath-room which have maple floors.
HERE are signs of revolt from the long continued sway of green. The stock of the large importers of upholstery goods show a bewildering variety of color, in which red, blue and yellow bear a conspicuous share, and there are even a good many imported fabrics in the purple shades.

These latter, like marriage, are not to be embraced lightly or unadvisedly. There are worse things than a bedroom with chintz of a violet design, but, in other rooms, purple fabrics need rich surroundings. With dark, richly carved oak furniture, and beautiful old silver and pewter, a cushion or two of dark violet brocade is beautiful. If one chances to have a vase of cloisonné, in which blue predominates, its beauty will be enhanced by setting it on a square of purple velvet, and the same purple velvet makes a good background for a collection of old silver or miniatures. But, beautiful in itself purple does not combine with any other color, unless one excepts some very gray shades of green and the purplish pinks. Still another exception must be made in favor of the very French combination of violet and pale blue, which is often employed on embroidered linens for bedrooms.

When one is willing to pay a large price for furniture coverings, sumptuous results can be achieved. A silk damask, at $23.50 a yard, in double width, has a ground of vivid yellow, with waved stripes of shaded blue, broken by great bunches of colored flowers and leaves, so exquisitely woven that the whole looks like a mass of splendid embroidery.

Quite as beautiful, in a different way, at a tenth of the cost, are mohair damasks, in beautiful shades of dull green, Louis XV blue and soft red, the designs copied from old brocaded velvets.

An effective material, for hangings, called by one importer soie de Genoa, has a conventional design of crowns, birds and floral forms in lustrous silk, on a mercerized ground of red, green, or blue. It costs $2.35 a yard, fifty inches wide.

It is a pity that plaster casts are not more often employed, as permanent decorations. A good bas relief inserted in an overmantel is a most effective thing. In a house, in a New England city, the familiar high relief, called the Horses of Lancia, is set into the white colonial chimney piece and woodwork and plaster painted in the same tone. Above a mahogany or oak mantel shelf three, or more, of the della Robbia Singing Children could be simply framed in the same wood, and would be far more interesting than any mirror. For a narrow space, between two windows, the oval cast of the Bambino is most effective, or it might be inserted, in the upper part of a narrow mantel, across a corner. There are any number of copies of the works of the Florentine sculptors, which are available, not too expensive, and greatly preferable to machine made carving.

A very moderate amount of ingenuity converts a commonplace article, into something pleasantly different from other
Decoration and Furnishing—Continued

people's possessions. A semi-circular wall cabinet of bamboo was transformed, by having the ends covered by a shining old rose silk, fastened top and bottom. To the central space of each shelf was fitted a box, with a drop front, covered with a delicately flowered paper. The body of the cabinet was enameled white. The boxes were intended to hold laces and ribbons. Search, at the counters where pyrographic goods are sold, will discover a variety of pieces, which can be enameled, or stained and waxed and effectively decorated with panels of tapestry, or Japanese brocade. The familiar little Japanese cabinets may be much improved, by having the inside of their doors covered with bright colored silk, or crepe, and leaving them to stand open. The silk should be pasted on, the edges secured with the tiniest brass headed tacks.

And speaking of things Japanese, an old paper screen may be quite successfully renovated with wall paper. The paper panels should first be covered with cambric pasted on very smoothly, then with the wall paper, which may be varnished. A really stunning screen can be made with Japanese leather paper.

A rather effective decoration, for table covers, sofa pillows and the like, consists of circles of graduated sizes, cut from cretonne, or Japanese crepe, and put on overlapping each other slightly. The groundwork is generally green denim, or linen, and the circles are outlined with a narrow black braid. The circles vary, in diameter, from two to four inches, and the work is rapidly done. It is most effective, when the ground is not much darker than the disks.

A very beautiful crown frieze consists of festoons of roses tied with blue ribbon, on a gray ground. Where each festoon meets the next, there is a long trail of roses falling down the side wall. The side wall is practically plain, with a sort of buckram effect, a cool gray about the tone of putty. The price of the plain paper is fifty cents a roll, the frieze $1.50 a roll, twelve crowns to the roll. It would be beautiful for a summer parlor, with furniture enameled in French gray, and cushions of an English chintz with a pale gray ground. Still, when all is said and done, the crown friezes are most satisfactory in bedrooms.
Decoration and Furnishing—Continued

Our Frontispiece.

The accompanying illustration pictures an admirable arrangement of wainscoting and panelling, with a beamed ceiling; at once simple and artistic. The original room is in one of our Southern cities and the dark wood used would be sombre in the colder light of the North, although the long easement window floods the room with light. Where a lighter treatment is desired, painted soft wood might be substituted for weathered oak and the panels of the upper two-fifths be filled in with Japanese grass cloth or with some fabric. A lighter tone of the color of the panels may fill in the spaces between the beams or a deep cream or pale yellow be used. The built-in settle is a particularly pleasing feature. Such a construction is especially suitable for a room which is to contain much china.

* * * *

Time was, when photogravures in color were made by one great Paris house and so expensive, as to be quite beyond the reach of people of moderate means. But competition has lowered prices, and exact reproductions of a great variety of old and modern paintings can be had reasonably. Sizes of plates, and prices are, approximately, as follows: 20x38 in., $30; 14x28 in., $10, and 10x20 in., $5. While many of the subjects are familiar, there are a great many copies of the works of modern German artists, which are beautiful and unusual. These photogravures, when framed, are treated as water colors. If the tone of coloring is light, a white mat is used and a gold frame. For prints of stronger tones, the mat is gold, the frame either gold or black. Occasionally, the mat is omitted and a gold frame set next the picture. An oval picture almost always looks well without a mat, and certain subjects lend themselves to an architectural treatment, of side columns and a pediment.

* * * *

A piece of furniture, which is an accurate copy of one much in vogue in the time of the Regency, is a hooded arm chair. The body is not unlike the ordinary eared chair, although it is narrower and the curves are more pronounced. The hood is a half-dome, the apex about 4 feet above the seat. The frame is gilt wood, the upholstery figured silk. After seeing the original article, tarnished and tattered, in a curio shop, it is a little startling to come upon its modern counterpart in a department store.

A rest room, in one of the Oriental shops, is suggestive of what may be done with bamboo. The walls, to within a foot of the ceiling, are covered with cotton.

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NATIONAL MIRROR WORKS
MANUFACTURERS AND DEALERS IN
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Decoration and Furnishing—Continued

crape, whose general effect is suggestive of apple blossoms, a blending of pink and white and delicate green. Above this is a strip of soft green, probably denim, and the woodwork is painted in the same color. A strip of split bamboo separates the green from the wall below, another is fastened at the top of the surbase. Each joining of the crape is hidden under a strip of bamboo, the whole wall being divided into panels, the width of the crape.

The carpet is plain green, the curtains green lattice cloth, the furniture green wicker. A green oak china closet is full of Chinese medallion ware.

Old ingrain carpet is seldom a valuable asset, but the carpet weaver makes excellent rugs out of it. It should be cut in strips, not more than half an inch wide, and woven very closely, hit or miss fashion. The result is a rug of finer texture and excellent surface, which wears indefinitely. A dark warp, red or brown, is preferable to white, except for blue or gray carpeting. An art square, nine by twelve will, if in fairly good condition, make three 36x72 rugs. The cost of cutting, sewing and weaving is sixty-five cents a yard. A few cents extra is charged for tying the warp ends. The best rugs are made from carpets of inconspicuous patterns and dark colors, and only one sort of carpet should be used in a rug.

Cedar chests, once a luxury, have made their appearance in the department stores, ranging from $3.50 for the ordinary shirt waist box size to $13.50 for one four feet long, and correspondingly wide.

The latest invention in the way of library furniture is a combination of cabinet and reading lamp. The wood is oak, the shape the tapering one of the ordinary magazine rack but the back is solid and the front closed in with a door. On the top some four feet from the floor is fixed an electric light with a mission shade of stained glass and oak.
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. W. C. R., Vincennes, Ind.
Q.—I have a mahogany davenport, also a cherry table that are over a hundred years old. I wish to have them done over. I would like to have the old finish taken off to the natural wood. Please tell me the best way of doing this and also how to put the right finish on after having the natural surface, do you think I can do this work satisfactorily with the help of a good man?

Ans.—While your best plan would be to send your pieces to an expert cabinetmaker and finisher, we give you herewith the following directions which, if carried out properly, will bring good results. In the first place the old varnish should be thoroughly removed by liquid varnish remover which can be obtained in any of the larger supply houses. Next process is to stain with a mahogany water stain, then one coat of orange shellac, one coat of varnish and sanded down, then the last coat of varnish and rubbed with pumice stone and oil. In refinishing the cherry piece it may be necessary to use a filler for the first coat.

F. A. B., Mendota, Ill.
Q.—I have a customer who is the owner of an old-fashioned house with eleven (11) foot ceilings. He is changing front hall and parlor, by removing partition wall, into a large reception room; has swung foot of stairs around to face room, with landing five steps up, ceiling is newly beamed into panels, all woodwork to be finished ivory white, hand-rail and spindles, are walnut, doors same; owner thinks that beamwork should be finished dark, my idea was to finish it ivory, white, or some light shade that would harmonize with tinting or paper used in filling panels; walls of this room I think will be finished with burlap dado and upper wall in good paper; I think it will be in green tones. Same party has large dining room, 12x22, finished brown Flemish, new beamed ceiling, walls to be in linoleum to plate rail with paper above; wall shades green and greenish brown, ceiling panels, yellowish cream color. Owner thinks ceiling beams should be finished dark as balance of woodwork in room, while I am inclined toward lighter shades for ceiling work. If you will give me a few pointers on this question I will appreciate it very much. If I am wrong in my ideas I want to know it, if I am right, I want to know it.

Ans.—To be consistent, the beams on the ceiling should be carried out in an ivory white to conform with the rest of the wood work. In some cases where there are doors and stair-rails in a different color from the wood work the beading which goes around the various beams is sometimes finished in that color to match either walnut or mahogany as the case may be, and the main part of the beams in the ivory white, the same as the rest of the wood work. In making beams all of the dark color, as in your case, the tendency would be to make the rooms top heavy. In the dining room which you describe, it would be advisable for you to have the beams finished the same as the wood work, in Flemish.

An important point in all decorative
What Constitutes an Ideal Water Supply?

First—should not disfigure the landscape.

Second—should be protected from frost and the action of the elements.

Third—Should be so placed as not to be a menace to life and property in case of an accident.

Fourth—Should be absolutely tight so that no animals, dust, disease germs, or other foreign substance can get in.

Fifth—Should be practically indestructible.

Sixth—Should keep the water aerated so that it will not become foul and stagnant.

Seventh—Should carry high enough pressure for fire protection or to force the water through the pores of a stone filter.

Eighth—Should be compact, simple, and easy to operate.

This describes the Kewanee System of Water Supply.

Kewanee Water Supply Co.,
Drawer B
Kewanee, Ill.

 KEITH'S MAGAZINE 105

...Second floor, would advise maple instead of hard pine for bedroom floors, either natural or stained. The article on "Modern Hardwood Floors" in September number will give you details. Paint woodwork S. W. guest chamber ivory white. A good paper for this comes in an all-over lacey design on a blue ground. N. W. chamber, mahogany stained woodwork, two-toned, golden tan stripe on wall. N. E. chamber, Dutch pink color scheme, white woodwork. S. E. chamber, woodwork painted olive green, wall up to card rail coppery red raw silk. Above this a wide fr.e.ez—galloping huntsmen in red coats in a green forest. A blue and white body brussels rug for guest room, tan and cream for family room. Pilgrim rugs in old pink and white for N. W. room. Paint tile wainscot in bathroom sea green. Woodwork and walls enamel white.
In nothing does the trained intelligence of the housewife show to more advantage, than in planning the daily routine, whether for herself or for her maid, or maids. Not one servant in ten has the faintest idea of arranging her work to good advantage. Indeed, it may be generally assumed that it is her lack of intelligence which keeps her in the position where she is. Anyone, experienced in hotel work, will tell you that the worker with executive ability does not stay in the ranks, but rises to be head of the linen room, later to be housekeeper. A very large proportion of those occupying responsible positions have worked up from the lower grades of service.

This being the case the mistress must think for her maid. She should need no exhortation to think for herself. Perhaps one of the hardest things to get a servant to do is to use her time continuously. Not one in fifty begins to wash her dishes until both the family and herself have finished a meal. She sits around waiting a call from the dining room when she might have the dishes of each course washed while the next is being eaten. This habit is at the root of a great deal of the general backwardness of the household processes in many families. If a maid does not see it for herself she ought to be told every day until the habit is fixed.

Again, with a small family, where some chamber work is expected of the one maid, she should be sent upstairs to do it as soon as the substantial part of the breakfast is on the table. Unless this is done the middle of the forenoon will find the upper rooms still in disorder.

This method of planning supposes that the servant is to eat after all the family are through, which is the general arrangement. As a matter of fact it is much better for her and everyone else, that she should be helped at the same time with the rest and eat in the kitchen while they are in the dining room or else take out her food before the meal is sent to the table. With either method her food is hot and palatable, and there is less temptation to the inordinate eating which makes many a servant's food cost more than her wages.

And apropos of food not one thing that the housewife can do tells more economically than five minutes after each meal devoted to putting away the left-overs and planning for their disposition. Begun with a new maid and faithfully carried out it is rarely resented and it reduces the bills wonderfully. There is a great deal of wisdom in beginning as you mean to go on.

* * *

Certain ways of managing the economist would like to see carried out in a good many communities. One is the habit of putting out the family washing, doing away with the most troublesome day in the week, and at the same time enabling the washerwoman to work in her own home. Many women are glad to add to their incomes and will take home a washing regularly for a definite weekly sum. Paying a professional washerwoman by the dozen is a ruinous extravagance. With the washing and ironing out of the way many households ought to be able to utilize the woman who is not fit.
What to Demand in a Closet

- Water seal of unusual depth, making escape of sewer gas impossible.
- Absolute cleanliness assured by water capacity and width of water surface in bowl.
- Vacuum chamber into which entire contents of bowl are drawn by syphonic action.
- Water jet at bottom of bowl, which cleanses inside of trap and insures bowl being absolutely washed out.

To know what a closet should be to be safe, study the sectional view showing the principle and action of the Sy-Clo Closet. If your closet is not self-cleaning, odorless, positive in its action when flushed, replace it with the Sy-Clo Closet, "the closet of health."

The Sy-Clo Closet overcomes the offensive and dangerous faults of the common closet of the wash out variety by its syphonic action. In addition to a copious flush of water from above, a powerful jet of water enters at the bottom of the bowl. This starts the flow of water over the retaining rim into the soil pipe, where a vacuum, or suction is formed, into which the entire contents of the bowl are drawn. If your closet merely empties without thoroughly washing the bowl, replace it with the Sy-Clo.

The Sy-Clo Closet as shown by the illustration of the sectional view, is formed in a single piece—fine hand moulded china—without a crack or crevice where impurity can lodge. unaffected by water, acid or wear. No enamel to chip or crack. If your closet is different in any respect, it is unsafe. Replace it with the Sy-Clo.

The name "Sy-Clo" on a closet guarantees that it is made under the direction and supervision of the Potteries Selling Company, of the best materials, and with the aid of the best engineering skill, and has the united endorsement of eighteen of the leading potteries of America.

FREE.—Send us the name of your plumber, and we will send you a valuable booklet—"Household Health." It will tell you how to be certain of the sanitation of your home, and may explain the cause of past illnesses you have never understood.

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Household Economics—Continued

for anything but domestic service, but will come for low wages, because she is not strong enough for heavy work.

The other is the employment of service by the hour at a fixed rate. A strong woman working under direction for perhaps three hours twice a week will sweep a fairly good sized house if the rooms are made ready for her and there seems to be no reason why a half grown boy should not be employed in the same way. The woman who would organize this sort of service in any community would be a real benefactor to a good many people. When it is a matter of experimenting for one's self occasional help is most likely to be found in the colored quarter.

A house well known to the writer was recently cleaned from top to bottom by a chore man in about half the time and with one-tenth the disturbance which a woman would have made. He brushed down walls, washed paint and floors, took up carpets and cleaned windows with neatness and despatch, and charged exactly what a woman would have done.

Someone suggests that freshly ground graham flour can be had from bakers who buy it in large quantities and often. The grocer's stock is apt to be stale.

The mother of a boy of nine and a girl of five, who has spent exactly thirty cents for medicine in the last year, attributes their admirable health to the fact that green salads and fruit form a daily part of their diet, fruit being eaten twice a day, to say nothing of casual apples and pears between meals.

Olive oil, by the way, is largely prescribed for those who would be healthy and beautiful. A teaspoonful before each meal is an excellent thing for the nerves as well as a tissue builder, and is said to prevent the joints from becoming stiff and rheumatic. Outwardly applied it prevents wrinkling, which is caused by a deficiency of fat in the cells of the skin. A small amount of brandy is said to be an improvement. Anything which will increase the absorption of fats into the system is desirable. A deficiency of adipose tissue is responsible for some forms of eye disease, and for that inconvenient affliction, a floating kidney. In cases of extreme waste of tissue larger doses are
Household Economics—Continued

advised, as the oil is absolutely pure nourishment. The Italian oil, which comes in cans, is cheaper and better than that sold in glass.

* * *

A late fad, which approves itself to people who have lived in England, is making one’s own butter. Small glass or earthenware churns are sold for the purpose and the process requires about twenty minutes. A quart of double cream will make about a pound of butter. It is not salted and of course must be made every day. The working process is admirable for the hands. In fashionable households the waitress is expected to make butter as well as mayonnaise dressing.

A BOOKCASE OF THE GEORGIAN PERIOD.

See article, pages 81 to 84.

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How he put in his own water supply system, and had running water all over the house—

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LEADER IRON WORKS

2155 Jasper Street,

Decatur, Illinois
HEN midwinter has settled down the floral decorations of the table are apt to assume a dejected air, if not to vanish altogether. Most ferns succumb to hot and confined air, and yet at no season is a touch of verdure so gratifying. It is a good time to fall back on our humble friends the wandering Jew and the German ivy, which will grow in water and can be set into a cool room between meals. A flat earthen dish with yellow or pink oxalis growing in it, is another simple and attainable centerpiece.

The bare table seems to demand some sort of vegetation to relieve the expanse of dark wood, especially if it is round. The bareness of a rectangular table, with the runner and cross pieces of linen now in vogue is less conspicuous. A good many people abominate the bare table, but it seems to have come to stay, and it is certainly a step in the direction of simple living. It must be confessed it looks incongruous with any delicate china. The deeply colored and effective wares are in much better keeping with its general style.

Some beautiful runners for tables in the craftsman style are made of a heavy unbleached linen, with coarse threads, hemstitched and embroidered in rather large conventional designs with English crewels. The work is effective and rapidly done and the colors of the crewels are beautiful. A good many stencil designs are available for this work. The crewels are sold by the New York Society of Decorative Art and probably by other societies in the larger cities.

A new Doulton ware which is very interesting, has a cream colored ground with a green border with a decoration of coaching scenes in excellent colorings. It comes principally in plates and jugs, and would seem to be especially suited for chafing dish supplies and the like. Plates are 75 cents each, large jugs $1.75. Not unlike these in coloring, but of German origin, are tall covered punch bowls, very elaborately decorated with drinking scenes in color and costing with ladle and stand, $8.50.

Among English dinner wares, we notice sets of plates, intended for a single course, almost covered with an intricate design of green leaves, very realistically painted. The green is guiltless of any suspicion of gray, a real old fashioned green, and it makes its appearance in a good many other ways, even extending to whole dinner services.

Occasionally, more often in apartments than anywhere else, one comes across a diminutive dining room which seems to be completely filled by the dining table. One hopes that only families of two have to occupy these dining rooms, but for them there is a measure of relief in the round settle table, which is built after the plan of the kitchen ironing table, but with the swinging top circular instead of rectangular. The seat has a box beneath it.
which will hold silver or table linen, and the top is 42 inches in diameter, large enough at a pinch, for four people. A couple of plate racks, one open, the other with a glazed cupboard in the centre will accommodate most of one's dishes and between meals the table top is swung up, and the table becomes a settle and is rolled back against the wall.

* * *

Late in the winter, cider has acquired just the right tang to make good jelly. It should be served either with meat or poultry, or by itself, with crackers and cheese for dessert. Boil a quart with three tablespoonsful of sugar for ten minutes, stir in a heaping tablespoonful of soaked gelatine and strain through cheese-cloth into a wet mould.

* * *

Two small families may often cooperate to advantage, by buying a piece of meat, which would be too large for either alone, together. A leg of pork is a good thing to share, so is a whole ham. The butcher will remove all the bones from a fore-quarter of lamb, making a long roll of it, which can be cut in two readily. Families have been known to divide a turkey. The small family, buying for itself alone, is apt to have to get such small cuts, or else from such small creatures, that meat is either unduly expensive, or not very good. However people must be on very good terms to do such things successfully.

* * *

Foie roti, which sounds very fine indeed, is merely a calf's liver, larded with fat salt pork and baked, basting frequently with buter. To the gravy made in the pan, after the meat is taken out, mushroom may be added.

* * *

Down in the Italian quarter, they sell cans of tomato paste, small ones for five cents, large ones for fifteen. One of the small ones will supply enough for two tomato sauces. It must be thinned out with water, or better with gravy. A
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NEW YORK CHICAGO BOSTON

Table Chat—Continued

dash of Worcestershire sauce and a pinch of curry improves it, also a bit of butter.

For a sauce for macaroni, thin out the paste with hot water, add butter and a liberal quantity of grated, sharp cheese and pour it over the hot macaroni. The Italian pastes, by the way, require long cooking. Twenty-five minutes is not too much for the medium size, which is the most profitable to buy.

* * *

Dessert, in mid winter, when eggs are dear and fresh fruit difficult to get, is something of a problem. Wafers, of some delicate sort, spread with a mixture of butter and grated cheese, and browned in the oven, are a nice accompaniment to raisins, dates, or figs. A baker's coffee cake, heated and eaten with a hot sauce is a fairly good pudding; so are Bath buns, with a sauce made by stirring over the fire, till it thickens, a mixture of a cup of sugar, a tablespoonful of flour, an egg, the juice of a lemon and a bit of butter, adding finally half a cup of boiling water.

Baker's molasses fruit cake, steamed and eaten with a hard sauce, is a fair substitute for plum pudding; only inquire if the raisins have been stoned. Some of the package desserts, all of them practically blanc manger, can be served, after the fashion of ice cream, with a hot maple or chocolate sauce.

* * *

Here is an authenticated receipt for the famous Lady Baltimore cake.

Cake.—Cream nearly a cup of butter, add in order a cup and a half of granulated sugar, three cups of flour sifted with a scant teaspoonful of salt and two of baking powder, and a cup of milk. Lastly, stir in the whites of six eggs, whipped stiff, and bake in two tins, fifteen or twenty minutes.

Frosting and Filling.—Boil together, without stirring, two cups of sugar and a cup and a half of boiling water, about five minutes, or until stringy. Take out enough to ice the top and sides of the cake and, into the remainder, stir a cup of nut meats and a cup of seeded raisins, chopped fine, and spread it between the layers.
## SPECIAL SUBJECTS IN BUILDING AND DECORATING

Following is a tabulated list of particular subjects and special classes of designs treated in former numbers of Keith's Magazine.

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### KEITH'S MAGAZINE, MINNEAPOLIS, MINN.

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**KEITH'S MAGAZINE—Minneapolis, Minn.**
Q.—As a subscriber and reader of your magazine, I take the liberty to address you on a question which is giving my wife and myself no little concern and would greatly appreciate it if you would kindly give us some enlightenment.

We have just finished building a new house and in the front room, reception hall and dining room, put in the 3% of an inch white maple hard wood flooring. This is over % inch pine flooring, of course. We then had the floor scraped and sand-papered thoroughly; then stained, then a thin coat of shellac put on and lastly two coats of Johnson's floor wax was put on and rubbed in fairly well. Now then, what we want to know is this. How shall we take care of these floors? Shall we dust them with a dry cloth? Or shall we use a cloth dampened with coal oil? Or shall we dampen the cloth with water? Or turpentine? Also, how often should we go over the floor with the Johnson wax now that the floor is in use?

Also please tell how is the best way to finish a hard pine ordinary flooring? We have one that was stained and then given a coat of rather cheap shellac and it is not at all satisfactory. What shall we do with it to make it look decent. It looks marred and dingy after only three weeks of wear.

Ans.—As for care of wax floors, would say water should never touch a wax floor. It is sufficient to wipe them off with a woolen rag or dry-tow mop and about once a month give it a fresh coat of wax polished with a weighted brush. A floor will improve every time it is waxed.

As for the pine floor that is stained and given a coat of shellac, would say if the staining gives an even appearance in point of color, wax over the shellac will make it. I think, quite satisfactory. The affect of shellac over the stain and under the wax is to make it a little more slippery.

* * *

Standard Specifications.

CHIMNEY—Build the chimney with flues, ash pit and fire places as shown by the drawings, all to be of good, sound, hard burned common brick laid in lime mortar. Where chimney shows above roof, face with selected red sand mould brick of even color and neatly point and clean down when finished, top six courses to be laid in cement mortar. Leave all proper openings to flue for smoke and ventilation pipes with requisite thimbles built in, bricking out around same. See that all flues are left clean and free from obstructions from top to bottom. All smoke flues to be well plastered on the inside to the roof boarding; chimneys to have galvanized iron flashings let into brick work and counter flashed with tin onto shingles. Turn trimmer arches between joists to support fire place hearth. Fire place to
have mantel bar 5-8x2¼ inches well bedded in brick jambs to support flat arch above, cut away under side of arch to slope toward flue so that the smoke will find easier egress to flue. Fire place to have ............ facings and hearth, fire brick lining, cast iron dump and damper.

MORTAR—All lime mortar is to be made of best lime, one part and clean sharp sand two parts. Cement mortar is to be composed of Milwaukee cement one part, clean sharp sand two parts; too much water must not be used in mixing and only such as is required for immediate use shall be mixed; none that has stood over night shall be used.

CARPENTER AND MILL WORK.

FRAME—Build the frame as shown by the plans, using No. 2 pine, hemlock, spruce or fir lumber free from all shakes for all joists, girders, posts, etc., and No. 3 for studs, rafters, under floors and roof boards. The size of all joists, girders, etc., to be as marked or shown on the plans. If the sizes called for on the drawings are not carried in the lumber yards in the locality where the building is to be erected, substitution can be made, giving the equivalent of strength. If same affects the mill work, make proper adjustment. Lay under floors throughout the first ............

OUTSIDE FINISH—Sheath all exterior walls with No. 3-6 inch D & M fencing and cover same, the roof and under floors with stringed tarred felt building paper. Same to be well doubled over openings and corners. Wherever shown on the plans for clapboards, use best quality “C” Pine, Spruce or Fir siding, laid 4½ inches to the weather, unless otherwise marked on the drawings and where shown for shingles and on the roof, use best quality of Cedar or Cypress shingles, 5 inches to the weather. If second story overhangs, grout between the joists or fill with dry sawdust so as to make warm and on all exterior walls and especially around the main cornice, see that the boarding is not only tight but that the paper is well put on and the house made tight in every way. All outside finish to be of No. “C” clear stock.

PORCHES—Build porch columns

THE FINISHING OF WOODWORK.

If properly treated, any wood may be finished in a variety of distinctively beautiful and artistic effects by the use of Wheeler Filler and Breinig's Stains, the superiority of which has been admitted for many years, as these goods are invariably specified by all well informed architects the world over.

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"Your samples of stained work received. I must say they are a handsome set. They are so free from 'muddiness' as I call it, which seems the prevailing feature with most of the wood work done here, due to improper treatment and inferior stains."

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Architect's Corner—Continued

and rail as shown in detail and porch floors to be No. 1, 4-inch D & M fencing laid in white lead and to pitch. Porch and cornice ceiling and any inside sheathing to be No. 2 D & M beaded ceiling. Porch steps to be 1 1/8 inch thick and steps and underpinning as shown on the drawings.

INTERIOR CONSTRUCTION—

All studs, rafters and joist are to be set 16 inches on centers, unless otherwise noted on the drawings and joists are to be securely cross bridged in every space of five feet. Furr around chimney, frame around all openings and spike strong. Double the studs beside doors and windows. Double the joists under partitions running parallel with same, setting them 6 inches apart on centers. Put on all necessary grounds for base, sheathing, etc. See that all joists are level before laying floors and keep studs plum and angles straight. Do all cutting and jobbing for other contractors. Build any basement shelving, vegetable room, coal bins, etc., shown on the drawings.

FINISH FLOORS—Throughout the first and second stories, unless otherwise marked, lay finished floors of No. 1, 4 inch D & M fencing, all floors to be driven up close and laid straight and securely blind nailed.

HARDWOOD FLOORS—In the rooms marked "H. W. Floors," on plans, lay finished floors of first quality, 1 1/2-inch face Myers IXL polished, bored, end matched maple or birch flooring as directed, made by . . . . . . . . . . . . . . . . . .

No hardwood flooring is to be brought to the house until the rest of the work is complete and it is to be kept dry and unmarred. Hardwood floors are to be left smooth and even ready for the wax.

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Splinters and Shavings

Fireplaces for Comfort and Utility.

No house with any pretensions at all is built nowadays without its fireplace. There is nothing which gives such a cozy and homelike effect to any room as a fireplace. At any season of the year when it is impractical to run the furnace and when stoves are out of the question, the fireplace will be found a source of great comfort and convenience especially on chilly evenings which abound more or less in our climate.

But the fireplace should not be built entirely for show. They should be built for the enjoyment they will give and they should always be located so that persons sitting around them will not be disturbed by those entering the room or passing to and fro. Lately the fireplace faced with brick and stone have grown in popularity, while very rich and attractive fireplace facings may be made of unglazed tiles in iridescent surfaces and colorings.

Hearth should only be built on brick arches, leaving a space of at least four inches between the top of the arch and the finished hearth, which space should be filled with cement mortar. To insure good draft the back of the fireplace should be inclined slightly forward. If care is used in the construction of the fireplace and same is built by a first-class workman no difficulty need arise and the fireplace of the modern home will be both a thing of beauty and a joy forever.

Disease Germs in Old Wallpaper.

The Camden, N. J., Board of Health is agitating the passage of an ordinance compelling paper-hangers to scrape all walls of old wall paper and to treat them antiseptically before applying new paper.

The Camden Health Board is convinced that the very general practice of pasting new wall paper over old is highly pernicious and that disease germs of-
Splinters and Shavings—Continued
ten lurk in the different coatings of paper and paste.

**Treating a Smoked Ceiling.**
The ceiling is badly smoked, and it is to be kalsomined. Scrape off all you can, then apply a coat of fresh hot lime wash, and where the smoke may still show through apply another coat. This will usually kill the smoke.

**Grease on a Plaster Wall.**
If thick, scrape away all you can, then wash with strong sal soda water, let dry, then another coat of the soda water; let dry; then apply a thin coat of kalsomine to which has been added a little plaster of Paris. This will be likely to keep back the grease, but if it should not, then apply a very thin coat of shellac varnish.

**Dead Black Stain for Wood.**
Apply a coat of hot logwood solution, allow it to dry, then apply a second coat; when this is dry, apply a solution of acetate of iron, made by dissolving iron filings in hot vinegar or acetic acid, which will turn the logwood stain dead black. Let this dry, then rub with raw linseed oil to a dead polish.

**A Square Deal in Roofing Plates.**
The tin roofer now has the opportunity of buying just what he wants and of knowing just what he gets when he buys roofing plates. All of the old confusion as to quality and grade has been swept away by a notable departure which is a long step in the right direction. It is what President Roosevelt might term a “square deal” in roofing plates.

One of the leading tin plate manufacturers of this country has arranged to...
Splinters and Shavings—Continued

stamp on each sheet of terne plate it manufactures, not only the brand, as has heretofore been done, but also, and vastly more important, the number of pounds of coating which it carries; the company will stamp on all waster plates the word "waster" in letters $\frac{3}{8}$ in. high.

These newly stamped plates will make their appearance on the market about the first of the year. In addition to stamping the plates, the company announces that a much closer inspection of the sheets turned out is being made than heretofore all tending to secure to the buyer sheets so coated as to stand successfully both the exposure to weather and the ravages of time and service.

This new stamping of the plates will give important information not only to the tin-roofer but to the architect, the builder and the final owner of any building covered with a tin roof. Many architects have confessed to the confusion, which the variety of brands and claims made for plates brought to them, when the selection of the tin for covering some important building must be made.

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**NOTES ON PRICES.**

Cost Estimate.

We ask our readers to bear in mind that the published cost prices accompanying our descriptions, are not close estimates, but estimated costs furnished by the architects. Also, that conditions frequently add or lessen the cost to a large degree. With a large amount of building under way, contractors will want a good big profit on any additional job they take. Reversed, contractors all looking for work, you get close figures. These facts account for the frequent wide difference in actual cost of building in different localities, from published prices. We likewise publish information concerning the different costs of material and labor throughout the country, as furnished by our correspondents, and request that those who have built or have secured such figures will send them in to Keith’s Magazine for publication.

**The Following are Prices Sent Us by Correspondents:**

**Richmond, Va.**

- Rough framing for medium house, per M............... $20.00
- Sheet metal, per M. .................................. 20.00
- Flooring, No. 1, 3/4 in., per M .......................... 35.00
- Flooring, No. 1, 3/4 in., heart, per M ................... 60.00
- Dressed boards, No. 1, 3/4 in., per M .................... 40.00 to 45.00
- Dressed boards, No. 1, sap and heart, per M ........... 60.00
- Excavating, per yard .................................. .40 to .50
- Common bricks, laid, per M ............................. 12.00 to 13.00
- Common bricks, at building, per M ........................ 9.00
- Plastering, no allowance for openings, per yard ...... .30
- Painter, per day ...................................... 2.25 to 2.75
- Plasterers, 9 hours per day ............................. 3.00
- Plumbers, (are on strike now), 8 hours per day, ....... 3.50 to 4.00
- Bricklayers, (strictly union), 8 hours per day .......... 5.00
- Hod carriers, (strictly union), 8 hours per day ...... 2.00

As reported for Keith’s Magazine by R. E. Elmore, Contractor.

**Columbia, S. C.**

- Sand, per yard ....................................... .75
- Bricks, per M. ....................................... 7.00
- Lime, per bbl. ....................................... 1.10
- Cement, Portland, per bbl. ............................ 2.60 to 2.75
- Plaster, per ton ..................................... 10.50 to 12.50
- Lath, per M. ......................................... 3.50
- Shingles, No. 1, heart, per M .......................... 4.50
- Rough lumber, yellow pine, per M ........................ 14.00 to 16.00
- Resawed siding (B), per M ............................. 17.50
- Flooring 13-16 (B), per M. ............................ 27.50
- Ceiling, 9-16, per M. ................................ 25.00
# Notes on Prices—Continued

Common labor, per day........ 1.00 to 1.25
Carpenters, per hour.......... 0.20 to 0.25
Masons, per hour............... 0.35
Plasterers, per hour......... 0.25 to 0.35
Painters, per hour........... 0.22 to 0.28

As reported for Keith's Magazine by Hasell Thomas, Contractor.

### La Junta, Col.

- No. 1 Dim. lumber, per M. $22.00 to $25.00
- No. 1 Stock boards, per M. 30.00
- B. Finish, Texas Y. P., per M. 50.00 to 55.00
- No. 1 lath, per M. 5.50
- Cedar shingles, per M. 3.50 to 4.50
- No. 2, common brick, per M 6.00
- No. 1, common brick, per M 7.00
- Pressed brick, red buff and cream colors, per M 13.00 to 17.00
- Stone, native, per cord.... 5.00
- Stone, special for sills and coping, hauled 10 to 25 miles, per cord.... 10.00 up
- Brick masons, 8 hrs. per day 5.00
- Stone masons, 8 hrs. per day 5.00
- Carpenters, 8 hrs. per day... 3.00
- Finishers, 8 hrs. per day... 3.50
- Mechanics, 8 hrs. per day... 3.50
- Laborers, 10 hrs. per day... 2.50
- Man and team.............. 4.00

As reported by O. E. Hoskin, Contractor.

### Copemish, Mich.

- Rough hemlock, not surfaced, per M. $14.00 to $16.00
- Siding, white pine, No. 1, per M. 28.00
- Cedar shingles, best grade, per M. 2.50
- Best Portland cement, per bbl 2.00
- Sand lime brick, per M. 14.00
- Quick lime, per bbl........... 90
- Lath, No. 1, per M. 5.50
- Masons, 10 hrs. per day.... 3.50
- Tenders, 10 hrs. per day.... 1.50 to 2.00
- Carpenters, 10 hrs. per day.. 2.50
- Painters, 10 hrs. per day... 2.50

As reported for Keith's Magazine by A. Irwin, Contractor.

### St. Petersburg, Fla.

- Rough lumber, yellow pine, delivered, per M. $18.00
- Rough lumber, yellow pine, sized, delivered, per M... 20.00
- Flooring, per M. 20.00 to 30.00
- Siding, per M. 23.00 to 25.00
- Outside finishing, per M... 25.00
- Interior finishing, per M... 30.00
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Cement, per bbl. ................... 3.20
Patent plaster, per ton ......... 16.00
Nails, per keg. ....................... 2.60
Cypress lumber, per M. ........ 25 to 70.00
Plumbers, per day ............... 5.00 to
Masons, per day .................. 4.00 to
Plasterers, per day ............. 4.00 to
Carpenters, per day .......... 2.25 to
Common laborers, 8 hrs. per day ........................ 1.75
Lathers, per yard ................ 0.03
Painters, 8 hrs. per day .... 3.00
Paper hangers, 8 hrs. per day 3.00

As reported for Keith's Magazine by H. A. Farmer, Contractor.

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Heating a Cottage.

I N discussing the question of heating a village dwelling by means of stoves Dr. Harvey B. Bashore states that the halls are usually cold, and, in addition, even in the rooms where stoves are placed, the floors are from 6 to 8 degrees colder than the temperature 4 or 5 feet above, a fact easily proved by experiment. As a consequence one's feet are just so much colder than head and shoulders. These two defects, cold halls and floors, are certainly factors in producing catarrhal inflammation of the throat and nose, if nothing worse. To remove these defects to a minimum it is necessary to alter somewhat the construction of the rooms. Everyone knows the value of the open grate, not so much as a heater, but as an equalizer of room temperature, and herein lies our remedy. Every room should have such a grate, or its equivalent, simply an airshaft connected with the chimney and opening into the room at the floor level. An airshaft so arranged and of suitable dimensions answers almost as well as an open grate and furnishes the means whereby rooms may be heated very well with ordinary stoves.

When a room which has no fireplace is heated, the heated air rises and spreads along the ceiling in a thick cloud, and if a window is opened the warm air rushes out before it has done much good; if, on the other hand, there is an open grate, some of the hot air escaping up the chimney creates a partial vacuum; this consequently, creates in the room a movement toward the opening, and the upper heated air is more diffused about the room, making the temperature more uniform.

The halls, whether they contain a stove or not, should have an airshaft, for it will assist somewhat in "sucking out" the heated air of the adjoining rooms. A small oil heater placed in the lower hall will be of assistance in keeping the hall temperature at the right point.—Carpentry and Building.
The theory and practice of plumbing design, in the form of questions and answers, is covered in a most thorough and exhaustive manner by Chas. B. Ball and H. T. Sheriff in the little book "A Plumbing Catechism." Condensed within its 90 pages is a valuable fund of information for the homebuilder, contractor and plumber. It is elementary enough for the layman to understand and we have seen some plumbing jobs that might have been improved had the workmen been in possession of the facts and principles set forth in this little book—things it is their business to know. Pubs., Domestic Engineering, Chicago, price $1.00 post paid.

No one seems to know just why the bear, among all the denizens of the wild, should have been selected as a mirth-provoking animal but the fact remains Frank Verbeck, the artist, has done many humorous sketches and verses with Bruin as the central figure, and these, from various sources, have been compiled and published in book form. Large size, with colored cover and every page in colors or tints, the volume makes a "bunch" of fun which would be hard to beat. Pubs., J. B. Lippincott Co., Phila., Pa., price $1.50.

An attractive little booklet has been received from the Wisconsin Land and Lumber Company, describing their I. X. L. Rock Maple Flooring "from stump to finish." The booklet is on enameled paper and profusely illustrated with important buildings for which the flooring has been furnished. It is a gem of the printer’s art and the text matter covers an interesting description of the manufacture of flooring.
One of the fall books that is attracting much attention is "The Prisoner of Ornith Farm" by Frances Powell. The field covered by modern fiction is so broad that it would seem that the possible subjects for a plot would become exhausted. It is with some surprise therefore that we find in this story a plot so thoroughly ingenious. Add to the novel plot, a charming heroine who relates her experiences in the first person, and the most dramatic experiences at that, and you have a most successful story.

Hope Carmichael, on the night of her betrothal, wanders alone into the garden and to the bank of a sea-coast river of swift current augmented by the out-going tide.

Stepping into a boat apparently tied at the dock, she is whirled away, without oars, out into the open sea.

Her rescue by the man who loved her, but to whom she was denied, her detention at his country place, against her will, her several attempts at escape, and the final rescue all hold the reader with breathless interest. Publs., Chas. Scribner's Sons, New York, price $1.50.

Winston Churchill has won his reputation on more serious work than "The Title Mart," so can afford to relax a little and show us the humorous side of his nature. "The Title Mart" is a three-act comedy written in regulation "play" style, with all the "business," "asides" and other accessories indicated, but unlike many such books, the action is here so rapid and the plot so good that it holds for the reader all the fascination of the actual play upon the stage. "The Title Mart" is as great a success in its way as have been Mr. Churchill's other books. Publs., The Macmillan Co., New York. Price, 75 cents.

For the student of decoration, particularly as regards the historical side of the subject, the new book by Helen Churchill Candee will come as a valuable aid. The work embraces a wide range of decorative styles and periods.

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periods from the early Egyptian and Pompeian down to the present day, and in treating of decoration, covers not only mural ornamentation and architectural detail, but furniture and furnishings as well. This makes a most comprehensive and complete volume and its value is enhanced by some 126 illustrations, nearly all of which are from photographs of actual examples of the subjects covered in the text. Pubs., Fred’k A. Stokes Co., New York. Price, $2.00.

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APRIL DOUBLE NUMBER
Concrete and Cement Block Houses.

The Modern Design Feature of Keith's for April will include a dozen examples in cement block and plaster houses...

Recent Domestic Architecture in the Southwest

The Construction of Chalets in Switzerland

How We Furnished Our Bungalow

The Start for a Home

Home Grounds and Gardens

[The Hot-bed]

THE KEITH MAGAZINE
MINNEAPOLIS.
A Modern Gateway.

WHILE we have fresh in our minds the interesting resume of the origin and scope of the plaster house, which appeared in a recent issue of this magazine—it may be acceptable to further enlarge upon this ever interesting theme by presenting some of the newest ideas in plaster construction in this section.

None of the houses here shown have been built more than two years, and all are the work of architects high in the profession.

Although by far the greater part of the new building in southern California is of wood, or wood with stone or brick or plaster relief—without doubt the more ambitious dwellings are largely plaster construction. The wood construction comprises the medium cost houses, the bungalows and the cottages. This is not universally the case of course, for some extremely elegant homes are built of wood chiefly; and per contra—we see bungalow designs and cottages, in cement. Indeed, one sees a 10x12 one room structure with a “lean-to” in the rear, built of rough-cast concrete, with a tin, imitation tile roof painted red, and a 14-inch square chimney projecting from one front corner which in addition to its practical uses, does duty as a Moorish tower, with a mosque-like cap at top of the aforesaid red tin. Or, on dingy back
streets, some little grocery, will display a distorted caricature of the undulating curves of an Alhambran parapet, at the top of its store-front of plaster veneer over cheap clapboarding. Such absurdities, go far toward bringing a really beautiful style, into disrepute.

In looking over the new plaster houses of this section, one is impressed by the marked ascendency of the plainer, more severe mission influence in their design, and also by the introduction of slanting lines and gables into the roofs of many of them. the architect has rendered in shingle rather than in tile.

The rough-cast plaster is a light cream color, the foundation and exterior chimney of deeper cream colored brick with quoin trim of cream stone; the roof shingle a soft brown and all the trim of dressed timber stained the same soft brown.

The sloping roof of our second illustration is not so happy an exponent of good architectural design. A more showy house than the first, and costing more money, it is not so harmonious in composition. One

“THE APPEAL OF NOVELTY, BUT LACKING UNITY”

At first thought, such a combination might seem incongruous; but in the hands of a skillful designer, it is made to yield very pleasing results.

Take for instance the first illustration, which is the beautiful new home of Mr. Wm. Baker, in Pasadena. Formerly, a flat-roof would have been the architectural decision for this house, with its low, solid walls, square openings and flat, pergola-roofed porches. But an entirely different character is given by crowning the building with a low pitched, but distinctly gabled roof, which with fine artistic perception, has the impression of weight, and clumsiness, rather than of strength and beauty. The character of the roof treatment is not adapted to tile; the projections are too deep for such a heavy medium, and too much crowded. The square and the curved outlines are not related to each other; they do not somehow, “belong.” The plaster flower box below the front window, suggests a bath-tub, an effect which might easily have been avoided by different modeling. In this instance, the architect seems to have applied differing motifs of design, in his detail, without rendering them freely and
fusing them together. His Saracenic copings and parapet, do not hitch with the wide eaves of his bungalow-like roof. The architect is of course allowed a certain scope in the choice of detail; all we ask of him is to bring it together, and to consider the production as a whole.

The very beautiful conception of the third design, illustrates the successful use of sloping roof lines on a square, plaster house of distinctly Spanish type, in the hands of a skilled designer. Here we even have the main roof portion of the flat, Oriental type; nevertheless the slanting lines of the porch roof and its extension, repeated in the projecting window hood over the entrance proper, give us no sense of incongruity or want of adjustment.

In this design, though cleverly adapted to modern environment and uses, we yet feel the inherent quality of the style itself pervading the entire composition. The building is not a lump of concrete, with alien ornaments clapped upon the heavy walls regardless of their fitness, but lightness and grace is expressed even through the plaster medium.

The character of the openings, the small, latticed window panes, the lines of strength and grace, the delicate frieze of open work stucco crowning the walls—all are suggestive and satisfying. Very chaste, is the open work frieze, of pure Saracenic motif, and the warm cream of the plaster tones in with the warmth of the atmosphere, and affords a perfect background for the bloom and leafage so gracefully and effectively disposed against it. This foliage, and the red tile, with the brown window frames, afford the only, but effectual, color relief to the exterior.

The massive single panel oak door, flanked on each side by narrow latticed windows, opens to an interior treated throughout in old English oak with oak floors, and stained plaster walls. Mullioned French windows open from the living room out upon an inner court, and upon another side of the quadrangle a similar group of windows opens from the dining room; while a glass door from the library opens on the third side. A small sunken pool with a water jet, occupies the center of the paved court, and from it a little wicket gate set in a honey-suckle lattice, leads to an enclosed garden in the rear.

The strongly designed mantel and fireplace of the living room are of rough-faced, cream sandstone, the shelf above, a plain, solid slab of oak, resting upon projecting corbels of sandstone at each end. The hearth is laid in large, square green tile, and the oaken seats each side the hearth have seat cushions of green velvet. All
the ceilings of these main rooms are beamed, with simply tinted plaster between.

This pleasing example of plaster construction was built two years ago, and cost about $25,000.

The same strength and simplicity of treatment is apparent in the fourth and last example of the plaster house.

The Mission motif is here the pervading influence, and the charm of well-balanced openings, orderly and harmonious detail, reserved ornamentation in sympathy with the design, are united in this satisfying composition. The eye rests with pleasure, on the reasonable wall spaces, unbroken by the meaningless projections, but sufficiently relieved by the dominant entrance and the deep reveal of the openings.

The roof is in admirable harmony with the type of design, and its deeply projecting cornice casts fascinating shadows upon the plain wall spaces beneath. The strong, symmetrical entrance with its terrace extension on either side, is a delightful substitute for the ubiquitous veranda. The relief ornamentation on the angles of the balcony is admirable in its simplicity and unique beauty. Altogether, this design impresses us by its fine lines, its good proportion, its simplicity and the carrying out of historic associations.

It must be confessed that in no other part of our land are these plaster houses so in harmony with their setting as in California. It is natural therefore to find this method of construction here at its best. The beautiful structures so satisfactory to the eye and so picturesque here, are foreign to our bleaker climes, and do not combine with the building necessities of cold climates, which demand compact and regular division of space. A type of plaster construction very successful with us is the combination of plaster with wood, and this style also is much in evidence in the southwest, where gables as English in type as any Tudor country house are not unfrequently met with.

A decided innovation in plaster construction is the plaster bungalow. A very good illustration of this type was shown in the article before alluded to, in the Dec. 1906 issue of this magazine. This form of plaster house combines the low, whitewashed walls of the old Mexican adobe type, with some attempt at a classic facade, and requires very careful handling to be successful and not a burlesque. Special landscape features are also demanded by such a scheme. When used with discretion very charming results have been achieved by this type of dwelling.
Hints for the Modern House.

By J. Taylor.

II.—ITS ARCHITECTURE.

Any one of an observant turn of mind must be struck with the change that has come over our street architecture during the last few years, and if this be true of the city, it applies with greater force to rural districts, where the character of the house has been so revolutionized as to alter completely the aspect of many a landscape. Without enquiring about the origin of the modern spirit one may take it that the new order is in the direction of reform for we live in a rational age, in which a quick intelligence knows what it wants and will have nothing else.

Besides a characteristic of the time is individuality, men now think, and while the modern architect is by no means above drawing inspiration from the masters of earlier periods, he is strong enough to know that all originality did not end with Robert Adam, the eighteenth century Scotch lad, who went to Italy to study classical Roman architecture in all its local color, then returned to London to establish the only style of any consequence in debt for origin and interest to the energy and originality of one man.

But Adam has been out of the architectural world for about three-quarters of a century, and a good deal has happened since.

This is what came about first, we passed through a period of uninteresting commonplaceness, when one house was as indistinguishable from another as the street lamps of a particular district, and then a revival of art came, and men becoming ashamed of the stupid monotony, set about finding the lost secret of building quaint and attractive houses.

Now what are the main features of the modern house, architecturally considered?

First of all there is rationality; a house is a house in the modern school, not an imitation of a Greek temple or a Roman Forum, its purpose is considered before effect, and the interest of those about to use it, put before the curiosity of the passer-by.

And all this is done with a simplicity and a quaintness, and withal an individuality that in the country accords well with the natural surroundings, and in the town makes a walk along our streets a mission of pleasure, for each elevation has an interesting character of its own, with a skyline worthy of more than a passing glance.

It is no uncommon sight in Glasgow, where I sit writing, and where the new spirit is very much alive, to come upon a man in a busy street standing still, gazing in front, while hundreds rush past in pursuit of art, charity, or mammon.

I met such a man the other day, taking in the points of a building just erected by an architect who plans on modern lines, and who thinks out every detail of the scheme down to the electric bell push for the elevator.

This was a simple, rational front, in a coat of grey rough coating to withstand the smoke and dust laden atmosphere of a big dirty city; there was not a projecting cornice, door or window sill, the only ornamentation being a small capital worked in the stone or plaster at a 45 degree angle at the top of each side line of door and window. This tickled the fancy of the only man in the street that day who wasn't in a hurry, and as I passed him, he had got to the stage of "Well I'm blessed."

Another point in the new architecture is its extreme unconventionality. Amongst the best men, one does not mind what another is doing, any more than he cares, except for an antiquarian interest, what the Romans or Greeks did at the beginning of the Christian era, and before it.

Then, as has already been indicated, there is a thoughtfulness for requirement such as was not common to any period of past architecture, and this is just one of the links that bind the modern architect and client in ties of very great closeness, making it possible for the best results to follow.

There is no apology for construction with the man who works on modern lines, as if there was any need to be ashamed of good honest construction and to hide it, or mock it, or make believe that it was other than it seemed to be.

Such hypocrisy is not practiced by the straight modern architect.

No meritorious ornament is permitted
to disfigure the unity of the simple idea, while the grouping of the detail, and the blending of color in stone, woodwork and material, are complete.

Take the gateway in the illustration as an example of the modern style, there is little in it if you come to analyze it, but you would not pass it without being tempted to stand up like the man in the busy Glasgow street. The house and street wall are built of random rubble, the window and door sills are of polished stone, some of the panes in the door panel are of speckled glass, and the wrought iron work in gate and lamp and bell pull are just of that quality that has the undefinable charm; and the artistic temperament would get more genuine pleasure coming across a front of this description, than from the contemplation of many a Broadway Hotel.

These are some of the characteristics of the new architecture, and there are others, but we will leave them for the present, and take up some of the aspects of the interior of the modern home, in a chat on its decoration in the next number of the magazine.

(The gateway referred to is our frontispiece, page 132.)
HOME. How this word thrills us; how it softens our nature! No one so hardened or calloused by the grind of life but will pause to stop and think on hearing it spoken, of all that it means. What an unutterable loneliness is expressed in the statement, "I have no home." It is one of the first and noblest instincts of all animal kind, that of providing a home, and no man can be called truly noble who has not this great inherent desire, that of providing a home for others beside himself. God in his infinite wisdom has made a pleasure of this necessity. Houses are continually building from purely selfish motives, that of selling and getting gain. In these cases there cannot be said to be any great enjoyment taken in the construction, but who ever heard of a home built without great happiness being realized by those who make the necessary effort and sometimes privations in securing the blessings of one's "own home." Aside from the matter of home getting and home providing, the natural drift and tendency of the life of the twentieth century young man is towards selfish gain, but at the very beginning of his manhood experience after reaching his majority, comes the call for home; if not for wife it may be for mother or father, sister or brother. Someone is sure to want a home and sooner or later he is called upon to provide it. This is well; this is Divine. And for a time his selfish vision of personal gain gives way to providing a home, and with the sacrifice comes the greater pleasure of giving to others that which he had planned to keep for himself. Here the promise is realized that "Bread cast upon waters shall return," for the shelter he has provided becomes at once a home not alone for others but also for himself. In this way his view of life almost imperceptibly changes and the narrow mind becomes broader, the selfish nature generous; more responsibilities are willingly and resolutely assumed. The necessity to provide and care for the home says to the young man, "You must"; and the determination being formed he replies "I will," and with this point firmly fixed in mind and never for once lost sight of, his future success is certain, for "Where there is a will there is a way." The life of the author of this article has been given for over thirty years to the planning of convenient homes and he is firm of the opinion, born of experience and observation, that it is wise for every man to own a home, and pay for it.

In this fast growing, western city, the home of the author, the idea of home getting is infectious, it is catching the young men fast, and, to a thinking observer, it means men of strong character, men of determination, men of energy, conservative men, saving and careful in expending money, for they have learned their lesson early in life as the pretty and tasteful homes springing up on every side will testify.

In conclusion, the home is a necessity in the early beginning of a man's business career for the comfort of his dear ones, for the building of a broad, generous character, for the development of perseverance, of unflinching determination, and of the "I will" qualities that lead to success.
review of a recent English book, on interior decoration, commented on the hackneyed color schemes of most American decorators. The present writer is inclined to think the stricture is a just one. The ideas of most people in the business, seem to be monotonously green or red for the living rooms, with a tendency to white paint and flowered papers for the bed-rooms.

This is partly due to the fact that with us the Arts and Crafts movement has been almost wholly expressed in very dark wood. Drawing their inspiration from the missions of Southern California, where dark oak furniture had a foil in the abounding light and color which surrounded it, the early Craftsmen used the same sombre stains for their furniture, and were driven to bright reds and strong greens, for the sake of contrast.

There is a good deal to be said for green although the deep tint of an emerald is not particularly lovely when transferred to silk or wool, less lovely still when it is applied to cartridge paper. But there are many beautiful tints and it is, after all, the preponderant color in nature and in its duller tones exceedingly restful. It is reasonably durable, does not dwarf the proportions of a room, and it combines charmingly with some reds, with medium browns and with white or cream. One can imagine an entire house decorated and furnished in green, which would be pleasant to live in. Certainly no one would care for a red house or a blue house or even a brown one, least of all a yellow one.

A warm red has its merits. It furnishes. The red wall comes toward you and gives a sensation of coziness. In a material with a sheen or a pile, it has a splendor which belongs to no other color. No other has the sumptuous quality which belongs to the orange toned Spanish red, or to the peach color called Italian red. But it is a poor background for most pictures, it makes small rooms look stuffy and is apt to be crude in all but the most expensive materials, and seldom fades harmoniously.

Brown, which is the resort of those who do not care to essay either green or red, has substantial qualities. It does not fade badly, it harmonizes with most wood and metal finishes and contrasts pleasantly with most positive colors. It is the best all-around setting that one can have, but it is dull and it has a tendency to grow uncommonly dingy with advancing years, and does demand a good deal in the way of pictures and bric-a-brac to light it up.

What presents itself to him who seeks adventures in color? What realms shall he explore in search of decorative schemes, which shall have some other merit than that of being new and strange?

First there is gray. Not the gray of the paper hanger, the pure cold, light gray which, in the childhood of some of us was considered admirable for parlor walls, and still holds an honored place on the palette of the man who calcimines, but the warm pale gray, with a suggestion of yellow. One finds this gray in putty and in rough cast walls. It is the most delightful of backgrounds. It recedes enough to give an effect of space to a small room and it looks deliciously clean. Besides it tones in well with the gray and fumed finishes of oak, so much in vogue, and is a good contrast to redwood and to the warmer shades of mahogany and cherry.

The worst of it is that it cannot often be had in paper. It must be produced with paint or calcimine. Possibly in an imported ingrain or in one of the German papers one might happen upon it. There is a delicious shade of it in Japanese grass cloth,
which adds a silvery sheen to the original color. In the new arrangement of the Art Museum in New York, this grass cloth has been used as a background for some of the special treasures of the museum.

Imagine a room lined with this silvery grass cloth, with woodwork of fumed oak, the upper third of the wall painted to match the grass cloth, with a narrow ledge below it. On this ledge, here and there an ivory tinted plaster cast, a platter of pink and green Chinese medallion ware, some bits of pewter, a jar of gray green pottery and an Oriental vase in peach bloom pink. The rug, on the dark polished floor, should be moquette or velvet in shadowy gray and pink and green, the furniture fumed oak in French shapes with a tabourette of dark wood inlaid with mother-of-pearl, such as one finds in all the oriental shops; no upholstery but loose cushions of dull pink Indian linen with one of Russia crash embroidered in dull green and another of sage green velveteen and straight curtains, to the sill, of greenish white raw silk; no pictures but a Japanese print and a mirror both in dark wood frames.

Or one chooses the gray wall for a sunny bed room, and paints the woodwork white and has a gray and white rag rug, with long dashes of scarlet. One has a white enameled bedstead and bureau, and china trays
and boxes of red and gold kaga and a pair of iron dragon candlesticks with red candles. One dresses the bed and covers an easy chair with a cretonne with a pattern of scarlet poppies, and makes valances of it for the short cheese cloth curtains. One paints a table and a chair black and waxes them and collects, for this room, one's scarlet leather belongings, one's books bound in red and white and gray, the lamp with a scarlet shade and the black and white Indian basket.

Or for a bedroom, where the furniture is cherry or mahogany, one stains the woodwork to match and surrounds the doors and windows with a nosegay border, with much rose red in it. One uses a linen taffeta with the same rose red on a gray ground, for cushions and covers, and hangs mezzotints, or their imitations, in narrow mahogany frames on the walls.

Gray is the color, for a sunny room, not too strongly lighted and schemes in which the violet shades play a part need sunshine too. Violet and green is not a unusual combination, seldom very happy except in rich materials, but foreign decorators use violet, blue and ivory together. Imported wall papers of conventional design blend the two colors on a cream colored ground. The violet has a pink tone, the blue a suggestion of gray, what is known as Louis XV blue. Ivory white woodwork is used and metal should be silver or pewter, rather than brass or gilt. An unusual coloring, like this, is most successful in a wainscoted room, the wall paper combining the two colors, the furniture in one, preferably blue. Care must be taken to keep the coloring light and not to introduce discordant elements. Cane furniture in old ivory frames, with loose cushions of blue or violet, a rug in cream and gray blue, and Arabian net curtains are all available, and a collection of silver would find an agreeable setting in such a room.

Apropos of gray blue, how many people know of the very beautiful Michelet charcoal drawing paper, sometimes used for book binding? It comes in sheets, about 22 x 27 inches, is of exquisite texture, extremely strong in at least three good shades of gray blue, and costs three cents a sheet, bringing the equivalent of a roll to about thirty-five cents. It makes a beautiful side wall with the seams covered by narrow strips of white painted wood, and with other strips introduced to form a simple geometrical design. With a shelf above, for blue china, plaster casts and the like, and the upper part of the wall covered with the highest part of the wall covered with the highest shade, with Flemish oak or black enameled furniture, with dull blue Oriental cotton cushions and curtains, a vivid red lampshade or a bowl of orange and scarlet nasturtiums, one has a charming and unacknowledged room, at slight expense, and quite within the capacity of any one clever with tools.

A wall covering, which lends itself to strapped arrangements, is the matting which comes around tea-chests. Dampered and pressed and tacked to the lower four feet of the wall, the joinings hidden by strips of brown or green stained wood, it is an effective dado. For the upper part of the wall, citrine yellow with a touch of green is effective, with the ceiling a paler shade or a German paper in pale brown, crossed by waving black lines, and it is not hard to find Java print curtains to cut up for cushions. Brown oak or green furniture, green pottery, brass, possibly some rather vivid turquoise blue and, if possible a brown Chinese wool rug, also pictures in brown tones will all fit into such a room and, unlike the others mentioned, the treatment is appropriate for an apartment of large dimensions.

Sage green, which was so popular in the early days of the decorative revival, is not often seen now. Alone it is a somewhat monotonous color, as a part of a scheme suggesting the coloring of the peacock it is exquisite. Why should not some one, clever with the brush, have a wall covered with the imported ingrain in a rather gray sage green, and adorn it with a frieze of peacocks feathers. The woodwork would be a rather dark olive, the rug of darker green moquette or velvet, the furniture oak, either of the tone of old French walnut, or else stained a gray green. Sage green raw silk curtains and cushions of a Japanese brocade in green, peacock blues and black would carry out the color note, supplemented by green bronze and pottery, the peacock iridescence of Austrian glass, and the turquoise of some Oriental pottery. Then, for a high light, a Japanese jar of deep ivory with quaint decorations in black and gold. If a smaller room, in the silvery gray grass cloth mentioned earlier, might open out of it so much the better.

Original and charming effects in house decoration, are matters, less of the long purse than of readiness to adopt suggestions, of an attentive eye for color effects and a willingness to be a little different from one's neighbors.
Starting Seed in the House.

By Ida D. Bennett.

With a climate which delights in warm, sunshiny days in March, followed by nipping frost and cold driving rains in April there can be little, if any, question of the sowing of seed of any but the most hardy flowers in the open ground. But one can anticipate the coming of genial weather and create conditions favorable to seed growth within doors by the exercise of a little ingenuity. The conditions are simple—a uniform temperature, a few shallow boxes or flats and some fine compost. Fine compost is distinguished from coarse in that the soils of which it is composed are sifted while the latter is more or less rough. Leaf-mould, loam and sand form the usual combination for this purpose, except in the case of the finest greenhouse seeds when pure leaf-mould or leafmould and a little sharp white sand may be used. The boxes used should not be over two inches deep for these finer seeds nor over four inches deep for the coarser seeds. They should be of a size to be easily handled and of a convenient shape to rest on the shelf, window ledge or wherever they are to repose during the period of germination. A shelf back of and above a stove, radiator or register is especially suitable and it should be easily accessible that it may not be forgotten or overlooked as it will need to be inspected several times a day.

Cigar boxes are the most easily obtainable of all boxes and are of a very convenient size for the finer seeds. Only the half-size boxes or the large ones cut in two should be used and these should be filled to within a half-inch of the top with the fine sifted compost or leaf-mould. But before this is filled in a few holes should have been bored for drainage in the bottom of the box and covered with bits of glass, to prevent the earth working into them and clogging them. The earth should be neither wet nor dry but just moist enough and should be pressed down evenly with a bit of smooth board kept for the purpose, and the finer seeds—such as rex begonias, gloxinias and the like, merely sifted over the surface. Somewhat larger seeds may be sifted over the surface and a little fine white sand sifted over them—merely enough to cover them. For the coarser seeds such as pansies, asters, and the like shallow drills may be made with the pencil and the seeds scattered as evenly therein as possible, care being taken not to sow too closely, and the ridge of earth drawn back over them and the whole pressed down firmly with the board.

In this planting of seeds in the house where the conditions are as favorable as is possible, deep planting, such as would be necessary out of doors is not advisable as the earth is not exposed to wind, rain, cold and burning sun, so if there is sufficient earth to cover the seed when it sprouts and the earth is pressed closely around so that the tender shoots may at once lay hold upon it that is all that is necessary; but this last point is very important.

Each flat or section of flat should be carefully and plainly labeled with the name of seeds and time of sowing and where known, the time it takes the seed to germinate. After the flats have thus been prepared they should be set for a few moments in a pan...
of luke-warm water until the water has risen in the soil nearly but not quite to the surface when they should be lifted and the box tipped on its corner to drain off all surplus water. It is now ready to be placed where it is to remain until the seed shall have germinated.

This is an important period in the life of the embryo, as, if too much moisture exists the seeds will rot in the ground, especially is this the case where the amount of heat is insufficient, if too much dryness arises the young rootlets will wither and die. For this reason the flats must be inspected three or four times a day and any excess in either direction corrected. The presence of drops of water on the glass which will be over the flats shows that the moisture is in excess and the glass should be raised somewhat until the excess moisture has passed off. If on the other hand the surface of the soil appears dry, water should be lightly and carefully applied by means of a rubber sprinkler or, where this is not available, by dipping a small whisk-broom in water and shaking it lightly over the flat; should, however, the dryness appear at the bottom, which is more likely where there is bottom heat, the flat should be set for a few moments in a pan of water as at first.

When the seeds have germinated and the first leaves appear the flats may be removed during the warmer part of the day to a window where they will get an amount of sunshine suited to their needs. Primroses and begonias and like shade-loving plants should not be placed in full sunshine but rather in a north or partially shaded east window and a sheet of white paper introduced between the flats and the window glass, and this precaution should be taken in the case of all seedlings in flats or pots until they have got of sufficient size to stand full sunshine.

The glass should be removed only partially at first as the young seedlings require the humid atmosphere it maintains. As soon as the young plants are large enough to handle, if at all crowded, they should be pricked out into larger but similar flats, setting them about one inch apart in rows and when they have made sufficient growth to again become crowded they may be again transplanted or pricked out into little thumb pots and so grown until time to set out in the open ground. A convenient way to transplant these little plants which are often too small to handle conveniently is to use a thin flat stick, notched at the end, this stick need not be over a quarter of an inch wide and the notched end is pressed down into the soil beside the plant so that the stem rests in the notch, then it is lifted and transferred to the hole prepared for it in its new quarters.

Always press the earth snugly around these planted seedlings and when the transplanting is complete set the flats or pots in water until sufficiently moist but never press or handle the soil after it has been wet.

Such large seeds as the ricinus, canna and the like may be started in small pots and grown on until time for planting out in the open ground when they may be slipped from the pots with the ball of earth intact.

The large earthen saucers which come with the larger flower pots make admirable seed flats, and window boxes such as are offered by the florists may be readily made at home and combine all the advantages of a small green-house in their limited area. These are of any desired size; twelve by fifteen or seventeen inches being a convenient size to use, and the front should be about three inches high with the back an inch and a half higher. To the back a glass lid is hinged and a notched stick supplied in front to hold the lid at the required angle.

Several varieties of seeds may be planted in the boxes, care being taken to separate each variety with narrow strips of wood sunk in the ground and to label all clearly. Stuff three-eighths of an inch or only one-fourth of an inch in thickness is heavy enough for the purpose as the lighter they are, the more easily are they handled.

Almost any seeds which will bear transplanting may be started in the house to ad-
vantage. Sweet peas, poppies, nasturtiums and the like had better be started in the open ground; the sweet peas and poppies as early as the ground can be worked in the spring or late in the preceding fall and the nasturtiums about the tenth of May in the northern states. Pansies should be planted as early as February if they are wanted for early spring blooming, or better yet in the cold frame about the middle of August of the preceding year. Asters are much benefited by frequent transplanting and balsams never reach their full perfection of size and doubleness unless they have at least one transplanting.

Salvias started in house or hot-bed early in April will bloom earlier and more freely than those purchased from the florists who grow them from cuttings and the cheapness of the seed grown plants admits of a profusion of bloom impossible with the purchased plants.

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Home Arts and Crafts.

A Hall Umbrella Rack.

As an introductory to this series, we believe many of our readers would appreciate a few definite instructions on the making of joints, getting out stock, and other details of wood-working.

It is pre-supposed that the use of tools is familiar to those who would be interested in this line of craftsmanship, so we will not devote our space to elemental instruction along that line, but will be pleased to refer readers to good handbooks on the subject if they so desire.

The following paragraphs on design and construction are from the book “Problems in Furniture Making,” by Fred D. Crawshaw, as is also the plan of the Hall Umbrella Rack, all of which we present by kind permission of the publishers, The Manual Arts Press, Peoria, Ill.

Laying Out the Tenon-and-Mortise Joint.

“For the benefit of those who may not be familiar with the process of laying out the tenon-and-mortise joint the following method is suggested. After all pieces are planed to the proper width and thickness and the face sides and joint edges marked, put together in a vice, with joint edges up, the tenon pieces that are to be cut the same length. From the center of one of these pieces (preferably the one nearest the workman) measure each way one-half the distance between the shoulders of tenons (it is supposed here that a tenon is to be cut on each end) and make a point with the end of knife blade. With the try square or carpenter’s square and knife square a line through these points across the joint edges. Now take pieces out of vice and square around each end from the line already marked on joint edge, being careful to have the beam of the square away on either face side or joint edge. To measure thickness of tenon lay rule on joint edge of one board and mark points with end of knife blade for tenon thickness. Take the marking gauge and set its stop so that the marker touches one of these points when the stop is firmly pressed against the face side. Before resetting gauge mark all pieces for this width. Now, set marking gauge for other point, again having gauge stop against face side, and proceed as before. If the workman has access to a power saw all the work of cutting the tenons may be done on it, but it is believed that quite as accurate work may be done with hand saws. Any trimming may be done with chisel and plane after the sawing has been completed. The mortise is laid out and constructed by a similar method.

The Cabinet-Maker’s Method of Getting Out Stock.

“Where a number of pieces of wood are got out for one piece of furniture it is wise to be very systematic in the method
of laying out and sawing up these pieces. The following method is suggested as good: From a complete working drawing of the piece of furniture to be made, make an itemized list of all pieces of wood, putting those together in the list that have equal widths and lengths, and making note of different thicknesses if there are any. Select the stock lumber and cut this up as economically as possible with reference to saving lumber and labor.

"The cabinet-maker's method of working consists in doing all similar operations on all pieces while tools and machines are set. If this happens to be the cutting of tenons or the boring of mortises be careful to complete this work on all pieces before beginning some other operation. Just what should be done first and what second, and so on, it is difficult to say, but it is always safe to complete all ripping and cross-cutting in getting stock to the roughing dimensions before
any hand dressing is done. It is likewise well to have all pieces dressed and finished to drawing dimensions before any joints are laid out and cut.

"One further point to note in the economy of labor is to keep pieces which are to be glued together to form doors, sides of cabinets, etc., in clamps as the work progresses so that when all tool work is done the several parts of the piece of furniture are glued up and ready for the final assembling.

"A word about scraping and sandpapering may not be out of place here. The best suggestion one can give in this connection is to do this part of the work thoroughly. Whether each piece should be scraped and sandpapered before any gluing is done or not is an open question. Much time may often be saved by postponing most of this work until the piece of furniture is assembled.

"There are three important considerations in designing a piece of furniture."

1. "**General lines and proportions.** The general character of the lines will be largely dependent upon the lines in the pieces of furniture with which the one you are designing is to be associated; there should be a general harmony of line, a re-echo of line, in the room as well as in the single piece of furniture. The general proportions will be determined by the space your piece of furniture is to fill and its use.

2. "**Construction.** The shape of the piece of furniture will generally determine its construction. One will hardly make a mistake in the selection of joints to be used, but there are many forms of some of the principal joints, such as the tenon- and-mortise joint, from which to select. Here, again, one must be governed by that fundamental law of design, viz.: there must be harmony. If the general design is a severe one, then the protruding form of joint will be appropriate as, for example, the open or pinned tenon- and-mortise joint instead of the closed one, or the screwed construction instead of the nailed butt joint, etc.

3. "**Decorative features.** Simple carving, upholstering or textile or leather paneling is often the thing needed to give a piece completeness in appearance but ordinarily the good lines, good proportions and good finish are quite sufficient to fulfill all esthetic requirements. The simple modeling of the top or bottom of a post and the introduction of broken or curved lines in some of the rails and tiles is sufficient decoration.

"In addition to these three considerations it is desired to call attention to two others dependent upon one or all of these three:

"There will constantly arise as one works over a design the question of widths and lengths of certain parts. Some of these will be definite because of the use to which the piece of furniture will be put, but many will be indefinite. These indefinite dimensions may be determined with some degree of accuracy if one will carefully consider the three following laws governing arrangement.

1. "Uniform spacing of similar parts is usually unsatisfactory.

2. "Wider masses and narrower openings should be made near the bottom of a piece instead of near the top to give the feeling of stability.

3. "The center of weight in a design should be directly below the center of gravity.

(b) "The satisfactory filling of space areas is often difficult. This is largely a problem in decoration, although it may be one in construction, when the strength of the piece of furniture is an important factor in the design.

"The requirements of the individual problem must always serve as the basis for conclusions but the three laws governing arrangement given above and the principle of re-echo or harmony of line will prove helpful guides.

**The Hall Umbrella Rack.**

The design presented in the accompanying plans is for a very useful piece of furniture and is so simple in construction that little description will be needed. "Chestnut has been used with much satisfaction in the construction of this piece. An ordinary shallow tin pan, colored by covering with lard oil and heating repeatedly in the fire, will make a good bottom. This is a good piece for fuming."

With our next article in the series will be given instructions for fuming, and the use of several stains and chemical finishes.
A Modernized Type of a Colonial Home.

A BEAUTIFUL home-like home, something to stop and look at, that attracts your attention, that you cannot pass without a second look—this quality is sought after in the planning of our modern homes, but is so often missed. How often you hear the remark: "A large house, a massive structure, always attracts attention by its size, but often looks forbidding, rather than home-like." The old "down-East" colonial homes hold their attraction for many reasons, largely on account of their associations, their history, and the rugged endeavor of our ancestors in early colonial times. These homes are not only endeared to us by their association, but they are often much enhanced by their surroundings, the old elm trees, the rocks and hills.

We are illustrating here a home that was designed for Mr. and Mrs. C. T. Jaffray, of this city. As in most cases, this home reflects the feelings and tastes of the owners, as much, if not more, than the architects. It is the usual case that the prospective builders of a home have definite and distinct ideals in their own minds of what is pleasing to them and if the architect is fortunate enough to catch the thought and the inspiration from them, so as to give a faithful production of their ideals, he is very fortunate, and the outcome is a successful production of a home that grows more home-like in years, as it
becomes identified with the people and its surroundings.

If we were to attempt to show a perfect house, we would stop before we began, as nothing yet has been built that is perfect and nothing so good that it might not be improved. We do, however, think that this house is "home-like" and that it has much of merit. It is very pleasantly situated, with fine outlook both front and rear, and a sufficiency of open space for light, sunshine, and cheerfulness. This house has a broad frontage, symmetrically treated with quaint central porch and central hallway. The walls are built of a dark, vitrified brick that is unexcelled, will not absorb moisture or soot, and will always look the same. The leading characteristic of this house both inside and out is the extreme simplicity of its details. There is no effort at show or display.

The interior woodwork is very light, simple in design and finished mainly in white enamel, with mahogany for the stair railing and steps, and also for the beamed ceiling, and finish in the dining room, also for the wood-work, book-cases and finish of the library; the other work throughout being in the white enamel, excepting only the kitchen and rear portion of the house, which is finished in natural light hard wood. The floors throughout are plain, polished hard-wood, and the decorations and furnishings are in exquisite harmony that reveal the artistic taste and refinement of the owners.

The entrance porch is of simple colonial type and, as in early days, forms the portal or entrance to the house, but is in no sense a piazza or sitting place. At the right hand side of the house and opening with the living room through long French windows is a broad liberal piazza that is screened in the summer and may be enclosed with glass in the winter, forming a beautiful sun room built with a stone floor.

This house contains five rooms on the
"MAHOGANY FOR THE STAIR-RAILING."

FIRST FLOOR PLAN
first and five rooms on the second floor, exclusive of the halls and auxiliaries and closets. The third floor by reason of its broad gambril roof, amply lighted, with gables and dormer windows, is divided into several rooms for servants and closets and one large amusement room. This home, to be fully appreciated, must be seen. It has many conveniences, as bath rooms, closets, wardrobes, pantries, etc., the outcome of much study, and which help to make a very convenient and commodious home. The total expense of this model house was $15,000, and it has been remarked by many people of good judgment that the money was well spent and that for every dollar of outlay a dollar of value was received. No waste of money and no loss, something that cannot be truthfully said of every home that is built.
The illustrations herewith are of a residence erected by Mrs. H. H. Milburn of Spokane, Wash., an eight room, modern cottage costing about $5,600. The construction is of a stone foundation and stone underpinning of porches and the superstructure is of frame with an exterior finish of shingles for the walls up to the second story sill course, above which is cement plaster on metal lath and half timber work. The roofs are shingled and stained a deep wood brown as are also the timber work and wall shingles.

The living room 26x16 feet in size is handsomely beamed and finished in Washington fir, in Mission style. The den and dining room are also finished in curly fir. The dining room has a wood cornice and plate rail and is paneled with plaster panels which are burlaped. The finished floors throughout are of narrow, slash-grained fir.

There is a combination staircase giving access to the kitchen, or cellar, as well as to main part of house.

The second story rooms are finished in pine and enameled white. There is a private bath off the owner's chamber which has a cabinet fitted with shelves and drawers.

There is a good sized attic and a basement extending under the entire house, the latter containing a servants' toilet, laundry and fruit room and a hot-air heating and ventilating plant. The heights of the stories are 8 feet 8 inches for the basement, 10 feet 3 inches for the first story, and 9 feet 5 inches for the second story.
FIRST FLOOR PLAN.

- Kitchen: 13'0" x 11'6"
- Living Room: 26'0" x 16'0"
- Dining Room: 20'0" x 13'0"
- Den: 11'6" x 10'0"
- Vestibule
- Clo'
The Milburn Home from the Front.

"The Living Room in the Milburn Home."
SECOND FLOOR PLAN.
The illustrations shown herewith, are particularly interesting on account of the fact that this is the first house that was ever built in the Northwest of concrete block construction. The owner being one of the leading building material dealers of the city was in a position to do considerable experimenting, and many of the leading architects and those in a position to know, have expressed the opinion that for color, artistic excellence, etc., this piece of work has not yet been surpassed, in spite of the fact that it was the first attempt made.

Realizing the fact that block construction is apt to look heavy and monotonous, the owner used a very pleasing combination of alternating blocks 9-inch rock-face and 4 ½-inch smooth. The basement was built of 2 8-inch blocks with an air-space between, bonded together, and the result is a cellar that is perfect for dryness and sanitary qualities. The first story was built of 10-inch hollow blocks, and the second story of frame.

A touch of the colonial is added by the semi-circular portico and pillars.

The stone work is in natural gray, and siding of upper stories is painted a yellowish gray to match.

The porch columns, rail and pedestals as well as window and other trimmings, are white.

The two interior views give glimpses of attractive rooms, finished and furnished in excellent taste. The ceiling ornamentation is plastic relief in Renaissance design. First floor finish is birch stained mahogany, with walls in rough plaster fin-
Detail of Porch, Johnson Residence.
ished to a deep, rich olive green. The ceiling tint is light green, high-lighted in gold.

The dining room is in black Flemish oak with dark blue walls and a lighter blue ceiling. The band of blue delft tiling below the plate rail is most effective in the general blue scheme. Below this the wall is fabric covered. Hall is in terra cotta with cornices and brackets in bronze.

The house is 35 by 38 feet, and has a composition roof. Hot air is used in heating. First floor rooms are 9 feet 6 inches in height, second floor 9 feet and third floor 7 feet. The cost to build was approximately $8,000.
A Design in Cement Blocks.
A Design in Cement Blocks.

Description.

The illustration opposite shows what can be done in cement block construction. The bays, dormers and gable ends are finished in rough cast plaster on metal lath.

Height of basement above grade may be regulated by local conditions of soil and moisture.

As seen by the plans, the feature of this house is the large living room occupying nearly one-half the ground floor. Other rooms and combination stairway are well arranged and every foot of space is utilized to good advantage.

Second floor has four chambers and bath with modern plumbing. Basement is complete with laundry trays, furnace room and coal bins. Cement floor. Cement block foundation.

Size of house 32x27 feet, but subject to change to accommodate any size of cement blocks. Height of first story, 9 ft.; second story, 8 ft. 6 in. Estimated cost, not including heating, $3,000.

Color Scheme.

Natural gray cement blocks and plaster with deep red stained shingle roof. The stone work may be pointed in black. Wood trim painted white; window sash black. Interior finish in Georgia pine in principal rooms, stained and varnished, upper rooms finished natural.

When You Figure the Cost of Home Building

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SARGENT & CO.,
151 Leonard St., New York
Rustic Siding and Shingles.
Rustic Siding and Shingles.

Description.

A VERY attractive exterior is secured in this design by the use of rustic siding for the first story, and shingles in the second story and gables. The house as planned, is intended for a southern climate, having no basement, but built on concrete piers.

By adding to the cost, a full basement and heating plant could be provided.

The front entrance is of attractive design and the upper balcony is a useful feature, appreciated by the housewife. A smaller balcony opens off the rear chamber also.

The porch at the side of dining room could be screened in if desired for summer use. The combined dining and living room makes a fine apartment, with built-in china closets and cupboards, and a pleasant bay window at the end.

If the chamber on first floor were not desired, it would readily become a library or den. The side window in parlor with seat is a pretty feature.

Four chambers and toilet are provided and attic space is reached by a scuttle in ceiling of upper hall.

Size of house 33x36 feet; height of first story, 9 ft. 5 in.; second story, 8 ft. 9 in., lowest height in second story rooms 6 ft. 6 in. Estimated cost $3,500.

Color Scheme.

With the rustic siding and shingles two or three shades of green could be combined to advantage for the exterior, or two shades of brown with white window trim. The construction is admirably adapted to soft, harmonious effects in the modern wood stains. Interior finish may be pine, poplar or cypress, though the hard woods can be used for first-story rooms if desired.

Like the Lungs,

warmed out-door air is carried into the house by the Jackson Ventilating Grate, and the cold, impure air is withdrawn. The

Jackson Ventilating Grates

give four times the heat of the ordinary open fire, and will heat an entire house with less fuel than a furnace. They can be fitted into any ordinary fireplace, and burn either coal or gas.

Write at once for illustrated catalogue "K," which gives explanation in full, also for catalogue of andirons, spark screens, mantels, tiles, etc., if desired.

E. A. JACKSON & BRO.
25 BEEKMAN STREET.
New York.
It is not many years since the bride, in furnishing her new home, was pretty certain to have a yellow room. Those were the days of light oak furniture and straw mattings. She probably chose a wall paper with yellow roses and green leaves, or a cream colored ground and there was a surfeit of white muslin laid over pale yellow, and of embroideries of natural flowers, in various shades of yellow. And a bull in a china shop was not in it with her husband's best friend when he spent a night in that room.

We do things rather better now. We have come to realize that, however beautiful a composition in different tones of gray or of green may be, yellow requires a strong contrast to bring out its best points, and that, perhaps for that only reason, it is always more successful in a shady room than in a sunny one. The east or west room, where the sunlight slants in warmly, but does not strike directly, is the ideal one for a yellow scheme. Then too, we confine ourselves to one shade of yellow. It seems to lack the subtle gradations of tone possessed by other colors, and when successfully used by embroiderers, is almost always flatly treated.

So we almost always use dark woodwork with our yellow, not perhaps black, though very successful things have been done with black woodwork. But black does not appeal to the average taste, and we are more likely to choose a warm deep brown tone, mahogany, or a very dull green. If the yellow used has a suggestion of green, it may be possible to use the grayish brown tone of fumed oak, but not with the pure bright yellow which is most satisfactory for ordinary use. To get the right color for a wall paper. I know no better way than to get a sample of a yellow furniture brocade, and match it as nearly as possible. One cannot go astray with the sumptuous hue of these French fabrics. One's choice of papers is always limited, as most of the yellow papers are on the brocade order, but one gets very satisfactory dull surfaces in the German papers. Happily, there is no temptation to use a frieze, for there are none to be had. When it is desirable to lower the height of the room, the ivory ceiling can be dropped a foot and a half on the side walls, the hue of junction marked by a moulding of dark woodwork.

On the stained and polished floor, one should have a rug. A yellow wall furnishes so well that it is well not to have too large a rug, but to keep a wide margin of floor. If the rug is to be of carpet, it is best to choose a brown one, either Axminster or Wilton. The Chinese wool rugs are of course very satisfactory in dull blue and brown tones, though their price is almost prohibiting, but a blue and yellow Kashmir rug, while some people object to its lack of pile, is effective and comparatively cheap. It may be supplemented by a fur rug or two, though the suggestion of a tiger or leopard skin may seem superfluous. Should the woodwork and furniture be green, rather than brown, the rug must be of that color.

The less upholstery there is in a yellow room, the better, unless it is of the general tone of the woodwork, but yellow is a wonderfully good background for highly polished furniture. Curtains ought to be within the frame of the window and may be either of Arabian net or of some soft
Oriental silk. It may be possible to carry out the tone of the wall in a window box of yellow flowers, or, at least, in a blooming plant.

There are gorgeous fabrics to be had in yellow tones. The trouble with most of them is that they are altogether too sumptuous, for common use. But one gets the color in raw silks, which are admirable for covering loose cushions, and are quite inexpensive. Others have a Persian effect, in which yellow is combined with much blue. Heavy double-faced French cottons, printed in the warp, have sometimes a ground of clear deep yellow, and are quite the perfection of the printer's art.

The yellow room demands pictures and ornaments of a certain sort. It is well to exclude everything, which does not contain tones of blue, brown and yellow. Pictures should be in brown tones and with dark frames and no mats. The metal work of the room either bronze or iron. The yellow wall is a beautiful background for Nankin china, or for the iridescent blues, of some Japanese wares and of Austrian glass. But wares containing yellow should be relieved against the dark wood of the furniture rather than against the wall. Modern Italian and some French porcelains contain a beautiful yellow in combination with blue, and there is a good yellow in Cauldon, as well as in some Oriental wares.

So far, we have thought of yellow, in its use for the walls of a living room, but it is most effective, in combination with green for a man’s bedroom. For that purpose, we would use a lighter yellow, and the green would be a medium shade, with a suggestion of gray. A good treatment is to carry a dado of burlap in gray-green half-way or three-fifths up the wall, finishing it with a narrow shelf of stained or painted wood, washing the space above it with clear light yellow. The floor should be painted a rather dark green, and waxed. There are cotton rugs woven of dull blue and green with a white warp, which will tone in admirably. The furniture will be stained, in the same tone of green as the woodwork, having perhaps a table and chair in dead black. Straight curtains at the windows will be of yellow linen, will swing back, under a pleated or gathered valance. For a bedspread and covers we will use the same yellow linen, with an applique, or stencilled, design in...
Decoration and Furnishing—Continued

blue and green. Brass will look well in such a room, if it is kept away from the yellow wall, and its crowning glory would be a big bunch of peacock’s feathers. A plaster cast or two, perhaps tinted green, black and white pictures, with white mats and narrow black frames, and green pottery will all look well against the yellow wall.

* * *

The furniture shops show a good many novelties, with the beginning of the spring season. Last year we noted mahogany or enameled furniture panelled with cretonne. This year chests of drawers of various sizes are entirely covered with cretonne or striped jute, and it is probably only a step further to the upholstered beds, once prevalent.

A very useful sort of table to be had in weathered oak, is equipped with book shelves just below the top at the sides and all the way down at the ends. A convenient adjunct, to the library, is a pamphlet table, a small table, on the order of the old fashioned light stand, but with an oblong top. Into this top are set five uprights, forming four compartments, to hold pamphlets.

* * *

As it is no longer fashionable to have the tea table in evidence, its character has changed. Most of those shown are on the Pembroke order, with a very narrow top and broad wide leaves, or else circular, with the top tilting up on a line with the supporting pillar. Either sort is wheeled back against the wall when not in use, and is quite out of the way. Another style is practically two tables, of different heights, one fitted below the other and drawn out at need. Muffin stands with several shelves and large tea trays, with swinging handles are the proper adjuncts to these tables. All three are of mahogany, generally enriched with a line of inlay in satin wood.

Then there are nests of four tables, with straight legs and square tops, each one sliding under the next higher, most convenient and delightful to have. Likewise, there are sewing tables, whose tops lift up and discover a tray with compartments for some possible requisite of the gentle art. Some stand on four legs with a shelf beneath and others are mounted on a claw-footed pedestal.

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J. F. M.—“I have nearly finished my dining room and have been undecided what to put on the walls. The room is 12x18 finished in mahogany, paneled 6 ft., beamed overhead ceiling in cream color.

“In the August number of Keith’s Magazine, on page 93 is a dining room with tapestry which suits me. Now I wish you would kindly inform me where the tapestry can be obtained, how much a yard and how put on. If you know of any other material, the information would be gladly received.”

Ans.—The dining room treatment referred to while very beautiful is expensive. Such a tapestry hanging could be procured at a first-class house furnishings and decorating establishment in a large city such as Chicago, New York or Minneapolis. The cost would vary from $4.50 to $10 per yard, 50 in. wide. Such a hanging is tacked to narrow strips of wood which are first nailed around the several wall spaces. A narrow gimp covers the tacks. Very handsome paper reproductions of such tapestries are to be had, if less expense is desired.

S. E. G.

Q.—“I have taken your Magazine for upwards of a year and am deeply interested in its contents. I would like your advice in regard to four chambers for which I have recently purchased wall papers. My selection for one facing east, is a pale pink and green with white bow knots. As there is only a little green and in view of the east expanse I thought of painting the woodwork green to match the green tints in the paper.

“Another room facing south will have Nile green and white striped satin paper. Would you paint this room in white?

“The bay window room also facing south will have baby blue and white satin paper. This is my daughter’s choice for her own room and she would like her woodwork painted white or cream.

“The fourth room which is my own, has west and north windows and I have selected a pea green velvety-surfaced paper, with a stripe up the centre of dull pink-shaded jasmine blossoms and a narrow gilt stripe on each edge. The border is 20 inches wide in the same flower with a background shading out to cream. This paper pleases me greatly and I thought the woodwork would look best painted cream to match the paper next the ceiling. I am opposed to paper ceilings and intend to have them calcimined instead.”

Ans.—White or cream woodwork is advised for the East room with the pink and
green paper. Green is too cold for an eastern exposure, and white woodwork would be glaring, in the south room with the green and white stripe. It is advised to paint the woodwork here a pale green, and to use a dainty bedroom frieze in green and white at the top of the walls. The 9 ft. ceiling will take a frieze well, and it will soften the rather hard effect of a plain stripe, the full height.

The blue and white paper should have white woodwork and not cream. Yes, a warm cream is a good choice for the woodwork in the fourth bedroom. The curtains too should be cream rather than white.

H. B., Westerly, Rhode Island.

Q.—Will you please advise me how to decorate a library and a dining room. The house was bought as it stood, and I want to redecorate it.

The library has two windows facing east, ceiling nine feet high, size 14x18 ft. It is finished in hard pine with a wainscot two and one-half feet high of common carving. Could I cover this with burlap? The furniture is dark oak.

The dining room is finished in white wood (natural finish) and has a bay window facing west—size 10x14 feet. The furniture is light oak. The dining room opens out of the library.

Ans.—The wainscoting which you mention in the library, two-and-one-half feet high, could be covered with burlap by tacking it on, but it could not be pasted on, as it would not hold. I would advise the restaining of the woodwork to match the furniture, and the walls to be treated with either paper or tapestry in soft browns, reds or greens, according to the exposure of the room.

Beside using the laces at the windows, a simple over-hanging could be used which would partly cover the casings at the side.

The dining room facing west and having a bay window might best be carried out in medium tones of a tapestry paper below the plate rail and a lighter shade, either in browns or blues above the rail, or some suitable pattern can be used for the whole wall without the plate rail. This room should also have the simple over-hangings to soften the light.

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Philadelphia Boston
HERE is a saying in which our grandmothers took great comfort, which they were wont to quote to unwilling ears, with much unction, “Whatever is worth doing is worth doing well.” Their application of it was usually to matters of womanly occupation, to housework and to sewing. It was felt that the young woman who put seventeen hand-run tucks into her wedding petticoats was fulfilling it to the letter. There was less concern if she was so indifferent to the training of her mind that her spelling was eccentric and her grammar uncertain. The possession of skillful and industrious fingers was held to be of great profit, for this world and the next.

Is what is worth doing at all worth doing well? It depends somewhat on our definition of the word. Except for the specialist, in some one line, it is not well to pursue one study with such zeal that the whole horizon is narrowed, that the man becomes dwarfed and stunted and loses all his capacity for enjoyment. Darwin admitted that he had concentrated himself on his scientific work with the result of losing his power to appreciate poetry which had once delighted his soul and there is no more tragic chapter in the history of learning than the life of Sonia Kovalsky. (See that amusing book “The Chauffeur and the Chaperon.”)

We must all admit the value of cleanliness in its relation to health and to refinement but it can be carried to excess. In thinking over the great nations, one is quite apt to leave out Holland which is noted for scouring the cup and the platter. There is a general impression that the silver and brass and pewter of Dutch households are more shining than the intellects of their female inmates. We have all known houses where “cleaning up” seems to be the principal business, where broom and duster are wielded till late in the afternoon and the sun goes down on the washing of windows and they are not pleasant places to be in. Sometimes we have been pained to note that this zeal for cleanliness is quite compatible with a distaste for open windows, and the provision of much greasy, fried food.

Order too has its abuses. There must be a skeleton of routine beneath the operations of the household, but a proper skeleton is articulated, and not rigid. There are households which take no note of exceptions. Does John arrive at home, from a journey, at seven, the evening meal is duly eaten at six and John’s portion dries up in the oven. Does an avalanche of guests appear on Sunday night the washing is done on Monday and the friends, you have not seen for ten years, and are going away at night, eat the left-overs of Sunday’s dinner in a pervasive odor of soapsuds. Or
Household Economics—Continued

the mistress of the house declines all invitations for Thursday, because it is the day she always has a roast for dinner.

And economy. There are houses where the most pinching calculation is needed to maintain a decent standard of living, where every item, in every department must be scrutinized. But there are others where endless time and thought are given to keeping down the expenses of food, that more may be spent on clothing, where no servant is kept but seamstress and dressmaker are hired for weeks at a time. Or it may be that service is dispensed with in the interest of a lavish table, that there is an excessive expenditure for food and an undue restriction in the matter of amusements and other social expenses. Here again there is a lack of that balance which is necessary to the general well-being.

We must be clean, we must be orderly, most of us must be economical. But we ought to recognize that the extremes of these virtues are vices. If one’s own hands must cleanse the kitchen floor, prudence would dictate the average results of the mop rather than the superlative ones of the scrubbing brush. The oiled floor, which is immune to grease, obviates the use of either. Dishes may be efficiently washed with a brush under the hot water faucet as well as laboriously with a cloth. A carpet sweeper cleans a room sufficiently, with less expenditure of energy than a broom.

Order may be largely assisted by simplification, by reducing the number of things to be taken care of. Every house ought to have an asylum for superfluous articles, neither useful nor surpassingly ornamental. We have heard a great deal about the simple life lately and however difficult it may be, it is surely doubly so if one is crowded with great possessions. Necessary deviations from routine are comparatively easy when the conditions of living allow a margin of time and effort.

As for economy, let it permeate all the departments of household activity. A wise economy applies to time and effort as well as to expense. A certain amount of leisure in which to plan one’s activities is an essential part of domestic management.
NOT for the first time, the writer wishes to speak on the subject of hospitality, not the give and take of formal social life, but the quiet exercise, in everyday times and places of a virtue, which is a good deal ignored in these busy days.

We have all, I think, known households and hostesses, who welcomed the casual guest with great cordiality. The length of the table and the provision of food were, alike, elastic. They belonged to an older day, to a time when the domestic service problem was not insistent, when the cost of living was less. Where they exist today, they are apt to be in small communities, where the conditions of life are simple, and outside interests not pressing. Probably, except among people of large means, that sort of hospitality is hardly possible at all, except in the large and more or less self-dependent family.

But if few of us are able to exercise, what may be called promiscuous hospitality, a good many of us might do a good deal more than we do to entertain strangers. Women too seldom realize how much difference it makes to a man, both socially and financially to be able to invite a business acquaintance to his house for a meal, without fear of consequence. Many a deal has been carried to a successful conclusion over the dinner table, which would have languished in the office of either party to it. The best partner a man can have is his wife, working in her own line, for her interests are identical with his, and it may very well be that his well-ordered home and his agreeable wife will be arguments in his favor.

Then again, with merely social acquaintances. The place to make friendship is in the home. (May it not also be said, that the home is the place in which to decide whether they are worth having?) It seems to be a law of human nature that people come close together over the satisfaction of their bodily wants. The child evidences it, in her doll's tea party, at a very early age, and there are instances of it in all sorts of tribal rites and ceremonies. When one realizes what human friendship means to the individual, it puts a new value on the breaking of bread together.

The children of the house ought to share in its hospitality. Their social instinct develops early and a wise mother lets it be gratified under her own eyes. The family table is an experimental ground for budding intimacies. It gives the child a chance, often quite unconsciously, to apply the family standards to his friend and he is pretty sure to detect any falling below it.

Then there is that other great class whom we most of us ignore, the friendless, not of necessity the poor, but the stranger within our gates, the teacher or the student, the young man or the young woman, come up to the city to earn a living, to whom the entree to a friendly house means so much. It is in reference to this class to whom it is so specially hard to minister, that we are instructed as to "entertaining angels unawares."

But—"I have only one maid, or no maid
at all;” “we live so plainly;” “I don’t think people would care to come;” “John’s business acquaintances are so much better off than we;” “children in the house make so much noise.”

But as only ninety-five per cent of the women of the United States do their own housework, the situation is not new to your guests, or, if you have one maid, you are in the distinguished minority. Plain living is the rule with most people. It is said that many multi-millionaires have an exceedingly simple table for ordinary occasions. It is always open to you to have your plainness of a perfection that is more agreeable than any careless elaboration. People always care to go to pleasant places. An unselfish hostess who is not self-conscious and thinks of the pleasure of her guests can always make her house agreeable. If John’s business acquaintances are rolling in wealth, themselves, they will think all the better of him and of you for living well within your means. Visiting children do make a noise, but there are compensations, and some day you will be enjoying an afternoon and evening of heavenly quiet, while your children are invited out in their turn.

* * *

If your own religious convictions do not impose the keeping of Lent, it is sure to touch us in some way, through servants or friends. People belonging to churches, which do not keep Lent, are apt to be ignorant of some little points. One is that Wednesdays, as well as Fridays, are days of abstinence from flesh meat. The other is that a meal in Lent must never be composed of both meat and fish, and this rule applies to Sundays as well as week-days in Lent. A knowledge of these two rules may prevent someone from entailing embarrassment on strict churchmen.

Aside from any religious considerations, Lent offers an opportunity of varying the table agreeably. There is an endless variety of what chefs call Friday entrees. A large number of these are fillets (slices cut about an inch thick) browned, and heated in various sauces. Others are flaked and creamed fish, served in ramekins or baking shells, or in cases of pastry. Still others are made by arranging layers of fish, highly seasoned in a baking dish, covering
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Table Chat—Continued

them with bread crumbs and browning in the oven. Our old friend, the scalloped oyster, is a typical dish of this sort and there are endless variations on the same principle. Then there are various vegetables, which can be treated in the same way, generally with the addition of cheese, while the ways of cooking eggs are legion. As almost all of these dishes depend for their excellence on being very hot, it is well to cook them in an earthenware casserole, which can be inserted in the frame of the chafing dish, over the lamp. In the absence of a chafing dish, a gas blazer, with an asbestos plate, attached to the chandelier, is an efficient substitute.

* * *

A capital sauce, for any sort of fish, is a tomato sauce, made either from ordinary canned tomatoes, or by diluting the Italian tomato paste, salso di pomidoris. Curry powder in moderation, grated onion, cheese, Worcestershire sauce, any or all, are additions, and a generous lump of butter should not be forgotten, nor the saving grace of salt, which is so often lacking.

For some unknown reason, grated cheese keeps much longer than if left on the rind. A small jar of grated cheese is convenient to have at hand. Many people like it to sprinkle into a vegetable soup and it is very good for bread and butter sandwiches especially brown bread ones. If the cheese shows signs of spoiling, its vitality can be renewed after removing the bits of mould, by the addition of a tablespoonful of brandy.

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 heating question, for perhaps nine-tenths of American home builders, is one of vital importance and should be well considered while planning for the new home.

It is an easy matter to install any system in a house during construction, while to make changes and alterations afterward is an expensive luxury at best, and sometimes wholly impracticable.

The diagram presented herewith illustrates one of the latest combined heating and ventilating systems and is worthy of careful study.

The first noticeable feature in this is the side-wall registers and the regulating dampers by means of which the heat may be directed into the first floor rooms while the second story chambers are out of use.

As may be seen in the drawing, this is accomplished by a turn of a knob at the first floor register and does not require a trip to the second floor to close a register nor to the basement to shut off a pipe damper.

At the base of each register is the ventilation openings which carry the cold, four air from the floors into an air space surrounding the wall pipe. The heat from the pipe causes an upward draft, and the foul air is conducted up to a point in the attic directly above the registers where it is led thru vent pipes to a chimney flue not used for any other purpose.

In this system it will be seen that but one basement pipe is needed for two rooms, one on the first floor and the other on the second.

The saving in expense of installation is an item, and the system permits of more straight pipes and fewer angles than in older methods. This reduces the friction and consequent radiation to a minimum and means cooler basements and warmer living rooms, with greater economy in fuel.
Architect’s Corner—Continued

Standard Specifications.

Continued from February.

Interior Finish—All finish throughout the house, except as otherwise marked on plans or specified, shall be second quality of ——— as detailed on plans. Basement and attic finish, if any, to be second quality stock finish. The front door and stair treads are to be of first quality of white oak. Wherever so marked, finish in hardwood of 1st quality and of the kind designated on plans. Build all seats, china cupboards, mantel, etc., that are shown on the drawings.

Note—Interior finish, if taken to the building before plastering is thoroughly dry or stands a few days of damp weather exposed to moisture laden air, will swell and afterwards shrink. Caution should be observed in this respect.

Doors—All doors to be as shown and of the sizes required. All door frames to be set after plaster is dry. Outside soft wood doors to be 1 3/4 in. thick and all inside soft wood doors to be 1 3/8 in. thick. Hardwood doors are to be 1 3/4 in. thick and to be made to correspond with finish of rooms, except double acting pantry doors which are to be 1 3/8 in. thick.

Windows—Window frames are to be as shown, all of white pine. All divisions in the sash shown upon elevations are to be of wood, unless otherwise marked. All box frames are to be fitted with cast iron pulleys, provided and placed by the mill contractor and all sash are to have round cast iron weights to balance same, hung with Sampson’s or Anniston sash cord. Set doors and windows in every instance possible so as to allow for full architraves. All sash are to be as shown, of clear straight grained white pine. Cellar frames, except box, if any, to be of plank rabbed on the inside and outside for sash.

Glass—All glass of the first and second stories, unless otherwise marked, is to be D. S. A. A. glass. Plate glass is to be best American. Basement and attic, if any, to be S. S. A. glass. All leaded glass
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THE ARCHITECT
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CHAS. S. SEDGWICK, Architect K 1027
Lumber Exchange, Minneapolis, Minn.

Architect's Corner—Continued
to be as shown by the drawings or if marked leaded and no design shown, contractor is to allow the sum of 75c. per sq. ft. at factory for the owner to select designs.

Storm Sash—Provide and fit with proper fastenings storm sash for entire house, four lights for regular sized windows, one in each room to be hinged at top to open for ventilation and to have proper buttons, hooks, etc., to properly hold same in place when open and when closed.

Wire Screens—Provide and fit with suitable fastenings, best woven wire window screens for all windows that open, over the entire house. Window screens are to cover entire window and to be provided with proper fastenings. Also provide screen doors to all outside doors, the front one to be of first quality of white oak.

Grates—Provide and put in place a— for each fireplace.

Miscellaneous—Run picture moulding in all the main rooms of the house. Finish around sink as required, leaving it open underneath. Construct pantry shelving as shown and required. Also all other cupboards, etc., marked on plans and fit up all closets with one shelf, hookstrip and six wardrobe hooks. Over the kitchen sink put a shelf 6 in. wide. Make doors, sash, casings, mantel, seats and stairway and all finish as shown by the drawings, allowing for the "come and go" of wood, and prepare all centers, etc. for mason as required.

* * *

Plastering.
Plastering Directions—The walls must not be allowed to dry out too fast. Openings in building must be closed, especially in windy weather. Put on putty coat as soon as surface is dry. The lath must be green or thoroughly moistened before applying mortar. After the inside finish is on, neatly patch up all defects in the plaster and at all times properly protect the work from damage.

Face Plaster—Lime mortar, throughout the house, except basement and attic, lath and plaster with best two coats of lime and best standard hair, one half bushel to each barrel of lime used.
Architect's Corner—Continued

Mortar is not to be haired or strained while hot and is to be good, strong mortar satisfactory to owner. When thoroughly dry, put on finish putty coat in smooth or sand finish as directed, same to be smoothly floated down to a level and even surface. When mortar is being made, same is to be run through a fine screen to prevent popping plaster. Finished rooms in basement and attic if any, to have one coat of brown mortar well floated down to a smooth and even finish.

(To be Continued.)

Hot Water Heating

Hot water for room heating purposes, where steam is employed to heat the water, can be attained in a good many ways. In a system of direct hot water radiation which has been installed in some tall buildings the risers are designed for steam circulation from a steam boiler in the basement, with special designed enlargements or reservoirs on the steam risers, from which branch pipes are taken to the direct radiators. These reservoirs or enlargements of the riser pipes are designed to catch the water or condensation as it is formed in the radiators until the amount is sufficiently great, when additional condensation overflows into the steam risers to return to the steam boiler. Without going into details, the system when the steam is first turned on operates entirely as a direct steam heating system. As the water gradually collects into the reservoirs the radiators become filled with water, as the reservoirs are in line with them. After they are thus converted into hot water radiators the steam which is constantly supplied through the steam pipes heats the water in these reservoirs, so that each reservoir acts as a small steam boiler, with a local circulation from the reservoir through radiation and back again to the reservoir. With such a system a wide range of radiator temperatures is available, and means are at hand for quick warming in starting up.

DECORATING YOUR NEW HOME.

Now is the time to improve your evenings in perfecting plans for the decoration of the new home soon to be built. How much better to solve the various problems now than to wait until other details of the home building demand your full attention later. Is it not true that very few of us, ready to decorate either a new or old house, know what we want? We cannot all reach a good decorator, so here is "PRACTICAL HOUSE DECORATION," 192 pages profusely illustrated with interior views and examples of wall decorations. Written by experienced decorators. Will prove invaluable in definitely shaping your ideas, and in securing a prettily decorated home. A gold mine in ideas for you. It gives 12 complete decorative schemes for an entire house, not elaborate, but for the average moderate priced home.

The book is handsomely gotten up, printed on a high grade paper and bound in a linen finished cover. Size 9½x7 inches. Price $1.00.

OFERRED WITH KEITH'S MAGAZINE.11

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PRACTICAL HOUSE DECORATION

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Splinters and Shavings

Interior Contractors.

SPECIALISM has become a recognized necessity in the building trade, as much so as in the more scientific professions. The firm or individual who makes a specialty of a particular line facilitates the work and produces the most satisfactory results.

In the large cities, one concern will be foundation contractors, another firm steps in when the work reaches the ground level and erects the steel framework, to be followed by still other contractors for the tile, concrete, or other construction.

Interior contracting is one of the newer developments of specialization, having its origin, as near as we can ascertain, in Baltimore. The work of the Interior Contractor is to take the bare walls of a building as it is completed by the builder and finish the entire interior even to the smallest detail.

In an interview with the manager of the pioneer firm in this line, the following points were learned, as reported in a contemporary:

"Our purpose is not to enter into competition with the architect, but to work with him in order to bring about a consistency in the general scheme of finish and decoration. We make a contract to complete the interior either under the plans of the architect or by designs of our own where the work is left to our discretion. From a careful study of effect we are able to produce a harmonious whole better than could be accomplished when done by several sub-contractors. When the finishing of a building is let to us, we submit a design embodying our ideas to the architect.

"This includes the plastering with its appropriate ornamental treatment, the metal work, wood-work, draperies, lighting and furnishing.

"The responsibility rests with us instead of on, perhaps, half a dozen sub-contractors. In this way the architect is relieved of the vexatious annoyances and delays usually experienced in dealing with different sub-contractors. There is a saving of time, money and anxiety.

"Our business extends to buildings of nearly every description and individual offices. We have completed a number of banks, residences and private offices. A competent corps of artists, each an adept in his line, enable us to give a comprehensive and consistent effect in any building. We study effects both artistic and practical, even to the lighting devices, the scheme of furniture, draperies, etc., so as to have the entirety blend and harmonize." 

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Weighted Brushed, Hardwood Floor Polish, Parquetting, Wood Carpet, and Exceloro Floor Finish.

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The artistic effect of stained shingles is never questioned, we believe, at least not by educated people; but their economic value is another matter, questioned in some quarters, but as a rule admitted to be established. Creosote
For Floors, Furniture and Interior Woodwork

Liberal sample sent free to demonstrate that with Old English Floor Wax you can preserve and accentuate the beauty of your floors better and at less expense and with less trouble on your part than permitted by any other wood finish.

Old English Floor Wax is the most satisfactory finish for all interior woodwork, furniture and hard or soft wood floors. It is economical in application and wear, because it costs no more than other high-class finishes, covers more surface per pound and retains its lustre longer in spite of heels and other objects coming in contact with it. Old English Floor Wax is sanitary, because it won't 'gum up' and catch dust and other foreign substances. Cold can't flake it; heat can't make it sticky. In 1, 2, 4 and 8-pound cans. 50 cents per pound.

Write for Our Free Book, "BEAUTIFYING AND CARING FOR WOOD FLOORS" which contains expert advice on the care of wood floors, woodwork and furniture. A book to read and keep for future reference. We will also send our question blank, which, filled out, will bring you free, an answer to all your floor troubles.


Money is saved by using New Century Metal Shingles because they are cheaper than wood and, being very light, do not require the heavy framework necessary to support slate or tile. Also make cheaper colonial AND Mantels 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 8518, Boston, Mass.

Our illustrated catalogue No. 25 contains valuable roofing information, comparative costs, etc. WRITE FOR IT.

stains possess the advantage of being rot-proof, to a great extent at least, and they stand exposure and hold color well under very trying conditions of weather. They are in use on the sea coasts as well as in the interior parts of our country, and usually look well after several years of exposure. The real creosote stain contains even more oil than ordinary paint does, and like paint, it depends upon oxygen to dry it. To an extent a creosoted shingle is fireproof. It never blackens; some stains do, but that shows the presence of petroleum oil.

The shingle stain should be transparent of color. It should not contain water. It should be free from poisonous matter, and there is no need for using poisonous pigment in its preparation.

When using shingle stains on a house, use as few colors as possible. If you may, do the entire job in one color. The greenish shades, brown, and olive give more general satisfaction than any others because they harmonize more perfectly with nature.

Avoid a reddish-brown on a pronounced yellow, or even a strongly yellowish-brown with a green roof. A greenish roof should be combined with a cool grey, or with a greenish-brown or grey. A green roof is very difficult to make permanent of color. Especially when the green is made, as sometimes occurs, with Prussian blue, will the green be made fugitive.

A beautiful effect may be had by taking a pail of quite thin red and one of quite thin green, and with one brush apply the colors alternately, which will give the vanishing effect of red and green as seen upon autumn leaves.

Practical Paragraphs.

Painting over putty that is not dry is about the same as painting over undry paint, or varnishing over it; if the paint does not scale off it will certainly crack around the edges of the putty.

To make a sticky painted surface hard, mix together equal parts of Japan and turpentine, and rub this well into the paint with a stiff brush.

Painting damp wood imprisons the moisture, which will rot the wood beneath the paint. For the same reason never lay linoleum on a damp floor.

Sheet lead is hard to cover with paint, and paints that take to tin and lead will not always adhere to zinc. As a general rule, the strong oxide paints take to these metals better than talc, or ochre and the earthy pigments.

It is not true that petroleum imparts life to colors. Neither turpentine nor petroleum, nor any of the ethereal oils can make colors clear, because they are of a volatile nature, and because the residue is too small.

Various reasons have been given for the peculiar action of paint upon galvanized iron. One of the most plausible is that the use of sal-ammoniac in the process of galvanizing causes the formation of a thin film of the basic chloride of zinc on the surface of the metal being galvanized, which material, being a hygroscopic nature, acts as a repellent to prevent the close adherence of the paint to the metal, and the pigment dries as a skin over it.
THE good door is part of the doorway and of the house; it cannot harmonize with both unless it be correctly designed and correctly made. It should combine strength with beauty—good design with serviceability.

Morgan Doors

meet these specifications as no other doors do, because they are produced under a perfect system of manufacture, and by artists and artisans whose sole aim has been to identify the name “Morgan” with all that is best in door design and construction.

Morgan Doors are sold under an agreement that is an unconditional guarantee of satisfactory service. They cost no more than other doors. Write today for our illustrated booklet, “The Door Beautiful,” telling you more about them. Sent free on request.

Architects and builders are urged to write for our 64-page catalogue entitled “The Perfect Door,” sent free where the request is written on business stationary.

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Running Water in Your Home

THE problem of furnishing water for the country home is solved—By the Leader Water Supply System.

Notice how simple it is.

Just a tank in your basement (or buried in the ground), into this the water from the well or cistern is pumped by hand, windmill or gas engine power, as you choose; the air in this tank is compressed into the upper portion and it forces the water through the pipes all over the house—So when you open a faucet anywhere a strong stream gushes out.

You get a 30 pound pressure, which will throw a stream clear over the house. This gives absolute fire protection, and you know what that means in the country. All the benefits of a city water works system are yours, and more too. For you can have soft water for the bathroom or laundry, if you wish.

You can use all the water you need for household purposes, for the garden, and for the stable and stock. You get cool water in summer, and water considerably above the freezing temperature in winter.

The old style elevated tanks are a nuisance. To get the necessary pressure they must be placed on a high elevation to permit gravity to work.

Then, if situated out of doors, the water becomes stale in summer or freezes in winter, often bursting the tank and causing expensive repairs. You know how exasperating it is to chop ice out of a tank on a high tower in the dead of winter. If the tank is in the attic, its weight is apt to crack the plastering. Nor does it give sufficient pressure for fire protection.

You fill it too full, or it leaks, and floods the house, doing great damage. The Leader Water Supply System does away with all this. The tank is on the ground and out of reach of frost. It is air-tight, so no dirt can get in.

It needs no repairs, and the only attention it requires is a few moments pumping each day.

You can install the system yourself, it is so simple, and we send full directions for installing. We furnish everything—tanks, pumping outfits, pipes, etc.—a complete system. We can fit any building or number of buildings with the Leader Water Supply System.

Write for our free booklet, “How I Solved the Water Supply Problem,” the story of a man who lived in the country and successfully equipped his home with private water works. Your name and address on a postal card will bring it.

Leader Iron Works Leader Water Supply System 2150 Jasper Street Decatur, Illinois
NOTES ON PRICES.

Cost Estimate.

We ask our readers to bear in mind that the published cost prices accompanying our descriptions, are not close estimates, but estimated costs furnished by the architects. Also, that conditions frequently add or lessen the cost to a large degree. With a large amount of building under way, contractors will want a good big profit on any additional job they take. Reversed, contractors all looking for work, you get close figures. These facts account for the frequent wide difference in actual cost of building in different localities, from published prices. We likewise publish information concerning the different costs of material and labor throughout the country, as furnished by our correspondents, and request that those who have built or have secured such figures will send them in to Keith's Magazine for publication.

The Following are Prices Sent Us by Correspondents:

Pittsfield, Me.
- Common dimension Fir, 2x3 up to 8x8 $18.00
- Spruce frame and boards ............ $22.00
- Native Pine, P 2 sides, per M .......... $30.00
- Good, clear Pine, 2 sides per M .......... $40.00 to 50.00
- Lath, per M ........................ $3.50 to 5.00
- Clear Cedar shingles, per M .......... $3.50
- Ex No. 1 Spruce clapboards, 5 in. to 6 in. wide, 4 ft. long $25.00 to 30.00
- Clear Birch flooring, 2 in. face .......... $50.00
- Common brick, per M $8.00 to 10.00
- Plastering, per sq. yd. $0.15 to .20

Granite cellars, per lineal ft. 6½ ft. deep 1.85
Cement walls 1.85
Cement walls with rubble and ashler underpinning, per lineal ft. $2.00 to 2.25

As reported for Keith's Magazine by Irvin Towle, Contractor.

Laconic, N. H.
- Carpenters, per day, 9 hrs $2.00 to $2.75
- Masons, per day 9 hrs $3.50 to 3.00
- Plasterers, per day 9 hrs 3.00
- Painters, per day, 9 hrs $2.25 to 2.50
- Spruce lumber per M 26.00
- Pine or Hemlock, per M 24.00
- Matched boards, Pine or Hemlock 22.50
- Square edge boards, Pine or Hemlock $18.00 to 20.00
- Hard wood finishing $50.00 to 80.00
- Pine finishing 25.00
- Cypress finishing 60.00
- Hard Pine N. C. $40.00 to 50.00
- Brick $8.00 to 14.00

As reported for Keith's Magazine by A. R. Collins, Contractor.

Earlville, N. Y.
- Hemlock $23.00
- White Pine 35.00
- Yellow Pine, No. 1 40.00
- Yellow Pine, No. 2 35.00
- Barn Siding, No. 1 34.00
- Bevel Siding, No. 1 35.00
- Shingles, Washington Cedar clear 4.00
- Star A Star Washington Cedar clear 3.50
- Spruce siding, No. 2 26.00
- Spruce flooring No. 2 26.00
- Carpenters per day 2.50
- Masons per day 3.60
- Plumbers per day 3.50
- Painters per day 3.50
- Laborers per day 1.75

As reported for Keith's Magazine by F. E. Stafford, Contractor.

Patchogue, N. Y.
- Carpenters per day $2.50 to $3.25
- Masons per day $3.50 to 4.00
- Painters per day $2.50 to 3.00

DON'T NEGLECT THE PLUMBING

No part of your home is more important than the plumbing. Your health and comfort depend on its being right. Faulty or cheap plumbing, if not positively dangerous, is a source of ever increasing annoyance and expense.

DON'T LEAVE IT TO THE PLUMBER

Know for yourself what material goes into your job. We shall be pleased to furnish information without cost that will help you to have your plumbing done right.

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UNITED BRASS MFG. CO.
CLEVELAND, OHIO, U. S. A.
### Siding Costs
- **6 in. Bevel Siding clear**: $40.00
- **6 in. Bevel Siding No. 1**: $38.00
- **6 in. Bevel Siding clear**: $40.00
- **N. C. Sheathing**: $28.00
- **N. C. Flooring No. 2**: $40.00
- **Spruce Flooring**: $31.00
- **N. C. Ceiling, clear 7/16**: $43.00
- **Cypress lumber**: $36.00
- **6 in. Bevel Siding No. 1**: $38.00
- **T. & G. Pine boards P 1 side**: $40.00
- **T. & G. Pine boards P 2 sides**: $42.00
- **R. L. Lime**: $1.55
- **Portland cement, per barrel**: $2.60
- **Portland cement, per bag in small lots**: $2.30
- **Lath, per M**: $6.50
- **White Cedar Shingles, 6 x 20, No. 1**: $17.50
- **White Cedar Shingles, 6 x 20, No. A**: $14.50
- **T. & G. Pine boards P 1 side**: $40.00
- **T. & G. Pine boards P 2 sides**: $42.00
- **R. L. Lime**: $1.55
- **Portland cement, per barrel**: $2.60
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- **As reported for Keith's Magazine by E. G. Terrell, Contractor.**

### Notes on Prices—Continued.

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### Why don't You Trade in New York

The Long Island Magazine

**West end of Long Island, N.Y.**

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**Clinton, Ky.**

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Cherry and Bird's Eye Maple Flooring

Thoroughly air seasoned and kiln dried, steel polished, end matched, bored and bundled.

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SPECIAL SUBJECTS IN BUILDING AND DECORATING

FOLLOWING IS A TABULATED LIST OF PARTICULAR SUBJECTS AND SPECIAL CLASSES OF DESIGNS TREATED IN FORMER NUMBERS OF KEITH'S MAGAZINE

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INTERIOR DECORATION

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Typical American Homes.

IN CEMENT PLASTER.

By Arthur C. Clausen.

"THE OAK PARK HOUSE FROM THE GARDEN"

O one comes in closer contact with a man's personality, individuality and temperament than his architect. In the planning and designing of a man's home, the architect finds his way by successive degrees into the very heart of his individual existence. He knows, before he is thru with him, his character, his artistic tendencies, or more often, the lack of them, his personal habits and ambitions. If he is a successful practitioner, broad and perceptive he will with tactfulness, combine the various moods of his client and family with his own artistic skill, expressing at once in the resulting home, the personality of its rooms and his own constructive ingenuity.

One often wonders at the vast variety of plans, designs, styles and combinations of styles that find their origin in the mind of a single architect. The above paragraph is the answer. The great variety of homes that find their origin on a single drawing board is due to the fact that the architect has had to deal with as many different individualities. As there are no two indi-
individual temperaments and tastes exactly alike, so there are scarcely two houses alike in the large assemblage of them that congregate in cities, except those built by real estate agents for investment purposes.

With numberless ways of expressing it, the great tendency today is toward plastered or cement houses. In fact, many designs declare that in building lines we are bordering on what is destined to be called the "cement age." There is certainly much that goes toward proving this contention, but I prophesy that when the relapse comes it will be found that the materials of clay have kept equal pace with those of cement. "The growing favor of plaster and rough cast cement for the exterior finish of frame country houses finds ample justification both practically and aesthetically." Its grayish white color lends itself beautifully to attractive and charming color effects in combination with other materials. It is not expensive (comparatively speaking) is light, warm and enduring. It stands a northern climate as well as a southern sun with equal endurance. In fact, any skepticism would immediately disappear upon a trip to Toronto, Canada, or along the northern shores of Lake Ontario where plastered houses have stood the test of forty years with a thermometer varying from ninety-five degrees in the shade to thirty degrees below zero. The plaster in most instances is as sound as when first put on and looks as if it would hold out for many years to come.

Occasionally there are published in this magazine under the general title of "Typical American Homes" some homes that outwardly bear a decidedly English, Italian renaissance or Spanish mission aspect. It must be remembered that there are few American citizens whose grandparents and sometimes parents were not born on alien shores. Often the homebuilder himself is foreign born. It is therefore quite natural that in expressing his individuality in his home that he should in some manner put
this foreign stamp upon it. This issue however, presents three homes, that are in every respect typically American. They express to a high degree the prevailing American ideals as applied to modern homes thru enthusiastic and progressive American architects. All three are plastered houses or, more properly speaking, coated with cement. All materials have their availability, also their limitations. The simplest way of using a material is most often the best, “simplicity being the terminal point of all progress.” When in using a material if it presents some essential requirement for its successful application, that requirement is most often emphasized, and under the hand of a skilled designer it becomes an indispensable attraction, in combination with the material. So in cement walls it has been found that it is essential for its endurance to have its top surface well protected, hence the far projecting cornices we are accustomed to see on all plastered or cement houses. Overhanging cornices are particularly effective on cement or plastered houses on account of the clearness of the shadow cast which helps to emphasize the usual scheme of horizontal treatment. Architect Frank Lloyd Wright, a pioneer and still a leader in the designing of cement houses, has set a healthy pace in this line of work. Examples of his work are here shown in the "Oak Park House" and illustrate to a high degree the skill of the designer in the adaptation; and the adaptability of the materials used. Mr. Wright uses as his motif the L'Art Nouveau style that is so captivating northern and western Europe, but it has too much of the designer's originality in it to be considered in any way a copy of another man or nation's creations. It has been toned down to a simplicity of line and contour which do not suggest in any way the short but apt definition of modern L'Art Nouveau,—"Beauty run mad." Mr. Wright appreciates to the full, the beauty of plain wall surfaces which do not show up for much on drawing paper but add infinite beauty and stateliness to the building.

This point is strongly emphasized in the rear view of the house. Each detail and group of windows is so well framed by sur-
rounding wall surfaces that each can be considered a practically independent feature, to be designed mainly for its adaptability to the particular room within and with but a slight correlation to surrounding windows or groups of windows. This well merited scheme of placing all windows in well defined groups Mr. Wright undoubtedly borrows from the English, for it is (regretably) not American. A casual examination of this home convinces the technical eye that it is the ingenious design of it and not mere experience that gives it its more than unusual attractiveness. No home is complete as the architect draws it. The decorator, the furnisher, and the gardener, all guided by that indefinable tactfulness of the wife and mother must put on the finishing touches before the rooms and walls breathe life. It is noticeable that the gardener has, with rare good taste, merely decorated and not hidden the walls of this dignified home with vines and other foliage. Nature should enhance, not hide, the beauties wrot by man.

In the residence of Mr. Bintliff is found a successful combination of various materials and colors. The walls are of cement, the upper part of the foundation up to the window sills being bright red brick, the lower part is Bedford gray sandstone, while the roof is red Spanish mission tile. The wood trim is a green black, and the steps leading up to the home are made of red Portage. The home has a distinctly Southern aspect with its tile roof and far projecting show rafters. The exterior is well balanced but at the same time affords constant surprises, when looked at from different points of view.

"Highmount" is a very attractive home built by the well-known architect F. B. Long, as an investment, also an experiment, both being eminently successful. The exterior is a white marble dust and cement composition on metal lath producing a delicate gray surface which contrasts with exceptional beauty with the bright red brick course and blue limestone foundation. As is characteristic of all the housework of the pioneer architect of Minnesota it has many unusual and picturesque features which distinguish it prominently the artistically from its surrounding neighbors.
We had quite outgrown our little house with its four small sleeping rooms. The children had grown from babies, well into their "teens," some of them, and larger quarters seemed imperative. The poor, patient "Man of Wrath" had, for ten long years, been obliged to divide his time for morning bath, and daily shave with so many—for there are nine of us—three "grownies," as the boys call us, and six children, and each must have his turn at the bathtub and the washbowl and be ready for a 7:15 breakfast. Our dining room too, was limited. The table had stretched out its broad top a little more and a little more each year until it was a question if we would not have to take down the dividing partitions and spread out into the next room. The "parlors" were small, and being two rooms, instead of one large one, we must either be a somewhat divided family, or fill every nook and corner and when a guest or two came in as nearly always happened, we felt almost obliged to send some one to bed to make room for the new arrivals. There was an exciting question afloat—the question of a new house. I had even been drawing house plans "off and on" for many years, but now began really earnest and serious planning and sketching. We must have more sleeping rooms surely. A room for each was my ambition, even if small, with a spot especially designed for the bed, that should not be directly in front of the closet door or over the register, and "windows set thick where the sun could shine through." Next in importance should be a large living-room, with a wide, open fireplace and seats about it. An "inglenook" where one could be cozy even in the most severe weather. I sometimes think I planned the entire house around the fireplace. The windows on either side with cases for books and the long seats, each seven feet, and wide enough for a comfortable nap—even on paper—seemed too good to be true.
In making our present supply of furniture "do" for some time, we must arrange the proper place for each important piece. How well I remember a large beautifully furnished home, where, though amply and elegantly fitted out, everything seemed wrong, some way—I think because nothing was just in the right place.

I wanted a living-room fully 30 ft. long, but our lot was only 94x94 ft and the house must be accommodated to the grounds, as well as to the pocketbook. Our corner is quite a bit higher than the surrounding lots, with a southwest exposure. The principal street to the west.

But, I said, I wanted our living rooms on the south, for the sun, and so begun the planning and replanning, to face the house with our neighbors, to the west, and our main rooms on the south.

To economize in the expense of building as well as in the heating, the house, we decided should be as nearly as possible square—36 ft.—allowing for some "juttings" and some breaks, as few as possible to get the light and effects desired. The front door must be on the west but the approach, as you see by the plans, is from the south.

We wished also, a door from the dining room to the south porch. Our first plan was a large porch running from the front, around the corner to the dining room, but a large porch is not only expensive, but hardly artistic, so we decided upon the small ones, each 12x14 feet, connected by an open court or terrace, with cement floor, like the walks. Just here let me tell you how much we have enjoyed this open court.

When the long, hot days are over and the cooler twilight comes—was there ever such a place to sit?

Covered porches are warm compared with this open court, out under the stars. Our friends and neighbors seemed to enjoy it also—it was only a step from the outside walk as they were passing—just a resting place, with the cool face of the "man in the moon," or the electric moon, on the corner, shining through the great lump of willows, silhouetting so distinctly their long branches and slender dancing leaves upon the dark gray cement of the house. It is indeed a picture to be remembered, and a spot to be grateful for.

You who are now planning the new home, will, I'm sure, like to hear how we arrived at the final result as shown by the photographs.

Won't you stand here, with me, for a
moment and try to imagine, (as we did), the house that was to take shape and grow here, and have it made to "fit" our 94-ft. square of ground and its surroundings. Of what shall we build and how make our design, so it will be in harmony with, and satisfactory to our neighbors, so near to us on both sides, as well as to ourselves.

We must not turn our backs, so to speak, directly upon our east end friends, neither must we forget that the west street is the principal one and the one upon which, already, a long row of homes are facing.

This we think we have solved by really facing on the main street while the approach is from the side. Directly across from us is a large impassive looking house of light colored, smooth cement. (See illustration "The Oak Park House" under article "Typical American Homes."—Ed.)

About us are others of various styles and materials, frame, brick, cement and frame together, etc., etc.

To be a little different, let us make ours, said one, of the "rough cast" cement with trimmings of undressed timber, to give it character, and this at last was our decision. But let us start with the foundation and I will try to tell you all about it.

The house, as I have said, was to be about 36 feet square, with a few breaks and juttings.

The foundation we laid with heavy concrete blocks 1 foot thick with 2 foot footings.

The frame was built of 2x6 pine studs and sheathed with 6-in. flooring.

This was covered with tar felt, furred and lathed with 1-inch wood lath, carried over the foundation to the ground, thus you see, covering the real foundation entirely.

A house, it seems to me, should at least appear to grow directly from its large foundation, the earth, but instead of that we usually build a little brick or stone wall upon the ground first, then set our house upon it.

But to go back to our walls, upon the lath was first put a heavy coat of lime and cement mortar. After this was dry a light coat of plaster was added, followed directly by the "rough cast", thrown upon the wet mortar.

This "rough cast" is made of fine crushed stone mixed with cement. A small quantity of lamp-black added will give the desired shade; just a very little will soften the usual cold gray tone. Upon this is put a thin cement wash.

You doubtless understand that the doors and window frames, as well as all the outside wood trimmings, are in place before the cement is put on, the wet cement thus
making perfectly tight joints.

We also took extra precaution against draughty places by packing mineral wool around all doors and window frames. A great saving in the heating, at a very small expense.

The outside doors, three of them, are of single panel, quarter sawed oak, stained dark, like the inside finish in color, old English oak stain, and varnished with spar varnish. The ceilings of the covered porches are of narrow beaded oak strips, slightly stained and also varnished. All the rest of the outside lumber is of undressed pine, upon which we used a mossy-green, creosote stain, which looks well upon the dark gray cement of the house. The chimneys are large and of plain red pressed brick. I think we have never lived in a more satisfactorily built house. One winter and one summer have we tested it and never before have we so readily and effectually ventilated in summer, or been made warm and comfortable in winter.

Note.—Next month Mrs. Ballard will take us thru the house and tell us of the interior arrangements and finish. Floor plans and interior views will be shown.—Ed.

"THRU THE GREAT CLUMP OF WILLOWS"

Pointers For Color Trim for Cement Houses.

By Ora W. Alford.

With the coming of the plaster house must come new ideas of color schemes. The black roof, so durable and common, is disastrous to a plaster house. Plaster in its naturel gray must be livened up to be pleasing.

Our city has two small plaster houses within a few blocks of each other. The one has wood trim of light brown with dead green roof. The one window box has blue, white and yellow flowers. An awning of blue and white completes the dreary aspect.

The other house, costing much less to build, has rich red roof, dark brown trim and barabrf porch lanterns. The balcony is completely surrounded with boxes filled with scarlet geraniums, nothing but scarlet. Surrounding the wide veranda the boxes are again filled with scarlet geraniums. An awning of scarlet and green, completes the dashing scheme.

The little house is a veritable oasis in the row of common-place square brick houses with their white trim and black rooks.

Another interesting house just being built has foundation, corners, chimney and porch pillars of red brick, the remainder is of gray plaster. The wood trim, of which there is very little, is black.
E intend to reproduce in our columns at intervals some views of Swiss chalets, as this most original style may have some interest for our readers, and lend variety to our subjects.

Wood construction was in Switzerland the original style of building for the dwelling house ever since the days of Lake Dwellings. It was nearly exclusively employed in former centuries even for towns, and only during the last hundred years was it more generally supplanted by stone construction. This was caused by the ever increasing scarcity of timber. Every year the chalet disappears more and more; even in villages stone buildings now prevail for new houses, changing the characteristic features of the landscape to the detriment of its originality and charm, and the time is not far off, when chalet buildings will be the exception and not the rule. In America, where timber still abounds in numerous districts, wood construction may be employed advantageously for many years to come. This reflection induces us to say a few words on the construction of a style, which threatens to disappear from Switzerland.

The outer wall of the chalet consists of blocks about 12 cent. thick by 25 cent. wide, joined tongue and groove, one above the other and fixed with pegs. At the crossings the thickness of each block is reduced. The outer surface is planed, on the inside the block wall remains rough and is coated over by a sheet of asphalt or an insulating carpet, which is again covered by the internal and visible wainscoating. The ceiling is formed by beams, which remain partly visible, the intervals being filled up by planed
boards resting on fluted ledges. The space between the floor and the ceiling beneath it is filled with tophaceous sand to deaden the sound. Much care must be taken to provide well seasoned material; the blocks must be free from pith. Wherever rain water might collect, the projecting wood must have a sufficient inclination to let the water run off. This rule is most important for the floors of balconies and galleries.

Chalets are generally placed on a foundation of masonry. It is advisable to separate the two materials, wood and stone, by a layer of asphalt, so that dampness sucked up by the masonry may not be imparted to the wood.

Another essential condition for the durability of the chalet is a good, far-projecting roof, so that all projecting parts may be well sheltered. For the roof itself a material must be chosen, that permits of a small gradient to be employed; for it is the flat roof with wide projections, which gives to the Swiss chalet its chief character. As indicated in the illustration it is easy to construct such a projecting roof; for this purpose the joists and blocks are caused to project in such a way that brackets are formed. As wood is a bad conductor of heat, it follows that chalets are agreeable dwelling houses. The wooden outer walls keep them cool in summer and protect them from the cold in Winter. To prevent sounds from passing from one room to the other, it is better to construct the partition walls of some natural or artificial stone instead of wood. The flues are placed against the inside walls and built of bricks. This rule holds good also for the placing of heating apparatus of any kind whatever. As a chalet looks best in the natural color of the wood, pure boiled linseed oil is employed as varnish. It preserves the wood without coating or altering its natural appearance. But some carved parts may be painted in oil color to add to the effect, or some panels may be adorned with painted ornaments. But whole surfaces must never be covered with a coat of paint, as this would diminish the value of the wood. A pleasing effect may also be produced by a combination of wood work and masonry, the latter finished in light colors.

These explanations demonstrate that, all necessary precautions being taken, timber is not only an excellent building material, but that it permits of a charming outward appearance, so that chalets compare favorably with other constructions. In districts where wood abounds this style ought to be cultivated, as it contributes a charm to the landscape.

The house, shown in our illustration, covers an area of 8.70 meters wide by 10.50
meters long, the site having an inclination from north to south. The basement is occupied on the north side by the cellar; on the south side is the kitchen with its dependances. The main entrance faces east and gives access to a spacious vestibule, containing the stairs, which lead to the upper stories. The stone substruction consists of solid masonry and is whitewashed. The chalet construction over it remains in its natural color, i.e. the wood is varnished with boiled linseed oil, to which may be added, if desired, some brown ochre. The material for the roof ought to be chosen in dark color. The rooms may be finished in wainscot, or the plain boarding may be covered with tapestry.

The Start for a Home.

By Chas. Sedgwick.

The subject of home-getting is of interest to everyone. Once away from the "old home" and its endearment, the heart becomes lonely and discontented and will not be fully satisfied until again settled in a place that is "home," and ownership is a great factor in the full enjoyment and appreciation of home. We enjoy most that which is our very own and that we have gained through our own efforts and perseverance. In these talks of home and home getting the writer desires to help and encourage the idea of saving for home. Much is written and much is said on the always present subject of accumulating money, getting rich, but what is it all for if not for home. I would rather be a poor man, with a home, wife and children, than a rich man, without the home and all that goes to make real and lasting happiness.

After all, only a few can be rich, but all of us can have a home if we make up our minds that we will have one, to will is to do, and to do is to have. Now my young friend, you are going to be married, or you are at least thinking of it. Don't deny it, because you are. Don't be hasty, plan well for the future, but in planning, don't forget you are leading up to a home. You know or ought to know that a home is the greatest hope and strongest desire in the heart of every true woman. Begin at once, make a start, own something, buy it yourself with your own hard-earned money. Secure a lot. There are always good building lots that can be had for a reasonable price, select a sanitary location, go out a little distance, get on high ground, if you can have trees and water near, so much the better, but always keep the future in view. Now you have your lot, put it in good order, necessary grade it, seed it, grass always looks good and by continual improvement you will not only increase the value of the lot but you will become attached to it. And the house will become a certainty.

You should own your own lot and have
a few hundred dollars saved up. At this time you may find it necessary to borrow money, in order to carry out your cherished plan, and it is the full belief of the writer that a small mortgage, of say one thousand dollars is not a bad thing. You will be paying interest and taxes and all for the enjoyment of a home, for wife and babies, and you will not pay as much as you would have to pay for the rent of an undesirable, unhealthy, flat or tenement, that is in no sense a home. Now you are ready for a plan, you must have a good carefully worked out plan; it is as much of a necessity as it is to provide the necessary means. You cannot build without a plan, in fact every undertaking has first to be planned out, and the better the plan the more successful the undertaking. The author believes in the family formulating an arrangement of rooms, and conveniences, born of its own experience and necessities, always keeping in mind the limit of expense and here again is a little advice, don't "want too much" for your money. Here are a few of the commonest necessities of a simple home where the outlay is limited to $2,000. First a good large living room, and if possible a wide open fireplace, simple, constructed of brick, and with one central chimney, that may serve for kitchen, furnace and fireplace. Second, a small dining room and kitchen, arranged with convenient pantry and china closet cupboards, no separate rooms for these as that takes too much floor space, and is no more convenient.

For economy in construction and saving of heat it is better to have a combination stairway inclosed with plastered partition and arranged so as to be easily reached from kitchen as well as front, and stairs to basement with outside door to same underneath.

The family chamber on second floor should be large and sunny with pleasant outlook, two large closets and bath room convenient, also if possible a connecting room for children. One other chamber will be required for guest and small room for sewing room or servant if needed. For greatest economy this house or cottage can be designed for a low structure with low reaching gambrel roof, and shingling all above the first story, or otherwise to suit the taste. To add to this hard wood finish, floors, etc., makes more expense, adds beauty, but may not add to the comfort. So far for the outlining of a plan in its crude formation. Now my friends the writer would not do justice to you nor to the home project, nor yet to himself, if he did not at this time advise you of the necessity of a good painstaking, competent architect; he will save you money every time in giving you the greatest accommodation with smallest space and cost. He will also show you how to improve your plan and how to carry it out, how to save on materials and how to use them properly.

He will write you a careful, plain, descriptive specification, that will tell you just how the work is to be done, and what the materials are to be. He will advise you about heating and ventilation, about painting and decorating, and he will be your friend, assisting you in securing a commodious and economical home, that will not only be good but look good, and when the time comes that you wish to sell it, you can secure a good price that will make it a paying investment, and all because it was well planned and well constructed.
HE modern home builder in the larger towns and cities has, undoubtedly many advantages over his rural cousin, not the least of which are the services afforded by the public utilities corporations.

Few towns of any pretensions now-a-days lack electric-lighting, gas and water systems, while many up-to-date little cities have a steam-heating service that is unobtainable in metropolitan centers except for the dweller in flats and apartments.

The numerous adaptations of electricity in the home and the advantages to be derived from its use will be mentioned briefly and may be suggestive for both the home builder who can install electric service while building, and the home owner who may decide to introduce electricity into a house already built.

Electric service is now so generally available that we believe its adoption for domestic purposes would be fully as general were its merits and uses more widely known.

Light is by no means the only useful feature of electricity as may be seen by the illustrations presented of its many applications in the residence of H. W. Hillman of Schenectady, N. Y. Here electricity is used for light, heat and power and so far as any practical use is concerned, the house could be chimney-less.

The upstairs sitting or sewing room shows an electric motor attached to the sewing machine, an electrically heated flat-iron is on the table near the telephone. An electric reading lamp with flexible arm is also a table fixture, while at the near end of the table, on the floor, is an electric radiator for heating.

The dining room interior shows the radiator in use. This is of the luminous type, giving out a cheerful glow in addition to a wonderful amount of heat for its compact size. On the little sidetable are an electric chafing-dish and coffee percolator, and next to them on the window ledge is an electric cigar-lighter.

Stepping into the kitchen we find the electric "stove" shown in our illustration,
equipped with frying pans, stew-pans, oatmeal boiler, oven, toaster, and, in short, everything complete for any ordinary culinary operation.

Going up to the bath room we find further uses for the magic current in the immersion heater shown in the bath tub, water heater at the lavatory bowl and the electric massage motor. One of the luminous radiators is also shown in the latter view.

We picture but a few of the household appliances and can only mention briefly some of those not shown. For laundry purposes a boiler is provided with the electric heating coils in the bottom. A cabinet clothes-dryer similar to those used in flat buildings is heated by electricity. A fan motor is arranged especially for hair drying, which not only delivers a strong current of air through a trumpet shaped nozzle, but heats it before delivery.

Another motor is furnished with an assortment of revolving brushes for polishing of all kinds.

For the cold-feet sufferers, electric warming pads may be had. In short, wherever artificial heat or light is needed there we have it in electricity in its cleanest, and most easily applied form.
Reliable authorities claim that all this cleanly heat and light service can be had at practically the same cost as coal and illuminating gas, the economy being in the ready switching on or off of the current and using it just as needed for local application. The moment it is off, the consumption of current stops, and, unlike coal or wood, we are not required to waste material in starting the fire in the stove or in leaving fuel to burn out after the meal is cooked.

Any housekeeper will agree that if the dirt and dust attendant upon the use of a furnace or stoves could be done away with, a large part of her labor would be removed, to say nothing of the saving in wear on window draperies, carpets and furniture from the grit and dust and necessary sweepings and cleanings. This much freedom from bondage is coming in the approaching “electric age.”
A PICTURESQUE HOME.

Harry W. Jones, Arch't.
Modern Designs for the Homebuilder.

In the accompanying English design we have not only a choice bit of architectural treatment but a house and grounds which make a picture. In fact, this particular design has taken several prizes, so we might term it a prize design. We give two views of the house, one of which, used as a frontispiece, shows the summer dining room or enclosed porch and the other diagonal view gives a somewhat better idea of the effect secured in the combination of the red brick, white pointed, and the paneled cement or half-timber work.

The outside chimney is rather imposing and gives decided character to the house, especially with the ornamental terra cotta flue tops.

The owner of this charming home, a
maiden lady, is a lover of the true English design; she brought back with her, after a trip on the other side, a great many ideas which she proposed to have incorporated into her new home, not only in the designing of the exterior, but the inside of the house as well. The writer of this description has seen the interior, which is somewhat novel in effect and arrangement for the average American home.

The owner stated that she had decidedly definite ideas as to what the interior arrangement and detail work was to be. She wanted it absolutely "English," but after all, when the house was completed, altho she was entirely satisfied, at the time, with the architect's carrying out of her ideas, still, something Americanized about the house remained. To give the place more of an English cast a little later a brick wall will surround the grounds. The care with which flower boxes, vines and shrubbery have been placed and started lends the picture effect to the whole.

The house is, with the exception of the brick work, entirely cement, using the pebble dash finish. A feature to the casement windows is a tongued-and-grooved window sash and sill. The window operates on a Geiser hinge. This hinge has a lever attachment fastened to the side of the window sash and upon raising the lever the window raises some three-quarters of an inch, sufficient to clear the projection of the tongue in the lower sash from the sill and permits the window to open in. When the window is closed it is a perfect excluder of the weather.

The floor plans accompanying show the homelike arrangement of the interior. As
will be observed, there is really no hall, the hall and living room being combined as one, giving a room 26 ft. long by 20 ft. wide. The fireplace is of an English design, built of dark vitrified brick, with a brick hearth. Running around under the casement windows from the fireplace is a comfortably cushioned window seat. Another window seat is at the far end of the room, on each side of which are recesses for books.

The entire lower floor is finished in oak, treated with an English stain. Considerable high wainscoting is used in the dining room and stairway.

Three of the bedrooms are of generous proportions, being about 15 ft. square, with ample closet accommodations for each room. The space on the second floor is used in a most practical manner, no space being taken up with long narrow halls. The location of the bath is exceedingly convenient to all rooms. The second floor is finished in white enamel and stained birch.

The house stands on the ground 26 ft. x 36 ft., exclusive of projections; full basement, provided with laundry, hot water heating plant, etc.

The owner built this home some two years ago on day labor at an expense of about $6,000.
"A Cement Cottage for the Lakeside"  Design No. 6, from Journal of Modern Construction.
A Cement Cottage for the Lake side.

The structural features of this attractive cottage home are the direct result of the prevailing prices of lumber and wood finish in the northwest. The basement walls are of concrete, the first story outside walls are of hollow four and six-inch tile bonded into a ten-inch wall, on which has been plastered an inch coat of cement with a rough cast finish coat and marked off into smooth beveled quoins at the corners, giving them a substantial bearing. The second floor outside walls are of rough cast cement on expanded metal lath. Another feature of this unique little home is that it has no inside window casings. Simply plastered joints, rounded at the corners and a plain wood sill. The style of the house admits of this unusual but money-saving feature. It is distinctly American, developed from American building conditions.

Sentimentally, however, it belongs to a class of houses that border on the Mission type as adapted throughout the west.

The interior arrangement and floor plans are a reaction from the extreme formality which has governed most modern work. To one who desires exclusiveness and seclusion this arrangement will not appeal, but to one who has cultivated the home spirit to a high degree (or has always possessed it), and can outweigh the lack of formality with sociability and comfort, these plans will be par-excellence. To enter into this house is not an entrance into a reception hall, or a parlor, it is an entrance into home. The spirit cannot help but prevail in a room so simply arranged as the long combination living and dining-room with its straightforward expression of simple needs. A heavy beam at the ceiling helps to draw the line between the two apartments. The large fireplace with its dark brick hearth extending up to the ceiling gives its comfort and cheer at all hours and occasions of the day; breakfast, noon and with the family circle gathered 'round at night. There is a servant's room on the first floor, adjoining her field of labor. Also a large porch in front and another in the rear of the home. The basement has a laundry, heating plant, fuel room and vegetable room. There is a grade entrance to both cellarway and kitchen on the first landing down on the cellar stairs. The second floor has three good sized bedrooms four closets, a bathroom, and linen closet.

The first floor is 9'-5" high and the second floor 8'-3."

Cost $3,000 without heating plant.

The exterior color scheme is cement plaster left a natural gray or mixed with mortar color to a dark grayish green. All woodwork stained a dark mission brown. The window sash a dark green and the roof stained dark green. A bright red brick foundation up to the watertable would give an attractive and striking effect.
An exceedingly attractive design, one which has been much admired in this city where the house is built.

The unusual treatment of the porch is a refreshing change, the wide projecting cornice giving good shade.

The combination of shingles up to first belt course and cement plaster above, for the exterior gives a pleasing effect. The lines of the porch, roof and dormer are all in harmony and the spacing of porch pillars is good.

Foundation is native blue limestone set broken ashler.

Belt course, pillars and ledge of the porch rail, window and door trim are painted bottle green, all shingles are stained C. number 303. Second story cement plaster is natural gray with rough stipple finish. Porch steps and floor painted stone color and porch ceiling very light blue.

Entering through the vestibule into the reception hall, we have on the right a pleasant nook with seats built in. The broad opening into the living room virtually throws the entire front part of the house into one. A feature of the living room is the large fireplace of red pressed brick with book cases and seats built in at either side.

An archway under the stairs leads to the dining room, which may be closed off by sliding door. Butler's pantry and kitchen facilities are most complete, including a rear entry with space for refrigerator, inside cellar stairs, and a good back porch.

Basement extends under entire house and is provided with hot water heating plant, fuel bins, vegetable cellar, laundry trays, etc.
The stairway to second floor is between walls above the landing and thus occupies a minimum amount of space. The chambers and bath all open conveniently on the central hall. A scuttle in the ceiling opens to storage space in attic, 7½ feet in the clear.

The finish of first floor is selected red birch, stained dark mahogany in hall and living room and a moss green in dining room. The wood is stained, given two coats of varnish and rubbed down to a satin finish. Flooring in main rooms, quarter sawn oak and white maple in chambers.

Kitchen has a wainscot in hard plaster marked off in tile effect and painted dark brown. Above the wainscot moulding, wall and ceiling is painted straw color.

Upper floor is finished in white pine, with hall and front chamber stained dark brown with two coats of varnish and rubbed to dull finish. Other chambers and bath in ivory white enamel paint. Bath room has plaster wainscot marked off to imitate tile and painted. This home built two years ago cost $4,000, with cost of lumber today 20 percent higher.

**The Question of Cement Blocks.**

The use of cement in its various forms of manufacture for houses and cottages as well as for larger buildings is a subject of large interest to the building public. In many localities brick cannot be obtained readily and lumber also has to be brought a great distance and the scarcity of the same and high prices result in turning the attention of people who desire to build, to the use of cement in some form that will be appropriate for their wants and not over-expensive.

Do you recommend cement block construction, is a constant query.

Blocks made of cement and sand are to be found in nearly every town and village throughout the west. Now there is a great difference in the quality of cement blocks. If the material itself is good, the blocks may be spoiled in the making and unless the blocks are all equally hard the walls will not be durable and permanent.

How then are we to know the good ones from the poor ones? The only answer
to this is to buy your blocks of reputable people.

For house work, 8" hollow cement blocks make a good wall. They should, however, be furred on the inside with 2x2" strips upon which to either lath and plaster or use plaster board which is much superior to the wooden lath. Either way secures a 2" air space which will insure a dry wall.

An Inexpensive Cottage in Cement Blocks.

The next design is that of a very modest cottage or bungalow with a plain hipped roof and single dormer. The builder avoids the suggestion of monotony in the square structure by the attractive porch across the entire front and around one-half the side, as indicated by the accompanying floor plan, also by the variation in the size of blocks used. The box effect, so often noticed in cement block houses, has here been done away with by the broad extending eaves of porch and roof.

This porch floor is cemented and hollow blocks were used for the foundation. Roof and dormer are shingled.

The interior arrangement is shown on the floor plan, and provides for a living room, dining room, bed room, kitchen and bath room, also two closets. In the ceiling of one of the latter is a scuttle giving access to the attic space above for storage.

The cellar is cemented and with the hollow block foundation will always afford dry storage for extra household effects.

It may be a matter of interest to many of our readers to know the quantity of blocks required for a structure of this size. The builder used 1287 cement blocks above the foundation and the walls were laid at an expense of $265.00. Completed cottage should be built at an expense of about $1,000.
A Good Example of Cement Block Construction.

Many of our readers have requested the illustration of good examples in cement block or brick construction that we decided to make a special number on cement houses for this issue and we give our readers in the accompanying design what we think is a choice piece of work in this class of construction. While we might make some criticisms from an architectural standpoint, we compliment the results obtained in this home by a happy combination of cement block and brick. The foundation treatment is somewhat unusual thru carrying up to a belt course the range rock six courses. From there on up to the upper belt course a mixture of different stone face is used with exceedingly pleasing results, giving a broken ashler effect. Smooth faced blocks are used for the corners and window trim.

This house has stood some little time and the cement brick shows practically no blemishes from weather stain and evidently the material used was made right.

Considerable character has been given to this square house by the wide three foot projecting cornice and the wide cornices carried out on the plain but effective square dormers. Good use is made of porch pillars.

The floor plans are laid out in a somewhat regulation order, with no distinctive features. They give, however, what is very generally wanted in a house of this kind, and four good chambers are secured on the second floor.

(Floor plans on next page.)
A Modern Type of Block Cottage.

In this series of cement block homes we give our readers several attractive examples of the cottage, or story-and-a-half house, as actually built. In the next illustration, how marked is the contrast between modern construction as indicated by the block house compared with the building along side showing the old style of architecture and the "ginger-bread" mill work! The porch is cement, also the foot rails, columns and chimneys.

The interior provides seven rooms and bath, one fireplace in the parlor with cabinet mantel. Interior finish is all hard wood, with hard wood floors throughout, except in the kitchen.

Cement shingles are used in part and part of the roof is tin covered. Size on the ground 45 x 50 and cost to build $5,000.
HE blocks used in the next cottage showing projecting roof over- 
tion in formation, except in the 
porch are rock face with no varia-
foundation where the courses and corners 
are of smooth-faced beveled blocks. The 
porch columns are a product of cement 
work and are fluted.

We would suggest a change in the struc-
tural lines of the roof to the proposed 
builder of this design. It would be better 
to have a larger dormer in front rather 
than the gable treatment.

Shingles are used on roof and gables and 
siding on dormers. The use of cement 
shingles for the roof and rough cement 
exterior finish in gables and dormers would 
carry out still further the cement idea in 
construction, and, while adding something 
to the first cost, would make a more durable 
and more nearly fireproof construction.

As will be seen by the floor plan, the 
house is more roomy than might be inferred 
from the exterior. In addition to good-
sized living and dining rooms and kitchen, 
two chambers and closet space is provided. 
The upper floor affords large storage space 
or may be finished off for one or more 
chambers.

The rear porch if screened in will give 
space for a refrigerator.

Plumbing connections are not shown but 
very good facilities for bath and laundry 
would be afforded by the basement which 
could extend under the whole house, and 
with hollow block walls would always be 
dry.
A Snug Home for a Cold Climate.

An attractive appearance is secured in this cement block design by the use of alternate courses of wide and narrow blocks. The partially enclosed porch gives a warm, cozy effect that is appreciated in the winter season, and will prove a cool retreat on a hot summer afternoon.

This cottage home is built on lines that will insure economy in construction. As shown by the plans, the rectangular outline is adhered to, excepting the one projection on the side to allow for stair landing and window.

A good, practical point to note is the centrally located chimney flues, three in all, one for furnace, one for kitchen range and one for the fireplace.

The arrangement of first floor rooms is particularly good; the living room separated from the hall by columned opening, gives really one large room. Dining room is of good size, pantry room is ample, and kitchen is well placed. A back stairs is provided.

The amount of room found on the second floor is really surprising. The corners under the roof provide large closet spaces, all being utilized to good advantage.


In choosing a trim and roof color for cement block houses the aim should be to brighten up the natural gray of the blocks as much as possible without going to extremes.

Our illustration shows a pure white trim, but ivory or gray such as L. B. numbers 297 or 289 would look well. For roof and gable shingles use Pompeian red, L. B. number 312, or bright red C. No. 320 shingle stain.

A further brightening touch may be added by painting sash cherry red, L. B. number 151.

(Floor plans on next page.)
A Compact Eight Room Cottage in Cement Blocks.

We have as the next design in this series, a plan for a cottage 30 feet in width and 36 feet in depth over the piazza. The roof is what is known as a gambrel roof, first pitch of the roof starting from the top of the first story. The rooms in the second story are full height, the side walls of same setting in from the outside a proper distance, to allow for the first pitch of roof. The upper portion of the roof is constructed with a low pitch, the whole treatment giving a low cottage effect at the same time keeping full height, square rooms in the second story.

The gable ends of this house are finished with small half timbers and the wall surfaces in the panels cemented with Portland cement. The cement blocks are carried from the grade line up to the top of the first story and continued out around the front piazza with piers carried up on the two front angles to support the projected second story portion.

The floor of the piazza is finished with concrete made level with cement on top. The central vestibule opens into a large living-room extended across the front. Opposite the entrance is a wide fireplace. There is an ample dining-room and kitchen with pantry between and a combination stairway, leading up from the living-room and kitchen with an outside grade entrance to cellar.

This house can be built at present price
and finished complete, including heating and plumbing, for a sum not exceeding $3,500 in the following manner: hardwood floors in the first and second story, Washington fir finish in the first story stained and varnished, and second quality of pine painted or enameled, in the second story.

The cement walls on the outside being of gray tone, it would be well to paint the cornices, casings, and half timbers showing in the gables, white, or a very light cream color and the roof either green or red. The light and cheerful effect of these colors will overcome the sombreness of the first story.
A unusually choice bit of plaster and half-timber designing is shown in the accompanying, two-and-a-half story home, the design being entirely free from any "fussiness." The gable-designed dormers running into the roof are of proper size and are located in the exact position to give a symmetrical and well-balanced cast to the entire exterior.

The timber work is not as heavy as frequently used, securing thereby a great deal of high light in the upper portion of the house against the dark painted woodwork. This is a good example of the practice of tinting exterior plaster before it has set. One sees at a glance that this is a home and not a house only.

We give a floor plan view of the lower part of the house only, with the addition of a perspective sketch of the dining room which shows the interior detail work and the effective decorations in the frieze above the high paneled wainscot. This sketch is also a choice bit.

The vestibule is not one of the cramped kind, being 5x8 ft., bringing us into a wide central hall, off of which we have the main living room 27 ft. long with a commanding fireplace located in the center of the south wall.

There is an unusually wide opening between the hall and living room, giving a still more spacious appearance. The dining-room 16x12, is closed off by sliding...
doors. This room is provided with a five, high-windowed bay, china closets running below. Attention is called to the compactness with which the plan is laid out, the ready access to butler's pantry from both kitchen and dining room. In the rear of the reception hall is a cozy den for the man of the house; a lavatory is provided off of the rear hall. The screened porch would be more generally used in summer in lieu of the den.

The entire downstairs front portion of the house is finished in selected birch stained mahogany and rubbed to a dull finish.

Service portion is finished in yellow pine and the floors are covered with linoleum.

On the second floor provision is made for four chambers of commodious size with large bath and dressing room. The second floor is finished in white enamel.

In the gables are several rooms finished off, one of which is used for a general play room for the younger members of the family. The other rooms are used by the servants. Hot water heating system provided throughout.

In building this house, finished as described, the cost would be about $6,000.00.

(Floor plan on following page.)
An Attractive Home in Siding and Plaster.

The residence of Mr. Felton is an eight-room modern home of frame construction. The foundation is of concrete, the outer walls above foundation are sheathed, papered and sided up to the second story sill course. Above which they are finished with cement plaster applied on metal lath. The outside walls are back plastered and face plastered. The roofs are shingled.

It is to be regretted that the constructor in building did not keep the brackets center-
ed over the windows as shown by the plans, as this would greatly improve the appearance.

The house is heated by hot water, has a fine laundry and servants' toilet in basement. The living room is finished in curly red birch, has beamed ceiling and brick mantel and selected birch floor.

The dining room is finished in quartered oak, has wood cornice and oak floor, a hand-pale blue.

On the second floor are four chambers and bath, the owner's is large and provided with a pass closet or lavatory to the other front chamber. These rooms are all finished in white enamel, and have polished hardwood floors. The owner's chamber has a small wood cornice.

The balcony gives excellent place for airing bedding, etc.

Geo. H. Keith, Arch't.

some buffet is built in. The den is finished in birch, has wood cornice and a Dutch bay. All three of these rooms have a plaster paneled wainscot.

Just at the rear of living room is the stair hall and toilet in retired yet convenient location; these are finished in birch. The pantry and kitchen arrangement is quite complete, they are finished in pine with a white enamel and plastered walls painted

The attic is floored over and contains good storage space.

The plans are of a compact and well arranged home. The one stairway serves amply. The grade entrance under stairs gives a pleasant garden entrance to the rear.

The cost to build was about $4,700 inclusive of heating and plumbing. The story heights are basement 7 feet, 1st story 9 feet 6 inches, Second story 8 feet.

(Floor plans on the following pages.)
A Homelike Plaster House.

Homelike best describes this house with its broad porch, wide spaced arches and generous front entrance. Natural gray cement plaster covers the exterior above a gray sand lime brick foundation. Roofs are covered with metal tiles painted dark green, and the window and door trim and porch woodwork a lighter green.

By reference to the first floor plan it will be seen that the main feature of this house is the living room. We illustrate a glimpse of the interior showing the brick fire-place with seats at each side. The bookcase shown in the photograph is duplicated at the opposite end of the room.

A passage at the rear of living room gives convenient access to the kitchen. Between kitchen and dining room are located the side entrance at grade, with steps up to back hall and down to basement. The dining room has large windows on two sides, making a very pleasant room. Sliding doors close it off from hall when desired.
"A Glimpse of the Living Room."

Full basement with cement floor, hot water heating plant, laundry trays, etc.

Five chambers are shown on the second floor plan in addition to generous hall space, back stairs and attic stairs and bath. A balcony over the back porch affords a place for airing clothes and bedding.

The interior finish of the first floor is quartered red oak in hall and living room, birch stained mahogany in dining room and kitchen pantry and back hall in Georgia pine, natural finish.

Upper rooms are in pine in several stains and white enamel.

The house is 51x63½ feet in size including porch extensions. Height of first floor rooms 9½ feet, second floor 9 feet. Estimated cost $14,000.

The best of materials have been used in making this a model home. The treatment throughout is on liberal lines, with beamed ceilings, attractive window treatment and many of those finishing touches that mean so much in appearance and added enjoyment for the owner.
NOTHING better indicates the impression, in general taste, than the constantly increasing manufacture of materials for decorative use. One need not be more than middle-aged to recall the time, when black hair cloth was the almost universal furniture covering, when varnished black walnut was the prevalent wood, when the white plastered wall was almost universal.

We have changed all that and, in no detail, more effectually than in wall treatment. Paper makers have done much for us, and the manufacturers of textiles have done their part, but it is only recently, that very satisfactory colorings for the plastered wall, which is not to be hidden under a layer of paper or fabric, have been attainable.

When all is said and done, the plain colored wall has transcendent merits. Too much of our interior decoration ignores the principle that the wall should be a background, and not a decoration. That there are exceptions only proves the rule. Paint and cartridge paper, sometimes burlap, have been largely used. Kalsomine, except for ceilings, is hardly worth mentioning.

The painted wall is washable. Unless done by an artist, its surface is not agreeable and it is never cheap. Our American cartridge papers have the trick of fading, and the cost of the imported article makes it prohibitive, for most people.

A comparatively new preparation, applied in the same way as kalsomine, has the merits of all other methods of producing a plain wall surface, with the additional one of being inexpensive and easily put on. It differs entirely from kalsomine. It is colored in its powdered state, coming in fourteen or sixteen different tints and in white. While the adhesion of kalsomine depends upon a gluey basis, which is composed of animal matter and must sooner or later decay, releasing the coating from the walls, this other material is of the nature of cement, and after setting in the first instance becomes harder and harder with age. Its surface is also perfectly antiseptic.

Although generally applied, and with exceedingly satisfactory results, both as to artistic effect and service, to plastered walls, either in rough cast or hard finish, it is equally desirable for use on wood, brick or canvas. The board house with canvas covered walls, or the adobe dwelling of the southwest are alike subjects for its use.

The colors of this material are generally light or medium, but a great variety of color can be produced by mixing the primary tints. The smooth, dull surface is an admirable background for stenciling. When a washable surface is desirable, in kitchen or bath room, the wall can be colored, coated with a preparation made specially for the purpose and then varnished.

The application of this coloring to walls is so easy and the results so good, that its use offers an excellent opportunity to the amateur decorator. Where, for any reason, an entire plain surfaced wall does not seem desirable these colors are admirably adapted to upper third treatment or to dropped ceilings. As the coating hardens with age the washing off process, so troublesome and
Artistic Simplicity in Wall Decoration

Simplicity is the keynote of harmonious and refined mural effects. There is an artistic touch—a richness of decorative effect in homes where walls are covered with

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In such homes you will find that the most artistic and beautiful results obtain, the wall tones blending perfectly with color schemes of furnishings and of adjacent apartments.

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We render a special service to all who contemplate interior decoration. Our experts will devise a color scheme adapted to your needs, showing actual samples of FAB-RI-KO-NA in actual shades contrasted with woodwork in natural tints, thus showing how your finished walls will look.

Write us for full information about this special and valuable service.

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In a room with soft pink walls and white woodwork, a table, a chair, a stool and a high screen and two or three cushion covers, all alike, of English cretonne, or even of art ticking in a dainty pattern, with white enamel, for bed, bureau and the other chairs, is very pretty indeed.

Art ticking is much more satisfactory than most American cretonnes. Its colors are fast, its designs fairly good, its wearing qualities admirable, and its price, twenty-five cents a yard, moderate. Although its coloring is usually rather light, it is very good in darker tones. There is one most effective design of pinkish red, hollyhocks on a buff ground, and another of bunches of scarlet flowers on a white ground.

Allusion has often been made in these pages, to the revival of cane seats and backs for chairs and settees. Much of the more expensive summer furniture is thus equipped, and frames show curving French lines. Cane panels for the head and foot boards of bedsteads were characteristic of the Louis XV. period and are found now in very elegant furniture. The frames are either mahogany or Circassian walnut or else white wood painted in delicate tones of old ivory or French gray. Time was when everything of this sort was imported, but it is now made in this country. The cane decreasing in renewing a kalsomined wall, is needless. Paper, paint, or a second coat can be applied without preparation.

* * *

Inspection of summer furniture does not bring to light any striking novelties. The cretonne covered furniture, noted last year is much to the fore. Its cost is prohibitive for most people. A bureau entirely covered with cretonne, even to the mirror frame, costs $75. The cretonne top has a sheet of plate glass accurately fitted to it. The bureau itself is probably a cheap oak one. It has a swinging mirror, nearly square, but with a curving frame. It would not be difficult for a clever amateur to copy one of these bureaus. Whether it is worth while is another matter. Bamboo furniture is utilized for the purpose. The chairs are especially pretty, all but the frame being covered with padded and tufted cretonne. Tabourettes are entirely covered, legs and all. This sort of furniture requires a special setting and must not be jumbled up with all sorts of other things. The cretonne too should avoid stripes or straight lines, should be distinctly “all over” in pattern. A special flat gimp an inch wide comes especially for use on this cretonne furniture.

In a room with soft pink walls and white woodwork, a table, a chair, a stool and a
work is of the finest sort and is exceedingly durable. Occasionally it is gilded. Chairs and settees of this style are popular for music rooms, not having the deadening qualities of stuffed furniture.

* * *

The possession of much cut glass is a snare to its owner. It is so intrinsically beautiful and so valuable, that the temptation is to set it for all to see. When it is arranged en masse in a glass-shelved and backed china cupboard, the effect is very much as if one domesticated an iceberg. Cut glass is charming in use but a poor decoration asset. Its best service is in lighting up a dark corner. A small corner closet lined and shelf-covered with dull red is a delightful setting for glass and silver. But do not put cut glass on the side board. Restrict that, if you will, to silver though china is so much more effective, but keep the glass in the background.

And, apropos of china closets, a velvet or cloth lining is infinitely more effective and far less expensive than the usual mirrors. Cotton velvet or velveteen is excellent for the purpose and has an elegance never achieved by any amount of mirrors.

* * *

What to do with the spoils of travel is sometimes a problem. One buys carvings in Switzerland, mosaics in Florence, glass in Venice and photographs everywhere, and so many things, beautiful on the spot, are rather hopeless in one's own special environment. The only possible thing with some things is to set up a wall cabinet, where they can be admired for themselves, without regard to their surroundings. I have heard of one woman who did not try to fit her possessions in, but had a small room with black woodwork and gray walls, where she arranged her treasures after the fashion of a museum.

A rather interesting way of using the long panorama-like photographs, of Roman or Greek ruins, is to have them framed to match the wood work of a room. In a strip long enough to go along one wall, dividing them occasionally by vertical strips of wood and to place them above a low book case, or between two door ways in a hall, at a height of three and a half or four feet from the floor. Seen at close range, they attract far more attention than when hung on a wall, where they give an impression of confused detail.

A New York firm of decorators made use of a number of colored photographs of Venice by moonlight, by setting them in the wainscoting of the fireplace end of a room. The chimney piece carried to the ceiling had a sort of arcade, or loggia effect, and inside its arches pieces of bluish green pottery were set. On either side of the fireplace extending around the corners of the room, to a window and a door respectively, seats were built against the high wainscoting, which was stained a bluish green exactly the tone of the moonlight water. In this wainscoting, protected by glass, surrounded by a beading of wood, were inserted the photographs.

Nothing is harder to find than a rug in a satisfactory blue. Even the Japanese cotton ones, which are by no means cheap, are not always pleasing. Fingering over a bunch of samples, the writer came across one of terry carpeting in plain blue whose tone was delightful. It was like a very heavy ingrain, yard wide, and eighty-five cents a yard, making a nine by twelve rug cost a little over ten dollars. Green, brown and mahogany shades were equally good.

* * *

The Hallway.

An important feature of the modern hall, especially in the northern states is that it should be well heated. The tendency of construction is to allow a free and unobstructed ventilation of all parts of the house by means of the lower and upper hallways, and, by heating the hall thoroughly in winter, the other rooms are also warmed appreciably with a saving in coal used in the furnace.

The defect of the hall as a living room is that it is not always possible to light it thoroughly from the windows of the stairway landing, and the light must necessarily come from the doorway or arrive at second hand from the adjoining room windows. The majority of these new halls make the most of such light, by having the portion of the wall above the wainscoting done in plaster, which is left in its natural color. The hallway is finding increased usefulness in the newest types of houses as a hallway and informal apartment where all members of the family may receive visitors, whether of a mere social call or for the transaction of business. Its popularity is justified.
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This book will be sent to any address upon receipt of 10c, coin or stamps. It tells in detail why Alabastine is more sanitary, more durable, more artistic and more economical than any other wall decorating material. It tells how little it costs to decorate with Alabastine—from 50c to one dollar for the average room—and gives many valuable suggestions for the planning and furnishing of the home. Regular painters and decorators will find this book valuable.

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From this handsome Art Portfolio you can see exactly how Alabastine looks on the wall, you can see how many beautiful combination tints can be made, and from it you can plan the decoration of your home and place your order for Alabastine.

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The Alabastine Company, 920 Grandville Avenue, Grand Rapids, Mich.
Mr. E. Trump, Battle Creek, Mich.

Q.—As I am a subscriber to your magazine I take the liberty to ask you for a few suggestions as to the proper finish and decoration of my dining room which I am about doing over. The room is 15x15, 9½ foot walls, with oak mantel and have oak furniture and quartered oak flooring, window on each side of mantel facing west. What kind of wood finish and decorations would you advise, and would you advise ceiling beams? The room opening on the dining room is finished in white enamel with a single door between. Would like the dining room up-to-date, without being too elaborate.

Ans.—The size of the room and the height of the ceiling will admit of a dignified and harmonious treatment.

A soft, fumed, wax finish would be the most restful color to be used on the wood work throughout the room. I would advise, by all means, use the ceiling beams. Should you use a plate rail, some of the recent designs in wall paper carrying out the fruit or foliage effect below this railing or above the wainscoting effect. Or should you not wish to use a wainscoting, a heavier fruit effect could be used below the plate and some plainer effect in harmony above.

For the windows something in the Scotch Madras or crette, blending in with the colors which you may use on the walls would be very appropriate.

Should you want the walls in plain colors, use the mineral coating mentioned in our replies to R. D. P. and Mrs. C. B. in this Magazine.

A rug in rather neutral and not too bright colors would be best to use.

Mrs. C. P. B., Winter Hill, Mass.

Q.—We have recently bought a summer cottage and wish to improve it a little, so write you for advice. I enclose floor plan as it is now and with intended alterations.

The living-room is to have a bay window from fireplace to front corner of...
Make a Summer Resort of Your Porch

Send today for our free booklet, "How to Cool a Hot Porch." It tells in detail how you can transform your porch into a cool, restful retreat, where you can really live, free from the Sun's hot glare, and secluded from the inquisitive gaze of passersby.

Porch Shades are made of light, long-wearing, Linden Wood Fibre strips, lock-stitched with strong Seine twine. They are stained in soft, harmonious, weather-proof colors.

Vudor shades are constructed to admit freely every cool breeze, but the Sun's rays cannot possibly penetrate. A Vudor-shaded porch is in soft, mellow shadow—those within can see every one passing, but no one can look in from the outside.

Vudor shades can be attached to the porch in ten minutes. They can be instantly raised or lowered, are very durable, and never get out of order. Although surprisingly inexpensive—the average porch costing from $2.00 to $10.00 to equip—to the appearance of even the finest home.

Vudor Hammocks are made to overcome the faults of the ordinary hammock shown in the diagram on the left. The cords in the old style hammock are fastened directly to the frail "body warps," which soon break from the strain. The Vudor way (illustrated on the right) gives permanent strength, because the cords are fastened direct to a sturdy Rock Elm spreader. These Hammocks sell at $4.00, and will doubly outlast ordinary hammocks. We also make a less expensive hammock on a similar principle for $3.00.

Vudor Chair Hammocks (the lady in the picture is in one) combine the luxury of an easy-chair with the gently restful motion of a hammock. Can be adjusted to any angle and conform instantly to every curve of the body, thus giving the fullest relaxation. Can be hung on the wall, out of the way, when not in use. More comfortable and more economical of space than you ever thought possible.

CAUTION: Inferior products—bamboo shades, which let in the sun, and do not retain their shape or color, and cheaply constructed hammocks are sometimes sold by unscrupulous dealers as Vudor goods. Look for the Vudor trademark on an aluminum plate on every genuine Vudor Shade or Chair Hammock, and on the cloth label sewed on every Vudor Hammock. It means quality in porch equipment and it's there for your protection.

Don't forget the free booklet. Write for it, and name of nearest Vudor dealer today.

HOUGH SHADE CORPORATION, 40 McKey Boulevard, Janesville, Wis.
house. All the windows to be enlarged, possibly by adding casement windows on each side of those already there, the front door changed to a Dutch door, and the room on the back at the left connected by an archway, and used as a library. The room at the right side to the dining-room with a French window opening on piazza, a large bay window the size of the end of the room and a door connecting with a large kitchen to be built directly back of this. On one side of the door a china closet and on the other a recess for the sideboard.

The inside of house is unfinished and I wish to stain it; have also thought of using burlap and denim in space between stud- ding. Is there any other material suitable for this? For the living room I have thought of a brown stain and yellow bur- lap, and blue and white scheme for dining- room. Can you suggest anything new and pretty for coloring and also for curtains, portieres and cushions? I prefer everything washable as far as possible.

How shall I finish the chambers? Can you give me an idea for the windows and for a Dutch door?

Ans.—Your scheme as outlined in your letter is very desirable and there is nothing that could be more pleasing to use than the burlap for the walls for your lake home. The brown stain wood with natural or gold burlap for wall would be very good for the living-room and I think of no better combina- tion for the dining-room than the blue burlap with the window curtains of coarse Scotch nets. These range in price from twenty-five to sixty cents a yard and would be most desirable, and soft finished bur- lap or craftsman linen for the draperies.

You can now buy inexpensive cretonnes in French designs or wild blossom patterns for furnishing your bedrooms and the same would be best for the overhangings and bed draperies; the over-hangings with a narrow pleated valance, using a simple mus- line curtain underneath. A very handsome combination could be carried out in that way, and it would be very inexpensive. For the Dutch door, having the upper panel with the small panes of glass is very desirable.

R. D. P., Du Quoin,
Q.—Under separate cover you will find

The "STUCCO" Plasterboard as a foundation for Portland cement exteriors of country houses, is superior to all other methods.

FOR INTERIOR PLASTERING. BOTH WALLS AND CEILINGS, "STUCCO" BOARD PROVES MORE SATISFACTORY THAN WOOD LATH AND CANNOT BURN

C. W. CAPES 1170 Broadway, New York, N. Y.

rough sketch of plan of house in course of construction. The house is on corner lot facing east and north, but we are making north the front proper. The house will be built of concrete blocks. Please give us color scheme for both first and second floors. Upstairs will be enameled white or cream. Which do you advise? Hall on second floor has no window in it so will be rather dark. Will have downstairs, excepting kitchen, stained and waxed. Enclosed with plan you will find sample of rug to be used in dining-room, which room we plan to have wood paneled to plate rail and had that to have the ceiling beamed. Would the brown Flemish or black Flemish be most suitable? and can we get furniture to match? The three windows grouped on the south side of dining-room are high casement windows. Living room and dining-room floors have oak borders but reception hall and den are to be entire oak floors. What color shall we use for fireplace? It is to be made of concrete block but will be colored to suit the room. Windows and inglenook are to be small, above seats. Will you please give me the best treatment for kitchen floor in point of looking the best with least work. I want something that can be wiped up and not scrubbed. My experience with linoleum is that it wears at the seams long before it is worn elsewhere.

Ans.—In the first place it would be advisable to enamel the wood work of the whole upper floor in white or ivory color. In fact just what you have considered is best. There are many beautiful effects in French papers for bedrooms. Some in the wild flower designs and others in the plain French stripe.

The finish for downstairs, which I understand is in oak, would be best carried out in russet brown or fumed oak. It is entirely feasible to secure furniture to go with this finish. There are many beautiful examples of wall-paper in the tapestry effects with blue grounds having a touch of brown for relief color or a warmer shade of brown could be used for living-room. For instance, a beautiful warm shade of self-tones in brown for parlor, a dark blue with detached figure for reception room and hall, and a fruit pattern or iridescent effect above the plate rail in the dining room.

A Revelation

In Finished Wood Effects

Unless you have seen our finished samples, you cannot realize the beautiful and artistic effects it is possible to obtain on all woods used in the general building trade. This applies both to soft woods, like pine and cypress, as well as hardwoods, like oak, ash, chestnut, birch, etc. The finished effects we produce on pine, for instance, are the talk of the trade.

Wood finishing today has become such an art there is no excuse for any wood being finished in an unattractive manner as so often happens, due to the use of inferior materials, and lack of knowledge on the subject. It will cost you no more to use the best products, which are world famed for superiority and economy.

A postal card, stating the kinds of wood you are using, and your dealer’s name, will bring promptly samples and detailed information free of cost. The more information you give us, the better we can advise you.

Several have written as follows:

“We are in receipt of the set of sample boards, and must say that they are the finest pieces of work of this kind that we have ever had the pleasure of looking upon.”

“You have sent us samples of finished work received. I must say they are a handsome set. They are so free from ‘banding’ as I call it, which seems the prevailing feature with most of the wood work done here, due to improper treatment and inferior stains.”

The Bridgeport Wood Finishing Company

New Milford, Conn. New York Chicago

Philadelphia Boston
A beautiful facing for the fireplace would be in the unfinished tile which is now to be had which would of course, want to be carried out in harmony with the wood work, that is, the tiling made in a lighter shade of brown which matches perfectly with the finish. However, as I note your facing is to be made of concrete block the color could be made just a shade lighter than the wood work.

Outside of the linoleum the only recommendation that I could give for the kitchen floor would be a filling, and two coats of varnish rubbed down, and if this is varnished each year you will always have a floor that can be easily cleaned.

For the windows in your various rooms there are for the parlor and living-room antique cluny or Arabian laces, for living-room and dining-room the Scotch nets and novelty effects could be used for the windows made up for the size and coming to the window sill. For plain walls in any of the various rooms which you want to carry out, a very desirable preparation is the new sanitary mineral wall coating, which contains no glue or animal matter.

Mr. B. B., Big Springs, Texas.

Q.—It has been my pleasure to read your magazine the past year, also your book on "Practical House Decoration," but I do not yet feel competent to "walk alone" and as we are completing plans for our new home I would write for suggestions, as to the colors of woodwork and wall coverings. See enclosed copy of plans. House faces west, on s. w. corner of block lot 100x140. In our climate a western exposure is not desirable and the west rooms in summer sometimes become very uncomfortable, so I am trying to minimize this objection by skill of interior arrangement and suitable color combinations. I have but one selection as to color and that is green for parlor, but what shade?

Will you tell me please the best color to use on yellow pine woodwork throughout for the reception hall, parlor, dining-room, and living room. The house is to cost about $2,500 and I prefer a finish of simple dignity rather than of vain pretentions. Mahogany has always seemed to me an expensive wood and I could not afford mahogany furniture (the real) so I have thought
of white enamel paint for parlor but what then for the hall?

Should fireplace mantel in parlor be brick or wood mantel? If brick should they be cream if woodwork is white? How high should mantel be?

Ans,—From the description of the house and windows as I find it from your plans would say that your idea of sage green for decorations for the parlor would be entirely suitable.

The woodwork should be in ivory or white for the parlor and for the hall and sitting room some of the lighter fumed oak stains could be used, and in the dining room the same tone but in darker shades, rather plain effects for the walls would be desirable as that gives an air of spaciousness to the room. It is possible to get the Mission style of furniture and it could be gotten unfinished and finished to suit the requirements of the different rooms. Hangings for the doors in the craftsman linen or arras cloth would be desirable, simple open Scotch or English nets for the windows could be used. Rather plain soft toned effects for the rugs would be desirable.

To get away from the sage green or colors of that description it would be possible for you to use for the room having the western exposure the blues and French grays which could be worked out very satisfactorily. However, if you should stain the woodwork a soft light brown in the light fumed finish, the shades of blue with a little more strength than the French grey would be desirable. The French grey could be used for the parlor and a heavier tone of blue for the reception room and parlor. If you have a plate rail in the dining-room a pleasing pattern of fruit design would be desirable.

Do you live in the country? Then you should write for this book. We send it free.

It is a most interesting story told by a man who resides out of reach of city water mains—How he put in his own water supply system, and had running water all over the house—How he was able to enjoy cool water in summer, and water above the freezing temperature in winter—How he had absolute fire protection, because there was pressure strong enough to throw a stream clear over the house.

He pumped water to the barns, cleaned his buggies and washed out the stables. He piped water long distances to tanks for the horses and cattle. And with less work and at lower cost than by the old style elevated tanks, in which the water froze in winter, or became dirty and stagnant in summer. He was able to do all this with a Leader Water Supply System

This system is so simple that anyone can understand it and operate it.

It consists of a tank in your basement (or buried in the ground outside). Water is pumped into this from your well or cistern. This water, as it fills the tank, compresses the air into the upper portion of the tank. Then when you have a 40 or 50 pound pressure, you stop pumping, and this air pressure forces the water through all the pipes. Open a faucet anywhere and a strong, steady stream gushes out.

There are no repairs to worry about; the only attention the Leader System requires is a few minutes daily pumping either hand, gasoline engine or windmill power to replenish the pneumatic tank.

But we haven't room to tell you all the good things about it here. Write for the free booklet, "How I Solved the Water Supply Problem." It will demonstrate positively how easy it is for you to do this on your own place. No matter how difficult it seems now, we know a Leader Water Supply System can be installed to your absolute satisfaction. Cut this ad out, and write your name and address on the margin. We will understand.

LEADER IRON WORKS
2155 Jasper Street, Decatur, Illinois
HERE is an universal complaint of the difficulty of getting good domestic servants, or any servants at all. With the current rate of wages $25 a month, for general houseworkers, in New York City, the situation is serious, not to say strained, and it behooves the woman who is able to secure a helper of any sort, to do her prettiest to keep her.

"One means thereto," as the prayer book says, in another connection, is to improve the general household conditions. Dark, pokey, inconvenient kitchens are responsible for a great deal of discontent; so is a neglect of small repairs, which are let go week after week, because they affect only the maid's comfort. Her room, too, is frequently a receptacle for disabled furniture, ragged carpet and demoralized window shades, and her washing accommodations of a character to lead her to prefer the kitchen sink. A very large number of mistresses expect her to keep all her clothes in her trunk.

It occurs to very few women to provide a couple of comfortable chairs in the kitchen, or to consider that a flaring gas jet, high over one's head, is hardly adapted to reading or sewing. The writer knows one woman who forbids her maids to sew in the kitchen, giving as her reason a fear that she may find needles in the food. Propose to her that she should supply tablecloth and napkin to her servant, and she would feel that the pillars of society were tottering to their fall.

Despite the strained condition of the problem, there are people who manage to get and keep servants and secure a fair degree of comfort. The woman who gets along comfortably with her servants, is usually a reasonable person, who does not expect impossibilities. Furthermore, she realizes her own advantages in the way of education and mental discipline and reconciles herself to doing more or less thinking for her servants. She is capable of talking things over with Ellen or Bridget and finding out exactly what would make her work easier. She does not expect a woman with a day's ironing before her to act as a substitute nurse, nor feel that the children are wronged by not being allowed to use the kitchen for a playroom. She is even willing to curtail the small girl's allowance of clean aprons, or dispense with them altogether.

One thing, which very few women seem to realize, is that the most efficient assistance they can render a servant is in relieving her, to some extent, of dishwashing and the care of the table. No department of household work consumes so much time, proportionately, as dishwashing. Not one maid in five hundred washes dishes either easily or systematically. Such refinements as scraping plates, scrubbing dishes off with a brush under the hot water faucet and soaking silver in hot suds are quite beyond her. Unless girls have been trained as waitresses, they make very laborious work indeed of setting a table. Bed making, on the contrary, which always falls to the mistress of one maid, requires far more strength and less skill. The housewife might, with great advantage to everyone, bring her intelligence to the task of washing the breakfast dishes, while her 'maid does the upstairs work. Our great grandmothers took the greatest pleasure in washing their own china, glass and silver. If their descendants followed their example,
Household Economics—Continued

there would be fewer breakages of household treasures.

* * *

We hear a good deal, in these days of the food values of the proteids, which contain the principle which supplies muscular strength. Its amount varies greatly in different articles of food. The highest percentage, 44, is found in skim milk cheese, and in Parmesan, Gruyire, Roquefort, Brie and Dutch, and what is known as full cream cheese, vary from 25 to 35 per cent. Next in proteid value, ranging from 20 to 25 per cent, are dried peas, beans and lentils, whole wheat and cocoa.

Among flesh foods, roast or boiled beef comes first, with 27 percent, lean mutton has 18 percent; calf's liver 20 percent, sheep kidneys 17 percent, and veal 16 percent. Eggs have 14 percent, and the average of fish is 16 percent.

Green vegetables and fruits, containing very little proteid, supply carbo-hydrates, while cereals contain both proteids and carbo-hydrates in high proportions. Flesh foods, deficient in carbo-hydrates, are rich in fats and proteids.

Are any of our readers so hopelessly urban as to use pulley lines? Such persons are advised to buy sash cord, instead of ordinary clothes line. While more expensive, it is very much stronger, and its durability will repay the extra cost.

It is sometimes possible to have a pulley line, extending from a rear second story window to a neighboring tree, upon which to air bedding, or to whiten garments which have become yellowed.

For giving clothes a good color, nothing is quite equal to the bleaching process of the public laundries. It is desirable to have white shirt waists done up at the laundry at least once, in the course of the summer. One treatment will not damage them and will whiten them perceptibly.

* * *

The first warm days of spring ought to see a perceptible change in the bill of fare, a disuse of heavy and rich food and an increase in the quantity of fruits and vegetables consumed. Eggs, in some of the many ways of serving them, and fish may be substituted for meat and are more likely to tempt the appetite, which is often capricious.

This Beautiful Colonial Mantel $12.00

We will ship this artistic, well-built mantel to any address on receipt of price. (Read full description under illustration.)

This design is especially well adapted for the living-room or bedroom, and is only one of the great variety we manufacture. Nothing neater could be desired in any house.

Lorenzen Mantels $2.50 to $250

display individuality in every line. They are made of well-seasoned material, in all woods and finishes, and every detail of manufacture is carefully supervised to assure perfect construction.

We are at all times prepared to furnish designs of Mantels and Fireplaces, in Colonial, Craftsman, Modern Mission and Historic Styles, such as Louis XIV, Louis XV, Louis XVI, Renaissance, Gothic, Rococo, Empire, etc., also a complete line of Tile and Brick Mantels.

Send for Catalogue—Our new Book of Mantels, illustrated with 100 handsome photographic reproductions is now ready. Mailed FREE on request.

CHAS. F. LORENZEN & CO. Inc.

293 NORTH ASHLAND AVENUE, CHICAGO, ILLINOIS
HOUSEHOLD ECONOMICS—Continued

at this season. Salads, too, ought to be a part of every dinner and may very well form the main dish at lunch or supper. Soup may advantageously change its character, and dispense with stock. A puree of canned tomatoes is an excellent spring soup, and may be varied by the addition of grated cheese. Almost any vegetable can be made the foundation of a cream soup.

* * *

In the serving of lettuce, radishes and the like, crispness is an important matter. They should be thoroughly washed, in plenty of water, tied up in a wet napkin or a cheesecloth bag and laid on the ice for a couple of hours.

* * *

A housewife, whose coffee is always delightfully clear, incloses the ground berry in little cheesecloth bags, three inches wide and six inches long. She cuts a yard of five cent cheesecloth into six strips, doubles each and stitches it lengthwise, cuts each strip into six lengths, stitches each across the bottom, and has a month's supply of bags. After the coffee is in the bag, she ties up the end, allowing plenty of room for swelling, and pours the requisite quantity of boiling water on it.

* * *

Tray cloths, often so necessary, to protect or conceal the table cloth, are apt to rumple up. This can be obviated by having them starched rather stiffly, pulled straight, and ironed without folds. They can be kept in good order by being rolled on a broomstick. A worn tablecloth will usually supply four tray cloths which should be finished with inch wide hems; mitred at the corners.

* * *

Importance of Good Ventilation.

Ventilation is much neglected in many homes, though good ventilation is an absolute necessity for perfect health. The writer has visited many homes where he would like to have opened all the windows and doors to let in some pure air. Undoubtedly many of the nervous ailments from which women and children suffer are caused by living in close, stuffy houses, where fresh, wholesome air is almost entirely excluded, owing to the fear of draughts. Breathing never ceases, night or day, and therefore pure air should not be excluded from the living rooms, either by night or day. It is strange that so many people have a dread fear of the night air.
We Absolutely Guarantee Every Kewanee System of Water Supply to Give Satisfaction

When you purchase a Kewanee System of Water Supply, we fully guarantee it to give you a first-class water supply to create sufficient pressure for ample fire protection and to do all we claim for it.

The successful operation of over 7000 Kewanee Systems prove that they accomplish everything we claim for them. We guarantee the Kewanee System of Water Supply to be the most efficient, most economical, most compact, most convenient. We guarantee each Kewanee System to give you a supply of aerated water at all times, delivered at an even temperature during all seasons. We guarantee every Kewanee System, with ordinary care, to last a lifetime.

We guarantee against freezing, leaking, collapsing, constant necessity for expensive repairs and other annoyances common in other systems of water supply. We guarantee that the Kewanee System will not disfigure your property in any way. We guarantee the Kewanee System to be sanitary and absolutely safe.

We guarantee the Kewanee System to be the most efficient, most economical, most compact, most convenient. We guarantee each Kewanee System to give you a supply of aerated water at all times, delivered at an even temperature during all seasons. We guarantee every Kewanee System, with ordinary care, to last a lifetime.

We offer the services of our Engineering Department free of charge in solving any problem of water supply for City and Country Homes, Farms, Public Institutions, Office Buildings, Manufacturing Plants, Villages and Small Cities. Our catalog, 2, tells you why the Kewanee System is so satisfactory and why we are able to make such a broad guarantee.

KEWANEE WATER SUPPLY COMPANY, Drawer B, Kewanee, Illinois.

Buildings illustrated in this advertisement are equipped with The Kewanee System.

PAINT ABC’s

PAINT is a thing the average house owner knows less about than he thinks he does—Yet it is a subject that is vitally important.

Common regard for appearances makes a man want to keep the face of his home bright, clean, cheery and beautiful.

Sound business sense makes him want to get paint that will give the best service—that will fail gradually, leaving a clean, smooth surface for repainting, that is most easily and economically applied, and that, when properly applied, avoids all the common paint faults of cracking, peeling, blistering, etc.

Lowe Brothers
“High Standard” Liquid Paint
Gives Best Results

It is made from the materials that thirty-three years of progressive paint-making have taught us contribute best to the working, wearing, looking qualities of paint. These are ground by the “High Standard” perfected process, finer than other paint—more particles to the gallon—and the mixing is so thorough that each fine particle is covered by a separate film of oil.

“High Standard” Paint is sold in sealed, air-tight cans, always fresh and ready to use with uniform results. Look for “—The Little Blue Flag”—your protection. “Little Blue Flag” Varnish—the best.

Our free booklet, “Paint and Painting”—is full of hard, practical paint common-sense. Let us mail you a copy, free, together with name of your nearest “High Standard” agent.

The Lowe Brothers Company, 450-456 E. Third St., Dayton, O.

Paintmakers, Varnishmakers New York Chicago Kansas City

Lowe Brothers
“High Standard” Liquid Paint
Gives Best Results

“High Standard” Paint is sold in sealed, air-tight cans, always fresh and ready to use with uniform results. Look for “—The Little Blue Flag”—your protection. “Little Blue Flag” Varnish—the best.

Our free booklet, “Paint and Painting”—is full of hard, practical paint common-sense. Let us mail you a copy, free, together with name of your nearest “High Standard” agent.

The Lowe Brothers Company, 450-456 E. Third St., Dayton, O.

Paintmakers, Varnishmakers New York Chicago Kansas City
White seems the most suitable scheme for the decoration of the Easter table, if, indeed, it is not the most satisfactory for any occasion. A certain amount of green is, of course, taken for granted. For a long table, a pretty arrangement is a line of three tall glass vases filled with narcissus or late hyacinths. These are sometimes connected by a trail of smilax or of asparagus fern. Or, if yellow is fancied and the room seems to need lighting up jonquils or daffodils are always delightful. Still another lovely thing is a low basket of violets. This may be arranged by setting a finger bowl into a small basket, covering its top with a circular wire sink drainer and arranging the violets in this, with a circle of leaves or ferns at the edges. Then a bunch of violets at the side of each plate.

The delicacies of the season, at Easter time, are brook trout and shad roe. The trout are usually broiled and served with maitre d’hotel butter, for the fish course at dinner, or as the principal dish at lunch. A newer way is to serve them in aspic jelly, for a cold entree. For this, the fish are cleaned, split, spread with butter and baked covered, in a hot oven, till done but not browned, perhaps fifteen or twenty minutes. While cooking they are to be basted every five minutes with a mixture of a cup of hot water, a tablespoonful of butter, half a teaspoonful of salt and a salt-spoonful of cayenne pepper. When the trout are cooked, fold them together, drain them carefully and cool them. Lay them in a shallow pan and pour over them a jelly, made of a pint of chicken stock, seasoned, and a third of a box of gelatine, straining it through flannel or cheesecloth and letting it get cold but not set, before pouring it on the fish. Set the pan on the ice and, when the jelly is quite firm, turn it out, onto a platter, garnishing it with sprigs of parsley and slices of lemon. If fresh trout are not available, canned ones may be used, and they may be embedded in cucumber jelly.

Shad roe, which is generally as hard as a brick bat, should be parboiled and when cold, dipped in egg and crumb and fried in deep fat. Its proper accompaniment is sauce tartar, or dressed cucumbers.

Shad roe croquettes are also very good. Stir together in a saucepan a tablespoonful of butter and one of flour, and add, stirring till perfectly smooth, a cup of cream. Remove it from the fire and stir in the yolks of two eggs, salt and a little cayenne and cook until it thickens. Boil the roes from two shad gently, for twenty minutes, skin, mash, and stir into the sauce. When the mixture is perfectly cold, make it into croquettes, dip in crumbs, in egg and in crumbs again and fry.

A spring-like decoration, for ices and cakes, is crystallized mint which can be bought at the confectioner’s. Ices served in sherbert glasses are decorated with a spoonful of mint leaves. They are also an improvement to a mould of mint jelly.

Individual dishes of various sorts add very much to the appearance of the table. All sorts of pretty things can be had in German stone ware, which will stand the
heat of the oven. There are the familiar, small, handled saucepans, which caterers use so much, deeper dishes without handles and little flat dishes for eggs, all costing ten cents each. Rather more expensive are those, in a new dark green stone ware, and, at a still higher price, one finds a great variety of pieces, in a light yellowish brown ware, of beautiful surface and texture. The Oriental stores offer a variety of small fire-proof bowls, mostly blue and white, and the familiar fishes, some in blue and white, some red and white. In default of anything else, large clamshells scrubbed clean are a good substitute for the manufactured article. The beauty of these individual, fire-proof dishes is that food is so much hotter in them, than when served from a larger dish.

** * * *

Strawberries in April, in most parts of the country, are among the luxuries. A small quantity goes much further when slightly crushed, sugared and served in pastry cases with whipped cream. Or they may be placed between two circles of rich pastry, for individual shortcakes. The baker will, on request, supply napoleons, without the whipped cream filling, which may be replaced by sugared berries.

Rhubarb, another early fruit, is seldom well cooked. It should be carefully cleaned but not peeled, and cooked only till it is tender. Carefully drained and rolled up in a rich crust, it makes a very good roly-poly pudding, which is better baked than boiled.

Some one suggests brown linen, of rather coarse weave, hemstitched and fringed, for fruit napkins. They do not show stains as badly as white, and can be boiled. Nothing is quite so serviceable as the old-fashioned red and white ones, but they are not exactly lovely. Are the effective red and blue ones still to be had? Anything is better than a white napkin.

Menus for Easter luncheons may be helpful to some one. Those given are comparatively inexpensive. The addition of a roast will convert them into dinners. Or, with slight modification, any one would answer for a company tea.

- Oranges with Maraschino.
- Clam Bouillon.
- Olives.
- Celery.
- Fried Chicken.

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 KEITH'S MAGAZINE 

Table Chat—Continued

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Frisbilla Pattern

Memories of '47

The Sixtieth Anniversary

It is sixty years since the introduction of the brand of silver-plate which has become famous under the trade mark "1847 Rogers Bros."

It is the quality of endurance proven by time which has given to spoons, forks, knives, etc., bearing this mark the title of "Silver Plate that Wears." It is this test of true value together with the remarkable beauty of design that makes "1847 Rogers Bros." ware, to-day, the choice of the majority and the works where it is produced the largest in the world.

Let us send you our Catalogue "D-4."

MERIDEN BRITANNIA CO., Meriden, Conn.
(International Silver Co., Successor)
Table Chat—Continued

Potatoes. Peas.
Lettuce and cheese salad.
Frozen plum pudding.
Coffee.

Strawberries.
Oyster bisque.

Radishes.
Almonds.
Soft shell crabs.
Braised tongue.

Peas.
Carrots in dice.

Tomato salad.

Ice cream.

Nut wafers.

Coffee.

Grape fruit.

Chicken bouillon.

Creamed shad roe.

Tomato salad.

Potatoes. Dressed cucumbers.

Cheese souffle.

Celery.

Maple parfait.

Coffee.

Fruit cocktail.

Green pea soup.

Fried oysters.

Sauce tartare.

Fried potatoes.

Egg and lettuce salad.

Cheese.

Wafers.

Frozen strawberries.

Coffee.


* * *

Some explanations suggest themselves.
In the first menus, the oranges are halved, the pulp taken out, freed from skin and seeds and replaced in the shells, with sugar and a little maraschino. They are set on the ice till very cold. The clam bouillon is made from equal parts of clam liquor and thin cream, thickened with a little flour, seasoned with pepper, salt and butter. The chicken is the breasts and second joints, fried in butter, two chickens serving six people. Frozen plum pudding is a chocolate ice cream flavored with brandy and thick with raisins, currants and candied peel.

In the second menu, the strawberries are served on small plates with the hulls on, and a heap of powdered sugar at the side of the plate. Braised tongue is thick slices cut from the centre of a boiled tongue and heated in a rich brown gravy. The vegetables are cooked first and heated in the sauce. The nut wafers are delicate cookies.
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Table Chat—Continued

made with brown sugar and thick with walnut meats, the ice cream plain vanilla, served in tall glasses.

In the next menu, the shad roe is parboiled, cut in thick slices and heated in a cream sauce. The cheese souffle, a mixture of eggs, bread crumbs and grated cheese, is baked in ramekins. Maple parfait is made by boiling a cup of maple sugar and one of water, until it threads, beating in slowly the whites of five eggs, whipped very stiff, and, when cold, a pint of whipped cream. Pack it in a mould and bury it in ice and salt, for five hours.

In the last menu, the fruit cocktail is a mixture of fruits, highly flavored with rum sweetened and served in small glasses. The frozen strawberries can be made from a can of the preserved fruit, bringing it to the boiling point and adding more sugar. Whipped cream should be served with this ice.

In serving a company meal, a tub of chopped ice and salt, with some sort of a cover, is a great assistance. For this, the cold courses can be kept in perfect condition till needed.

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L. M. L.—Marathon, Wis.—Q.—Will
rain water if stored in a tank in the second
story of a dwelling (temperature 60-70
deg.) spoil, get slimy or unsanitary for
bathing and general washing purposes, etc?
Will stored water as above ruin the wood
work, etc., of the rooms or not?
Ans.—We can advise you that rain water,
if stored in a tank in the second story under
a temperature of 60 to 70 degrees, will
spoil, become stagnant and a growth of
vegetable matter called algae will cling to
the sides of the tank. This water should
not be used, as it will create unsanitary
conditions.

Fresh water is water with plenty of air
in it. Stagnant water is water from which
the air has evaporated. Let water stand
out in an open pond and the air evaporates.
Now, if that water is under a temperature
of 60 to 70 degrees, the conditions become
more unhealthful and repulsive. You have
seen such ponds.

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fresh condition because the circulation of
the water admits a certain amount of air.

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we believe, would be to have an air tight,
steel pneumatic tank located in the cellar.
The water would be pumped into this tank
just the same as it would be pumped into an
overhead tank. Pumping the water, creates
air pressure. This air pressure delivers the
water to the plumbing fixtures. You will
get better service than you can get from the
overhead tanks on account of the high pres-
sure.

The water will be kept in a fresh, useable
condition. It will be uncontaminated and
will be protected from any extremes in
temperature. The weight of the tank will
be on solid ground, instead of on the frame
work of the house.

Chas. V. P., Warren, Pa.—Q.—The
building of plaster houses being new to
most parts of the country, I would like to
have you answer the following questions.
1. Would a studding frame house,
plastered inside and outside, be warm
enough for localities as far north as this,
or as far as Minneapolis. So far as I
know, a plaster exterior except for panel
work in gables, has never been tried in this
locality.
2. What is the composition of this plas-
ter? How many coats are applied and how
thick should it be put on?
3. Would ordinary wood lath be suit-
able for exterior work? Would the plaster
at times absorb enough moisture to swell
the lath and thus crack the plaster?
Ans.—There is no question but that ce-
ment exterior construction will be suffici-
ently warm for any climate which you have
in the state of Pennsylvania. There is a
great deal of this class of work here in
Minneapolis where the climate is much
more severe, even the writer's own home
has cement walls for the exterior finish for
the upper portion, and many houses have it
for the entire structure.

We have answered in previous numbers,
inquiry as to the proper application of ce-
ment for exterior work and refer you to the
November, '06, number of Keith's. Do not
use wood lath for this outside work, but
plaster board or metal lath. Plaster board
is superior for this purpose.

J. W. C., Memphis.—
Q.—Are not concrete houses with solid
walls damp in wet weather, and if so how
can this be remedied? What is the dif-
ference between this kind of a house and
the plaster houses shown in the December
Keith's Magazine? How are the latter
constructed and what is meant by a "rough-
cast" finish?
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Architect's Corner—Continued

Ans.—The outer walls in concrete construction should be provided with air spaces. This is perhaps best accomplished by the use of concrete blocks. These, as made under the best patents are provided with practically continuous horizontal and vertical air spaces.

The plaster exterior construction you refer to is applied over a suitable "foundation" attached to regulation studding as in frame construction. Air space is had in thickness of studding, as in an ordinary frame house.

The "rough-cast" finish is applied over the first cement coat, the scratch coat, and is simply the cement mixture thrown onto the wall with a wire brush, "spattered" on, so to speak, the idea being to do away with the uniformity of a smooth surface or the monotony of lines as in a laid-up wall.

* * *

A. H. G., Estancia.

Q.—Do you know of any one making forms for building cement walls right on the foundation, which will make a hollow wall and which is a good practical outfit? Such forms should not be too cumbersome and should make a good outside appearance.

Ans.—We do not know of anything of this kind for residence work, but have seen advertised forms for warehouse walls, retaining walls and other rough work where the exterior finish was not of importance. Can any reader give us further information?

We are inclined to think that you would find it less expensive and the results far better to operate a concrete block machine, making blocks with the proper air spaces.

Woods for Modern Homes

Among the many questions that face the home-builder is one pertaining to the kind of woods to be used for the interior finish.

In deciding this the cost of the wood and the treatment must be considered. Expensive woods seem to call for expensive treatment, which in a sense is true, yet a cheaper wood can be treated to give great satisfaction. But a mistake is often made in specifying a costly wood and giving it the cheapest possible finish, consisting of no more than a filler coat and one flow of var-
Architect's Corner—Continued

nish not even rubbed down.

Let a man choose plain oak in preference to quartered oak, but insist upon it being scraped and hand-smoothed as well as machine sanded. Then give it a treatment of the best materials consisting of filler, shellac and two coats of varnish all to be well rubbed down with pumice stone and oil even to the shellac and he will be more pleased than if he used the more expensive quartered oak with cheap materials and less labor.

To satisfy yourself on this point simply look at the difference in furniture. There is a great deal more value in a nicely finished table than there is in a table with an ordinary gloss finish.

Get away from a variety of woods. Don’t have each room of a different kind. This is no longer good taste and is more costly. Variation in color can be had by means of finishes.

Before you decide on the interior woodwork have the various manufacturers of wood finishes send samples showing the variety of color. Even if a small charge is made, pay it, for you will be better satisfied in your own selection.

* * *

D. M. P., Canton, Miss.—Q.—Being a subscriber, will you kindly inform me how far the roof should project over the walls of a modern bungalow?

I have reference to the first illustration of a bungalow in your April, 1906, number, and am anxious to know the roof projection. How high should the walls be in a bungalow with a 10 ft. ceiling?

Ans.—It is almost impossible to lay down rules for the class of houses you refer to, for, as you know, there is no style of house in which there is more variation of design, and originality than in a bungalow. The projection of the roof should be considerable, but varies with almost every house; on the other hand, it should not be carried to the extremes that suggest a small boy with a man’s hat on. The bungalow “built on the installment plan” which you refer to, has a roof projection on the side of about 28 inches. As you have not given us much detail in regard to the house you contemplate building it would be impossible to tell you the proper height of the outside walls. We will favor you with an illustration, however. If your bungalow is about 22x30 feet with a ten-foot ceiling and a hip roof, the outside walls (if grade is level) should be about 12 feet from the grade up to underside of roof where the jack rafters cross the outside wall.

If your problem is more than a very simple one we would suggest that the most satisfactory way of developing the plans, (and in most instances the cheapest) would be to send your ideas to a competent architect and have them developed as you suggest. Any of the architects illustrating work in “Keith’s Magazine” would give competent service.

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MINNEAPOLIS, MINN.
THE INDESPENSABLE HOT BED.

By Ida D. Bennett.

No matter the least of the garden's outlay in time and money is represented by the purchase of plants for bedding and for the vegetable garden. This is obligatory if one will have early vegetables and flowers that shall come into bloom early in the season and reach full perfection of growth and bloom before destroyed by the early frosts of autumn.

The price of garden plants such as cabbage, tomato, peppers, cauliflowers, egg-plants and the like is trifling as represented by the dozen, but runs into a considerable figure when the number mounts into the hundreds as it will in a garden of any considerable size, and the cheapest of bedding coleus, salvias, asters and the like will cost from three to five dollars an hundred, a cost which will cover the construction of a hot-bed which will supply plants for any ordinary garden and leave a surplus to sell if one has the commercial spirit, sufficient to pay for the original instalment of the plant. Aside from this utilitarian phase of the subject gardening in a hot-bed is one of the most interesting and enjoyable forms of garden and one that may be undertaken by the delicate woman or invalid as successfully as by the most robust man who aspires to a garden.

The requisites for a successful hot-bed is first a suitable site, one on the south side of a building or tight wall being the most satisfactory as it insures protection from cold north winds and the concentration of all available sunlight. The ground should, if possible slope away from the beds in front or in some other direction which insures good drainage.

The pit for the bed may be of any material available—merely a hole in the ground with even, perpendicular sides, cement or concrete walls or walls of brick or stone, the concrete being the most economical and satisfactory. The size of the excavation will depend upon the sash used. If regular florist's sash are used it will be three by six or six by six according as double or single sash is used. Many prefer, however, to use old window sash which greatly reduces the cost of construction and answers every purpose. In adopting old sash, however, it must be carefully looked over and given any glazing required before placing it in position on the beds.

Where walls of concrete are adopted four inches will make a strong enough wall; brick may be laid lengthwise and laid with with cement.

No floor is required in the pit and the depth should be about four feet. The height of the frame should extend above the ground about one foot in front and six inches higher in the back; this will give sufficient slant to shed water and also to concentrate the greatest amount of sunshine on the bed.

In digging the pit if the soil on the surface is mellow and fine it may be laid to oneside for use in the beds and the sub-soil carted away, but if poor it will be better to procure sufficient good soil for the purpose, a good mellow loam mixed with leaf mould and a little sharp sand being best for the purpose.

When laying the last course of brick or concrete in the pit of masonry a board frame to support the sash should be set in the mortar to insure a tight joint. On this the sash may be hinged or strips for it to run on may be applied.

Where a number of sash are to be used it will be economical to make one long pit answer for all, grooves being made in the masonry at points where the sash meet, for the insertion of cross partitions. This will allow plants requiring different conditions
Horne Grounds—Continued.

SASH COVERED HOT BED.

of heat, air and moisture to be grown in the same beds but under separate sash, and the labor of emptying and filling each year will be greatly reduced as the sash may be removed, the partitions slipped out and the whole bed be open for digging.

In the north it will not be advisable to start the beds before the middle of March and it will often be found quite early enough if it is deferred until the first of April, but should not be delayed much beyond that date. This will give from six weeks to two months time for the plants to grow before time for planting out in the open ground and little is gained by having them too far advanced as a spell of bad weather may delay planting for some days and the plants become crowded and spindly in the beds.

In starting the beds fresh horse manure—that which has accumulated over night, should be procured in sufficient quantities to fill the pits full when thrown in loosely. This should be filled into the corners closely and the whole covered with

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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.

Address "Information Service Dept."

Home Grounds—Continued.

the sash and left to heat, which will begin at once if the manure is fresh and from vigorous, grain fed horses. The manure should contain a liberal amount of straw, leaves or other bedding but not sawdust. This leaf straw or other matter acts as fuel for the fire of the manure and prolongs the heat of the bed far beyond what would result were manure alone used.

If all conditions are favorable heating will begin almost at once and this may be determined by thrusting a fork into the pile for a few moments and removing and feeling of the tines. When the heat has penetrated every part of the mass it should be trampled down as evenly as possible which will reduce the bulk a foot or more. On this well trampled manure place a thin layer of well pulverized manure and over all about four inches of good soil, the surface inch or two of which has been passed through a coal sieve. This should be leveled off and pressed down smoothly. If the soil is too dry it must be watered with a watering pot and warm or better still, hot water and then allowed to dry out so as to be in good working condition, which it will soon do under the combined heat of the manure and sun. Do not handle or work the soil while still wet.

When the soil has attained the right state, mellow and warm, the seed may be sown. Considerable judgment should be brought to bear upon this part of the work as much of the success of the undertaking will be measured right here. Plants which require practically the same conditions should occupy the same section of the hot-bed. Among vegetables cabbages and cauliflowers may be grown together with advantages, neither requiring much heat, while such warmth loving plants as peppers, eggplant and tomatoes should occupy compartments given over to more heat and moisture. Among the flowers the asters and pansies will require about the same temperature as the cabbage, while stocks, salvias and various tender annuals should be given the maximum of heat. Of course the manure will supply the same amount of heat to all parts of the pits, the temperature being regulated by the amount of air admitted, shade supply and other conditions under the control of the operator.
Plant seeds which germinate at about the same time in adjacent pits as far as possible, placing the taller growing varieties at the rear of the beds, and those which do better in shade along the front of the frame which will afford considerable shade. Divide each little plat of seeds from its neighbor by narrow strips of wood sunk in the soil. Label each plat very plainly with name and date of sowing and when known the period of germination.

Sow the finest seeds on the surface of the soil, pressing them down with a flat board of a size to go within the squares and provided with a handle on one side, and cover with a piece of white paper. The next finest may be also sown on the surface and covered lightly with fine sand sifted over them. Coarser seeds may be sown in drills, scattering them as thinly as possible. Pansies, asters, salvias and stocks come under this head. Dahlias may be placed from one-fourth to a half inch apart in the drills and the earth drawn back over them and pressed down. Large seeds like ricinus and hyacinth beans should be sown about twice their depth and seeds of cobaea scan-

dens should be placed in the ground edge-wise and kept quite dry until they have their first true leaves as these seeds are to use the words of a Japanese friend—"Highly corruptible."

When all the seeds have been planted cover the beds with newspaper, close the sash and wait for germination to take place. The period at which the various seeds germinate varies greatly, some, like the stocks and salvias germinating in from three to five days while others require as many weeks. It is, therefore, well to inform oneself as far as possible as to this point and add the number of days to the seed label and so avoid much impatience in looking for the speedy germination of seeds which perhaps require several weeks to appear. It is always well not to disturb the ground where seeds of unknown habits are planted until it is necessary to use the ground for other purposes as one will often secure plants long after all hope has vanished. The Japanese hop is one of the most uncertain of seedlings, sometimes coming up in two or three weeks but more frequently not until the following spring.

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clematis require six weeks or more to germinate while the cobeas, maurandias, beans and ricinus take about fifteen days to appear above ground.

The beds must be watched carefully that they neither become overheated or chilled. The temperature in the closed bed rises very rapidly under the influence of sun and heating material and the sash must be raised a little during the hottest part of the day to allow some of the heat to pass off. Care must be exercised that in opening the sash a draft is not created over the bed; this can be avoided by covering the opening on the windward side. If the weather changes, the sun goes under a cloud or a cold wind arises the sash should be at once closed.

Papers spread over the sash and held in place by screens of netting or lath will temper the glare of the sun gratefully for the young plants and as they advance in size the sash may be raised and screens of lath substituted during the warmer part of the day. Later these too may be replaced by screens of wire netting and the plants hardened off their transplanting into the open ground.

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SPECIAL SUBJECTS IN BUILDING

AND DECORATING

FOLLOWING IS A TABULATED LIST OF PARTICULAR SUBJECTS AND SPECIAL CLASSES OF DESIGNS TREATED IN FORMER NUMBERS OF KEITH'S MAGAZINE

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The Decorative Use of Windows
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The Evolution of a Country House
(An "elastic" house that can "grow")
Porches and Pergolas
A Building Experience in Japan
(Might construction for warm countries)
Modern Hardwood Floors
(With special colored insert)
Some Interesting Interiors
Plaster Houses, special number
Cottages of small cost
(From 3 to 7 in each Magazine)

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KEITH'S MAGAZINE

MINNEAPOLIS, MINN.
NOTES ON PRICES.

Cost Estimate.

We ask our readers to bear in mind that the published cost prices accompanying our descriptions, are not close estimates, but estimated costs furnished by the architects. Also, that conditions frequently add or lessen the cost to a large degree. With a large amount of building under way, contractors will want a good big profit on any additional job they take. Reversed, contractors all looking for work, you get close figures. These facts account for the frequent wide difference in actual cost of building in different localities, from published prices. We likewise publish information concerning the different costs of material and labor throughout the country, as furnished by our correspondents, and request that those who have built or have secured such figures will send them in to Keith's Magazine for publication.

The Following are Prices Sent Us by Correspondents:

**McCook, Nebraska.**

- Dimension Lumber, per (1000-No. 2)...
- Flooring (No. 2 D. & M. Fencing)...
- Sheathing Boards (6-inch D. & M. No. 3)...
- Sidings "C"
- Finish Lumber...
- Shingles, Star A Star...

**Selling, Kansas.**

- Framing Lumber, 2x4 in., 2x6 in., and 2x8 in...
- 2x10 in., and 2x12 in...
- Y. Pine Sheathing, A grade...
- Y. Pine Sheathing, B grade...
- Fencing, A grade...
- Fencing, B grade...
- Shiplap, A grade...
- Shiplap, B grade...
- Flooring, A grade...
- Flooring, B grade...
- Ceiling, clear Y. P., 1/4-inch, A grade...
- Ceiling, clear Y. P., 1/4-inch, B grade...
- Drop Siding, A grade...
- Drop Siding, B grade...
- Y. P. Beveled Siding, 1/4-inch, A grade...
- Y. P. Beveled Siding, 1/4-inch, B grade...
- Redwood Beveled Siding, 1/4-inch...
- Clear Y. P. Finish, 1/4-inch...
- Clear Y. P. Finish, 1/8-inch...
- Y. P. Shingles...
- Prime Cypress Shingles...
- Redwood Shingles...
- Red Cedar Shingles...
- Lime...
- Cement...
- Select Brick...
- Kiln Run Brick...
- Carpenters...
- Laborers...
- Brick and Stone Masons...
- Painters...

---

The Kelsey Fresh Air System of Heating

Means good health and comfort for all the family with the minimum cost for fuel, management and repairs.

Send for booklet which tells why the Kelsey Warm Air Generator

1. Warms fresh air by the best method.
2. Why it warms large volumes of air.
3. How it forces the warm air to distant rooms.
4. Why it is more healthful, efficient and economical than furnaces or steam and hot water systems.
5. Why it is the best possible heater for the small cottage, as well as for the finest city and country residences, churches and schools.

30,000 Sold principally to home owners who have investigated.

Send for booklet Book “Opinions” by I. L. Bragg & Son, contractors.
Fruitvale, Calif.

<table>
<thead>
<tr>
<th>Trade</th>
<th>Per day.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenters</td>
<td>$5.00</td>
</tr>
<tr>
<td>Electricians</td>
<td>$5.00</td>
</tr>
<tr>
<td>Brick Layers</td>
<td>$6.00</td>
</tr>
<tr>
<td>Cement Workers</td>
<td>$5.00</td>
</tr>
<tr>
<td>Mill Men</td>
<td>average 4.50</td>
</tr>
<tr>
<td>Plasterers</td>
<td>$5.00</td>
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<tr>
<td>Plumbers</td>
<td>$5.00</td>
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<tr>
<td>Painters</td>
<td>$4.00</td>
</tr>
<tr>
<td>Teamsters</td>
<td>average 4.00</td>
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<tr>
<td>Steam Fitters</td>
<td>$5.00</td>
</tr>
<tr>
<td>Hod Carriers</td>
<td>$5.00</td>
</tr>
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</table>

As reported for Keith's by Tom Bell, Contractor.

Roland Park, Md.

<table>
<thead>
<tr>
<th>Lumber Type</th>
<th>Per M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing Lumber, Va. Pine</td>
<td>$22.50 $25.00</td>
</tr>
<tr>
<td>Framing Lumber, Ga. Pine</td>
<td>40.00 30.00</td>
</tr>
<tr>
<td>Weather Boarding, No. 1 Cypress</td>
<td>$50.00</td>
</tr>
<tr>
<td>Weather Boarding, No. 1 Yellow Pine</td>
<td>40.00</td>
</tr>
<tr>
<td>3½x2½ Flooring, No. 1 Yellow Pine</td>
<td>40.00</td>
</tr>
<tr>
<td>6x20 Shingles, No. 1 Cypress hearts, M.</td>
<td>12.50</td>
</tr>
<tr>
<td>6x16 Shingles, No. 2</td>
<td>9.00</td>
</tr>
<tr>
<td>Clear Cypress Finish</td>
<td>60.00</td>
</tr>
<tr>
<td>Clear Yellow Pine and Poplar</td>
<td>35.00 to 40.00</td>
</tr>
</tbody>
</table>

All trades work 8 hours per day, with 1½ time for overtime. Building has never been better to my knowledge, and there is plenty of work here.

Any information in regard to the cost of building material or wages in this section at any future time, I will furnish you if you desire it. I think a great deal of your magazine.

Columbia, Mo.

<table>
<thead>
<tr>
<th>Lumber Type</th>
<th>Per M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension lumber, Yellow Pine, per M</td>
<td>$27.50</td>
</tr>
<tr>
<td>Maple flooring, 2½ in. face, 3 in. wide per M</td>
<td>55.00</td>
</tr>
<tr>
<td>Flat Sawed White Oak, interior finish per M</td>
<td>80.00</td>
</tr>
<tr>
<td>Quarter-sawed, same per M</td>
<td>85.00</td>
</tr>
</tbody>
</table>

All Shingles, thick, per M | $4.15 |

Shingles, thinner grade per M | 3.60 |

Siding, A spruce per M | 3.00 |

Siding, Yellow Pine per M | 24.00 |

Siding, Red Wood per M | 30.00 |

Finish lumber Yellow Pine per M | 50.00 |

Finish lumber, Spruce or Cypress per M | 60.00 |

Finish lumber, Red Birch per M | 72.00 |

Yellow Pine flooring, A-1 matched, vertical sawed per M | 45.00 |

Finish lumber poplar per M | 60.00 |

Rubble stone work, per perch | 2.50 |

Rubble stone work, brick laid | 9.00 |

Excavating per cu. yd | 0.30 |

Masons, per day | 7.00 |

Carpenters, per day | $2.75 to 3.00 |

Common labor, per day | 2.00 |

Lathing and plastering, two coats, per yard | 0.32 |

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Every country home, every farm-house may be just as comfortable, and with less fuel and labor than stoves require.

We have made good furnaces for thirty-three years, and we not only offer a heater embodying the very best in design and construction, but we offer it Direct from Maker to User.

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We Guarantee Success or No Pay

We risk all, you risk nothing. Isn't it worth trying? Our heaters are suited to all needs, from the humblest cottage to the largest residence, church or school. Our free 40-page booklet, explains fully the principles of furnace heating, and how to apply them successfully to any building.

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Save Half Your Cigar Money

AND GET A BETTER SMOKE

Envelopes addressed to us as “Manufacturers of Decent Cigars”, “Makers of Cigars Fit For Gentlemen”, and a letter before us from a prominent physician, in the South, runs: “I consider it one of the red letter days of my life, on which I sent my first dollar for one of your sample packages.” These are proofs—visible, material and tangible proofs—the best proofs to show that the “direct to you” plan, we originated, is appreciated—it shows what is thought of us and of our methods. It’s “caught on” and what’s more, it will continue to appeal to every smoker who takes a moment to think what this “direct to you” plan means to him.

The value of every cigar we ship can not be bought at less than twice our price, retail. The price to you is half the price created by jobbers', salesman’s and retailers’ profits and expenses, added to manufacturing cost.

DON'T SEND MONEY NOW

Just ask for our catalog—"ROLLED REVERIES"—that tells you all about it—about our broadest of guarantees—about each of the cigars in our big list—about an ideal, clean, sanitary factory—about the freedom from flavor or dope, and how you save 50% of ordinary retail prices. Then, select your trial order, not blindly, but with positive assurance of the best results to your pleasure and the sure saving of HALF YOUR CIGAR MONEY.

Do it to-day—NOW. It costs you two cents and will bring you the greatest satisfaction. Write the old reliable

JOHN B. ROGERS & CO. The Pioneers, 237 Jarvis St., Binghamton, N. Y.
Some Interesting Cement Facts.

“No product in the world has a wider application to useful purposes than Portland cement. Men who know its worth realize that it is the only absolutely fireproof building material in the world. In this respect, brick, terra cotta, and granite all suffer markedly by comparison with it.

“It is the ideal building material in bridge construction, whether for strength, form, beauty, or durability. There has never been found a paving material on earth equal to Portland cement concrete, whether for sidewalks, street-beds or roadways. In house building there is hardly an article used that cannot be made stronger and more durable out of Portland cement than out of any other known material.

“Recently there has been so marvelous a growth in the manufacture of Portland cement, and its uses in great works of construction have multiplied so rapidly, that a little digest of information about it will doubtless prove acceptable here.

“Egypt was probably the home of the early cement makers, 4,000 years ago. But their art perished and history records nothing important either in the manufacture or use of cement for fully 2,000 years. The Romans then discovered a process of manufacturing a hydraulic cement, the result was the so-called Roman cement, intermediate between Portland and natural cement of today, and for which they found very extensive use in the building of walls, vaults, roadbeds and the like. But they, like the Egyptians, were the sole possessors of the art, and seem to have found no imitators up to the time of Col. John Smeaton, in 1756.

“Smeaton was a celebrated English engineer who discovered that a certain limestone containing a percentage of clay produced on being calcined a cement which he termed ‘Improved Hydraulic Lime.’ Zealous in his purpose, Smeaton risked his reputation as an engineer and showed his faith in his material by building with it the famous Eddystone Lighthouse, the foundations of which stand today as a monument not only to the excellence of his cement, but to his ability and courage as an engineer. The work was completed in 1759, and has withstood the fiercest storms for a century and a half unharmed, and to the present time. It was with this discovery that the real history of modern cement manufacturing commenced.

“A third of a century later a Mr. Parker, of London, patented a process for manufacturing Roman cement that produced a product about the grade of the present American natural cement. Several other patents were taken out previous to 1813, when a French professor at Paris discovered the fundamental chemical action in the manufacture of Portland cement, namely, that in the burning the silica of the clay unites with the lime and produces a product with hydraulic properties.

“Following this line of investigation, Joseph Aspdin, an Englishman, manufactured in 1824 a cement which he called Port-
land cement, since the blocks molded from it so closely resembled building stone of that name quarried at Portland on the Cornish coast. For twenty-five years the new material was put to frequent tests, and the unqualified endorsement it received forced its recognition by English engineers, who finally accepted it as a reliable building material.

"In 1846 the first cement mill was established in France near Boulogne, and in 1855 the first in Germany, at Stettin. About the same time Belgium, Austria and Russia also took up the manufacture of Portland cement. England, the first in the field, maintained the lead for twenty-five years, but the continental factories being under more progressive management soon forged ahead, and the German product became the standard for the world.

"In 1872, David Saylor built the first American cement factory in the Lehigh Valley, Pennsylvania, and its product soon became a worthy competitor of foreign cements, demanding for itself recognition just as its English predecessor had done. Mr. Saylor, who was a man of energy and ability, made up his mind in the early seventies that he could make Portland cement in this country, and his first experiments were most interesting. By sheer force of his native ability, Mr. Saylor studied out the problem and was successful. Mr. Saylor's work was materially aided by Mr. John W. Eckert, a graduate of the Lehigh University, who became first the chemist and afterward the superintendent of the Coplay Cement Company.

Plans of this Home $15.00.

This includes complete working drawings and specifications, prepaid. This house has furnace, concrete foundation, gas and electric lights, plumbing, complete. Cost to erect from $2,500 to $3,000. Send 50c for our portfolio of photographs and plans of sensible, practical, artistic Homes. They have no superiors. Send stamp for our sketch offer.

KKAPP & WEST, Architects, Colman Bldg., Seattle, Wash.

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CRESTINGS and FINIALS,
made of galvanized steel, will give your roof an everlasting "finishing touch."

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Manufacturers of the Willis Hip Shingles.
In his latest book, Mr. Harold Bindloss has repeated his former success in "Alton of Somasco." "The Cattle Baron's Daughter" shows us the conditions prevailing in the great Western cattle country at the time the homesteaders were pouring in and the lands once ruled by cattle barons were being preempted and put under cultivation.

The central figure, Larry Grant, himself a young cattle baron, champions the cause of the homesteaders as he sees the inevitable success of their cause and the ultimate transformation of great grazing tracts into prosperous farms. In this action he incurs the fierce enmity of his former friends, among whom is the father of the girl he loves.

The cattle barons unite in underhand methods to drive out the homesteaders and to get rid of Grant, and these struggles for supremacy form a basis for a story of intense interest.

Running through it all is the love story. The girl is at first loyal to her father, is turned against him by his participation in unfair methods against Grant whom she loves. Her sense of justice together with her love at last overcome her paternal regard and respect and she leaves all for the man she loves.

The author is especially strong in his word-painting of the scenes and life of the plains and the book has that stimulating outdoor flavor that is so delightful and so rare in later day writing. Publs., Fred'k A. Stokes Co., New York. Price, $1.50

MODERN PLUMBING ILLUSTRATED.
By R. M. Starbuck.
This is a standard work on modern high grade plumbing and covers the whole range of work from the simplest house plumbing to the most complicated work in large buildings and factories. Also covering the questions of sewage disposal and systems for country places.

Each chapter takes up a particular subject, and treats of it in full page drawings which are described in detail.

Some of the chapter titles are as follows: Connections for Bath Rooms, Lavatories, Main Trap and Fresh Air Inlet, Local Venting, Plumbing for a Cottage House, Construction of Cesspools.

The book will be found valuable to the plumber in his actual work, giving special details as to size and weight of pipes required under different conditions. To the architect it will be found suggestive and aid in preparing plans and directing and superintending work; to the owner in aiding him to secure the best and simplest system for his buildings; to the plumbing inspector the many practical features it presents will remind him of the methods to be pursued to secure safe and healthy sanitary conditions, and to the plumbers practical methods of executing the work.

The book represents, in a word, the latest and best modern practice, and should be in the hands of every architect, sanitary engineer and plumber who wishes to keep himself up-to-date on this important feature of construction.

Norman W. Henley Co. Pub., N. Y.

What's $20 EXTRA for a GOOD Furnace?
NEXT MONTH

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THE RE-CONSTRUCTION OF A COUNTRY HOME
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THE MAKING OF A HOME
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BULBS FOR SUMMER BLOOMING
   By Miss Bennett.

DUPLEX HOUSES AND FLATS

THE KEITH MAGAZINE
   MINNEAPOLIS

15¢
"Home Comforts on the Summer Porch"
Oriol Windows.

By Carlos de Gouex.

O strictly define or describe an oriol, or oriel window, as the term is applied today, would be a difficult undertaking. It is a name applied to a large and varied class of special ornamental windows used for a number of reasons, which will be described, but which serve the practical purposes of bay windows, being at the same time something more, also something less. The principal distinction between a bay and an oriol is that a bay, properly speaking, extends clear down the wall and has its foundation on the ground, while an oriol is supported on brackets or corbels.

For the origin of the oriol we must go back to the earliest days of Gothic architecture. Here we find it used, not as an
ornament, but serving a practical use as an artifice of war. They were usually located far up on the battlements, sometimes projecting from the very parapet itself. They were made to admit one man who standing in it could, entirely protected, look up and down the wall through the narrow apertures in the ancient oriel (spelled then, oryel).

Ancient fortresses, as is commonly supposed, were not at all times the object of contending foes, and during brief periods of national and domestic amiability the arts of war gave way to the arts of peace. During one of those brief periods a sculptor took possession of a rough rock oriel and carved it into a thing of beauty. In this manner they come down to us through

as a location for the piano, bookcase or buffet. By placing it high the articles of furniture named can easily stand under it, making, in our opinion, a pretty group which of course must also include a sword palm or a few nicknacks which a tasteful housekeeper knows best how to arrange to add to the more material beauty. The oriel, I find, often affords a splendid opportunity to display a bit of art glass and nowhere does it show off, both inside and out, more advantageously. If this is the trend of your mind, however, you are beseeched to buy art glass by all means, that gives a true interpretation to the name. There is no form of decoration that will more enhance the beauty of a room more easily and more certainly than decoration of art glass, or that which too often passes for it. The principal thing to guard against in art glass is the tendency to display too brilliant colors. The savage or an infant grabs at the striking notes on the color chart, but the more refined, cultured and enlightened we become the more we admire the finer shad-

the Tudor and Elizabethan styles, having today the same essential elements that prompted their use during the reign of the "Virgin Queen," as outlooks and as ornaments on the wall, to which we have added a third element, that of admitting an abundance of light to the interior.

In the present article we deal with the living generation of the progeny of this ancient temerity. As an architect, the writer finds that one of the principal uses of the oriel is to break up the monotony of an otherwise bald appearing wall space. Or, as is often the case, to admit light and air on the side of a room which is indispensable
ings, the half tones and even the quarter tones of the chromatic scale. Oriols are used to a large extent, though not entirely, on cottage homes. They seem to lend themselves readily to the home spirit that pervades a cottage. One illustration shows a broad brick chimney flanked on either side by five foot oriols that are corbeled out into graceful bays, above which is a wall of dimentioned shingles. The combination bespeaks a cottage home without further detail. The sills of these oriols are about four feet from the floor. Aside from their picturesque appearance, the principal objects for their existence in this instance are that they admit light and air from the south side of the house, which because of its location in close proximity to its neighbor would afford a poor outlook through ordinary windows. Oriol windows as a rule are casement windows, but this rule is variable as is shown in a group of modern oriols which are virtually bays on brackets extending from the floor to ceiling. Each with two large sliding windows in the center and “peek-a-boo” windows on the ends. This house is abundant in artistic window effects and grouping. The wall composition is also splendid; the exterior being light gray rough cast cement with a red brick border at the base resting on a blue limestone foundation. The oriols are, however, the prominent and most striking features of the house.

Back to Your Mountain Home.

By H. Edw. Walker.

As the buds begin to swell, and the morning air is laden with odors of the coming spring, the mind grows reminiscent and thoughts are awakened which have lain dormant while the home of “Keith’s” has been in the grip of winter. Days spent in clear air and bright sunshine, with ragnet, rod, and gun, are lived over again during the morning walk down town and mental
promises are made of what good times are to be forthcoming when the season is here in earnest.

Vacation time seems suddenly, not so far away, and the rustic lodge surrounded by lofty pine and cedar issues its call from the wild. Its counterpart in tangible form is illustrated herewith in a low, rambling picturesque habitation built largely of materials found close at hand, surrounded by the natural forest, an ideal summer home in the Adirondacks. Poles of various sizes are used wherever possible, both inside and out. Note the split saplings which are used for battens in the upper story to cover the joints between the boards. The shingles have been left to weather as in such surroundings nature's stains are best employed and are guaranteed by "the manufacturer." Simplicity seems to have been the keynote here and methods of construction only those which naturally suggest themselves. Inside, poles are used for every purpose of support and finish. The stud-
ding, ceiling joists, and window trim are all fashioned from them, but the most charming feature of all and that which really gives character to the interior, is the screen and lattice effects in birch with the bark on. The lines of the lattice are in harmony with the lead lines of the windows. The stair with its newels and rail of birch has a luster in the photograph like a high polish. The fireplace in the living room is a splendid example of what can be done with rugged materials under the direction of an artistic mind. No photograph can convey the beauty of the stonework with its varying tones of harmonious color, in red brown and green mingled with the sheen of glistening granite.

The recessed panel forming the shelf gives added character to the breast and the strong wooden lintel below supporting the arch, reminds one of a similar motive in the brick mantel in Shakespeare's kitchen.

The sturdy framings of the poles above is a fitting compliment of the strength displayed in the fireplace design. The furnishings are the homey kind, such as look best after a day spent outdoors in vigorous health-giving exercise. It is truly a summer home full of useful suggestions for the months to come.

Two other log-houses are shown, also in the Adirondacks, a little too symmetrical perhaps but still very pleasing.
LAST month I told you something of our plans and desires as regarded the interior arrangement, but really took you no further than the front door in actual description of our home as built.

You think we have a good many outside doors. Yes, we have. One must surely have front and back doors, but with a large family a side entrance is so convenient. Here the boys may run in, leave umbrellas and coats in the roomy vestibule, and go directly to the little lavatory (just under the stair landing) to wash and "tidy up a bit." If the furnace needs attention, here too is the door leading to the basement and another to the kitchen and hall. It is really an ideal arrangement as you can see by the plan. The "French windows," or long glass doors, from the dining-room to the south porch, we only use in warm weather; we could not do without them. When I was a child, the front entrance of a house always meant something to me. If the approach was narrow and the door small it seemed to say "we don't want you," but if wide and ample, it meant more generous hospitality. This is at least worth thinking about.

Entering from the west porch, we find ourselves in the open hall, from which we
From Living Room, Across Hall to Reception Room.

"...will go directly to the living-room. Let us try to imagine that many weeks have elapsed since we were enjoying the cool outside. It is now well into November and the Thanksgiving season is upon us. The young folks have gathered huge bunches of belated oak leaves and long scraggly branches of green pine, and have placed them on either side and above the mantel shelf, and over the end bookcases, with, here and there, yellow paper pumpkins to give a touch of color and to remind one of the gathered harvest.

A blazing wood-fire is snapping and crackling upon the hearth and the long seats on either side, with their green denim-covered cushions, look very inviting. You like the open fire in the end of the room do you, so do I. Most of my friends have the fireplace in the middle of the living-room but I determined that ours should be in the far end, away from open doors and drafts. You ask me about the bricks for the chimney-facing. They are indeed dark and rich looking against the old English oak trimmings.

The bricks are called "Oriental," the sides "wire-cut," which makes the rough appearance. The hearth bricks are the same, only we used the large surface for the floor, which must of course be smooth.

We think this a pretty picture of the "Ingle-nook."

Did you ask if the long seats would open? Yes, indeed! I don't know what we would do without these big boxes, that is what they really are, they are filled with extra magazines, books or they are divided into two parts each, so as to be more easily handled. The wide window-sill of the little bay on the south is so pretty for a pot of flowers or ferns for a few books, a pin tray, and quite convenient for a lazy elbow to rest upon as you sit looking down the street.

This large plate-glass window, 48x52 inches is stationary, and just here, to accommodate a large leather-covered "sofa" we pushed the outer wall upon the porch about one foot by 5½ ft. long. It really adds to the appearance of the room and prevents this piece of furniture from taking up too much space. We call this our "aftermath."

The living-room is only 22½x14½ in the clear—though it does look larger—on account of the 8 ft. opening into the dining-room. I think, generally the opening between these two rooms would have been
in the centre of the wall and I was strongly urged to make it so, but, as I said before, we want made places and right places for each piece of furniture, and here, by the big window, must stand the piano, and indeed I like it better anyway, because it is odd. The dining-room, I smile, but am not at all surprised at your exclamation; everyone exclaims upon entering this room. It is not so large, only 18x12½ feet, but the large opening to the living-room and the eight pretty windows, in two groups, four on the east and four on the south, does make it a very charming room. You see this room extends four feet beyond the rest of the house to give it the length, and also makes a place for the long French windows, or glass doors, to the south porch. This summer we are planning to screen this porch, so we can put the table out there when we wish, and we can then be like James Whitcomb Riley's little boy who "et out on the porch."

From the north end of the dining-room we pass through a double-swing door to what we call the serving-pantry. There enclosed shelves give plenty of room for the china and glass, we had them raised one foot above the table shelf so as to make ample room in serving, below these are the drawers for table linen. The shelf, too, under the window, with its cupboard below, is most convenient. On the other side of the room we have a long wooden rod for dish towels with a shelf above it. This door, leading to the kitchen, you see swings only one way and the long sink-table is close at hand, only a step from the serving-pantry table. The sink is unusually large, being 22x36 in. and the connecting tables are 24½ in. by 3 ft. each.

Under the first one are enclosed shelves for pots and pans and under the other one large drawer divided into sections.

I was careful to have the sink about two inches higher than is the custom and
the windows over it are 14 in. higher than the tables, this gives plenty of light and makes us a little more secluded.

The gas range sits in a niche made for it and beyond, is the small, but complete, kitchen pantry, with its chest of drawers, enclosed shelves, flour bins, two of them, etc. To the north is the vestibule for the ice-box, with a small sliding door for the milk-man and grocery boy to slip things in, without disturbing us to answer the bell.

The outer door opens upon a small covered porch which we found a cool and pleasant place for shelling peas and hulling berries, on hot days. Just beyond the kitchen pantry is the door leading to the basement and side entry. On the other side is the passage to the front hall; here are two closets, one for coats and one for extra table-leaves, brooms, etc., also the little door to clothes-chute and the back stairs. Another niche here has hooks for kitchen aprons and the ironing-board.

There is one advantage in a square house, the rooms are so close together, 'tis only a step from kitchen to front door or dining-room, to the basement or the side door.

One room on the main floor we have neglected altogether; it is this one at the left as we enter the front door. We call it the reception-room, just for a chance caller, or, if the living-room is full of young folks, where one may sit apart, a bit.

And a pretty room it is too, with its four windows in the corner. I find corner windows are becoming quite popular.
and really they are not only pretty, but, grouped together thus, leave more wall space for furniture.

I am glad you like our wall coverings. The decorators protested vigorously when I said I must have all the first floor rooms (except the kitchen) and the stair-landing or den, furnished alike, with burlap, in the natural color, but when it was completed I think they were quite surprised and pleased themselves.

It makes a very pleasing background for pictures.

The walls are first "sized" as well as the back of the burlap, which, by the way, only reaches to the trim, you see; it puts on very smooth and to good advantage.

You notice we have hardwood "trim" (oak) everywhere except on the third floor. It is perfectly plain and 4 in. wide and runs in a straight line all around the rooms, above doors and windows alike. We used the "dead lock" finish and the "old English" stain.

Above the trim and the ceiling is what they call a sand-finish, which has a soft, hazy gray-brown tone and harmonizes beautifully with the dark wood and gray-brown burlap.

On the floors we used the "floor satin" and like it very much. They are several shades lighter than the 'trim' but dark enough to set off the rugs, are smooth and "satiny" looking and do not slip as the wax finish does. As to the wear, of course I am not able to judge yet, but should think fully as satisfactory as the other.

How I did want a wide stairway, but one cannot have everything in a moderate sized house, so we cut it down to 3½ ft. for the first half, to the landing or "den," while the upper part of flight, as well as the back stairs and the few steps leading down to the lavatory and side door are some less than 3 ft.

The stair landing is quite a room; here we have a large desk with the telephone, a couch, and book-case. A small opening over the basement stairs we cased in, making shelves for reference books, the upper one is movable and we find it very handy. We have followed the corner window scheme throughout the second floor and all are casement windows, hinged so as to open in. They are easy to clean and vastly superior for ventilation.

From the upper hall we have a closet for extra coats and brooms and one for linen, with drawers.

The main bathroom is large and as you see, has a medicine closet and a long tow-
el closet with five shelves. The southwest corner room is sacred to the "man of wrath" with its fireplace and private bath room, where he can wash and shave, with no one to molest.

Our Mary's room is on the northeast and has a door (with a Dutch window in it) opening upon a "perfect love of a balcony," 'tis small, but so convenient for shaking rugs and brushing clothes, she shares it with us all, surely no house is complete without a balcony from the second floor. The southeast room has two fine closets and eight windows, an ideal room for light and air.

The other two rooms are small, but light and pleasant.

On the third floor are three pretty rooms with closets and store rooms. From the large square hall is a small lavatory which serves for this floor. We are surprised to find how cool and comfortable this floor is in summer.

The clothes-chute is made of galvanized iron (a fire caution) and reaches from third floor to basement.

In the basement is the laundry with its stationary tubs and laundry stove; opening from this is a small vegetable cellar.

There are two large cisterns with a filter in one, and a force pump carries the soft water to all the hot-water pipes. The furnace heats the water in winter and the laundry stove in summer. The heating was indeed a serious question and one upon which we pondered long and thoughtfully, finally deciding upon hot air, with hot water attachment; this however, we have not found necessary to use so far. With this heating process, one is sure of fresh air being forced, constantly, through the house and it has proven quite satisfactory. We take great pride in our windows, which our friends call artistic. It was difficult to get the design for the leaded glass simple enough to suit us, but at last succeeded. We have kept as much as possible to straight lines, putting in the conventional lily in soft green and the effect is good. We found this simple pattern just about as cheap as plate glass and even more attractive.

Taking it altogether there are not many things we would change. I am indeed surprised that the plans worked out so beautifully. The workmen all declare there is not a foot of waste space, and that is as it should be.

How good of you to take so much interest in all this.

Indeed it is as you say, "a woman's home should be as it were, a part of herself, where her personality is always felt and where she herself feels in harmony and at home. Where she finds her greatest joy and comfort, with ever a sense of the fitness of her surroundings and more than all, a place she loves and where she can find rest and the satisfaction she derives and needs, it should be to her, the one place on earth—home." But whenever or however we are situated, I believe Spenser is right when he says "The noblest mind the best contentment hath."
How We Furnished Our Bungalow.

By Ora W. Alford.

"Built at a cost of only $350.00.

Seeing a picture of our bungalow in your April, 1906, issue it has occurred to me your readers might like to know how we are furnished and how we manage to live happily and entertain our friends in three rooms.

The sunny living room which extends the full width of the house, which fronts south has built-in bookshelves on either side of the front windows and built-in cupboards on either side of the east and west casement windows, thus insuring an abundance of "places to put things." Window seats are built at either front window with a shelf below, a front is hinged on just like a table leaf, when this is up behold our guest bed. It is the rule of our house that a guest must make his bed, put the pad and covers on the shelf and let down the leaf. In the cupboard he will find a mirror on the door and toilet articles on the shelves. A screen makes a complete bedroom on a moment's notice.

A huge fireplace of red pressed brick is just opposite the entrance. This placing of door and fireplace naturally divides the room into sitting-room on the east and dining room on the west. The cupboard near the kitchen door is a china closet. The deep casement window sills are abloom with gay flowers. There is very little wall space to panel so a four-inch strip was used 'neath the casement windows and on either side of the fireplace. The mantle shelf extends from bedroom door to kitchen door. The beamed ceiling is made of the cross beams smoothed and stained brown like the rest of the woodwork. Pine takes the stain beautifully, better than oak, we think. The rough walls are left their natural gray. The floors of carefully selected quarter-sawed Texas pine are finished as light as possible. Any one who
eration had to be removed from the chairs, it took me just a week to do it. And a word of advice:—The paint remover on the market may do what it professes to do for one coat of paint, but for old wood a piece of glass or an old knife to scrape, then a can of lye, a scrub broom and the bath tub of hot water are the only successful agencies. Even then if you can find some one else to do it and guarantee a clean surface, better let the other fellow do it.

We invested in a table desk, a reading table and two rockers of craftsman design in brown. The other chairs are wicker stained green. This is our all-the-year-home so we have oriental rugs, some good pictures and many books.

The bedroom trim is stained gray, the floor a gray green with gray rag rug with border of pinkish hue. The walls are left their natural gray but with a very smooth finish, a border around doors and windows of a climbing rose is cut from an inexpensive paper. The cottage furniture is stained gray. On the window seat are pink and green pillows.

The large closet with drawers next the floor makes a convenient place for boxes and shoes on the top and brings the hanging garments above the dust, which will accumulate on the floor. Above the hooks are shelves to the ceiling. The closet also contains a lavatory. The kitchen is small but so well arranged that a corner is saved for the laundress. Built in cupboards neath the sink drain boards and above the sink bring most of the kitchen work to one corner.

The cost, yes $350 exclusive of plumbing. The owner did all interior staining and most of the shelf and cupboard work.

The living room permits many a gay party, but best of all it provides a commodious home for the owner.
AMERICAN architecture in colonial days was good in design as it was mainly copied from the best work of England and France. Then for a period of a hundred years, it was most commonplace, a marked revival in art and architecture being manifest after the Centennial Exposition in 1876.

During the past thirteen years, a great improvement has been noted: First in the design of the building itself; next in the situation and surroundings of the building; and most recently, in the materials used.

The Congressional Library has a worldwide reputation for its beauty, and the mosaic pictures in the corridors and reading rooms go far to make the perfect whole. The State Capitol Building, at Harrisburg, Pennsylvania, has had much advertising because of its cost, but justice has not been given it for artistic and rich design.

The illustration gives no idea of the coloring but it shows the design which is worked out in marble. It shows a section of the dome in the new Harrisburg Capitol, this being erected by Mr. Joseph M. Huston, architect.

The cornices in which the cut glass mosaics are used are 3½ feet high, and 320 feet long in the upper and 432 feet long in the lower one. The field in the same was made of light gold and the letters, 3 feet high, were worked out in ultramarine blue, which colors blended beautifully with the mural decorations throughout the dome.

The mottoes placed were as follows, viz.:
Top—"There may be room there for such a holy experiment, as the nations need a precedent."
Bottom—"My God will make it the seed of a nation, that an example may be set up to the nations, that we may do the thing that is truly wise and just."
Theo. C. Link, Arch't., St. Louis.

LADIES' WAITING-ROOM. WABASH PASSENGER STATION, PITTSBURG, PA.

KITCHEN WALL.
Glass mosaics are more brilliant than marble, and can, of course, be had in a greater variety of colors. In addition to this, they are less expensive than marble. They are, however, more difficult to set securely, and require especially skilled workmen. Most of these men are Italians, and are the descendants of families who have done such work for generations.

The use of mosaics in residences and places where it is not convenient to secure these mosaic workers is now possible by the plan recently devised by the Assembled Tile Company. The accepted design is slabbed to fit the space to be occupied, and any good mason can then cement it in place.

The illustrations show the glass mosaic as placed on the walls of the Pittsburgh Wabash Station, on a kitchen wall, around a window, and in a fireplace.

The fireplace with hood is worthy of special comment, being designed by Carpenter & Crocker, architects, of Pittsburgh, Pa., and was used in a room where the same color effect was carried out on the walls and ceilings. The colors in the field were dark amber, the vines, leaves and fruit being worked out as near to the natural shades as it was possible to get them. The space it filled in was 6 ft., 6 in. by 5 ft., 6 in.

NOTE—Illustrations by courtesy of Edwin A. Jackson & Bros., New York.
THE little design shown above might readily be used as either a small country club or summer cottage home. The principal feature to the interior arrangement being a large living room across the entire width of the cottage with the customary open fireplace in the center. Plenty of porch room for the evening gathering of the family or club members. Should it be desired to turn this little plan into a home, the room shown as cafe would naturally be used as the dining room or possibly as an extra bed room. Two chambers are obtained on the upper floor in the gables.

The exterior treatment is exceedingly rustic, the intention being to use field stone, when available, for the first story with shingled roof and shingles in the front and rear gables. The diamond panes in the upper sash and in the small windows are all in keeping with the general cottage effect. Such a building should be very inexpensive to build, being but 23 ft. wide by 30 long. No basement, heating or plumbing. Interior finished in fir, weather stain. Second floor in pine, natural. Estimated cost $1,600.
Cement Blocks and Plaster.

The next house among our designs this month shows a happy combination of cement blocks for the first story with cement plaster and exposed beams for the upper story.

The open terrace is used as a change from the usual porch and a shelter over the front entrance is provided by the projecting balcony above.

A concrete foundation is used, with cement blocks above grade level. Basement is cemented and has a hot water heating plant and the usual laundry facilities, etc.

To return to the exterior, we have an attractive color scheme in gray and green. All cement work is in its natural color. The wood trim and beaming is rough finish and stained a dark green. The roof is of red burnt clay tile and the chimney of red brick. The bay windows on both sides of the house are given the plaster exterior finish.

The house is large enough to permit of a very pleasing arrangement of rooms as may be seen by the plans.

A novel placing of the den and the inglenook above it is an attractive and ornamental feature of the general plan. The toilet room off the back hallway is a convenient adjunct and, in fact, the whole rear portion of the house is arranged for utility and convenience. Two porches open off the kitchen, one serving as a rear entrance and the other is enclosed with lattice-work as a place for the refrigerator, as well as garden tools, hose, and other apparatus which is more often put to use if near at hand.

Special features of the second floor plan are the sewing room and large linen closet. The former is really a part of the back hall and off it opens an upper balcony, always a highly prized adjunct for the good housekeeper. The finish upstairs is all Georgia pine as is also the kitchen and pantry. Principal rooms of lower floor are finished in quarter sawed oak and stained birch. The house is 39 by 53 feet exclusive of the terrace. Height of first story 9½ feet, second story 9 feet. Estimated cost $10,000.
“A More Compact Cottage will be Hard to Find”
MORE compact and at the same time a more roomy house for its size will be hard to find. Its dimensions are twenty-four feet by thirty feet, not including a porch, which is eight feet by the width of the house. The roof is carried over the porch in a gentle curve and is broken by a single dormer, which is a whole bedroom in itself. It will be noticed that the frieze below the porch cornice is carried around the house, dividing it into an upper and lower part. The upper part is shingled and the lower part sided. The foundation is of stone, but may be made of cement blocks on either a concrete or cement block foundation below the grade. If the first story of this house up to the frieze border is made of cement blocks it will make a pleasing exterior and add to its durability and salableness. If ten or twelve-inch blocks are used it will be best to make the over-all dimensions, of the house a foot larger each way rather than to reduce the interior. Under the side kitchen window is located the area window, below which the laundry tubs are placed. In this way the plumbing is all kept on one side of the house, with but one soil pipe thru the roof; the sink being over the laundry and the bathroom over the sink. The rear of the house has a large shingled dormer, which accommodates the stair landing with a window in the center that admits light into both upper and lower hall and two windows into bathroom and bedroom, respectively. The living room and dining room are entered right and left from the central hall thru four-foot openings. These openings may be reduced to single door width and a door hinged on or increased to five feet and double doors placed in them. Sliding doors may also be used, but this necessitates increasing each wall to twelve inches thick, which must be taken off of the rooms or added to the total width of the house.
As an interesting variation in our designs, it is a pleasure to give our readers a good colonial example of southern architecture in a home of generous proportions and for the accommodation of a good-sized family. This is evident from the architect’s very successful provision of five large bedrooms on the second floor with additional accommodations on the third floor.

Turn for a moment to the general treatment of the exterior. We find the most pronounced features of the house are the elaborate porches with numerous capped colonial columns and a generous use of spindle rails.

The two main chimneys accommodating the fireplace, reception hall and library with their divided flues, are specially dominant. The entire structure is frame with the medium width lap siding and slate roof. Foundation brick. The courses above the ground laid up in red brick, pointed with white mortar same as exposed chimneys.

The customary wide central hall running clear thru the house is used with wide openings into the principal rooms. We have in this case the main stairway leading from the reception hall, a good photographic view of which is given on the second page instead of from the main central hall. For heating, fire-
places are used entirely, one being provided for each of the main rooms. This of course is characteristic of the southern home. One the second floor private bath is provided for the front chambers and it is noticed that servants quarters are well excluded from the main portion of the house, toilet rooms for them being provided on first floor and extra bath on second floor. Georgia pine is the finish throughout. The reception hall is white enameled and stairway mahogany. The lower floor being given several coats of varnish and rubbed down to a wax finish, bringing out strongly the rich grains of the selected woods used here. House of this dimension and built in the southern construction would cost from $12,000 to $15,000, varying according to the detail and finish demanded.
COTTAGES appeal with greater interest to us at this season of the year and certainly the one before us is rich in artistic effect. The touch of timbered cement work in the gables, together with the broad overhanging eaves with the same treatment carried out on the dormers, gives the tone to the cottage. While we would like to see the design set somewhat higher from the ground, the results are generally good. View of the house was taken directly following completion. Addition of shrubs, etc., to the grounds will add much to the attractiveness of the place. The sided supports of the central projecting gable or overhang for porch, have good lines. This porch could nicely accommodate seats at the ends. The principal accommodations for rooms are on the main floor and the interior is laid out most attractively. The central living room with fireplace is the keynote to the interior arrangement. It will be hard to find a better layout than given.

Undoubtedly this central living room is where the family will "live."

The cottage covers considerable area, being 46½ ft. wide by 41 deep, including bay extension. Lap siding is used with red cedar shingle roof. Note that one main chimney takes care of all requirements which in this particular case does not demand a system of heating.

Finishing the house throughout with Washington fir, using this material for the flooring as well, it is estimated that cottage would cost to build $3,500 exclusive of heating and plumbing.

A suggestion for the outside color scheme for the outside color scheme would be in green tones, using moss green L. B. No. 321 on siding, willow green L. B. No. 325 for trim including timbers in plaster gables. Leave the cement work natural, rough cast. Line window sash black, using shingle stain on roof, C 301. The porch ceiling to be natural fir, oiled. For the porch floor greenstone L. B. No. 317.
Floor Plans

For

A Model Cottage.

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151 Leonard Street, New York.
However, in these days of much positive color, of the ubiquitous (and often ugly) green, of the strident red, which is supposed to compare well with golden oak furniture, sees buff, the old fashioned compound of creamy yellow and warm light brown?

The writer just remembers the days when people were beginning to realize that a white wall was not wholly beautiful and that a tint given to the largely prevalent kalsomine would be an improvement. A discreet painter, possibly aghast at his own daring, suggested buff as a suitable tone for the parlor walls. What a good background it made for the engravings which every one had then, and what a lovely suggestion of sunshine it gave on a dark day. That particular wall ran its course and was presently covered up under a paper of Pompeian red, and is probably, today, deeply green, happy if it has escaped a gilt figure.

Still buff can be had occasionally. I have seen a two-toned stripe, which would be delightful for a bedroom, or even for a living room, with the right things in it. There is also a grass cloth in buff, and an occasional cretonne. If I am not mistaken, one of the standard patterns of the Morris cretonnes is made in two or three shades of buff.

Buff is not a color which looks well with light wood work. It is impossible with golden oak, and faded out with white paint. It needs a contrast, mahogany, or walnut, or a russet brown paint. Black is very good for it but not many people have the courage to paint whole doors and surbases black.

Sometimes, it has been possible to modernize a set of black walnut bedroom furniture. Judicious lopping off of glued-on ornament, lowering of the bed head and refinishing brass been done, with good results. The rejuvenated pieces will look their best against a buff wall paper. The rug should be rather dark, perhaps an old moquette carpet dyed brown, possibly an English art square in brown tones. Then, for chair cushions and table cover, a cretonne can be found combining the buffs, browns and reddish pinks of hardy crysanthemums. For the draperies of the toilet table, for a bedspread and for window curtains, either an ecru swiss with white dots or a white and ecru striped lawn will answer. The general effect of such a room being not antique but old-fashioned, other things must be in keeping. The curtains ought to hang beneath a cretonne valance and the mantel be upholstered with cretonne. There should be a pair of vases in harmonizing color, a not too modern clock, perhaps some bisque figures. Such things belonged to the black walnut period. As for pictures, they ought to be engravings in gilt or walnut frames. Such a room will charm old-fashioned guests or some elderly inmate of the family.

For a small room, with not too much light, a buff grass cloth may be laid above a dark wainscoating. Straight curtains well pushed back, of buff raw silk, cane furniture with black frames, heaps of cushions some of buff, some of bright-hued oriental silks, a rich-toned Eastern rug, pictures vivid in color, not green landscapes, and brown and blue pottery find a fitting environment in such a room.

Again a bedroom may have its walls
covered with cretonne, with a set pattern of old-fashioned flowers, on a deep buff ground, and a matted floor. The iron bedstead, the chiffonier, wicker chairs and a table are all enameled black. Covers cushions, and curtains are of plain buff linen, striped or bordered, with one of the colors predominant in the design of the cretonne. Naturally, there would be no pictures in such a room, but a bit of pottery and the china on the dressing table would repeat the note of color of the cretonne.

Home made furniture is falling into disuse, except in the hands of the trained amateur, who has learned his craft. Its passing is not to be regretted, it was seldom beautiful, generally wobbly. Still it is possible, with the assistance of a carpenter, to manufacture some really useful and presentable articles at an extremely moderate cost.

One of these is the box couch. It requires two twelve-inch boards, thirteen feet long, cut into two lengths of six feet each, and two of two feet, six inches, screwed together at the corner. Over the bottom is tightly stretched a piece of sailcloth or heavy floor oilcloth, strengthened by narrow strips of wood nailed across at intervals. One strip at each end has casters screwed to it. The cover is a light frame work of wood, attached by hinges, and covered with sailcloth. To this is fastened a wire spring over which is laid a thin mattress, or a heavy pad, of cotton or hair. Such a couch is light and capacious. It may be covered only by a drapery, or may be regularly upholstered. In that case the pad or mattress is covered and tufted, and a fringe or a box-pleated frill, attached to its lower edge, conceals the wire spring, while the sides of the box are plainly covered.

A davenport, the straight couch with back and ends of equal height, is easily managed. Five feet six inches is a good length for it, with the back about three and a half feet high, and the seat two feet wide. Grooved and tongued boards should be bought for the back and ends with a strip of four-inch material for the front of the seat, which should connect the ends at a distance of about fourteen inches from the floor. At the same height stout cleats should be nailed to the ends and a strip inserted in the centre connect-
Decoration and Furnishing—Continued

ing the back and front. Whether upholsterer's springs, or a wire spring shall be used is a matter of choice. The latter will have to be made to order, while the sewing of the springs in place is a very simple matter. If springs are used, a cleat must be fastened the entire length of the back. The couch is turned upside down and strips of webbing, interwoven closely and tightly stretched, nailed to the lower edges of the cleats and the front strip. To this foundation the springs are sewed twine can be passed, sewing the stuffing in place. Over it is tacked a covering of thin unbleached muslin and over that the upholstery fabric. The outside of the ends, and if the davenport is intended to stand out from the wall, the back also, is covered and a strip of the fabric stretched across the front below the seat. (A narrow board, by the way, should fill in the front of the couch, below the seat edge). Either a wide guimp or a strip of the material, folded in and fastened at

An Inexpensive, but Pretty Davenport.

With heavy twine, in groups of three, fastening one group to the central brace. They are held in place by lengthwise strips of webbing, tacked over their tops, to which they are sewed.

The couch is now ready for its upholstery. A smooth layer of hair, cotton batting or excelsior is put on the sides and back, held in place by an occasional double-pointed tack. Or gimlet holes may be bored in the wood, through which regular intervals with ornamental nails, edges the top and is brought down to the floor at either end. The seat cushion is movable, made after the fashion of the Morris chair seat, with welted edges. For a bedroom couch, with a chintz cover, a pleated frill across the front is an improvement. In any case the couch should have two pillows covered with the same material as itself.

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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. V. H. V.:

Q.—Kindly tell me in your next issue what colors to use in our large living room with 10-foot ceiling. Wood work is finished with the old-fashioned ugly grained effect. What can we do with it? We wish to put in a mantel and would like suggestions as to what to use in inexpensive material to curtain windows.

Ans.—In the first place I would suggest in the large living room, in which you say the wood work is grained, that you paint it or enamel it ivory color. With this for the wood work, restful shades, such as browns or reseda greens, could be used in two-tone effects of tapestry wall paper to good advantage.

The mantel should be the same color as the wood work, unless you want it in the mahogany color which can be used with the white enamel wood work.

The cluny or Arabian curtain would be desirable for the windows, or some of the inexpensive Scotch nets would be suitable as well. Over-hangings in cotton rep, plain color, in darker shades than the wall could be used, or they could be lighter, just as the requirements may be. If you have plenty of light in the room the over-draperies could be somewhat darker than the wall.

Shades of dull blues can be used in the dining room to good advantage.

C. H. C.—Baltimore:

Q.—Please suggest an appropriate but inexpensive decorative scheme for our reception hall, living room and dining room. Desire to carry out as far as possible the mission idea. Entire first floor with exception of kitchen is sand plastered, both walls and ceiling. Standing wood finish is a cyprus, stained dark brown. Floors are also stained dark. We have in the angles a wide 6 inch strip in place of the usual picture moulding. These 6 inch strips also run down the corners, meeting the base boards. Also the side window casing extends from base board to ceiling. This secures a paneled effect of each wall. All standing finish is severely plain with sharp edges, no bevel on any of them. What do you suggest to do with the walls and to put in for draperies?

Ans.—In this department is not expected to furnish such comprehensive decorative schemes in detail, but as a general reply, would say for a summer cottage, such as you have built, the principal ideal would be to suggest coolness, and in this way colors without too much warmth should be used. I think that for an inexpensive and pleasing effect the use of wall stains, such as are advertised in this magazine, would be very suitable.

As the wood work is a dark mission brown in color, for the living room a lighter shade of russet brown, for the reception hall soft blues which would also want to be carried out in the stairway and upper hall. For the dining room you could use paper having French grays. These are to be had now in very pleasing designs, rather conventional. Ceilings should be in plain tints, preferably cream color.

Simple net hangings for living room windows with inexpensive cotton over-hangings for draperies and for the bedroom windows muslins would be better.

Mrs. L. G.—Seattle:

Q.—I am writing with a hope that you can assist me by suggesting the decorations for a cottage which I am remodeling. Desire to have the walls yellow in living room, hall and dining room the same, with either tapstary paper or burlap in dining room top. I wish to use portierres and what finish to give the wood work to best harmonize.

Ans.—Your suggestion, as to color schemes, is quite correct to have the two rooms in the same color. However, with the cottage facing the west, you might, possibly, use something in a cooler color than the yellows, such as greens or darker gold colors.

You could have the dining room in a warmer shade of old red, should you wish to change that somewhat; a plain burlap with the paneled effect would be very pleasing. Portierres should correspond with the paper, in somewhat darker colors. These can be had in reps or velours. If you wish to stencil, the plainer rep or agra linens could be used. If your wood work requires painting, for the living
room, white ivory enamel would be most suitable. The dining room could be in fumed oak finish.

Mrs. C. H. H.—Mechanicsville:

Q.—(a) In our living room, 14x18, we have two east and one south windows, 9-foot ceiling, furniture dark golden oak, golden oak trim finish, oak floors. Will you advise what color for walls, rug and curtains? What color brick to use in fireplace?

(b) We have a den back of living room 12 feet square. We wish to use walnut furniture in it. What had best be used in trim, color scheme and curtains?

Ans.—With the golden oak furniture for your living room it would be just as well if the floors are somewhat lighter than the trim of the room. Warm shades of brown could be used, or, in fact, any of the standard shades, as you may prefer. Soft shades of reseda greens are very restful for the living room. Should you wish to use browns on the walls of the living room, there is a brick made now with a mottled effect in soft shades of this color, which, I think, is somewhat newer than the red brick. For the dining room, there are made now beautiful examples of fruit designs in wall paper which are used either above or below the plate rail, as one may desire. Some of these papers have the colors which you mention in your Wilton rug. If your wood work is golden oak in this room it would be advisable to buy your furniture in the same wood.

For the den shades of copper red will be found probably as desirable as anything with the walnut, and I should stain the wood work a fumed oak, which is near the color of walnut in effect. This same walnut color is good for many rooms on the first floor of the house.

Linoleum would be best for the bath room floor, unless the floor is hard wood, which could be finished with a stain and two coats of floor varnish, or waxed.

For your living room I would suggest Arabian curtains with overdraperies of shikii silk, plain velours hangings at the doorways, and a rug in rather soft tones.

For your dining room some of the Scotch madras in colors would be very pleasing, coming to the window sill. Scotch net by the yard would be suitable for the den, and could also be used in the hall.

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This grate fits any regular fireplace. Any mason can do the setting. Burns any fuel, and the saving in this soon repays the entire cost.

Send for catalogue giving description and illustrations; also reports of these grates in use in your own neighborhood.

Also, if interested, send for catalogue of wood Mantels; the most artistic designs, made in best possible way, at lowest wholesale prices.

F. B. M., Ashland, Ky.

Q—I have been reading the several numbers of your magazine that I have seen, with great interest, and find it very practical and helpful, so much so that I have already incorporated into the plans for the remodeling of my dwelling some of the ideas obtained from it, and am now enclosing you herewith blue-prints of the house as remodeled, with a view of getting from you some suggestions on the interior trim decorations, etc.

As at present arranged, the reception room is divided into two rooms, in which the finish is in different woods. I had thought to paint the remodeled room ivory white. The top casings of the openings into this room are now six inches wide with corner blocks. I had thought to change this casing, making it wider and more after Colonial treatment. The ceilings in this room are eleven feet, height above the casing 18 in. or 24 in., including the casing above the opening. What would be the best width to make the top casing as remodeled? What should I have in the way of moldings at intersection of ceiling and wall, if any, and what should be the width and shape of same? How far below ceiling shall I run picture molding? If I run a wainscoting in this room, give proper height of same, and size of panels.

Inasmuch as openings between this room and hall are so large, I have thought it would perhaps be necessary to paint trim in hall ivory white also. How high should wainscoting be here?

The stairway has been changed from drawing and has a straight run to what is now shown as second landing. I had thought to use white paint, and mahogany rails and treads. The furniture in reception room and hall is mahogany, and the doors will be stained to match.

The library, I would prefer finishing in quartered oak, the dining room in birch stained mahogany, as the furniture in these rooms will match these woods.

The trim in the upstairs rooms will be in soft wood. Would be glad to have your suggestions as to the finish for same.

Would you kindly give me your views on this treatment, and suggest color scheme for wall papers, rugs, cushions, hangings and suitable lighting fixtures. I had thought of grey or old rose for reception room, green and terra-cotta for the hall, green for the library.

I desire to provide an open fire for the library, which is also the living room. What would you think of a brick mantel here? If you approve same, what color brick, or had the mantel better match woodwork?

Ans.—As to the color of the woodwork in your remodeled reception room would say that the ivory white would be the most desirable color that could be used. The top casings of the windows can be at least eight inches wide, but instead of using corner blocks, use a cap across the top of the window. The ceilings being so high it would be well to drop the picture moulding at least eighteen inches, or possibly to the window or door casings. In this case it would not be necessary to have any moulding in the angle of the wall.

Considering the location of the hallway and the size of the openings leading into it from the reception room, it would be advisable, I think, to have the woodwork in the ivory as well. The wainscoting should be from five to six feet high, and it would be desirable to use the mahogany rails and treads.

The woodwork for the upstairs room should all be painted white.

Regarding the color scheme for the various rooms would say that a soft, restful shade of gold brown for the reception room, old red or terra-cotta for the hall, and a warm, rich green for the library would make a pleasing combination. If the dining room is not wainscoted I would suggest a fruit pattern below the plate rail, 5½ feet high, and a plain, restful blue to match above the rail.

There are either the dull or glazed tiles which would be in much better taste for the facing of the mantle in the living room than the red brick, and not so common.

Papers can be secured for the bedrooms in the French effects and Art Nouveau in the American as well as the English papers and in the various colors which are used for bed rooms.

The rugs, cushions and hangings should be selected in harmony with the various wall papers. The fixtures and trimmings should be in the dull brass.
PRING is dear to the novelists and the poets, but, for the busy head of the household, it is a strenuous season. It is more agreeable to watch the renewal of all things than to participate, actively, in it. But, since needs must be, it is well to meet the task with what courage one can muster and make it as short as possible.

For some measure of spring cleaning may not be shirked. Blankets and heavy clothing must be cleaned, aired and packed away; winter draperies taken down, some semblance of coolness given to the house. Closets and drawers should be emptied and all useless articles disposed of.

Just here, most women have to wrestle with temptation. There is one sort of woman, who sells everything to the old clothes man, preferring present pennies to future benefit. There is another sort, and largely in excess of the other, who cannot bear to part with anything. It was one of the latter who preserved in a Maine attic, for more than forty years, white cotton trousers crossbarred with black, worn in New Orleans, before the war, by a long deceased and unknown brother-in-law. Moth-eaten garments, out of date carpet bags, old bonnets, that most hopeless of all debris, old silk hats, all find some feminine heart to cherish them. (Yet some silk hats have their uses. A local undertaker was much gratified by the gift of half a dozen not too hopeless ones, using them for his drivers.)

When the saving instinct is most powerful, when the axiom about keeping a thing seven years is most appreciated, let us remember the words of Scripture, "There is that scattereth and yet increaseth," and weigh the present benefit of others, against our own uncertain future advantage.

If it seems desirable to save old garments, for future making over, it is best to rip them, discarding the old linings and cutting out any specially stained places in the goods, or else cleaning the material thoroughly. Moths revel in a soiled garment, and have an infallible instinct for grease spots. Spring and not autumn is the time to have men's winter clothing cleaned. It pays to send furs, cloaks and overcoats to cold storage. It is impossible to be quite certain of non-professional methods of moth prevention. In cities, very many of the older houses are so infested with moths that anything like security is out of the question.

Whether the house shall be exhaustively cleaned in the spring is a matter which must be decided by the individual. Certainly, a house gets very dirty in the summer, and the cleaning, done in April or May, has to be largely supplemented in October. One is fresher, for serious undertakings, in early autumn than in spring, and the house is pleasanter and sweeter for its winter use if the cleaning is left until then. Spring, too, in northern latitudes, is a chilly season indoors, and draughts and house-cleaning are inseparable.

In the house with hardwood floors, a compromise seems desirable. Early in May, the rugs are taken up and sent to the steam cleaner, stoves are taken down and fireplaces cleaned. Each room is thoroughly swept but papering and repapering are de-
Household Economics—Continued

layed until August, when windows can be open day and night. Then, in September, walls and paint are cleaned, floors refinished and rugs replaced. In the house with carpets, September is the best time to have them taken up and cleaned, but the whole business is much simpler if the closets have been attended to in the spring.

* * *

Looking at the average kitchen, one wonders if it ever receives any attention at all. And do most people ever throw away worn out utensils? Some time ago the economist had occasion to make some cornstarch pudding, in a friend’s kitchen, in the absence of the maid. At least twenty saucepans hung in the cupboard, and everyone of them either leaked, or was so burnt that it could not be used for milk. The cornstarch pudding achieved itself in a tin pail set in a frying pan of boiling water. Housecleaning time should witness a rigid inspection of pots and pans and the survivors should be boiled in potash lye and scoured with brick dust. Almost all servants are destructive and, while the gas range has many merits, it is hard upon sauce pans. Housekeepers who “always buy the best,” will be aghast at the suggestion that, for the average maid, it is well to buy kitchen ware at the ten-cent store and replace it frequently. Nor are expensive devices for saving gas, sectional kettles and the like, to be lightly intrusted to servants.

* * *

In planning for summer comfort, bathing facilities should not be forgotten. The benefit of an abundant supply of hot water is so great, as to almost reconcile one to a range fire. Of course, there are numerous water-heating devices, all more or less expensive, and, for that reason, beyond the reach of most of us. A simple contrivance, which may be installed in almost any bathroom, consists of a shelf fastened over one end of the bath tub and supporting a single-burner gas, or oil, stove. Set on this is a large covered tin boiler, provided with a faucet. A length of rubber pipe is inserted in a hole in the cover, and its other end attached to the hot water faucet. The contents of the boiler will heat, in twenty minutes or half an hour. If an arrangement of this sort is not practicable, a copper bottomed tin tea kettle, of the largest size, set on a gas stove on the floor will heat enough water, to give a tub partly...
Household Economics—Continued

full of cold water a sufficiently high temperature.

Another addition to the bathroom, which repays its cost twenty times over, in comfort and refreshment, is one of the circular sprays, costing a dollar and attachable to any faucet. A cold spray is an admirable finish to a hot bath.

* * *

A saucer of broken pieces of charcoal set into the refrigerator will absorb impurities and prevent unpleasant odors. It should be renewed each week.

Too much stress cannot be laid upon the importance of perfect cleanliness, in the refrigerator. Its interior should be washed at least twice a week and the utmost care should be taken to avoid keeping any food in it which has been cooked more than twenty-four hours. If one cannot have a separate compartment for milk and butter, they should be kept on the upper shelf of the single chamber where the current of cold air reaches them before being contaminated. It is a good plan to have one of the little nursery refrigerators, specially for butter and milk, using the larger closet for miscellaneous food.

The May days, when there is still more or less chill in the atmosphere, demand some provision for heat at night and morning, after furnace fires are out. The most agreeable, of course, is the open fire. but many houses lack facilities for it. Failing this, the most satisfactory is an oil heater which can be carried from room to room, at need. The radiating power is greater than that of gas and there is less exhaustion of the atmosphere. There are a variety of appliances to be attached to a gas jet, which heat a room very comfortably. It may not be generally known that some of these require such a high pressure of gas as to be useless in many houses.

The same thing is true of a gas range, notwithstanding the fact that it has a separate connection with the meter. When this is the case, the gas company will right the matter by putting in a larger meter. This would seem to be self-evident but the writer has known of so many people, to whom it had never occurred, that she mentions it for the benefit of others, in like case.

---

**Compare this with what you know of metal lath or any other method:**

"STUCCO" board will last as long as the house. It can't rust.

It requires about half the amount of material to plaster as metal.

It is solid and rigid and will not bend under the trowel.

Being a non-conductor of heat and cold, it renders a house cool in summer and warm in winter.

It is fire-proof.

It adds strength to the house.

It is easily nailed up and can be applied to studding, sheathing and furring.

It has a perfect undercut key.

Architects who have used "STUCCO" board recommend it to their fellows.

Residence of Geo. F. Vreeland.

Wm. Allen Balch, Archit.

5 W. 31st St., N. Y.

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The "STUCCO" Plasterboard as a foundation for Portland cement exteriors of country houses, is superior to all other methods.

FOR INTERIOR PLASTERING, BOTH WALLS AND CEILINGS, "STUCCO" BOARD PROVES MORE SATISFACTORY THAN WOOD LATH AND CANNOT BURN

Samples Mailed Upon Application

C. W. CAPES

1170 Broadway, New York, N. Y.
"And after April, when May follows, 
And the white throat builds and all the 
swallows—
Hark! where my blossomed pear-tree in
the hedge
Leans to the field and scatters on the clover
Blossoms and dewdrops—at the bent spray's
edge—
That's the wise thrush; he sings each song
thrice over,
Lest you should think he never could re-
capture
The first fine careless rapture!
And though the fields look rough with
hoary dew,
All will be gay, when noon-tide wakes anew
The buttercups, the little children's dower."

D INER au pot d'étain, is French for
a meal entirely achieved from the
contents of various tin cans. It is
an excellent repast for the com-
memoration of a tin wedding and it is as-
tonishing what a variety of food is possible.
Here is a suggestion for a menu.
Canapes of Anchovies
Tomato Bisque
Salmon Steak Green Peas
Chicken Cutlets
Beef Tongue Braised Fried Tomatoes
Salad Jardinière Peach Ice
Camembert Biscuits Coffee

The canapés are circles or crescents of
bread, cut from slices three-quarters of an
inch thick, fried in butter and spread with
anchovy paste. The soup needs only the ad-
dition of a cup of hot milk, and a thicken-
ing of butter and flour, to a can of tomato

soup. Salmon steak comes out of a can.
and is to be broiled and buttered, or better
have a Hollandaise sauce. and is accompa-
nied by French peas.

Chicken cutlets are simply a croquette
mixture made from canned chicken shaped
into cutlets, crumbed and fried in deep fat.
For the pièce de résistance, a canned tongue
is cut into thick slices, which are heated in
a brown sauce made from extract of beef.
The tomatoes are those which are put up
whole, drained carefully and cooked in the
usual way. The salad is a can of mixed
vegetables, laid on lettuce leaves and cov-
ered with French dressing, and the peach
ice is made with preserved peaches.

Of course, many variations are possible.
and the idea is equally suitable for a
luncheon or a handed-round supper. De-
spite all the commotion about canned food,
the greater part of the goods on the market,
sold by reliable dealers, is excellent and
comparatively cheap.

* * *

For permanent adjuncts to entertaining,
nothing is more satisfactory than a circular
mirror and four glass candlesticks. A floral
centre-piece gains very much, when it is
reflected in a fern wreathed mirror, and
the cost is not great. Pressed glass candle-
sticks, with white candles and white and sil-
ver shades, have a most festive air and come
in a variety of styles. They are particularly
good with a white and green scheme.

A centre-piece, which is specially pretty
for a child's party, is a birch bark canoe
filled with flowers and resting on a mirror.
When in the neighborhood of silver
birches, it is well to secure a supply of
bark, as it makes charming jardineres for ferns. A window box covered with it, filled with common wild ferns and set in the empty fireplace, is a delight to the eyes all summer.

Glass dishes, of various sorts, in silver stands are in high favor. For instance, a silver stand supports a celery tray and smaller trays for radishes and olives, or a sardine dish is flanked by a tray for lemon points.

While cut glass never loses its hold upon public favor, rock crystal, or rather its imitation, is very popular. For the moderately long purse perfectly plain Bohemian glass is very satisfactory. One wishes that our domestic glassblowers, who are so successful with thin, plain tumblers, would turn their attention to making other pieces. Why can we not get absolutely plain, thin preserve dishes, cruets and plates in domestic glass? And, oh, for an undecorated carafe!

People, who use carafes, are advised that a weekly cleaning with shot is the only way to keep them clear. This treatment is too heroic for cut glass, which demands crushed egg shells and ammonia, well shaken up.

When the childish appetite rebels against wholesome and nutritious prunes, try this mode of serving them:

Scoop out the centre of a loaf of baker's sponge cake and fill the vacant space with the cooked prunes, draining them and removing the stones. Cover the top with a meringue, browning it in the oven. Substituting whipped cream for the meringue. This is a delightful way to serve strawberries.

Toast is one of the things which are continually eaten and are seldom good. Few people seem to realize that the crust should be cut off before toasting, and that such slice should be buttered the moment it is done. If the toast is to be crisp it should be kept in the oven, till the minute of serving. If, it is liked soft, set the pile of slices in a colander over a boiling tea kettle, covering closely.

Slices of toast, on which meat or vegetables are to be served, should be buttered and laid in a plate of hot water, until saturated, not soaked.
Table Chat—Continued

The lover of novelty may experiment with whole macaroni, boiling it in the dripping pan. When tender, coil lengths of it around the insides of buttered tea cups. When the tea cups are lined fill them with minced chicken seasoned with chopped ham and mixed with an egg and a tablespoonful of cream. Set them, side by side, in a round pan, fill it half full with boiling water and cover. Cook an hour and turn out the moulds on a hot platter. Serve with chicken gravy. This is a pretty dish for a child’s party.

* * *

For a boiled fish, served cold on a hot day, have a dish of tartare sauce, a mould of lemon jelly made without sugar and thick with thinly sliced, young cucumbers, and Saratoga potatoes.

* * *

The tea cosy is desirable for piazza suppers. The most sensible sort is washable, at least its cover is. Some very pretty ones are plainly covered, with silk in a solid color, and a cover of heavy linen scalloped and eyeletted is laced on. Others have removable covers of washable cretonne. Elaborate embroidery seems out of place for so utilitarian an article, but the initials or monogram of the mistress of the house are always appropriate.

* * *

Now that spring lamb is with us, it is well to remember, in the interest of economy, that the fore-quarter is quite as acceptable as the leg and considerably cheaper. The ideal roast of lamb has all the ribs left on, the neck and breast trimmed off for a stew or pie. Cucumbers, new potatoes, mint sauce and an asparagus salad make one wonder if ambrosia could have been any better.

* * *

Our native American tea is on the market, and very good tea it is. It is grown at Pinehurst, North Carolina, of three varieties, English Breakfast, Oolong and Green. Green is a dollar a pound, the others eighty cents. It should be steeped exactly five minutes in a heated pot, then poured off the grounds into another heated pot.

* * *

It is a wise woman, who balances her luxuries with economies. Conversely, the popular housewife balances her economies with luxuries.
C. V. P., Warren, Pa.

Ques.—Please give us information in regard to the following. First, would a studding frame house, plastered inside and out, be warm enough for this section? As far as I know, plaster exterior except for panel work in gables has never been tried here.

2nd. What is the composition of this plaster, how many coats are applied and how thick should it be put on?

3rd. Would ordinary wood lath be suitable for exterior work?

Ans. 1. Such construction is entirely suitable for cold climates.

No. 2. Full explanation of the proper application for exterior work was published under Architect's Corner in our Nov. 1906 issue. Portland cement should be used and just a little hair mixed into the material used on the first coat. Two coats are applied.

No. 3. Wood lath would most certainly not be suitable. Either metal or plaster board for the base.

S. J. O.

Ques.—Will you kindly inform me thru your columns as to the proper proportions for a stairway, that is, what the proper proportion between the riser and the tread and what makes a stairway easy to ascend.

Ans.—There are several accepted rules for establishing a proper relation between the risers and treads of stairways. The German rule is to make their quotient between seventy and seventy-five. The French rule is to take twice the height of the riser and add it to the tread, keeping the sum between twenty-four and twenty-five inches. Thus if you make a riser seven and a quarter inches high, the tread ought to be ten and one-half inches from face to face of the risers with the projecting nosing considered as additional. An extensive article was published on this subject in the August, 1905, issue of Keith's Magazine.

SPECIFICATIONS.

We continue this month the publication of standard specifications which was interrupted in the last issue.

Plumbing and Gas Fitting.

SEWER CONNECTIONS.—Connect with main in street, a 6-inch sewer pipe and extend same to within three feet of foundation wall; pay all city charges for street opening and inspection. If there is no sewer in the street, dig a cess pool 4x4 feet square and 20 ft. deep, not nearer the house than 20 ft. Curb-up and cover with a double plank cover and run connections to the house, as specified for sewer.

SOIL PIPE.—At point outside of wall, connect with 4-inch cast iron pipe and extend to point under bath room and up through to one foot above roof. Any soil pipe run in outside partitions is to be packed around with mineral wool. Make tight with galv. iron flashings; connections to be made by Y's and one-eighth bends on sanitary T's. Provide hand hole fittings at all points necessary to make the system accessible with the sewer rod. Also provide wood man holes around such as are below cellar bottom. Provide 2-inch vent pipe for water closet and 1½-inch for sink, bath tub and basin; extend same above highest fixtures and connect with main soil pipe.

TEST.—Plug all openings and subject same to preliminary air test and after fixtures are set, final test is to be made with water guage, leaving entire job tight and complete in every respect.

FIXTURES.—Furnish and set up complete the following fixtures in position shown on plans; fixtures taken from the catalog of the Co., except as otherwise noted.

One...inch lavatory...... complete.
One five-foot bath tub, complete.
One thirty gallon galv. iron range boiler on a cast iron stand, fitted with coup-
LIQUID GRANITE

and the Home Beautiful

Varnish occupies a conspicuous place in the making of modern homes, and Liquid Granite is the most desirable, durable and satisfactory varnish yet produced for Floor Finishing and all other domestic purposes. It is invaluable in restoring Oilcloth and Linoleum. It is easy to apply and difficult to deface. Put up in cans of convenient size from ½ pint to 5 gallons.

Send for samples of Finished Woods and information on Wood Finishing and Home Varnishing.—Free on request.

DEALERS EVERYWHERE

BERRY BROTHERS, Limited

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Canadian Office and Factory: Walkerville, Ont.
Architect's Corner—Continued.

lings ready for connections to range. For kitchen.

One 20x30 white enameled iron sink with painted brackets. For kitchen.

WATER SUPPLY.—Connect with main in street, owner to pay for tap, by a 3/4-inch lead pipe; run same to curb and place there a stop rod boxed in; from this point run a 3/4-inch lead pipe into cellar. There place stop and waste cock with rod above cellar floor. At this point run up and overhead across cellar to point under kitchen. Extend to hot water boiler, with shutoff at same; also to kitchen sink and to bath room and to sill cock at front of house with shutoff inside cellar. Supply all fixtures with cold water. Run hot water pipe from boiler to all fixtures, except water closets. All pipes and connections not specified otherwise are to be galv. iron. All water pipes to be run inside partitions, or if in outside partitions, to be wrapped with mineral wool. If ordinance requires lead pipe, substitution can be made. Provide 1/2-inch Fuller cocks at sink. If no main in street, provide tank system as follows:

TANK.—Construct a galv. iron tank 3 ft. in diameter and 3 ft. in depth, using No. 26 galv. iron. Seams to be riveted and soldered and iron bands used at top and bottom of tank. Set in an overflow pan 2 inches deep, made of No. 26 galv. iron and provide with 3/4-inch galv. iron overflow pipe running to kitchen sink, with end left open. At point 4 inches below top of tank, connect 3/4-inch galv. iron pipe, run same to and connect with overflow pipe.

CISTERN AND WELL SUPPLY.—Supply tank from cistern or well through a 1-inch extra heavy galv. iron pipe, run to within one foot of bottom of cistern or well. Provide and set on kitchen sink, a single acting lift and force pump of approved make with all proper connections.

SUPPLIES FROM TANK.—Provide and place at bottom of tank, a tank valve with an air tube carried above water level and from it run 3/4-inch galv. iron pipe to supply boiler and all fixtures. Supply fixtures with hot water as specified under “Water Supply.”

GAS FITTING.—Pipe the house for gas bringing out the ends where marked on the plans and capping each end. Ends are to project one inch only beyond plas-
Architect’s Corner—Continued

Water. Also a 34-inch outlet in kitchen for gas range connection. Leave main close to front wall of house ready for the meter. Before plastering is done, test system with an air pressure test of five pounds to the inch in the presence of the inspector and owner.

Hardware.

All hardware is to be furnished and put in place by the contractor. All “trim” hardware throughout the building, not otherwise specified, is to be of the kind and quality selected by the owner from the catalog of............. and for which the contractor is to allow sum of .............within his contract price at factory.

Heating and Ventilating.

FURNACE.—Furnish and set up complete a .................furnace or other equally good make approved by owner, of ample capacity to easily heat all the rooms to a temperature of 70 degrees Fahrenheit, during the coldest weather.

From the furnace casing, carry supply pipes of ample size to the various apartments to be warmed, as shown on the plans, each pipe to be supplied with a damper within two feet of furnace. All pipes to be run as direct as possible, as shown on plans and the elbows to be not less than three pieced, and square elbows avoided. Wall and basement pipes to be carefully covered with asbestos paper and exposed woodwork to be covered with tin to avoid all danger of fire. All piping to be made of good quality of bright tin.

Provide furnace pit and fresh air intake and duct and sides of same to be made of good, hard burned brick; to be laid up in good lime mortar, bottom cemented with good cement and top covered with a 2-inch plank, the top of same to be no higher than bottom of cementing on basement. Connect cold air duct with outside atmosphere by means of a galv. iron riser, made of No. 26 galv. iron, the same to have a slide damper for the purpose of regulating the supply of air and a trap door between slide and floor of basement. Openings on outside to be covered with 3/4-inch mesh galv. iron screen, no glass. Run 12-inch galv. iron cold air return pipes from hall as marked on plans and run underground duct in same manner as fresh air duct and connect into furnace pit; place shield in front of opening in

A Revelation

In Finished Wood Effects . . . .

Unless you have seen our finished samples, you cannot realize the beautiful and artistic effects it is possible to obtain on all woods used in the general building trade.

This applies both to soft woods, like pine and cypress, as well as hardwoods, like oak, ash, chestnut, birch, etc. The finished effects we produce on pine, for instance, are the talk of the trade.

Wood finishing today has become such an art there is no excuse for any wood being finished in an unattractive manner as so often happens, due to the use of inferior materials, and lack of knowledge on the subject. It will cost you no more to use the best products, which are world famed for superiority and economy.

A postalcard, stating the kinds of wood you are using, and your dealer’s name, will bring promptly samples and detailed information free of cost. The more information you give us, the better we can advise you.

Several have written us as follows:

"We are in receipt of the set of sample boards, and must say that they are the finest pieces of work of this kind that we have ever had the pleasure of looking upon."

"Your samples of stained work received. I must say that they are handsome set. They are so free from ‘muddiness’ as I call it, which seems the prevailing feature with most of the wood work done here, due to improper treatment and inferior stains."

The Bridgeport Wood Finishing Company . . .

New Milford, Conn. New York Philadelphia Chicago Boston
Architect’s Corner—Continued

such a manner that air cannot blow into it from fresh air duct. Combined area of the two ducts to be at least 80 per cent of combined area of all hot air pipes.

Registers to be black japanned registers of suitable size.

VENTILATING.—Run 3½-inch ventilating pipes where marked on plans from each room into basement and run separately across basement ceiling into ventilating flue of chimney. Ends of pipes to be covered with ventilating faces of same finish as registers to be set in baseboard. Run chains for controlling dampers to a convenient point on first floor.

GUARANTEE.—The plant shall be left in perfect working order, complete in every respect and of capacity to accomplish the perfect heating of the building in a noiseless and economical manner and heating contractor is to make good at his own expense any defect of material or workmanship that may appear during the first year’s use.

Q.—May I ask that in some future number you treat on modern ice-house construction?

Ans.—The construction of an ice-house is a rather simple proposition and it had not occurred to us that special plans would be worth while for a building of that kind. For your information, we might briefly state in these columns that for a summer consumption of 9,000 pounds of ice on the basis of 50 pounds a day, an ice house 6 ft. by 6 ft. and 5 ft. high would give ample capacity, allowing for sufficient spacing between cakes, irregular packing, etc. Ice will keep longer and better the more compactly it is put into the house. The cakes, therefore, should be somewhat uniform in size that they might set closely together.

In case the ice-house is to be located in a sunny spot, two small latticed openings should be provided at opposite ends just underneath the gable peak for ventilation. In constructing the ice-house, use double thickness of matched boards on 2x4 stud with sawdust filling. Also the theory of omitting the sawdust packing between and using vent holes top and bottom is successful.

Q.—May I ask that in some future

This Beautiful Colonial Mantel $12.00

We will ship this artistic, well-built mantel to any address on receipt of price. (Read full description under illustration.)

This design is especially well adapted for the living-room or bed room, and is only one of the great variety we manufacture. Nothing neater could be desired in any house.

Lorenzen Mantels

$2.50 to $250

display individuality in every line. They are made of well-seasoned material, in all woods and finishes, and every detail of manufacture is carefully supervised to assure perfect construction.

We are at all times prepared to furnish designs of Mantels and Fireplaces, in Colonial, Craftsman, Modern Mission and Historic Styles, such as Louis XIV, Louis XV, Louis XVI, Renaissance, Gothic, Rococo, Empire, etc., also a complete line of Tile and Brick Mantels.

Send for Catalogue—Our new Book of Mantels, illustrated with 100 handsome photographic reproductions is now ready. Mailed FREE on request.

CHAS. F. LORENZEN & CO. Inc.

293 NORTH ASHLAND AVENUE,

CHICAGO, ILLINOIS
THE USEFUL ART OF TRANSPLANTING.

By Ida D. Bennett.

When one has planted the seed in flats in the house or in coldframe or hot-bed out of doors and the seed has germinated and grown into sturdy little plants of recognizable size one is apt to feel that the rubicon is passed and no further fears or doubts await the gardener, but until the plants are safely transferred to the open ground and are growing vigorously it can not with truth be said that there is nothing more to fear. Up to this time eternal vigilance is the watch-word and upon the care with which the operation of transplanting is carried on will depend the future life of the plants.

Nothing is gained by too great haste in putting out plants. Cold nights and soil will be destructive to all but the hardiest varieties of plants, but after the soil and ground have once become warm all the occupants of the beds may be safely transplanted and may be trusted to grow on vigorously from the start.

The best time for transplanting is during a spell of clear, sunny weather when the atmospheric conditions can be relied upon for some days in advance. Planting just before a rain is always an advantage if the weather following can be depended upon to be cool and cloudy, or if the rain is heavy enough to thoroughly saturate the earth and so settle the plants firmly in the ground, but rain followed by hot muggy weather is no ways desirable.

In bright, sunny weather one may plant and leave the surface of the earth covered with fine dust mulch which will remain undisturbed for days and reduce the care of the beds to the minimum. But rain after planting must be followed by cultivation of the soil to restore the dust mulch and this may have to be repeated often.

The plants to be transplanted should be hardened off by being exposed to the open air both night as well as day for at least a week before moving. They should also be given alternate dry and wet spells that the plant may have learned to store up moisture for an emergency.

The plants should be thoroughly watered the night before transplanting and lifted while yet in a fresh condition in the morning.

The beds which are to receive the plants should have been made a week or two in advance that they may have had time to settle before receiving the plants as newly spaded beds are too loose and porous to receive small seedlings.

Only as many plants should be lifted at one time as may be gotten into the ground before they wilt.

Each plant should be given sufficient room for the fullest development of which it is capable if one would have a bed of vigorous, healthy plants loaded with bloom. There is no more common mistake than to see a dozen plants crowded into room barely sufficient for one.

In setting plants in solid beds they should be set in even rows a regular distance apart, the plants in one row alternating with those in the preceding row.

In setting the plants a hole of sufficient size to take the roots without crowding should be made with the trowel or dipper and the plant set therein and a portion of earth drawn around the roots and
THE USE OF Ttile IN THE HOUSE

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Home Grounds—Continued.
press rather firmly about them: the hole should then be filled with water and when that has partially soaked away the remainder of the earth should be filled in and made firm and snug, but not hard. The earth about the plant should be then worked over with the trowel to produce a fine dust mulch. When all of the plants have been set in the beds it should be looked over for any damp spots which may come to the surface and these, if any, worked with a trowel. Thus treated the plants will require no further care for several days unless indeed wet spots should appear the following day about any of the plants, when the dry dust mulch should be restored. No protection whatever should be given; the plants standing with their roots in the cool moist earth and their heads open to the fresh air and sunshine are in the best possible condition for growth. If an occasional plant should show signs of needing water before the rest of the plants a hole may be made at one side and water poured in and the dry mulch restored. Do not water until the plants show signs of becoming established, and should it rain immediately after planting the ground must be worked over as soon as it begins to dry to restore the dry mulch and retain the moisture in the ground.

While these directions are intended principally for young plants from flats and hot-beds it will apply equally well to plants in the open ground which are to be taken up and divided and reset or for plants ordered by the florists when received by express with the roots and earth intact.
Splinters and Shavings

Improved Window Device.

WINDOWS as ordinarily constructed are difficult to clean without exposing the operator to danger. Furthermore, the usual sliding sash construction does not permit of opening more than one-half of the window at a time, so that it is impossible to get the complete ventilation afforded by the old casement windows. A recent invention in a very simple manner overcomes the above-mentioned defects. The glass is mounted in a frame, which is hinged to the window sash in such a manner that it can be swung into the room. This enables both sides of the glass to be cleaned without the slightest danger to the operator, and when the glass is swung open for ventilation purposes, it will be evident that the entire window frame is uncovered. The glass-carrying frame is perfectly made of light steel strips. In this manner a very strong construction is provided, which is at the same time very light, and does not obstruct an appreciable amount of light. The metal frame is covered by a molding, which harmonizes with the window sash. The window sash is provided with a lining plate formed at the outer edge with a flange against which the glass frame lies when in closed position. The frame is provided with a spring catch at one side, to keep the glass frame closed. It will be obvious, says the Scientific American, that the sash may be mounted to slide in the window frame as usual. The window may thus be lowered or raised to any extent desired. In this way the advantages of the sliding sash and casement windows are combined.

* * *

Interesting Redwood Figures.

The distributive movement of California redwood lumber for the fall season of 1906 has been remarkably large relative to other months of the year,
as well as to the corresponding period of preceding years. According to the returns compiled by the Lumber Record Bureau of San Francisco, the mills in Humboldt, Del Norte, Mendocino and Sanoma counties—the redwood producing district—sent out more than 126,000,000 feet in the time between the close of August and the first of December. Of this great quantity, 99,000,000 feet, in round numbers, were shipped to the Bay of San Francisco, a fact which throws considerable light on the activity of rebuilding operations in California’s metropolis.

For the eleven months of the year the total forwardings of redwood lumber stock have amounted to 363,500,000 feet, as compared with 312,165,000 feet for the like time of 1905 and 293,372,000 feet for 1904. For years still further back, 1903 holds the record for the largest eleven months’ movement, with 273,506,000 feet. Inasmuch as December of last year witnessed shipments of 35,513,000 feet, it is safe to say that for the current year complete the redwood mills will move 400,000,000 feet; and the chances are that shipments will go slightly above that mark.

### The Lumber Cut in 1905.

The U. S. Forest Service has completed work on a valuable bulletin which is now in circulation, covering in an exhaustive manner the entire lumber cut of this country in both hard and soft woods. The matter is much too voluminous to be given here at length, but a few facts gathered from the report will be of interest.

In the table of production by states, Washington leads with a big majority. Wisconsin stands second, Louisiana third, Minnesota fourth, and Michigan fifth. Oregon and California are about tie on production and, a surprise to most folks, the old state of Pennsylvania produced more lumber than either of the latter western states.

The table of production by species shows yellow pine almost double in quantity to white pine, the next on the list, with Douglas fir a close third. Hemlock is fourth with half as many billion feet to its credit as fir. White oak and spruce come next in order, followed by western yellow pine, cypress, red oak and maple. Other woods rank as follows: Poplar, redwood, cedar, redgum, basswood, cottonwood, birch,
elm, chestnut, beech, ash, sugarpine, western white pine and hickory.

* * *

**The Art of Wood Staining.**

Were the object sought merely the giving to the natural wood an unnatural appearance by the application of some stained liquid, the art of wood staining, as considered from the architect’s and finisher’s standpoint, would scarcely be an art at all, but, rather, the reverse of it. The skilled finisher has studied the woods which he has to do with, and he knows that they differ, as a rule, in their requirements at the hands of the finisher. If it is a good piece of work that is to be stained and finished, it certainly will be well to place the work in the hands of a skilled workman. As “the beauty of one star differeth from that of another star,” so does the beauty of woods differ. To bring out the wood’s true beauty and so heighten the whole effect, that is the stainer and finisher’s art. It is said to reflect upon the acres of good floors, for instance, that are utterly ruined every year by the novice.

Amid the multitude of prepared stains on the market we walk with uncertain tread, unless we are sure of our way. The stain that is well adapted for one particular wood will prove a miserable failure on some other sort of wood. For instance, try weathered oak stain on pine, especially yellow pine, and note the result. Then, too, are the spirit, and the oil, and the water stains, all to be considered. Each having its special field of usefulness, but useless in another field. Then the stain appropriate to each wood. There may easily be made five hundred different stain effects. And yet there are not so many kinds of woods.

**Hard and Soft Wood for Finishing.**

THE OAKS. There are the red, the white, and the black oaks. The most useful as well as popular of all our interior finishing woods. There is a wide difference even in these few varieties out of our some forty native oaks, when it comes to their finishing. Then when we quarter-saw our plain looking oak, and get the now familiar flaked effects, we enter a new field. But all the oaks need to be paste-filled, because they are in the open-grained class of woods. The ammonia method of staining oak to an antique effect is the best, though the process is seldom practicable in a building; of course, the interior trim may all be fumed at the factory. The difficulty with pigment stain for antiquing oak is that it allows the lights to show through, and this is not true old-age effect. The ammonia or fuming
process does not allow this, but darkens the surface evenly, flakes and all. But if the more gaudy effect of golden flakes is desired, then stain with a pigment medium. This is not considered as refined an effect as the fumed or dead effect, beautiful though it be. Golden oak is the most popular of all the many oak finishes, but this applies more to furniture finishing than to house work.

**Mahogany and Its Imitation.**

The architect and the finisher do not always agree as to what will be proper when the matter of staining wood to make it look like some other wood comes up. It is best to select a wood for staining in imitation of another wood that possesses as many of the physical characteristics of the real wood as possible, otherwise the result will surely be disappointing. Now, if we want to imitate mahogany we take birch, not pine or any wood, unless it be cherry. This will take many of the peculiar markings of the real wood, brought out by the staining. And yet it is only an imitation. I was once surprised to hear an Indianapolis architect, showing some pieces of wood stained to imitate mahogany, declare that would be impossible for anybody to detect the deceit, for it is easily apparent to any one. I have had ordinary persons pick out for me, from a scattered lot of stained wood samples, the real and false mahogany, every time. And the specimens were well done. Cherry looks well when stained to a mahogany color, but the effect certainly is not that of the real thing.

Old mahogany, which has acquired a richness and depth of color through long use, is of course scarce, and brings a fancy price. But the newer and cheaper grades, like that imported from Central America, for instance, are gotten in very large quantities, and the supply will not suffer any appreciable diminution for a generation at least.

The best grade of mahogany, distinguished by its deep and rich color and beautiful markings, is used more for veneers than in solid mass, because of its great cost. Mahogany veneers are usually sawn of a thickness running about 26 pieces to the inch, and it is cut with the grain or across it, like quarter-sawed oak, according to the uses to which it is to be devoted.

**WHAT CAN YOU DO?**

The School for Defective Vision, Hearing or Speech, conducted at 403 Newberry Boulevard, Milwaukee, submits the following facts:

This school was founded in 1903 by Miss Alice Burnham Fellows, and is still conducted by her and its managing board is made up of Milwaukee business men.

There have been twenty-nine pupils cared for during that period.

These children are not only educated and inspired with the desire to be self-supporting, but they receive skilled medical care, the majority of them being seriously afflicted physically.

The entire burden of conducting the school and raising funds for its support has fallen upon Miss Fellows ever since its establishment.

That Miss Fellows may give her entire attention to the care of the children and be relieved of the financial burden, it is desired to raise immediately a sum sufficient to equip the school with necessary apparatus, enlarge and improve its present quarters for the accommodation of the increasing number of children. Your help is needed and earnestly requested. All money received will be properly acknowledged and applied by the Board.

Please make your check to the order of the Treasurer, A. L. Gilbert, care of Spencerian Business College, Milwaukee, Wis., and accept our thanks for your kindly co-operation.

**NOTE**—The publisher of Keith's believes this a very worthy cause and trusts some of our readers will take an interest in assisting the work.

**AD INSERTED COMPLIMENTARY.**

**WANT A GOOD HEATING SYSTEM?**

A stuffy, Steam or Hot Water Radiator-Heated Flat may satisfy the city dweller who is obliged to put up with it, or A Hot Air Furnace may be good enough for the man who builds cheap houses to rent or to sell, but 30,000 KELSEY, WARM AIR GENERATORS have been sold to the HOME BUILDERS who have investigated. SEND FOR BOOKLET which explains why the Kelsey warms large volumes of fresh air properly and forces to every room in the house and why it is healthful and economical.

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Bearing on the Labor Situation in the Northwest.

As we go to press with this issue, a serious disturbance is likely to occur in the building trades of Minneapolis, due to demands made by the union carpenters for an advance in their scale of wages. In fact, at this writing the master builders and the representatives of the union have locked horns.

The painters have just come to an agreement to make their scale for this year 42 1/2 cents an hour. The prevailing scale for some time for carpenters has been 40 cents an hour and that as a matter of fact many contractors have been paying their best men 45 cents, the new scale asked is 45 cents. During the early part of the negotiations, the master builders agreed to compromise, offering 42 1/2 cents an hour. This the union declined to accept, after which the master builders withdrew that offer and now are making a stand for the same 40 cent scale to be effective and insisting that they be permitted to engage non-union foremen on the job. This the union absolutely declined to consent to. While there are but seven to eight hundred carpenters, if the master builders make a fight for the open shop or at least that phase of it, putting non-union foremen on the job, it will undoubtedly cause the affiliated trades to refuse to go on with the work where such men are employed. This will call out all of the building trades and effect some seven thousand men. It is to be hoped that both sides will get together and avoid such a result as there is a great deal of construction work under way.

It will be especially interesting just at this time to note what the carpenter scale is in other sections and we have letters from several points showing that in Vancouver, B. C., carpenters get $3.50 a day, 8 hours, Bayhead, N. J., $3.00, Jonesboro, Ala., $3.20 to $3.50, Coeur d'Alene, Idaho, $4.00. Of course the farther west we go the higher the rates with corresponding greater cost of living.

A carpenter getting 40 cents an hour working 8 1/2 hours a day earns $80 to $85 a month. While this is a good monthly salary for tradesmen, it must be remembered that most carpenters are not fortunate in being employed all of the year. They are thrown out of work two months of the winter time, which makes a decided difference. If they are out of work about two months of the year, this would mean an average reduction of $15 a month, putting them on the basis of $70 a month, which is a reasonable living wage for a mechanic. 45 cents an hour would bring the earning capacity up to practically $100 a month. After all it is entirely a matter of whether a man earns his pay or not and certainly good carpenters are worth 45 cents an hour, but poor ones most decidedly are not and that is where the rub comes in on unionism.

Plans of this Home $15.00.

This includes complete working drawings and specifications, prepaid. This house has furnace, concrete foundation, gas and electric lights, plumbing, complete. Cost to erect from $2,500 to $3,000. Send 50c for our portfolio of photographs and plans of sensible, practical, artistic Homes. They have no superiors. Send stamp for our sketch offer.

KKAPP & WEST, Architects,  Colman Bldg., Seattle, Wash.
Things Worth Doing and How to do Them.

The latest of the Beard Books for Girls is a bulky volume of some 450 pages, fully illustrated, and brimming over with “things to do” which are especially for girls. The authors, Lina Beard and Adelia B. Beard, are well-known to the children thru their magazine articles and former books such as The American Girl’s Handy Book, Recreation for Girls, and others.

The present volume covers such subjects as parties, shows and entertainments for all occasions and holidays. Things to make for home, gift days and fairs, including useful articles in pottery, stencils for drapery and wall covering decoration and the like.

Just the book for elemental guidance in home-craftsmanship and a veritable “mine” of new ideas to keep the children occupied, hand and mind, during rainy days and winter afternoons after school. Outdoor sports figure prominently among the “Things Worth Doing,” and altogether the book will prove a valuable investment for anyone with a daughter in the family.

Pubs., Chas. Scribner’s Sons, New York. Price, $2.00.

The Field and Forest Handy Book.

Dan C. Beard is a name to conjure with among American boys, and since the appearance some years ago of the “The American Boy’s Handy Book,” Mr. Beard has been the recognized authority on “what to do and how to do it” as regards the boy’s world. The new “Field and Forest Handy Book” is full of new ideas for out-of-doors thruout all the seasons, as applied not only to sports and pastimes, but including much on the line of nature study. Healthful, out-of-door life with abundant occupation for brain and hand is the latter day “slogan” that calls with irresistible appeal to the American boy, and Mr. Beard’s latest book serves as a guide to the best methods of applying his “surplus energy” in right lines.

Pubs., Chas. Scribner’s Sons. New York. Price, $2.00.

Listener’s Lure

A very happily worked out story, told by E. V. Lucas. means of letters; a method of novel writing which is not new but which has rarely been as well handled as in Listener’s Lure.

To tell a story successfully thru “re-produced correspondence,” so to speak, and without the personal and present elements usually drawn upon so freely by novelists, shows a rare degree of skill. In the present instance Mr. Lucas has, without the help of “action,” and relating events always in the past tense, as is necessarily the case in correspondence, succeeded in giving us an interesting story.

There are but few dry places to skim over, most all of the numerous letter-writers, whose epistles go to make up the story, being unusually good correspondents. The book abounds in clever character sketches, and a vein of humor crops out in numerous places, often quite unexpectedly.

A charming love story runs thru the web of letters, which cross and re-cross between the several characters in the book, and even the final happy denouement is told the reader thru someone’s letter to somebody else. Pubs., The Macmillan Co., New York. Price $1.50.
So many qualities enter into the making of a successful home that the person who accomplishes it is deserving of the utmost credit.

This is particularly true if it need be brought about through the exercise of economy. The less money expended, the more honor is due to him or her, who from little brings forth much. A home, say, that is not only pleasant to look upon but comfortable and practical to live in.

Nor is economy the only cardinal virtue that must be brought into requisition in the making of a successful home on small capital. It also demands most careful discrimination as to the use of lines, the combining of colors, the best methods of lighting and heating—a study of the
elements that make for beauty and healthful, and normal living. One who accomplishes this, however much taste he may possess, must plan every small detail as thoughtfully and carefully as those that appear most vital. He must learn where to sacrifice here in order to be more lavish there. He need learn to compromise in some instances and stand firm for his convictions in others. The house, though it should be planned from beginning to end before the sod is even turned, may need for reason unforeseen at the outset, to undergo devious changes. This is where architects and clients arrive at misunderstandings often. The architect with some wise end in view, sees it best to make alterations in the plans and the client straightway charges him with not knowing his business. On the other hand, the client for reasons important to the dweller in the house under consideration wishes changes and the architect's contrary and holds to first principles. It is the proverbial story with two sides.

Of course, houses which are inexpensive must be simple. But there is so much written these days about the beauty of simplicity, one rises up in rebellion at the sound of meaningless phrases that run into long discourses without putting a single practical or helpful notion into the reader's head. If one can show what has actually been done, or may be done, then there is some excuse for the moralizing. The home-maker, however, who is really successful must love it. No one ever heard of a man's founding an orphan asylum who hadn't a particle of liking for children, nor did any one ever know of a delightful home being evolved from a brain that didn't like the grist come to its mill, or enjoy thethreshing of it.

The house illustrated is most pleasing to look upon, even more so than the picture might lead one to think, for a house that faces north is a problem to even the best of photographers. The conditions of its making were as follows. Given a plot of ground and a eucalyptus grove, together with a small amount of capital, which to be sure is convertible into building material, how make a home, especially when the capital amounts to considerably less than a thousand dollars, and the house for the comfort of the family who are to occupy it, must be fairly good size. The man who possessed the above enumerated articles, not only loved a home, but he abhorred ugly ones and he spent a good many thoughtful days speculating as to just how he might, to the best advantage, make use of his wares. Finally he concluded the eucalyptus grove should have a share in the making of the new home. He straightway hired a Mexican to cut down part of it. And soon after the foundation was laid; he was passing along the street one day when he saw an old store building, which had plate glass windows, being torn down. He immediately purchased the windows for a small sum. Then he progressed with his house, building the first story of eucalyptus, exactly as if it were of logs, leaving large openings for his windows. The fact that the windows were large was fortunate from an economical view,—that of heat saving in a climate where fuel is very high—as they offered such large surfaces to the sun.

There were some obstacles, including
the windows, which, while such a bargain, were not all alike. But here was a place where compromises had to be effected. They were so many that the builder by no possible means was able to change them, but he consoled himself with the fact that they would admit more sun and air, and even more of a beautiful landscape and mountain view than as if they had been smaller. When the first story was completed, the eucalyptus began to give out, so for the upper story ship-siding was used. But to further the artistic effect the second story was made to overhang the lower, and to support it a clever coup was resorted to. Trees that grew close at the base and for stove wood now rose to the dignity of covering the chimney, resulting in a picturesque log cabin effect. This suggested their use for the railing of an uncovered veranda, which is floored with cement, with spaces left next the house for the vines that since the picture was taken very nearly cover it. Over the chimney, ivy is growing and the second story is stained a real ivy green. The window sash are white and the roof also, though it has weathered sufficiently to have a lichen-like gray appearance.

The garden gate, too, is of eucalyptus short lengths, and the whole garden fence would have been made of it, only that it gave out and there wasn't time to wait forked at the top, prong-like, were used at the four corners to brace the top story and these do double duty as a trellis for climbing roses. All of the economies, however, did not turn out as such. One was the chimney man—truly a poor person to economize on. He constructed a fireplace that drew well, but alas, his eye was not straight, and the chimney on the outside looked like a drunken campanile. But the wise, patient, compromising homemaker obviated the difficulty in a very smart fashion. The short lengths of eucalyptus that had been saved for more to grow, though it has the reputation of doing so in a night.

The brightness of the flowers and trees in the garden accelerate the pleasing color qualities of the ensemble. There are a quantity of old fashioned flowers, roses in abundance, trees of glowing pink myrtle and tropical loquats, besides the golden globed oranges, the fruit of the latter, which combined with the bloom of the acacia tree, make a beautiful harmony in yellow. And part of the garden is carpeted with Irish shamrock.

The interior of the house to begin with
KEITH'S MAGAZINE

consists of what is called the sun-room. It is the room you enter and has a beautiful view of the mountains and is favored with the sun all day, having both an eastern and southern exposure. The stairway goes out of this room, leading to two large sleeping apartments above, a good bath and the closet room requisite to general housekeeping. Then there is an upper veranda on the south that does not show in the photograph, which serves as an outdoor sleeping room. Continuing down stairs is a cozy sitting room, with the large fireplace of which we have spoken, this of red brick, which makes the cheerful note of color necessary with the wood tones.

There are comfortable chairs, plenty of books and magazines, and always a bright fire on the hearth when the weather is cold. From the windows of this room is a view of the garden—the delight of the owner's heart.

Opening with a wide arch from the sitting-room is the dining-room. The walls here do not show the logs as in the other part of the house, but are covered with natural burlap, and there are red curtains at the windows that harmonize in tone with the red mantel in the sitting room. Some red geraniums in the window attest to a thoughtfulness for the right bit of color.

The floor of the sun-room is covered with matting, for even the most deserving of rugs would fade here, but a few Betsey Ross rugs are disposed at necessary intervals. In the sitting-room a large prettily colored jute rug is spread in the center bordered with matting, giving a cosy, livable look. And in the dining-room the floor is again covered with matting, resulting in a pretty color harmony, since it is so near in tone to the natural burlap on the wall.

It is in every way a perfectly comfortable and most economical home, and bears the earmarks of originality throughout. How much more of life is there to be enjoyed here than in a rented house of which there are usually a large number just alike, making one feel as if he were one of a large sheet of postage stamps. And how much more worth living is life here than in a stuffy city apartment where one feels still more like a pigeon in a box.

This house was entirely the product of the owner's brain, and a good deal of it was the work of his hands. He isn't obliged to temper his days to the ideas of some disobliging landlord, as he might in a rented cottage, nor must he appeal to a general janitor to poke his fire on a cold, winter day should he desire his home a few degrees warmer. The making of this home has occupied many pleasant days and its maker has more respect for himself, and so have his neighbors for him, than as if he had indulged himself in unnecessary extravagances for the sake of having something just like somebody else.
SIDING, shingles, brick, stone, cement or concrete blocks? The relative cost of the materials used in the exterior walls of homes very often decides this perplexing problem for us and this accounts for the fact that nine-tenths of the houses put up yearly are sided, for siding is, (all opinions to the contrary considered) the cheapest material for the exterior. The time is coming when it will be as cheap to make the exterior walls of solid masonry as of frame construction, but that time has not yet arrived. The question of cost, however; is not always the ruling factor. When it is not, the problem becomes at once more complexed 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 previously erected by both artistic and misguided people who on the one hand strive for something beautiful and on the other for something odd or “different from the rest.” It would be hard to tell which class has originated the most combinations. As mentioned the commonest exterior is the one on which lap siding has been used, but all lap siding is not put on the same. The cheapest of course is the ordinary drop siding used on barns which gives a far too ordinary appearance to be considered for a house. Then there is the six inch white pine siding laid four and
five inches to the weather. Variations from this is narrower siding laid two to three inches to the weather, also alternate wide and narrow strips. Then one occasionally sees special siding laid inch thick at the thickest end and eight or ten inches to the weather. This is used only on a severely plain colonial house intended to look as tho put up "in those good old days" when workmen were handicapped by a lack of tools which made their work necessarily crude. To the writer, however, there is more character to such a wall than to one on which narrower siding has been used. In getting away from the all sided house the first variation is usually to side the walls up halfway, or to a belt cornice on a line with the porch cornice and to use shingles from there up. When this is done the wall shingles should be stained to harmonize with both siding below and roof above. White cedar shingles are the best for both roof and walls. Dimension shingles are usually used for the walls, (shingles all of the same width) tho as a matter of fact they look if anything better when laid the same as on the roof. Too much regularity or repetition of the same thing is not as attractive as a wall with a little variety and character to it. To this end some designers prefer to wave each line of shingles a trifle in order to overcome slightly the stiffness of the parallel line effect.

Shingles are very attractive when used as the exterior for cottages or bungalows, as will be seen in the unique all shingled cottage illustrated. The side walls of this cottage have been laid up with "shakes," a very large shingle made in some rural western towns. On this cottage they are laid ten inches to the weather with a slight irregularity of line. Shingles are usually laid five inches to the weather for side walls but there are variations to this rule. A pleasing way to break up the sameness of a shingled exterior is to lay each alternate course two inches to the weather. Another way is to lay each second, third or fourth course double, thereby making a deeper shadow under the double course which gives a character to the wall which is hardly comprehended until seen.

Another combination of materials now becoming popular is to shingle the lower half of the house and plaster the upper half with cement, either in the natural gray or tinted. The editor of Keith's has an attractive home in which he carried the shingles up to the second story sills and used cement plasters from there up. Cement plaster when used on the exterior of a frame wall is (or ought to be) applied to expanded metal or wire lath which has been furred out an inch from the sheathing to insure a good foundation. Of this more will be said later on. Of the truly rustic exteriors few can equal a wall of cobble stones or field stones. To lay these properly, however, is almost an art. The mason will either try to make the wall look too good and get them laid

"A RUSTIC EXTERIOR OF FIELD STONE."
up too regular or he will do it too carelessly and get the mortar joints too wide. Either extreme should be avoided. A cobble stone wall should be at least eighteen inches thick in order to be able to use large stones in places. The view of a bungalow shows a very satisfactory job of stone work. It is a peculiar fact that it does not look well to use a cobble stone wall up two stories. It is best to use it only up the first story and to shingle the wall from there up.

(To be continued in our July issue.)

General Use of Terra Cotta Blocks and Fire Proof Brick.

MORE general use of terra cotta blocks and fire proof brick is coming into favor for parts of buildings bearing the stress of heavy loads. In the past, fire proof tile has has principally been called into service more for the purpose of protection of steel work, for partitions and ceilings. In a number of the lately designed buildings the main walls are built in the usual way of steel columns and girders to carry the load, protected on all sides by terra cotta semi-porous and porous blocks, but the dome on the top floor of each structure is made with fire-proof tiles. A double line of steel columns divides the domes in two sections and from the top of these an arched ceiling effect is made of tiles. The span between the columns is sometimes upwards of fifty feet, but so perfect is the arch made that the compression is uniformly distributed and no part of the load is in danger of falling. The tiles used for this domic ceiling are 6 by 15 inches in size, and they are laid on edge so that the flat surface is exposed. The first few courses above the supporting steel pillars are made of fireproof brick, and then the tiles spring from this masonry work and gradually curve inward to the skylight of the dome. The tiles are laid in cement mortar.

Such a domic ceiling gives the maximum of lighting space at a minimum of weight and cost. The fire protection is considered by architects and engineers unusually safe. In the event of a fire the glass skylight could be broken through, but no other damage would result. The upper loft is completely incased in terra cotta tile burnt in the making to a temperature approaching 2,500 degrees. There is no metal framework supporting the dome, and as a result no temperature below 2,500 degrees could affect the stability of the arched ceiling.
PRING is an awakening of life among all the activities of man as well as nature. In the country is seen the most marked changes, the fields are no longer barren, the fruit trees bloom and the cock crows lustily on the fence. In the towns and cities the stores are restocked, the houses cleaned inside and out, dissatisfied people are changing their place of residence and everywhere the robins' song must compete with the hammer and saw. Even insect life is awakened to its pestous part in nature's plan. Spring is a time of rejuvenating happiness; 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 heart, man never is, but always to be blest." As home is the one place in all the world where true, satisfying happiness is found, to possess one and provide for it comfortably is therefore the prime object of all natural people. That this should bring about building activities in the spring is quite natural. When we see dumb nature building we are convinced of our own powers and the work assigned to us in nature's intricate plan and we build. Then too comes to us the fact that all this beauty is only transient and that we must have our homes ready for occupancy before the next winter's snow.

When the family decides to build a home there is nothing else talked of within its circle for some weeks. The lot must be selected and there is a host of incoherent ideas to be "boiled down" before definite arrange-
ments can be made to build.

It is to assist these families in coming to their conclusions that we present this month three pleasing homes which found their conception during other springs. These homes, it will be noticed at a glance, are all of frame construction, and here I answer a question asked me every day: "Is it cheaper, or as cheap, to build in cement or brick as in wood?" No; while the time is fast approaching when it will be as cheap to build walls of masonry as to make them of wood frame construction, that time has not yet arrived. The cheapest house to build is still the one with frame walls and siding, sometimes called clapboards. These three homes, it will also be noticed, are all painted white, both body and trim. There is no other color (we call it a color through habit) that lends itself more readily to a happy combination with nature, through contrast, than white. It does not matter much what the color of the roof and foundation will be, it goes well with it. And nowhere does it look better than when it is half hidden among green foliage. The beauty in architecture, as in life, is brought out by its shadows. It is not the glaring high lights, but the shadows, that test or prove the virtues of a design or individual.

It is probably through this fact that white became the legendary emblem of purity among the ancients. If there are any especial features about the design of a home, white will emphasize them, other colors subduing them in varying degrees according to the colors used. You will note how prominently the cross work over the porch entrance in one of the views stands out against the shadowed background, in spite of the fact that it is itself in the shadow of the overhanging cornice. This house, in fact, is given its soul by the use of white paint. Its entire attractiveness is due to the fact that unusual attention has been given its minor details. Paint these dark brown and they would be lost to the casual observer. This house is distinctly original. Its most striking feature is undoubtedly the art glass dome over the entrance porch. In it hangs an appropriate cluster of lights, making the dome appear the most beautiful at night from without, while its various hues are, mingled with the sunshine, cast in a radiant
glow upon the porch floor during the day. The cornice of this house is heavy, but is so embellished in its ornamental details that this fact is overcome. Considerable attention has been paid to inside and outside effect through the ornamental treatment of the windows.

In comparing the houses in the other views one might almost be called the simplification of the other. The one has an extended porch, a rather expensive cornice and some prominence given to its dormers. The other has simple dormers, a simple cornice and porch columns of a simpler order, they being in the one case Scamozzi Ionic with fluted columns and in the other simple Doric. This simple Doric porch is ideal in every respect. It is unusually home like. A touch of life is given to the plain clapboard wall by giving to every fourth strip a double projection. This idea whether carried out in siding or shingles always lends considerable life to an otherwise plain wall surface. These three homes are typically American in every respect.
Modern Designs in Duplex, Four and Six Family Houses.

SKETCH OF FRONT ELEVATION.

A Very Interesting Sketch for a Four Family Flat.
A Four Family Suburban Flat.

In the accompanying illustration a small suburban flat is shown, providing for four apartments on the first and second stories, while the third story provides ample space for either two bachelor apartments of three rooms each or could be finished into additional rooms for the flats, providing servants quarters for each flat.

In making the design, it was the intention to eliminate the set lines so often found in apartment buildings, even in the smaller ones. For this reason, it will be noted that the ends are treated differently, while the same arrangement of rooms is maintained. The building is designed for a corner lot, approximately 50 x 150 feet in size, tho the building is only 28 x 90 and would go on a smaller lot, but it should have a site of about the size mentioned in order to properly set off the building and provide lawns for the tenants. It is intended that one of the lawns be made into a croquet ground and that in the basement, which would extend under the entire building, a fine play room for children could be finished off as well as an apartment for the janitor, laundry and heating plant.

The exterior walls it is intended to sheathe and finish with cement plaster put on with metal lath and given a very rough stippled finish. The cement plaster is very durable and does away with a great deal of expense for repainting. It also makes a very warm wall.

The halls, living and dining rooms would be finished in hardwood. The other rooms would be finished in pine with hardwood floors throughout. The heating would be by steam and the kitchens would be provided with gas ranges and contain built-in cupboards and refrigerator drains.

One of the most desirable features is the elimination of unsightly rear stairs and porches. The story heights would be eight feet for the basement, nine feet each for the first and second stories and eight feet for the third story. The cost is estimated at $12,000 complete.

A Duplex Providing Splendid Porch Room.

Duplex houses or two family flat buildings are becoming exceedingly popular with many people both for homes and for safe and conservative investments as well. Many times these duplex houses show lack of the architect's hand and are rather ordinary affairs. The accompanying design,
however, that of a two family flat, at once shows that a competent architect made the plans. This building is somewhat larger than the general run of two family houses, the foundation measurements being 50 ft. long by 33 ft. wide and each apartment has six good sized rooms and bath. The front columns are quite imposing and the projection of the roof in front gives a very commodious porch 11 ft. wide for each family. The broad simple cornice adds strength to the entire design. The structure is of frame, lapped siding finish. Foundation is three course stone, brick being used under the porch. Basement accommodating the heating plant, laundries, vegetable cellars, etc., extends under entire building. There is but one entrance for both apartments, the stairs leading to the second floor from the main vestibule.

Entering the apartment on the first floor, we come into a square hall which obtains most of its light from the glass paneled entrance door and connecting rooms. Across the front is the main living room, 24 ft. long with fire place on inside wall and book shelves on each side. A wide doorway leads into the dining room connected by butler's pantry to the kitchen. Each chamber is well provided with closet room. In fact close attention to the floor plans will show ample provisions for closets in both upper and lower flats.

The inside finish is plain oak excepting in the bedrooms, kitchen and rear hall, where the finish is pine enameled. This building was erected several years ago when the price of building material was considerably cheaper and the structure was put up at a cost of $6,500.00.
An All Frame Six Family Apartment.

The accompanying design for an all-frame six-family apartment building is very interesting as most generally a flat building to accommodate six families or more is built of brick or stone. The use of the large fluted Colonial columns running two full stories, supporting the porches, together with the three center dormers, make a most imposing front. All of this front and the trim is in pure white with a pearl gray for the body of the structure. The roof and gables are shingled and stained green. Native blue lime stone range rock four courses high is used for the foundation. The interior is finished throughout in birch, the same being stained mahogany. Also birch is used as flooring material in the entire building, with the exception of the bath rooms, which are tile as well as the bath room walls. One main steam heating plant provides for the six flats.

The janitor's living apartment, boiler and fuel rooms take up one side of the basement, while the other side is devoted to a general laundry and store room for each apartment. The first and second floor apartments are identical, each having seven rooms and bath.
OUR next design is of a four family brick flat structure each flat having five rooms and bath. The construction material used in the building is brick with pressed brick facing in front, common brick for the other walls and central partition. A very pleasing central entrance is obtained through the use of the large fluted columns. This structure would be a good example of rental property for investment purposes. The apartments are of modest size but make most excellent accommodations for young married couples.

The front parlor is about 13 ft. square. The adjoining dining room of similar proportions. Off of this is the main bedroom. Accommodation for servant’s bedroom is provided directly off the kitchen. Individual hot water heater and tank is provided for each of the four flats so that their occupants may run their own plant independent of the rest of the building. There is also a little gas heater attached to the hot water tanks for summer use.

This building was finished throughout in birch. The front rooms being stained mahogany and varnished, while the back portion was left in natural finish, varnished. All of the floors are birch. The building which we are now considering was erected in 1906 at a cost to the owner of $6,000, exclusive of plumbing and heating.
The Low Sweeping Roof and Projecting Eaves.

Fernand Parmentier, Archt.
Description.

We have quite an unusual exterior in the accompanying design of which we show a photographic view as actually built in the west. Attention is requested, however, to the fact that the cottage was not built in exact accordance with the plan as originally made by the architect, as given in accompanying floor plan cut.

The dormers to light second story chambers, originally provided, were omitted, and the builder in this case converted the main space of the second floor into one large front room. The entrance is also changed somewhat. Of course had the house been built as originally planned, it would be considerably larger, but as it stands before us, the builder has secured exceedingly pleasing and satisfactory results. The low dip roof projecting some 4½ ft. past the wall line and with broad extending cornice supported by heavy beam brackets, is quaint and satisfactory treatment. These eaves are finished with 6 inch red wood boards left in natural finish. Siding is used over the entire building and is carried down to the ground, as the house was built in a warm climate, no basement being required.

The exterior is finished in slashed grain Oregon pine, stained to imitate antique oak. Brick mantel. Floors oak. Cottage has all of the modern conveniences and will cost about $3,500.00.

A Concrete Post Office.

There are very exacting and lengthy requirements which every building erected for the government must meet and any building which does meet them cannot be improved in the quality of its materials and workmanship.

It has not been over five years since we commenced to consider with seriousness, the feasibility of constructing walls of concrete and the first experiments along that line were far from satisfactory owing largely to the inexperience of the workman and an over enthusiasm on the part of the manufacturers, to carry the uses of the material beyond its limitations. For example they tried to guarantee a "stone house," at the price of a frame one, first by using the material as an imitation of stone surfaces, and second by "skining" down on the quality of cement used to reduce the cost. No one, however, with any judgment has for an instant admitted that concrete from the mould bore any resemblance to rock-faced rock but if the proper materials are used the quality of strength is freely ad-
mitted. We must therefore acknowledge the limitations imposed upon us and evolve a style adapted to cement block construction and build “concrete block structures,” and not attempt “imitation stone” ones.

It is not our purpose to criticize the architectural (?) style of the Lyndale avenue Sub-station Post Office, so we will merely pass over the subject remarking that it is not the “style adapted to concrete block construction” before mentioned. It presents however, in concrete form (double meaning) many of the possibilities of concrete construction and it is because of the number and quality of their forms and not their relative harmony that we have selected this building for publication. The coping, cornices, lintels and sills are all of concrete in various forms and patterns, thus proving the availability of concrete for ornamental work. These ornamental forms are made in the proportions of cement, one part and three parts of finely crushed rock. Unlike the manufacturer of blocks they are left in the moulds for three days and then laid aside for further curing. The main part of the front is of concrete brick made in the standard brick size. The concrete brick is only a facing four inches thick which is tied with metal ties to eight inches of common brick behind. The side and rear walls are composed of four inch hollow concrete runner blocks which are also tied to and backed by eight inches of brick work. All walls are furred and plastered. The foundation is block veneer to grade and then a sixteen-inch solid concrete wall. The roof is a combination pitch, tar paper (five ply) and crushed limestone. The building was erected by private interests, but of course before being accepted for use as a sub post office it had to be accepted as a suitable place for this purpose and was constructed and planned under federal approval.
SECOND FLOOR PLAN

SCALE 1 IN. 8 FEET.
Conducted by Eleanor Allison Cummins, Decorator—Brooklyn, N. Y.

Whatever the wall decoration chosen for the lower rooms of the house, too much cannot be said in favor of an antiseptic surface for the bedroom walls and for bath rooms and nurseries.

Aside from the sanitary advantages of the treatment which is a part of the wall rather than pasted on, much is to be said for its esthetic advantages, as well. The plain surfaced wall is restful to the eyes, tired with the day's work, or just accommodating themselves to light. In sickness, however beautiful, is often a source of pain to senses abnormally acute.

The figured cotton fabrics which custom ordains for bedroom hangings and coverings are thrown out to the best advantage by a plain colored background, while it is quite easy to vary the monotonous surface by the use of a stenciled decoration repeating the colors of chintz or cretonne.

For instance, in a bedroom of medium height, the ceiling and the upper fourth of the wall might be a warm light gray, the remainder of the walls a soft pink. The woodwork would be gray, of a little deeper tone than the ceiling, with a picture moulding to match. Just above the moulding would be a stencil of a floral design in gray greens and pink. The cretonne used would have a pattern of pink flowers and green leaves, on a gray or white ground.

With a green and white cretonne, perhaps one of the reversible Morris cretonnes, the ceiling would be cream, the side wall green of a lighter tone than the cretonne stenciled in cream, while the curtains might be of green linen, or denim, in a still darker tone. An equally good scheme might be worked out with one of the Morris cretonnes in shades of old red on a cream colored ground, using a very light old red for the side wall, and a reddish cream colored ceiling. With mahogany or cherry furniture this coloring is specially pleasing.

One advantage of a plain surfaced wall is the possibility of getting an absolutely harmonious color scheme. Has any reader ever wrestled with the problem of getting other things to harmonize with a cretonne in lavender tones, or tried to find a wall paper to tone in with a specially beautiful blue and white Japanese crepe? All these things are easy enough when it is merely a matter of mixing and modifying powdered color.

While it takes a professional to paint a wall successfully, the wall covering, which consists merely of mixing powdered color with cold water and applying it with a brush is quite within the skill of a very amateur worker indeed. It can be applied over a wall paper which is firmly attached to the wall and is not too violent in color. Heavy gilding or flitter should be removed with sand paper.

Whether or no to dispense with draperies in the summer time is a vexed question. Considered as to the welfare of the draperies it would receive a decided negative. But draperies certainly add greatly to the comfort of the house, shutting out much vagrant sunshine and by catching the faintest suggestion of a breeze giving an illusion of coolness.

Perhaps the best solution is to have two sets of curtains, something thin and cheap, like art muslin or silkoline, or even cheese cloth for summer use and keep the better ones for cool weather.
Unless a house is very well shaded, two sets of shades are almost a necessity unless one is to pass the summer, in Cimmerian darkness, behind closed blinds. In hanging the two sets care should be taken to have the two shades at exactly the same level, or, if this is not possible, to have the dark shade next the pane and lower than the light one. Otherwise it will make an ugly black line at top of the window.

A young man, who is a guest in demand for week ends in country houses, said: “I always like to stay with the So-and-Sos. They put flowers in my room and a new magazine and some books they know I like. Then there’s a lamp I can light easily on the table by the bed, and a full inkstand and a stub pen. And they don’t ask people to meet me who are daft on nature study, when all the nature I know about is hunting dogs.” Which may be the sufficient word to some wise hostess.

Two or three dollars invested in a pretty striped gingham or percale, will do a great deal in the way of freshening the house for summer. Covers should be made for all the sofa pillows and another for the couch itself as well as for any upholstered chairs. One often finds a gingham with a broad strip of gray blue or rose red on a white ground, which is pretty for the purpose, or a percale in pink or ecru and white. It goes without saying that one chooses something which one would not get for a dress. Occasionally one runs across some cheap cretonne, for eight or ten cents, but it is never warranted to wash, and is hardly worth buying.

The brass bedstead is undergoing sensible modification and losing, to some extent, its metallic character. It is now made so as to exactly resemble a wooden one, of the severe type, with a banistered head and foot board, while the finish is not bright but dull, and in color more like golden bronze than anything else. Beds of this style are an expensive luxury, costing ninety dollars. They are adapted to a greater variety of surroundings than the ordinary brass bed, which requires very delicate furnishings.

A young woman, who had acquired in some way a long wooden settee, such as used to be seen in Sunday school rooms, transformed it into a settle for a long space in her bedroom. She removed all the paint and varnish, shortened the legs a couple of inches and enameled it white. A flat cushion, shaped like a mattress for the seat and four similarly shaped ones for the back were covered with flowered cretonne and fastened securely to the back with tape strings.

Some of our readers have perhaps seen the very effective Arts and Crafts rugs which are woven with a white warp and a dark blue woof and which have a slight greenish cast. This is produced by mixing with the rags an occasional strip of old-fashioned grass green calico with small yellow figures. Another effective variation can be made by the introduction, in a blue rug of a small proportion of blue-and-white apron gingham. The sort of herringbone stripe of green and white on the end of pink rugs is made with checked gingham and red and white gingham is used when the remainder of the rug is turkey red.
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. R. A. D., Seattle, Wash.

Q.—I enclose a drawing of the first floor plan of a residence we have just purchased. The rooms are almost like one room as you see by plan, finished in walnut. The hall and dining room are paneled about four feet, and a plate rail in dining-room even with the top of the windows.

Have a clinker brick mantel in corner of living-room. Height of ceiling 9 feet. Please give me some information about decorating the walls and also carpeting. Our furniture is nearly all golden oak. Also as to window draperies, and how should the stairs be finished. Should I carpet them?

Ans.—The paper for the hall would best be in shades of dull blues with possibly a relief color of brown and dull blue burlap in the dining room below the plate rail and a fruit pattern above the rail.

Your main living room would look best in tones of soft browns in tapestry effect paper. This can be had in colors with which rugs and draperies can be bought to match perfectly.

The stairs should have either a regular Wilton carpet or an Oriental rug. For the parlor soft tones of browns and a green burlap might be substituted for the oak paneling,—the suggested frieze remaining,—or the walls might be divided into a series of upright panels from two to three feet wide, by plain 4-inch oak straps, surmounted at the height of the door by a projecting shelf.

The filling, the green burlap suggested. With this arrangement the frieze stencils should be in due relation to the spacing of the panels.

Many a good suite of furniture loses in effect by being placed in an unsympathetic environment, and one of the secrets of success attending the new art is this, the whole tout-en-sensible is considered by a designer, thoroughly imbued with the spirit of rational art and schooled in the technicalities of craft.

The study of furniture design and interior decoration is as important as it is interesting; it is attracting the attention of numbers of promising students and if these are carefully directed, there need be no apprehension regarding the future of the house, the furniture and the decoration.

Mrs. C. B., Cheyenne.

Q.—We are just completing a new home and I would like some of your valuable suggestions on finishing the dining-room.

Our dining-room I wish finished in golden oak to match my furniture.

The room is finished in sand-finish plaster. I wish the walls to be tinted or painted a dark green to the plate rail and from there to ceiling a lighter green. Our ceiling is plastered in the sand-finish. Now, I wish your advice in regard to a beamed ceiling. How large are these beams? How close together are they? Would you have cross-beams? How are they finished where ceiling and sides meet? How do you like my color scheme? I thought of putting a veneering of golden oak between beams and have beams of golden oak.

Our hall is to be red. We have open stairs. Can you suggest a hall seat or cosycorner? Can you suggest a finish of some kind for back of seat? How would tapestry with a narrow picture rail answer for background? Should the under seat be left to view or should covering of seat extend to floor? I send sketches.

Ans.—Regarding your dining-room would say that the beamed ceiling will give dignity and strength to the room and would be very desirable. The beams are placed from three to three and a half feet apart. It is an improvement to have the beams cross which makes the panels, for instance in your case, the space between the long beams would be three and a half feet and divided up by about four beams. These beams are from four to six inches wide and three to four inches deep, and should be finished the same color as the wood work in the room. Your color scheme for the walls would be very satisfactory, but in case you carried out the color effect which you describe with a darker green below the plate rail and a lighter shade, I would suggest a still lighter creamish green for the panels in the ceiling. There is a wall coating made in delicate tints which is very desirable for this finish where the walls are rough plaster.

I think something in tapestry for the window seat in the hall would be desirable in reds with contrasting colors, and the back could be as you suggest with the picture rail. The seat can be made of planed boards and the front can be covered with a pleated
valance fastened on with large gilt nails.

For the dining-room windows a Scotch madras in contrasting tones, hanging to the sill.

J. A. R., El Paso, Ill.

Q.—Please give advice as to interior decoration of two rooms, parlor and dining-rooms. Rooms are adjoining with 6x8 feet sliding doors between; 9 feet 2 inches ceiling. Parlor has one large window east, one south, also has offset forming vestibule with large opening 6x8 feet, with built in seat with paneled back set with plate glass mirror. Room is 14x14 feet. Vestibule 4x9 feet. Dining-room has window seat to south with 2 narrow windows on angles and large stained art glass over paneled back of seat, also one window west. The principal colors in stained glass are straw yellow, light blue, pink and light green. Size of dining-room is 13x14 feet. Woodwork of both rooms is quartered white oak, stained light brown. Furniture is of same wood and color. I would like a color scheme for wall decorations. Intend to put up plate rail in dining-room. Would portieres look proper over seat? Seat opening has cased sides and top, same as sliding door opening, ceiling is 1 foot lower than room ceiling. Floors will be carpeted. What shades of color should carpets be?

Ans.—Having your woodwork in the parlor and dining-room stained a light brown, something for wall covering in the complementary colors of blues or different shades of brown would be more suitable to use. Also you could use a certain shade of empire green for halls having the stained glass. However, with the straw color, light blue, pink, or light green in the stained glass it would be well to carry out one of these tones, possibly, lighter or darker. For instance, for the straw color a darker shade of brown could be used and for the green a darker shade of empire green could be used. It would be well to use draperies over the window seat, but drawn back pretty close to the casing.

W. A. T., Port Arthur.

Q.—I have a dining-room finished in dark weathered oak also table and buffet. Floors are waxed maple. Two windows and two doors.

Would like you to advise a wall treatment in a medium priced decoration. Have an upstairs sitting-room finished in the same manner with a square arch leading into a small study. The prevailing
Answers to Questions—Continued

color in the floor rug is brown.
Please advise a wall treatment for this room.
The rug used in the dining-room is an Oriental design with much red.
I enclose a sketch of the two rooms.
Ans.—Your dining-room having the dark weathered oak woodwork and the furniture to match, if you have a plate rail, it would be well to use browns in fruit patterns of tapestry below and rather a plainer iridescent effect above. The Scotch nets for the windows coming to the sill with a rather plain soft hanging for the overdraperies would complete the room.

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Roman Art Stone Co.
317 Rivard St.,
Detroit, Mich.
Before putting away heavy winter clothing or blankets, they should be thoroughly aired and cleaned. If there is a moth anywhere around, he revels in a grease spot. Blankets which must be washed in the summer should be carefully inspected in the spring and spots taken off.

If one has a cedar chest, the care of woolens is easy. Otherwise the best thing to do is to fold them away in newspapers, sprinkling them liberally with black pepper and carefully pasting the edges of the paper. Pepper is quite as efficacious as camphor, and much cheaper. A label indicating the contents should be attached to each package.

This is the old-fashioned way. Simpler and more modern is sending furs, winter overcoats and cloaks to cold storage, cleaning other garments thoroughly and leaving them hanging in their closets, the closets having been thoroughly fumigated. Woolen underwear, well washed and packed away requires no precautions, unless a few lumps of camphor makes the owner feel happier. It is a question whether it is really worth while to have gowns and men's clothing of heavier weight, for winter wear, than that used in autumn and spring. Certainly the number of people who make no difference is increasing. One famous specialist advises his patients to depend for additional warmth in winter entirely upon outside wraps.

The service of meals in bed is generally a tribulation, to both patient and server. Here is an idea which someone may find helpful. Get a kitchen table, of the smallest size and have its legs sawed off, so that it stands about fifteen inches high. Stain, or paint, it, and wax it. Have a zinc tray made exactly fitting it, with sides an inch high, which can be done at any tin shop. The table will stand squarely upon the bed, having ample room for the patient's legs beneath it. A piece of heavy white blotting paper, exactly the size of the tray, laid under the napkin which covers it, is serviceable in case of a spill. If the house has a dumb waiter, the table can be prepared in the kitchen, putting silver, napkin, and hot plates in the drawer, the food in covered dishes.

Some dishes, originally intended for other purposes, can be utilized for invalid service. A covered gravy tureen is nice for soup and a butter dish for vegetables, meat or toast. Tea or coffee with the cream heated before it is added, and strained into a small earthenware chocolate pot, keeps hot a long time. The truly fortunate invalid, however, does not even objecting to congealed grease.

An encomium on a butcher heard recently was: "His beef is large and his lamb is small," to which another woman added: "Yes, and his pork is a hog and not a pig."

Just in what respect the use in the cost of domestics service is a gain is not so easy to determine. The maid-of-all-work is passing: when she exists at all, she is an exotic who, as soon as she is acclimated, will become a specialist. It is pos-
Household Economics—Continued

possible that the servant problem is permitted as a means of discipline, and for the indirect encouragement of habits of self-reliance. It is so easy to do things for one's self if one really tries. In the meantime, someone in every community ought to organize a system of domestic assistants, who could be hired by the hour for a fixed sum. Such a system would be helpful alike to the housewife and to a large class in every town, who can leave their homes to work only for a portion of the day.

When tempted to groan over the price of coal, let us be thankful that gas is so much cheaper than it used to be. Twenty years ago, a gas range was a luxury in the kitchens of the rich; now it is far less expensive than a coal range. Since the wide-spread agitation for cheaper gas, it is usually supplied at a lower pressure than formerly. While diminishing its illumination, the low pressure is better for a range as the heat is entirely adequate for any ordinary processes and much less gas is consumed.

There is a great deal in management with a gas range. By heating the oven thoroughly, turning one burner entirely off and the other half way, several different articles, requiring slow cooking, can be done at once. A pot of beans and a nice pudding can be baked, a stew made and a loaf of brown bread steamed, all at the same time, while a dish of apples can be slipped in on top of the other things, and various odds and ends of cooking done under the flame in the lower oven.

It is well to preserve strawberries in the last days of May or early in June. Later the fruit is apt to be too ripe to be satisfactory. Good as strawberry preserve is, it is rather difficult to keep it. The only safety is in using plenty of sugar, nearly, if not quite, pound for pound. The open air method of preserving is excellent if one has the patience, but it is very fussy. If the fruit is cooked in the ordinary way, sealed up when boiling hot, and set away immediately into a cool, dry place, the chances are that there will be no fermentation which cannot be rectified by bringing the preserves to the boiling point when they are opened.
The riot of color and profusion of flowers, in June, make decorative schemes easy and fascinating. The rose is pre-eminently the June flower, and it is hard to tell which color is lovelier. It may be well to remember that pink or white goes better with the average table furniture than crimson or yellow, and both pink and white roses are at their best in a glass bowl which allows room for plenty of foliage. On a bare, dark table, with much silver, the darker roses, Crimson Rambler or Jaqueminot, are most effective, as are the different sorts of yellow. These latter look best when shaded from deep yellow down to cream color, and are especially lovely in some of the greenish gray pottery which is so often met with now.

Another June flower, which is immensely decorative is the snowball. It needs a liberal allowance of feathery green, like asparagus fern.

As June festivities are usually school or college spreads, or wedding anniversaries, they are of rather an informal sort and refreshments are served from the sideboard.

Generally iced bouillon forms the first course. Enough gelatine is added to the hot bouillon to make a stiff jelly, which is broken into small pieces, which are piled into cups and served with strips of buttered rye, or brown, bread.

For the next course, one may have something hot, in a chafing dish, or a cold boiled fish covered with sauce tartare. Salmon is expensive and one of the right size is not always attainable. In its place, a small cod, a haddock, or a very large mackerel may be served. It should be boiled whole in a fish-kettle, cooking it not a minute longer than necessary. Vinegar in the water will help to keep it firm. The skin must be removed and when the fish is entirely cold, it is to be covered with the dressing. It will be more easily served, if the backbone is removed when the fish is dressed. The dressing is merely a mayonnaise, to which chopped capers and pickles have been added. Bread and butter sandwiches and others with a filling should be passed with the fish. Egg and lettuce ones are generally liked and there is a delectable combination of stuffed olives and cream cheese.

If one elects to serve salad rather than fish, there is not much choice. If only one kind is to be served, it is best to have chicken, as so many people are afraid of lobster salad. The latter is one of the things which is uncommonly poor, unless it is very good. It is apt to be sloppy. The only way to obviate it is to dry the lettuce and lobster thoroughly with a cloth, before mixing them, and when they are mixed to let them drain in a colander for some time, adding the dressing at the last minute. It is a great mistake to marinate lobster.

It would seem absurd to caution anyone against making chicken salad in a meat grinder, if one did not see so much that is almost like a sandwich paste. The meat should be cut into cubes not less than a third of an inch in diameter.

Mayonnaise dressing, made by the ordinary rule, has too much oil for many palates. In making salad for a quantity
Table Chat—Continued

of people, it is a good scheme to make a soft custard, quite thick, without sugar or flavoring, adding a tablespoonful of made mustard to each pint, and mix it with an equal quantity of mayonnaise. The mixture will be less expensive, and more palatable to most people, than the unadulterated article. The readers of this column have been frequently advised to buy their oil at the Italian shops, in tin. Berrio of Lucca makes a particularly good oil.

Ice cream is a serious addition to the expense of an entertainment, and hard ices, in any quantity, are rather beyond the resources of most establishments. Frozen strawberries, which require no manipulation beyond being buried in a tub of ice and salt, will please most people, at moderate expense. They should be served in sherbet glasses, with an accompaniment of delicate cake.

When the eatables have been decided upon, the question of what to drink is insistent. Whatever one's own feelings, or principles, on the subject of wine-drinking may be, it must be admitted, by everyone, that it is highly undesirable to serve anything of that sort to a gathering of very young people. Probably iced coffee, with plenty of cream, passing with it sugar and whipped cream, will please the generality better than anything else. It is a good plan to have a reserve of hot tea and of black coffee for the exceptional people.

Some little points are often neglected. Pepper and salt ought always to be at hand, also a flask of oil and another of vinegar for people who want to modify their salad. Large plates are much more comfortable for a handed round collation than small ones. Whatever the temptation to use paper napkins, it ought to be resisted. They belong to picnics, along with wooden plates and paper cups. A man with a moustache and a paper napkin is not an edifying spectacle.

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N. B.—Questions on construction and specifications will be answered promptly here.

C. H. M., San Francisco. Q.—The fireplace I now have, has a three-foot opening but it smokes considerably and I am obliged to rebuild the same. The illustration in the January number gives me a pretty good idea of what is necessary but is not complete enough. I would like to know whether it would be possible for you to include the plan of a fireplace for burning wood with a four-foot opening. Enclosed herewith you will find a rough sketch of my room and fireplace, so that you can see how it is situated.

Ans.—The size of your fireplace opening (3 feet 3 inches by 2 feet 6 inches by 1 foot 6 inches) seems to me to be all right. The trouble therefore, must be in the construction of the throat or the flue. The article by Geo. W. Burridge, published recently in The Journal of Modern Construction, which you refer to covers the ground very well, but we will emphasize the following points:

In reconstructing the fireplace be sure that the ledge marked "a" (see cut sketch) is not more than 4 inches.

Be sure that the throat is the full width of the fireplace opening.

Be sure and have an independent flue for each fireplace and make same at least 8 inches by 12 inches (12 inches by 12 inches being best).

Be sure that chimney is above all roof ridges within fifty feet.

If doors on each side of fireplace lead out-doors they will interfere with the draught if left open when fireplace is going.

There is some difference of opinion between builders as to whether throat should have a ledge, as indicated, or whether it should slant up as shown by the dotted line. Regardless of the theories advanced for either construction, if the other rules outlined are followed your fireplace will have a good draught and not smoke.

If you use a damper be sure and get one that will when open, not obstruct any part of the throat.

* * * *

[The Placing of Warm Air Registers.]

Dear Sir:—In a recent reply to an inquiry regarding the placing of warm air registers, the advice was given to place same in the floor near the outer boundary of the room.

As I do not advocate this method, and as I believe many have never experimented for themselves along this line, I trust you will give space to something further on this subject.

The writer has learned, after twenty-three years' experience in the warm-air heating business, that, while the outside wall is the place for direct radiation, it is not the proper place for indirect radiation, and we believe that you will agree with us that warm-air heating must be construed as indirect radiation.

It is a fact that the natural movement of the air on the outside wall of the room is downward while the natural movement on the inside wall is upward. You will therefore see that if a warm-air register were placed near the outside wall the natural movement would have a tendency to prevent the warm air from entering,
while if it were placed on the inside wall the natural movement of the air would assist it in entering, when it would rise to the ceiling and come down on the outside wall with the natural current and thereby be assisted in its movements.

We are advocates of the side-wall registers in preference to the floor registers, provided the side-wall have ample capacity for heating the rooms they are intended to heat. The best registers are made with the bottom opening sufficiently large to accommodate or take care of all the warm air that a 12-inch basement pipe will supply. As the ordinary living room requires a basement pipe with 78 square inches area, and a room on the second floor of corresponding size requires a $3\frac{3}{4} \times 12$ or No. 8 wall-pipe, which has about 35 square inches area, the two rooms, therefore, would require 113 inches of warm air to heat them successfully, provided, the registers were properly located.

The latest system provides for using one 12-inch pipe for heating the two rooms referred to, in preference to two pipes of smaller capacities, which would necessitate the using of twice the number of elbows, collars, dampers, etc. We claim there will be much less loss of heat in the cellar from friction and radiation with this system. If the registers are placed in the wall the air does not ascend directly to the ceiling but circulates through the room on its way to the ceiling, thereby heating the room more quickly, and by having the registers so placed, they do not serve as receptacles for dust and sweepings, furthermore, they retain their finish, inasmuch as they are not walked over as is the case with the floor registers. By having these registers in the inner walls much less basement piping is required, and the air is discharged into the room to be heated quicker, therefore will be more effective than if long pipes were used, which would be necessary if all of the registers were placed on the cold or outer side of the rooms.

A great many of the so-called side-wall registers which are on the market could not be used in connection with this system, owing to the fact that they lack the necessary capacity, and it is this fact which has caused what opposition there has been to the side-wall registers.

A. O. J.

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ONE of the most valuable assets of the garden is a generous supply of flowering bulbs. These are not only easy of culture and moderate in price, but have the additional merit of being readily transferrable from one garden—however widely separated—to another, so that even the nomadic dweller in city or country may carry with them in their wanderings the nucleus of a summer garden that in matter of bloom and tropic loveliness will leave little room to regret the hardy shrubs of floriferous annual.

For general tropical effect there are few plants which surpass the stately canna especially in the large orchid flowered varieties such as Allemani, Italia, Burbank and the like and the more ornamental of the dark-leaved section as best represented by Black Beauty or Musafolia, and the large caladiums or elephant-ears; with these alone a garden may be beautiful from July till frost.

These two classes of plants delight in a rich soil of muck and old manure abundantly supplied with moisture and full exposure to the hottest sun. If to these two tropical looking plants one adds the banana, which may be grown successfully at the north if one is careful to give it a congenial situation—one in fullest sunshine and protected from rough winds which whip and tear the great leaves, and too near vicinity of other plants they will make wonderful growth and far surpass in effectiveness any other plant grown. They may be wintered in greenhouse or warm cellar and the second year will be a delight to the garden.

The new large flowered caladiums have handsomer leaves than the older sorts, the edge of the leaves having much the appearance of being hemed, and the blossoms—when they can be induced to bloom, are an added attraction. These are not, however, a true bulb, forming simply a crown from which the leaves spring and should be wintered if possible in a growing state and planted out where they will have an abundance of sunshine and be liberally supplied with water.

For grouping with these large tropic-leaved plants and furnishing the bloom with which they are somewhat lacking, the tritomas are without equal. These are not bulbs, being rather a mass of fleshy roots with a crown and should be kept in a partially dormant state during winter. They bloom from early August until well after frost and are one of the most showy and effective of the garden treasures and of the easiest culture, standing an amount of drought and neglect that seems entirely incompatible with the great spikes they throw up in such splendid profusion.

Among summer bloomers the gladiolas will always be favored for cut flowers. The improvement in this class of flowers has been marked in the past few years and flowers of a size and color undreamed
of a few years ago are now of common occurrence. Many of the greys and blues are interesting merely for their oddity and not especially beautiful or desirable for cut flowers. There is a dark wine-colored flower, however, with green throat which is not only unique but also desirable as a cut flower, but as a general thing the clear scarlets, pinks and rose colors in the large fine flowers will be found most satisfactory. Among these may be cited such fine examples as Wm. Falconer, Splendor, Saratoga, Princeton, Oriole, Brilliant, Dr. Parkhurst, Henry Gillman, Daisy Leland, Kitty Leland, Imperial, Pink and Nakomis and for contrast the darkest of all—Mezinscott, Variabilis, Governor Saxton, Florida and Africa. Many of these will give under generous culture, spikes of flowers three feet or more in length and individual blossoms of enormous size; the foliage also is most robust and the general effect of the plant a great advance on the old favorites of the garden.

The culture of the gladiola is of the simplest. They require simply good garden soil—a warm sandy loam well enriched with old stable manure being best and to be planted deeply—at least nine inches deep, early in May. The deep planting renders staking usually unnecessary and the bulbs may be planted earlier and lifted later than when less deeply planted and are less affected by changes of temperature.

Before planting the bulbs should have the husk removed and all remains of the old bulb which may adhere to the base of bulb.

Montbretias are a charming miniature gladiola which may be planted in front of the gladiolas with charming effect. They bloom through the greater part of the summer and their airy, slender spikes of bloom are very valuable for cut flower work. They come in shades of lemon, orange, scarlet and red, and their culture is similar to the gladiolas, except that they require more shallow planting and are hardy in the open ground with sufficient protection and increase rapidly.

Among the tender bulbs for summer blooming no more charming example than the giant ismene-I. Callanthina could be desired. The bulb sends up in June, broad, strap-like leaves, followed closely by a spike of snowy amaryllis-like flowers, curiously fringed on the edges and with a delicate green throat and with a delightful fragrance. They should be potted in April and planted out when all danger of frost is passed and lifted before frost has touched them in the fall as they are very sensitive to cold and if the leaves are frozen the heart of the bulb is almost certain to decay.

The zepryranthes are another most desirable class of summer bedders, each bulb sending up flower after flower of lovely color—white, pink, rose or yellow all summer long. They should be planted out when the ground is warm and lifted in the fall like gladiolas.

The tigridias are attractive flowers of many odd colors which do well as summer bedders, but are more effective interspersed between other plants than when planted in beds by themselves as they do not show sufficient bloom at one time to
make them effective when grown alone. Although not a bulb, but a tuber, the dahlia is far too popular to be overlooked in a list of summer bedders. It requires abundance of everything, sunshine, food, water and room and should not be planted out until the nights and ground are warm. It should be started in the house, setting the tubers in sand, earth or baskets of moss kept constantly moist. In preparing the tubers for sprouting it is not necessary that there should be more than one tuber to a plant but each tuber should possess a live eye or a bit of the stem. Eyeless tubers will make roots but no top growth so that the old stem must be divided or split lengthwise, giving a portion to each tuber if plants are to result. Sometimes a single tuber will show two or more sprouts at the top where it joins the stem in which case the tuber itself may be divided, and when two or more sprouts start from a rooted tuber one or more of them may be removed and used for grafting a sproutless tuber by cutting the end to a wedge-shape and inserting it in a similar cut in the top of the tuber, the tuber is then placed in the ground and the earth drawn up around the graft which soon unites and grows. One shoot to a plant is better than many and this should be securely staked as the dahlia is prone to blow down in high winds and to split at the joints. As the dahlia is a fall, rather than a summer bloomer, it will be better to remove all buds during the earlier part of the summer as they usually produce inferior flowers. Later all but the terminal buds should be removed that the strength of the plant may go to the production of notable rather than a great number of flowers.

The dahlia should not be allowed to suffer for water at any time and should be given liberal culture and care. Individual preference must decide the variety and colors of selected plants but to my mind there is nothing to compare with the cactus and the single dahlias when grown to their highest perfection. The soft pinks, pure whites, glowing scarlets, cardinals and deepest maroons are more desirable than the parti-colored ones for cut flowers and corsage use.

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Painting Cement.

The following method of painting a cement wall was described at a recent convention of master painters. The building had become discolored in places and the joints were of a different color from the surface of the blocks. Two parts of Portland cement were mixed with one part of marble dust and mixed with water to the consistency of thin paint or a thick whitewash. The wall must be well wetted before the application of this paint and kept constantly wet while the material is applied, and then must be kept for a day longer, in order to make the cement wash adhere to the cement surface. The wash was applied with ordinary whitewash or calcimine brushes, and a man was kept busy playing a hose on it while the work was being done. The whole secret of success lay in keeping the wall constantly wet. A price could not well be quoted on such work, but on a scaffolding job should be worth less than a dollar a yard.

A well-known painter, who is one of the largest contractors in the country, in commenting on this, said that he had frequently been called upon to paint the cement panels in half-timbered houses, and the best material he could find for the purpose was an English material known as Duresco. This comes in paste form and is thinned with water to the consistency of thin cream and to this a little of a so-called “petrifying liquid” made by the manufacturers is added. This material is the same color when it is wet as when it is dry—differing from ordinary water paints in this respect. It can also be used on pressed brick fronts. The results are said to be as durable as oil paint, without the gloss of that material, and consequently well adapted for

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Splinters and Shavings—Continued

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* * *

Combination Heating.

The increase in the number of water heating attachments for hot air furnaces now offered by different makers is evidence that this system of heating is better understood and is giving better satisfaction than the heating fraternity generally has been disposed to admit. This fact is sufficient to warrant a more careful investigation of their benefits and to study the conditions under which such installations are rendering satisfactory service. Almost every furnace manufacturer provides some sort of a water heater for use in his furnace, but unfortunately in too many instances the information and instruction which will enable customers to understand just how to proportion these systems is wanting and the heating contractor is left to master the problem alone. Like much of the other work done by mechanical tradesmen, the element of common sense is an excellent guide. The combination system has peculiar advantages where a building covers a great deal of ground or is of the rambling character. Some of the successful in installing combination heating systems have made it a rule to run no hot air pipe a greater distance than 15 feet from the furnace in any direction, and rooms which cannot be reached by such hot air pipes are warmed by means of direct radiators connected with the piping from the water heater in the furnace. It can be readily seen that when the furnace is located so as to heat most of the building with hot air that there will be but a small proportion of it left to be heated with radiators. The radiators selected for this work should be of ample size, and the size determined in accordance with the best practice in hot water heating. The piping of these radiators should be with ample pitch and a size to facilitate rather than impede circulation. With the hot air piping made right and the hot water radiators of the proper size and piped in the proper manner, the size of the water heater and the size of the hot air furnace can both be determined.

A Revelation

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Splinters and Shavings—Continued

The furnace should have grate area sufficient to heat the entire building, as if it were to do all the heating with hot air. Then the firepot will hold sufficient fuel to heat the water as well as the air. These are general requirements for which provisions must be made, and to a man who has been successful in hot air furnace heating there is little to be feared in making the combination of hot water attachment.

* * *

A New Use for Sugar.

Experiments have recently been made to prove that sugar is a valuable ingredient in mortar and cement, having strong binding qualities. Equal quantities of finely powdered lime of a very common kind were mixed with an equal quantity of good brown sugar, with the addition of water, and the result was a cement of exceptional strength. This has been tried at Peterborough Cathedral, two large pieces of stone of the broken tracery of a window having been joined firmly together by sugared mortar. The severest test is joining glass, which gives no hold to mortar without the use of sand, yet this has been successfully done. The fact appears to be certain that sugar produces an extraordinary effect on lime when the latter has been allowed to fall into a fine powder and has been thoroughly slacked. Particles of unslacked lime would destroy the result, because of their expansion, which would make the mortar lift. The sugar mortar thus made will be found to be as good as Portland cement, and the only question, therefore, is one of cost. It is even probable that Portland cement itself would be made much stronger by the addition of sugar. Treacle might have the same effect.

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Summit, N. J. 5 W. 31st St., N. Y.
Painting on Brick Work.

Brick walls may be painted either to enhance their beauty of color, or to preserve them against the weather. The treatment is different in the two cases, but the preparation must be the same. That is, the walls must be made perfectly solid and free from loose matter. It may be necessary to scrape and sweep down the walls. Then the surface should be perfectly dry. If the paint is to be oil color, then prime the work with venetian red, made quite thin with raw linseed oil, with some driers to hasten the drying. If the surface is old and somewhat soft, then, after the priming, apply a filler coat; that is, a paint that will fill up the spongy surface. A paint of ochre will answer. The first coats should have ample time for drying and hardening in, and then the putty may be applied wherever needed. Summer seems to offer the best time for outside brick painting.

Get as much oil into the bricks as they will take, and especially where the sun is most direct against them. Where efflorescence occurs, wash it out with dilute muriatic acid. A wide wall brush is best for this work, say a 5-inch brush. Mix enough paint to do the entire job, in order to secure uniformity; the better way is to have the ready-mixed paint.

If the work is to be flated, there will be no need for more than one coat of oil color on the priming coat, unless there should be an unevenness of the gloss, showing that the paint had sunk in in places. Then another good coat. The dull, flat finish is produced by using almost all turpentine in the finish. For a dead finished red wall stripe along the mortar lines with white paint. For Milwaukee brick color use black striping, or dark red. Sometimes no striping is used, but for the so-called Philadelphia brick effect the work will look richer with the lining on the bricks. By the way this lining should not be run directly on the mortar joints, but along the upper edge of each course of bricks, for this will give a smoother surface to line on than the mortar will.

Protecting Pipes from Freezing.

WATER pipes are usually protected from freezing by the use of such non-conducting materials as straw, cork and oakum. In a new French method, a layer of straw, sawdust or tanbark is first placed around the pipe, and pieces of unslacked lime as large as the fist are then packed around this coating and enveloped in a layer of non-conducting material, the whole being held together by wrapping of coarse linen. The inside layer serves simply to protect the pipe from corrosion by the fresh lime. The outer covering admits only a small amount of air, and the moisture in this acts on the lime, which becomes warm and is so slowly slaked that the heat may be kept up during an entire winter.

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KNAPP & WEST, Architects, Colman Bldg., Seattle, Wash.
NOTES ON PRICES.

The wage scale and current lumber prices in force in Minneapolis, May 15th, is as follows:

Carpenter labor, per hr. .......... $ .42½
Painters, per hr. ........................ .42½
Masons, per hr. ........................ .50
Plasterers, per hr. .......... $5 per day of 8 hrs.
Lathers, per hr. ........................ .50
Plumbers, per hr. ........................ .50
Girders, 6x10, 16 ft..............No. 1 $35.00
Posts, 6x6, 15 ft......................... No. 1 29.00
Floor joist, 2x10, 14 ft...........No. 1 29.50
Studding, 1st, 2x4, 10 ft............No. 1 28.00
Studding, 2d, 2x4, 16 ft............No. 1 26.50
Roof, 2x4, 18 ft......................... No. 1 28.00
Boarding, S. I. S. ...............No. 3 27.00
Sheathing, D. & M...Fencing No. 3 27.00
Flooring, 4 in......................Fir 42.00
Ceiling, beaded, 4 in. ..........No. 1 36.00
Siding, 4 in. C. ..........Pink 36.00
Birch, flooring, 2½ in. Face.....Clear 46.00
Shingles, Ex and at .Best Red Cedar 4.00
D. stock boards, 4 to 10 in. ......42.00

While the building operations both locally and over the entire country are on a large scale, it is not likely that the totals for the year will exceed those of 1906, tho the number of buildings may be greater. The number of building permits issued in March in Minneapolis were larger by 10 percent than for the corresponding month a year ago, tho the amount of money represented was considerably less. The cost of nearly all classes of materials has advanced. The greatest advance being in pine lumber and some particular lines handled by the plumber and furnace man. So much work is being done in concrete that the cement market is exceedingly active, prices hold steady around $2.

Prevailing prices in Vancouver B. C., Can.

Plasterers, per day ....................... $5.00
Bricklayers, per day ..................... 5.50
Masons, per day ......................... 5.00
Helpers for plasterers, per day ........... 4.00
Common labor, per day ................. 2.50
Plumbers, per day ....................... 4.50
Painters, per day ....................... 3.50
Line, per obl ......................... 1.25
Cement ........... ......................... 3.00
Good sand for cement work, per load...... 1.50

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### Notes on Prices—Continued.

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<td>Cypress, good and clear, per M.</td>
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<td>Prevailing prices in Coeur d’Alene, Idaho.</td>
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<td>Brick work, in fireplace and large chimneys, per M. about</td>
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<td>Excavation, per cubic yard</td>
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<td>Dimension lumber, sized</td>
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<td>Sheathing, S. I. S.</td>
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<tr>
<td>D. Finish, 4 in. to 12 in.</td>
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After Alteration in the "Re-Construction of a Country House."
THE CHARM OF COTTAGE ARCHITECTURE IN THE SOUTHWEST.

Third Part By Henrietta P. Keith.

(Note—Parts I and II were Published in January and March.)

The charm of the cottage architecture of California is something universally conceded. In no other section of country we think, do architects expend so much effort and devote such interest and genuine enthusiasm, to designing the cottage type of dwelling as here. In fact, they often take more pains, devote more time, cudgel their brains still harder, for a cottage, than for a mansion.

The result, is a profusion of the most unique and fascinating bungalows and cottages to be found in any part of the country.

There are so many styles, so many varieties, one perpetually wonders how the architects can possibly think up anything new. But the human brain is fertile, and new ideas in houses as in valentines, are ever being evolved. To be sure, not every new idea is desirable. Some are eccentric, some impracticable.

The illustrations in this article are all designs by well-known architects of recent cottage architecture in Pasadena.

There are many more elaborate designs in the cottage style to be seen as one drives about, some very costly and expensive. But these have been selected as embodying new and attractive ideas, at about the same av
Average of cost—a cost of from two to four thousand dollars.

Most of the cottages here illustrated are examples of shingle construction. In fact, the great majority of such dwellings here are so treated, and the wonder is—and still the wonder grows—how so much variety of design can be got into the use of one material. It is without doubt a very elastic material; it is not bound by the limitations which attend the use of more formal materials, such as brick or plaster. Either by itself or combined with these other materials, it is capable of the unexpected—always a potent factor in the quality of charm, either in houses or women. It is Shakespeare, you remember, who reminds us of this greatest fascination in woman—her “charm of infinite variety.” It is no less true of houses.

Take, for instance, the cottage on Grand avenue, in the first illustration. Did any one ever see a dormer let into a roof like that? Yet who will deny its charm. It is generally a dangerous thing to attempt a one-story, pent roof projection of one part of a dwelling, especially in front. But here it has been so skilfully managed as to be not only inoffensive but picturesque; because the pent roof has been extended to form the open-rafter, thatched roof of the side porch.

The slight Japanese suggestion which is felt in this exterior is much more strongly marked in the home of Mrs. Halstead of Pasadena, also on Grand avenue. And here
It is pertinent to remark, that the location of these cottage homes, their environment, has largely influenced, as it should, the character of the designs. Grand avenue is probably one of the most picturesque residence streets in any city. With a rugged mountain background in the distance, it overhangs a wild and precipitous arroyo, giving views of surpassing beauty. Some of the millionaire residences on this street, are built on such steep and sloping ground as to require retaining walls of great height. But in even these expensive dwellings, where twenty thousand dollars has been paid for the site alone—the same informal, picturesque style of treatment has been adopted.

The cottage here shown is by no means a “cheap” dwelling. It is the home of refinement and comfortable means. Unhappily the photograph is marred by the presence of the awning on the principal porch. It must be confessed that the present rage for out-door-sleeping, and the consequent ubiquity of these awnings, detracts very considerably from the beauty of the dwellings thus outfitted. People imagine they will roll the awnings aside when not in use; but they soon tire of taking the trouble, and the disfiguring device remains. The rustic porch-roof extension and roughly laid up field stone of the abutments are in harmony with the general feeling of the design. Yet the interior is carefully treated with beautifully finished woodwork, polished hardwood floors and refined furnishings.

The third cottage is an exception to the picture is quite spoiled by the vexatious awnings. This cottage has also had an architect’s careful supervision, and is on a handsome street. The living room occupies one wing, the sleeping rooms the other, with the dining room, kitchen and bath in the cross section between. Such a cottage furnishes a novel and convenient design for a summer home in a more northern latitude; and the cat-tails of our lake marshes would furnish an admirable thatch for the open rafters of the porch roof. The finish used in the interior is Oregon pine slightly stained and not rubbed. The floors are the same wood in 3-inch width, stained, shellacked and waxed.

The closing illustration is a cottage considerably more formal in...
character, as a matter of fact it adjoins the preceding one. It speaks so admirably and so clearly for itself, that little need be said about it. The soft cream colored sandstone is of a pinkish tinge, and contrasts yet tones in with the deep maroon color of the wall siding, which is further lightened and relieved by the cream trim of the windows. A sun room is enclosed at one end of the porch.

The stained glass decorations are very chaste and reserved, the front door hand-some, solid, paneled oak. A high attic is used only for the ample air space which keeps the rooms below perfectly cool. If we were to offer any criticism upon this beautiful cottage, it would be on the character of the roof dormers, which impress us rather unpleasantly, as resembling half closed, heavy eyelids. The long roof line demands a break, but such a mere excrescence is not good design. With this exception this beautiful cottage would adorn any residence street in any city.

(Concluded.)

Re-Construction of a Country House.
By E. D. Ford.

Its discovery was, apparently, a mere matter of chance. It was years ago, while driving in the country, that we turned upon a by-road, running between a small piece of timber and an old orchard. As we progressed, the orchard gave place to a cluster of large oak and elm trees and small shrubbery. A few rods farther brought to view, with pleasing suddenness, the rambling old house, standing on a rise of ground, its outlines quite distinct below the dense foliage surrounding it. The upright weather-boards and battens were innocent alike of smoothing plane and paint, and forty years of alternate winter snows and thaws, and summer rain and sunshine had given roof and wall soft tints in gray and tender brown, and made this work of man a child of nature, akin to the tangled leafage, the stones and the trunks of trees.

The plain gabled structure was a story and a half in height, with a projecting wing at either end and a long veranda traversing the facade between the projections. North of the main structure was one similar in form, running parallel to and adjoining the north side of the main building by its very eaves. North of this, a broad gable at right angles, completed a contour of simplicity which architectural skill often fails to achieve.

The windows throughout, glazed with small panes of glass, varied in size according
to position; and rough stone foundations gave to the whole an expression of unpretentious utility. A closer examination, however, revealed its ruinous condition. Deserted it was by all save squirrels, bats and kindred creatures. A certain grewsomeness lurks in all vacant houses, but in this one, situated in the midst of a considerable tract of semi-woodland, shut off from sight of human habitation, and from every sound save the voices of frogs and crickets, the isolation was something to be felt. Even with the sunlight glinting through the trees and making uncertain patterns on the gray walls, it seemed a fit place to encounter the restless denizens of another world. (We afterward learned from the neighbors that it was, in reality, the general rendezvous for hobgoblins.)

These impressions, the blackened and shattered plasters, the dirtstained floors and woodwork and the many evidences of a sieve-like roof might have deterred greater experience and smaller enthusiasm, but the possibilities of the old house and its environment were so borne in upon the artistic member of the family, that, without much delay, we became its owners, sharing its inconveniences with the former occupants.

While the old house in this condition was picturesque, it was impracticable as a dwelling place, and numerous plans were made for its improvement. We soon recognized, however, that the farther these designs departed from the original simplicity which had appealed to us, the less pleasing they became. It was finally decided that just enough should be done to the exterior to remove the appearance of general dilapidation. This included the completion of unfinished details, the addition of cor-

![South Living Room from Hall](image_url)
ities were retained and accentuated. For instance, owing to the abbreviated height of the house, the upper rooms extended above the line of the cornice. When the angle between wall and ceiling on one side of a room was cut away by the slant of the roof, the angle on the opposite side was cut away in like manner. Closets were built into rooms instead of out of them, forming window-seats and alcoves. An ample fireplace, with plain, old-fashioned mantel, was made the feature of each living room, the one in the north room occupying an inglenook. In this latter room a third window
was introduced between the two opposite the fireplace, separated from them by the width of the casing, and beneath the three, a long window seat.

The north dining room is long and low; the joists supporting the upper floor are finished as the beams of the ceiling. From this room juts a hanging window, with seat and book-an upper hall, the gallery is a pleasant sitting room, easy to heat in winter and delightfully cool in summer.

The remodeling of the south suite was conducted on entirely different lines, owing partly to the originally different conditions of the two sections, partly to a desire to avoid monotony. Here, the vestibule opens into a reception hall. This hall being plastered, beams were applied to the surface of the ceiling, dividing it into four panels. The stairs, leading thence to the gallery, are within what is known as a box staircase, which was formerly closed at the bottom by a common door. This door was removed and the entrance finished in harmony with the hall.

The living room adjoining is similar in treatment, the ceiling being divided into six panels by one lengthwise and two cross beams. The angles between ceiling and walls are cut away, the supports of the beams run down the incline thus formed and terminate in brackets placed against the walls. The structure of the fireplace projects into the room, leaving on one side a cozy book alcove, on the other a deep recess occupied by the French window.

The gallery, which is also the central hall of the upper floor, is an interior room, being nearly surrounded by the chambers. The ceiling follows the roof and is divided into shelves. While answering every purpose as panels by the rafters. From this room juts a hanging window, with seat and book-

The process of alteration extended over a period of about twelve years. That the work required so long a time is not surprising, when it is remembered that the improvements were not only planned but, for the most part, executed by the present owner, many of them being the result of well-employed, spare moments.

To people of ample means, the development of such a property is a comparatively easy task. If, however, a man is passionately fond of what nature can give, can handle plane, hammer and saw after a manner pleasing to himself, is not afraid of work and thinks he knows what his requirements are, he need not hesitate, because of his limited income, to take upon himself the re-habilitation of such a home. Of course, it is probable that his family will for years live in a fashion little removed from camping, with no permanent abiding place; that each room in its turn will serve in every capacity; that the kitchen utensils in case of rain will become miniature cisterns, under the largest leaks and that the problems will yearly recur, where to eat, sleep and place the cook stove. All these things dwindle to trifles, compared with the pleasure of bringing order out of chaos, room by room; of building into the home the heart's desires, until it comes to be but the outer garment, fitted to individual needs and development. Such a home has within it the elements wealth cannot buy, and the possessor thereof envies no man his habitation.
OF ALL things which enter into the construction of a home the plumbing should be the last upon which one should seek to economize, either by the omission of some of its important details or in the acceptance of inferior fixtures or workmanship. On the contrary, in preparing the specifications the builder should give this question his most serious consideration for there is no other so important. His aim should be to procure the best sanitary equipment obtainable, for cheap fixtures and makeshift plumbing are nothing but a constant source of annoyance and expense.

When rightly considered, a complete and perfect plumbing system is not by any means an expense but a sound and wise investment. Modern sanitary fixtures, properly installed, abundantly repay their cost in durability and satisfaction in usage. The property value of the home is materially increased by their installation and should the necessity of sale arise the plumbing is one of the chief features in the eyes of the real estate agent or prospective purchaser.

In the equipment of the kitchen particularly a vital point is that the fixtures must provide absolute sanitation. Even under the greatest care, the cheap old-fashioned slopsink is not only unclean and malodorous but an ever-present danger to the household health. Again, the great saving of labor afforded by the enameled iron kitchen equipment is a big item in the housewife's daily routine as practically no effort is required to keep it clean and wholesome. With innumerable points in its favor, there is but little difference between the price of the enameled iron fixture and that of the obsolete, unsanitary equipment. When viewed from the combined standpoint of health, convenience and comfort, the trifling increase in costs is unworthy of a moment's thought. The cost of the modern fixture has now become sufficiently reasonable to place it within reach of persons of the most limited means.

An illustrative of one of the many uses demanded of the kitchen equipment let us take the most general—that of dish-washing. In the modern, well-appointed kitchen this duty is performed in an enameled, roll-rim sink with either a high back or a tiled wall behind it. The dishes drain on an enameled board and the water goes directly into the sink. The hot water is always at hand and the dishwater is immediately disposed of. The enameled drain board is of course the best as the wooden board soon becomes water-logged and unsanitary. One of the most complete arrangements for dish-washing is here illustrated in the sink with a double drain board. This is a porcelain enameled sink with apron all round, enameled legs and wall-supports. It has a 30-inch right "perfection" ash-drain board hinged at the end to the wall and a 30-inch left ash-drain board with nickel-plated telescope support, nickel-plated strainer and fully adjustable flange bibbs. The drain boards are grooved on the surface and have turned up edges. This is a fixture of the neatest type and is one of which its makers are justly proud. Space or preference sometimes makes it necessary to have but one drain board. For this arrangement, if there
is no tiled wall behind, the best fixture is probably the one with a double back which extends from one edge of the sink to the opposite end of the drain board, sink and drain board being supported by brackets.

One equipment illustrated is that of an flushing rim, nickel-plated, trap standard with clean-out enameled slop-sink with a nickel-plated flush fittings and vent to wall. This is considered the best arrangement for the modern kitchen. These fixtures are also made with 15-inch enameled backs for either isolated fixtures or right and left hand corners. The sink is that previously described
having in this instance a single drain board. Behind both sinks is a tiled wall and to their left a good sized window high enough from the floor to set a table under it.

The equipments described are but a few of those that have exercised so powerful an influence in changing the inconvenient and often dismal kitchen of the past to the cheery, wholesome kitchen of today. The wise builder will not hesitate to install the full and complete equipment of a modern plumbing system in his home for in the additional comfort and convenience it affords he will find an ample return for the few extra dollars thus expended.

(Modern Plumbing continued next month.)
KEITH'S MAGAZINE

Modern Designs for the Homebuilder.


Interior Wood Work in "Mission."
Our opening design for home builders this month is exceedingly attractive and the of the cottage type, is a good sized house, being practically 34 feet square. The overhang of second story gives space for four good-sized chambers and bath on second floor.

The interesting interior shows the treatment of inside finish in mission, which finish is in Washington fir in hall, den, living room and dining hall, with oak floors. The balance of the house is Washington pine finished to paint.

The grouping of the porch piers with the
heavy brackets is effective and the little projecting balcony in front is very artistic. Field stone is used for foundation material, siding for first story, shingles, stained, in the gables. Fireplace is built of rough face vitrified brick and the same brick is used on exposed chimney.

At the time that this home was built, it cost $4,000 complete, but on today's prices an increase of 20 per cent on this price should be figured on.
The $100 Prize Design in Concrete.

By Frank H. Hutton.
Arthur F. Byuo.

COMPETITION in designing suburban dwellings in concrete has just closed in Philadelphia and we take pleasure in presenting in this issue two of the prize-winning designs in the competition. We shall publish in succeeding numbers, the plans of the prize designs of which there were a total of eighteen. These designs are classified as A 1, 2 and 3; B 1, 2 and 3. In class A 2, we give this month the design which won the second prize of $100.00. The designs coming under A 2 required that the same be for a single dwelling, cost to build not to exceed $3,000.

The lines of this prize design are quite simple. The prospective brings out the pleasing effect of the porch arches across the front and at the ends. Specifications for its construction are, foundation and cellar walls to be 12 inches thick of monolithic concrete construction. Walls of first story and gable walls above on second story to be monolithic concrete construction 6 inches thick with iron bars at corners and over all openings.

The exterior surfaces above grade are to be plastered with Portland cement and
coarse sand slightly colored to give a warm tone.

The partitions of the first story are to be of hollow concrete blocks 4 inches thick. The inside of concrete walls are to be furred with 1 inch by 2 inch wood furring and the walls and ceiling of first and second stories, also the cellar ceilings are to be plastered, with the exception of the ceiling of the living room, which is to have beams exposed forming a beam ceiling.

The chimney is to be built of concrete blocks with tile flue linings and brick facings and hearths in the fireplaces.

The framing timber is to be of hemlock.

Exterior trim is to be of cypress. The interior trim and doors to be of cypress.

The dining room is to be wainscoted 6 feet high in cypress.

N. C. pine floors comb grained to be used for all rooms and halls. The floor of the piazza is to be covered with 10x10 rough red tile laid on a concrete bed.

The cellar floor to be finished in cement over a concrete bed.
We here give the design which won the third prize in Class A, requirements for which were, a single dwelling not to exceed cost to build, $2,000.

It is a compact, economical plan with an exterior of quiet simplicity and individuality.

The absence of a porch is perhaps to be regretted, but this is admissible in some climates, especially in an inexpensive dwelling of this kind. If the living room is to be used as a dining room also, a door is suggested from the kitchen between the fireplace and the stairs, reducing slightly the width of the fireplace.

Foundation walls of concrete, 1 foot 6 inches thick, laid up monolith in wooden forms. (The material from the forms to be made use of for roof boarding, etc.)

Walls of hollow concrete blocks one foot thick, plastered inside.
Cellar under whole house.
Cellar floor, concrete 2½ inches thick.
Piers, concrete.
First story partitions, 4-inch hollow concrete blocks, plastered. Second story partitions, stud frame lathed and plastered.
Floors, supported on wooden joists.
Ceilings, lathed and plastered.
Roof, wooden rafters, boarded and shingled.
Chimney, 6-inch concrete blocks, topped with solid concrete.
Bath room floor, concrete topped with cement, on boarding cleated between the joists.
 Hearths, cement with tile borders.
Plastering to be tinted by mixing coloring pigment with the plaster before applying.
WHILE the above design is of very modest proportions, it presents a quiet dignity not often found in so small a structure. Its setting gives us a touch of suburban life and it will be noticed that the building site is not even ground, the lot being considerably lower at the rear.

The general style is of the cottage plan and we might term it a story and a half cottage. The large central dormer with the graceful bay window provides for full height walls in the front chamber. The porch like the first story, is sided and has a rail around a flat tin deck roof.

A very pleasing and home-like arrangement is given to the rooms. Four steps from kitchen lead to the stair landing, giving a combination stairway.

It would be difficult to find a more snappy design or a better arranged cottage home than this and a responsible contractor in Minneapolis the first of the year estimated the cost to build the same at $2,500.00, exclusive of heating and plumbing.
A

N ideal material for the building of homes, small or large, is concrete and an illustration of one of the houses built at Haworth, N. J., is here given. This house is of the monolithic or monocast type of construction.

In this connection it may be said that the value of the concrete hollow brick block or artificial stone as a building material depends of necessity upon the methods of manufacture. Improper aggregates in assembling the materials, imperfect mixing, a poor quality of cement or of sand, or improper methods of curing the block after manufacture, are the common causes of the production of blocks unfit for building material. Although thousands of such unfit blocks have been used in the construction of small houses in the last few years, it has been amply demonstrated, however, that with small expense and with small technical skill, concrete blocks can be produced that are more adaptable, because of the plasticity of the material, and are cheaper and more durable, than any kind of stone or brick.
THIS design covers the generally popular features for a square frame house of large proportions, being 38x55 feet on the ground exclusive of porch. The house receives additional character from the unusually wide projecting cornices. The porch in addition to running across the entire front, extends around on the south side and is 12 feet wide. Attention is called to the fact that the cut of floor plan shows a reversal of the plan from that of the photo view of the house as it was built.

Range rock set four courses is used for foundation and narrow siding for exterior covering. Cedar shingles for roof. Estimated cost exclusive of heating plant, $8500.00.

By H. Ris & Shopbell.
First Prize Design Competition for Traveling Scholarship of the Pittsburgh Chapter A. I. A.
THE prize winner for the traveling scholarship offered by Pittsburg Chapter, American Institute of Architects, after returning from his journey to the cities along the Atlantic seaboard and thru portions of the South, read at a meeting of the chapter, a narrative of his wanderings, and also exhibited the drawings he made, which are here reproduced.

Mr. Markley said that the Colonial example which most appealed to him was the Van Lew mansion in Richmond, Va., which he measured and submitted drawings, as required by the competition.

The Van Lew mansion is situated on
Church Hill in Richmond, overlooking the James River and was built about 1740.

Miss Bet Van Lew, the mistress of the house during the Civil War, was a northern sympathizer and spy. The old house became famous at this time as the hiding place of escaped Federal prisoners from Libby Prison. Miss Van Lew sent many messages thru the Confederate lines, and many an escaped prisoner from Libby prison found a secret hiding place in the old mansion.

The work of Mr. Markley is exceedingly well executed and the design is worthy careful study.
ONE of the interesting developments of the last couple of decades has been the establishment, both in this country and in Great Britain, of various forms of what are generally known as cottage industries. The Deerfield experiment will suggest itself to many of our readers, also two or three rug-making villages, in New England. The movement has not been as successful in this country as in Great Britain, probably due to the fact that we have no land-holding class, feeling a responsibility for the welfare of its tenants. The products of such industries, as exist among us, can hardly be said to be articles of commerce, in any but the most limited sense. The general stores know them not, and they are most generally sold more or less privately, or through the medium of the Women's Exchanges and the Arts and Crafts Societies.

They do things differently on the other side. The hand spun and woven linens of Westmoreland and the rugs and carpets of Donegal are assiduously advertised, and in thoroughly commercial fashion, greatly, we hope to the profit of their makers. So the decorator was not unduly surprised, when making some vague inquiries about the Donegal rugs, to be directed to the offices of a wholesale carpet house, in New York, and to be shown a line of drummer's samples.

The Donegal rugs, sometimes called the Irish Oriental rugs, are of the long-piled type, woven by hand, with vegetable-dyed yarn, on a linen warp. They are not so closely trimmed as the Aubusson or Savonnerie carpets, which they most resemble, and are exceedingly thick and fleecy. So heavy is the pile and so closely set the threads composing it that they are, like a really good Eastern rug, almost indestructible. The colorings, it goes without saying, are beautiful, and like all vegetable colors, improve with age, while the wool itself, uncorroded by acids, or made harsh by aniline processes, has a beautiful sheen.

The general run of these rugs have plain centers and more or less elaborate borders, generally in a scheme of coloring which depends more upon harmony than upon contrast. The designs, all the work of artists of distinction, are conventional. The heavy piles does not lend itself to elaborate detail, or to the use of many colors in a single design. For that sort of elaboration, one must have a Savonnerie, with twice the number of threads to the inch, and at nearly double the price.

The subdued color and heavy texture of these rugs makes them specially suitable for use with the more severe styles for interior decoration. They are specially harmonious with furniture in Mission style, or with very heavy mahogany, or dark oak. In the lighter tones of color, one of them might very well give a note of strong color to a rather light scheme. For instance, a medium green with a border of blue and cream would accentuate a room in paler greens and cream, with touches of turquoise blue. Or a plain rug in that indescribable color between pink and brown may bridge the chasm between walls of faded rose and furniture of light mahogany.

With all their beauty, however, Donegal rugs are for the few and not for the many, being far from cheap. Prices are quoted by the square yard, from $12 to $20, the 9x12 size costing from $144 to $360. It is some satisfaction to recollect that the rug at such a price is as nearly perfect as taste and skill and conscientious work can make it. The higher figure includes the added charge for making to order, original designs being furnished in any
desired coloring. The time required for execution is from three to six months. Whether, at the price a rug of this sort is preferable to a good Eastern one, is largely a matter of taste.

How do these Irish rugs compare, in cost, in beauty and in durability, with the similar product of our own country? In the matter of cost, the difference does not seem to be appreciable. As far as the writer knows, the two varieties of rugs, whose quality is comparable with that of the Donegal rugs, are not made in what are called carpet sizes. Probably a rug of large size would have to be made in two or more widths and seamed together. But square foot for square foot, the cost about strikes an average between the two extreme figures of the Irish product, with the advantage on our side. Nor is there reason to think that the foreign made article is any more durable.

In the matter of color and design, I am inclined to think the American rugs take the palm, for originality of design and for glowing and brilliant, yet harmonious color. I have seen rugs which compared not unfavorably with the best specimens of antique Persian carpets. In the matter of design they certainly do have an advantage over the rather conventional character of the Donegals. Were they more widely advertised and brought more generally to public notice, the increased demand would, doubtless, so stimulate the energies of the individuals, who have charge of these industries, that the limitations now surrounding them would promptly disappear and that they would have a substantial success in accordance with their merits.

* * *

One might announce the passing of the over-mantel, did it not linger so persistently in city apartment houses. In its worst form it is diversified by small panels of plate glass in addition to the central mirror, and tapers toward the ceiling. Something can be done by pictures covering the objectionable bits of mirror, also by hanging pictures or plaster medallions outside the tapering line, so as to carry the eye straight up to the ceiling. When the lines of a mantel are very bad, it should have as little on it as possible and that not conspicuous. A muddle of highly colored bric-a-brac makes things infinitely worse.

* * *

To brighten a gray-green room, with a cold exposure, nothing is so good as a pomegranate red, not in a mass by itself, but combined in some way with the gray-green. One finds this combination in Liberty velvets and, in lighter tones in English printed linens. A Liberty velvet, with a pattern of nasturtiums and their leaves, in the red and gray tones costs $2.75, a yard, fifty inches wide, and there are other designs in the same coloring.

* * *

Heavily carved oak dining-room furniture, of the Renaissance order, is effective in combination with tapestry rather than leather. For that leather is not perfectly suitable, if of the Spanish variety, but the tapestry lends a touch of rich color to the somber wood. Tapestries in exact reproductions of historic designs can be had of all the large dealers and will outwear leather many times, at less expense. The tapestry is specially pleasing in a room with a tapestry paper above a high wainscoating.
Answers to Questions on Interior Decoration.

Q. We are building a small cottage with living room, hall and dining room opening into each other and would like to know if you would consider Antwerp stain too dark for these rooms, also do you think it would be better to vary the stain in the different rooms rather than having all three rooms alike. Will yellow pine take a forest green stain?

Ans. We should say that Antwerp stain would be suitable for your dining room or the hall provided that the furniture corresponds but it would be too dark for living room. You will find in a small house that better effects are secured by a uniform wood finish for the greater part of the wood work on the same floor, tho the dining room might be finished as above suggested in a different finish or the Antwerp stain should it be desired. Think that you would find weathered oak stain very satisfactory for your hall and living room. The yellow pine will take a forest green stain with excellent results.

R. L. R.—Bishop, Cal.
Q. We are finishing an apartment house with compoboard and are desirous of having a plain surfaced wall. Kindly advise the best method of finishing and what material to use.

Ans. The compoboard material that you speak of can be coated with a high class sanitary wall coating. Before applying, however, the compoboard should receive a coat of size. Take a cheap varnish, thin down about one-half with benzine, add a little Japan for a dryer, after which you can apply the wall coating in any tint desired. The object of the size is to fill the pores of the surface of the compoboard and stop the suction or absorption which it would have for the wall coating.

L. B. W.—Bismarck.
Q. I have your book on Practical House Decoration and would be very glad if you would give me further suggestions as to interior colors and drappings. Enclose sketch of our house plan giving the information desired. Dining room furniture is quarter oak, have leather sofa in sitting room with mixed furniture. Rooms are finished in birch, natural. Am planning to buy mission furniture for the hall. I am uncertain as to a plate rail in dining room. Two corners would take a small plate rail. The wall is cut up with doors and windows on three sides.

Ans. Owing to the fact that between the many door and window openings and large side board you have very little wall space in dining room, would advise not to attempt to work in a plate rail. If you have some special china, however, which you desire to display, you could build a projecting cap of mouldings over the windows and doors only, same to be grooved to hold plates. This suggestion is made assuming that your doors and windows are not over 7 ft. high.

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40 Corcoran Bldg., WASHINGTON, D. C.
W. F. B._Mishawka, Ind.

Q. Kindly give us suggestions regarding the draperies suitable and appropriate for living room. What material to use and how to hang them. The room is large, 26x28, faces west, ceiling 10 ft. high with cream paper. Walls are deep green, rugs red and green and large red brick mantel. Room finished in quarter oak, has brass fixtures.

Ans. With your green walls and red and green rug, should suggest window draperies of green lattice cloth, or Madras. If you prefer a lighter hanging, get a Madras with a cream ecru ground and red and green figures. Hang them on a small brass rod, set in sockets, inside the frame of the window. Finish the top of the curtain with a two inch hem and run the rod in this, without a welt.

For hangings in the arches leading into other rooms, Craftsman canvas, in a deep, soft green is advised. It is fifty inches wide, and costs $1.25 a yard. A reversible mercerized tapestry, in green, with a small pattern, in self color, is also good, and cotton rep costs still less. The Craftsman canvas should be finished with a simple hem, the others with a cord or gimp, at the sides and bottom. Run a pole in a hem at the top of the curtain, and set the sockets at least a foot below the top of the arch.

H., Lake City. Q. Will you kindly thru your magazine, give some Japanese ideas as to finishing of woodwork, walls and furnishing of a smoking den?

Ans.—Probably you do not wish to attempt a strictly Japanese room. Such a room would require unstained woodwork and an extreme severity of furnishing which would amount to bareness, to our eyes.

Black woodwork, greyish walls with a Japanese freize introducing scarlet on a grey ground, furniture in simple shapes, of wicker with some pieces, perhaps wood frames stained black; several thicknesses of matting rugs for the floor with Japanese prints in slight frames of ebony or natural wood, on the grey walls—these are features that would convey a Japanese feeling.

Pages 59-62 in our book—Practical House Decoration—describe in detail a Japanese den, also give striking and effective suggestions on other lines, for such rooms, with illustrations.

T. H., Chicago. Q. I would appreciate some suggestions as to what style and color of paper and rugs to use in the rooms as described on the accompanying sheet. My furniture is dark golden oak.

Ans.—For the front room a paper well covered in a sort of tapestry design, having shades of soft tan and old blue with ecru ceiling is suggested. Such a paper will blend in better with the mixture of woods in woodwork and furniture than a plain wall. Let the rug show the same colors. Emphasize the blue in the paper by repeating it in minor details, such as a cushion, chair covers, a picture or a plaque. In these, the blue is not necessarily all the same shade, tho the varying tones must harmonize. On the guest room opening from this use a striped blue paper with white ceiling. The long and narrow room on the other side of the house could best be in golden browns. It will help this room also to use a striped paper and to break the floor line by using two rugs. The one at the dining room end, the smaller of the two. They should carry the golden browns of the wall.
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WHAT to do with the children, in vacation time, is a vital question with most mothers. The boys are only too willing to take care of themselves, but the girls are a more definite care. The tom-boy lurking in every girl is not to be encouraged unduly. The little girl who was so sweetly demure, when school closed, has been known to become a hoyden in the short space of two months. However much the hoyden may please herself and her intimates, she is not altogether agreeable in the ordered activities of everyday life. Making due allowance for the natural ebullition of animal spirits and the need of physical exercise, it must be recognized that the making of a wellbred woman must begin at an early age. Also that quiet and agreeable manners are not more important than a taste for the domesticities of life. We have all of us known the woman who has no domestic aptitudes: very few of us envy her, except in reckless moments.

The long summer days, when the pressure of school routine is removed, are the ideal time for teaching the little girl, who will be a woman before many years, the elements of her profession in life. For, after all, homemaking in some form or other is the vocation to which almost all women are called, and it is like most other arts in being best learned in early youth. Here and there a woman of exceptional intelligence may work out its problems for herself, in mature life, as she might master a science or a language, but such women are exceptional, and their housekeeping is apt to lack the flexibility which is the trait of the more practiced hand. The unexpected guest is too often conscious that he has disturbed their serenity, and their cooking is too much a matter of rule ever to rise above the disaster of a short age of milk or eggs. They are absolute strangers to the happy makeshifts which bring other women through triumphantly.

A child's first lessons in household affairs are best given in cooking. No other part of the household economy is likely to be so interesting to her, nor has so many processes within her reach. Some ambitious mothers try to teach their small daughters to make bread. Bread making, with its really hard muscular exertion, with its necessary exercise of judgment, ought to belong to the post-graduate course of cookery. Far better begin with simple puddings, go on to breakfast breads and simple cake, and then advance to meats and vegetables.

But some one objects: "Why waste my time and my patience in teaching a child to cook, when a professional teacher will do it so much better, in school?"

For a good many reasons. For one that the teaching of cooking in the ordinary school is academic in the extreme, that it is limited in scope, and necessarily so, and that it takes no account of the limitations of the ordinary kitchen. How many of the pupils in the cooking class, of the average public school will have the permanent use of even a gas range, to say nothing of the more elaborate appliances?

Again, when teaching in a regular cooking school is attainable aside from its cost, which is by no means small, it is apt to be adapted primarily to the wants of those who are fitting themselves for teaching, and to be too elaborate for ordinary requirements, besides spreading itself over a great deal of time.

But the best reason of all is that the
teaching brings mother and daughter to-gether in pleasant intimacy, and gives op-portunities for many indirect lessons, in manners and morals.

* * *

Washing blankets is a task which should be attended to in July, when the days are long and sunny and showers are infrequent. The essential point, as with all other woolens, is in keeping the washing and rinsing waters at the same temperature. The change from hot to cold, or vice versa, shrinks and fulls the blankets. The easiest way to manage this is to make a tub full of strong suds, with hot water and white soap, and to let it get cold before putting the blankets in. If there are any spots they should be taken out with a nail brush and soap, before the blankets are submerged. Let them stay in the water half an hour, sousing them up and down frequently, and rinse in several cold waters. Do not wring but squeeze them and hang them up to drip. Leave them hanging in the sun all day, take them in at night and hang out a second day. When they are thoroughly dry, re-bind them, if necessary. For nice blankets an inch-and-a-quarter binding of white India silk is best: for others use the ordinary ribbon bindings.

A device which saves blankets from soiling, at the head of the bed, where they are apt to touch the face, is a strip of cheesecloth, half a yard wide, folded in the middle and bound over the top of the blanket. It will protect the blanket perfectly and can be taken off and washed frequently.

* * *

Prunes are so wholesome it is a pity they are seldom appetizing. They may be cooked, without any sugar at all, by pouring warm water over them, rather more than enough to cover them, and setting them, closely covered, on the back of the range, where they will steam all day, or until the water is all absorbed. Cooked in this way, they are very good eaten with cream and sugar. Or they may be steamed and the stones taken out and a syrup made with a cup of water and a cup of brown sugar, boiling in it a few pieces of crystallized ginger. When it is cooked the stoned prunes are brought to the boiling point in it.

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THE food question is rather more trying in summer than at any other time of the year. It may be hard to achieve variety, in winter, but at least appetite waits on the housewife's efforts. In midsommer, one has to contend with one's own disinclination to exertion and, too often to encounter a trying fastidiousness and delicacy of appetite, on the part of one's family. Where the cooking is entrusted to a servant, the case it often worse, for very few cooks, much less general servants, care to bother with the little niceties essential to dainty hot weather service. Greasy gravies and limp vegetables are to be expected and the feelings of the lady, whose favor is so important, are almost sure to be hurt, if they are criticised.

Under these circumstances, it is desirable to vary the usual routine somewhat. If a hearty breakfast has been the rule, try having something specially good in the way of fruit, an uncooked cereal, toast and coffee. If someone feels that he must have meat, follow the English fashion and have a piece of cold boiled ham, on the sideboard, which can be carved at will, always seeing that the knife is sharp. The children will think it great fun if eggs or bacon are cooked on the table in a chafing dish, or over a gas blazer. Frizzled beef or creamed fish are more appetizing in hot weather than chops or steak.

If dinner is at night, it is quite in order to drop lunch out as a formal meal. A dish of some sort of sandwich mixture, a loaf of bread, on its board, a plate of fruit or cake and a pitcher of some cooling liquid, laid out on the bare table, in the dining room, will make it easy for each person to get his own lunch, taking his soiled dishes to the kitchen, when he has finished.

Once in a while, on an exceptionally hot day, an absolutely cold dinner is desirable, but not often. A certain amount of heat is necessary to the proper performance of the digestive processes and the temperature of the stomach must be re-inforced by that of the food. A cold soup ought to be followed by hot meat or fish and vegetables. and when the dessert is a cold one, it should be succeeded by hot coffee. When after dinner coffee is the rule, it is worth while taking the little extra trouble of making cocoa for the children. There is a preparation of milk-chocolate which only requires the addition of boiling water, for a very palatable drink.

Fruit soups are much in vogue, as the first course of a luncheon, or of a summer dinner. Any fruit which has a definite flavor can be used. The fruit is cooked in sufficient cold water to cover it, strained through a cheesecloth and slightly sweetened. It is thickened with arrowroot, or cornstarch, preferably the former, in the proportion of an even tablespoonful to a pint of liquid, and strained again. When it is cold, add two tablespoonsful of wine, or a less quantity of rum, and serve very cold, in punch glasses, with wafers.

Strawberries, raspberries or pineapple are served as cocktails for a first course. The fruit is cut small and arranged in cocktail glasses, with a tablespoonful of shaved ice
Table Chat—Continued

in each. The sauce is made from the juice of three oranges and one lemon, with sugar to taste.

*  *  *

Gooseberries are ripe in July, not the huge luscious globes of English and Scotch kitchen gardens, but nevertheless a fruit with a very piquant and agreeable flavor of its own, and many uses. Hulling gooseberries seems an undertaking to most people, but a pair of sharp scissors facilitates it wonderfully.

A gooseberry tart is a really delightful institution, and a roly-poly pudding, with a gooseberry jam filling is better still. Then there is gooseberry fool, dear to the hearts of our great-grandmothers, which, as nearly as one can gather from the copious words of their receipt books, was a sort of gooseberry sauce, into which a lump of butter and numerous eggs were stirred, as well as a coloring of spinach juice. Cake was served with this and one compiler remarks that, to complete the dessert for most tastes, a glass of rich milk would be needed. One has a great respect for the digestive organs of a past generation, when one reads a remark like this. The modern compromise, in the South, seems to be a mixture of gooseberry pulp and boiled custard.

Gooseberry jelly is worth putting up in large quantities, it is so exceedingly good with almost any sort of cold meat, or with poultry. It should be made of the fruit before it has begun to turn red at all. Gooseberry jam, on the contrary, is more palatable when made of the partially ripe fruit. It also requires less sugar, half a pound to a pound of fruit being ample.

A centre piece for the Fourth of July table is in form of a star, the framework being made out of pasteboard, with a rim two or three inches high. This is filled with moist sand and the flowers are stuck in, a circular mass of dark blue bachelor's buttons in the centre, a row of scarlet geraniums around the edge and the rest of the form filled up with white flowers of some fine variety. A florist would probably supply a star shaped wire form, if the dignity of the occasion warranted. An extremely patriotic effect, a little cost of effort, is obtained by the conjunction of big bunches of scarlet geraniums and Canton china, each gaining by contract with the other.
F. McL., Charlotte, N. C.
Q. Would it not be practical for you to illustrate designs and give cost estimates of five or six-room cottages of fire-proof construction, using reinforced cement floors, flat concrete roof, outside walls built of brick, metal furring to provide an air space inside, so that these designs could come into general use and enable steel mills to make and carry stock sizes of I-beams?

Ans. It is doubtful in our minds if it would be practical or serviceable to the general building public to do this, owing to the increased expense in the building of these small cottages. A man who is going to build a small five or six-room cottage is obliged to economize very closely. I do not imagine there would be one out of five hundred buildings such a house who would care to build it as a fire-proof house.

O. L., Antler, N. D.
Q. I am a carpenter and builder and want to know some good rules for figuring the size of a building to be built for a given sum. Am now figuring on a schoolhouse.

Ans. We suggest that you take up this matter with the International Correspondence School who have worked out just such problems. To accurately figure the cost and quantity of material for the school building you should have the plans drawn up so that you may be sure of lengths and sizes of timbers, spans, etc.

J. B. D., Greencastle, Ind.
Q. 1. (a) To make a closet in the attic moth-proof, will a complete lining of red cedar, door included, answer? (b) Would red cedar shingles answer as well as ceiling stuff?

2. What is the best way to make an attic cool in summer? How can mineral wool be used to advantage for the same?

Ans. 1. (a) A complete lining, including door, of cedar, is advisable for a perfect moth-proof closet. (b) Cedar shingles might serve the purpose but you would find red cedar ceiling or flooring would make much the neatest and most effective job.

2. The best way to make attic both cool and warm at the extremes of the year, is to lath and plaster it. The plaster can be a rough brown coat. Mineral wool is also good if you do not mind the expense.

O. F. H., Ardsley, N. Y.
Q. I am building a stable, the second floor of which is to be used for horses. The outside dimensions of stable are 40 ft. wide by 60 ft. deep. A girder will be run thru center of first floor to carry beams of second floor, making a span of 18 ft., each size of girder, the stone walls of stable being 2 ft. thick. The beams to carry second floor will be 2x12 in. spruce timbers placed 12 in. on centers, to be covered with 1 in. boards, then waterproofing, then 6 in. of cement. What I want to know is, are the 2x12 in. spruce timbers strong enough to carry the cement and horses?

Ans. Answering your inquiry concerning the proper dimensions of joist and strength of beams for barn, would say that the 2x12 in. joists are a trifle light for a stable 40 ft. wide by 60 ft. deep, but if 4 ft. of cement were used, they would carry without serious settlement. 2x14 in. would be a better construction and amply strong for the 6 in. of cement.

H. L. B., Kansas City, Mo.
Q. Would like to know how to figure a lumber bill complete for a building with some degree of swiftness, also the millwork and hardware. Please tell me the best way to go about this.

Ans. There is only one practical way to learn how to figure bills of material and that is to practice in an architect’s or contractor’s office and learn how. The majority of draughtsmen are not able to readily figure an accurate bill of material, strange as this may seem. It is a good deal a matter of judgment, altho some things are done by rule. Rules, however, do not guarantee accuracy as all materials can be used in careful and wasteful manner. This is, of course, somewhat dependent on the work on the job.

G. W. B., Nassau, N. Y.
Q. In a house 36x40 eaves all around, kindly give me the proper length of cor-
ner rafters. Height in center 12-foot from studding which extends above attic floor. Will 18-inch projection be sufficient?

Ans. With a roof twelve feet high and eighteen-inch eaves projection, the length of your hip rafters will be thirty feet and three inches. With a roof fourteen feet high the hip rafters will be thirty-one feet and four inches long. A twelve-foot roof is rather low if you intend to put the attic to any practical use.

J. A. R., El Paso, Ill. Q.—I wish to know whether galvanized wire netting is suitable for plaster exterior houses? I have heard a great deal of complaint about metal lath (expanded) rusting out. I have a house under construction of this type and am making this inquiry for the owner.

Ans.—We believe you would find the use of "plaster-board" or "stucco-board" to be the most satisfactory. The old method of stuccoing over frame build ings was to use metal lath; sometimes galvanized and sometimes just plain iron. The latter we know from experience, will entirely corrode to a dust within two years. As to galvanized lath, while we have no personal knowledge as to its longevity, we are informed by architects of repute who have had large experience with this material that the life of same is hardly more than seven years. The reason for this is that the galvanizing of the lath is seldom perfect and a little imperfection will permit of the moisture contained in the cement to work its way into the heart of the lath under the galvanizing and eventually corrode it.

Aside from this, galvanized lath is quite expensive. Its original cost being considerable more than the "stucco" board. Three coats of plaster are required to finish over metal lath, whereas "stucco" board requires but two coats of cement to finish. The cost saved being the heaviest coat. We say heaviest, in that a large quantity of the first coat (the one saved) in being applied, is pushed through the mesh of the lath and falls down behind and is lost in back of the lath, accomplishing absolutely no purpose. The architects in and about New York City are gradually discontinuing the use of all metal laths and specifying the "stucco" board.

**How to Cool a Hot Porch**

Porch Equipment will make your porch as comfortable and inviting as the one in the picture. The porch is in cool, mellow shadow, and you can see everybody passing, but no one outside can see you.

Made of Linden Wood Fibre and Seine Twine, durable and weatherproof, stained in harmonious, lasting colors. Any porch can be equipped at from $2.00 to $10.00.

**Vudor Hammocks**

are built on the "made-to-wear" principle. The supporting cords are fastened direct to a Rock Elm spreader, as is also the body. This gives double the life to the Vudor Hammock, as it is especially strong where other hammocks are especially weak. Vudor Hammocks sell at $3.00 and $4.00 and are guaranteed to wear twice as long as any other hammock on the market.

**Vudor Chair Hammocks**

afford the most comfortable, most durable and simplest resting place ever devised for use on the porch. If your dealer doesn't carry them, we'll express you one prepaid on receipt of $3.50.

**CAUTION**—Inferior products—bamboo shades, which let in the sun and do not retain their shape or color, and cheaply constructed hammocks are sometimes sold by unscrupulous dealers as Vudor goods. Look for the Vudor trademark on an aluminum plate on every genuine Vudor Shade or Chair Hammock and on the label sewed on every Vudor hammock. It means quality in porch equipment and it's there for your protection.

Prepare now for the hot summer—write for our free booklet, "How to Cool a Hot Porch," and name of nearest Vudor dealer.
SUMMER FLOWERS.
Bedding Plants From Seeds.
By Ida D. Bennett.

It is not, I think, generally realized how easily and cheaply a great many of the bedding plants with which our summer lawns and gardens are adorned may be raised from seed by the simple conveniences at hand in every household or at least easily procurable. The growing of plants from seeds is the cheapest and at the same, one of the most interesting forms of culture possible and one grows to appreciate and enjoy plants so raised in a way impossible with those which have been under the fostering care of the florist, and seem to breathe, even when transplanted to our own door-yard, the commercial spirit.

Those plants used for foliage beds on the lawn are the most commonly purchased of the florist and include the canna and the coleus. Now both of these plants come readily from seed and respond generously to ordinary care. Most florists offer seeds of the better varieties of cannas including the large orchid flowered varieties, and the canna seeds are among the most certain to germinate. Certain precautions, to be sure, must be observed to obtain satisfactory results; for instance it is necessary to file away the hard outer shell of the seed until the white shows through and to soak the seed in hot water—over night usually, in a warm place, when if planted in small pots of moist soil set in a warm place—over the furnace or on top of the kitchen range, the seeds will almost like Jack’s bean stalk, come up in a night, at least they will come up in three or four nights. As soon as they have developed a pair of leaves they may be put in a sunny window and encouraged to grow with might and main until time for planting out in the open ground, shifting the plants into larger pots as required. These seed grown plants not infrequently come into bloom earlier than those from roots.

Coleus, so much used to edge beds of cannas and for ribbon beds are as easily grown as asters or pansies. It is only necessary to purchase good seed of reliable seedsman, sow them on the surface of boxes or flats of fine leaf mould enriched with a little well decayed manure, press the seed into the soil and cover with a little fine soil sifted evenly over them and likewise pressed down, to water lightly with a fine spray,
Home Grounds—Continued.

cover with glass and a sheet of white paper and put in a warm place until the seed germinates. As soon as the little plants are up and large enough to handle if at all crowded they should be pricked out into other larger flats and grown on until time for planting out in the open ground. By the time they leaves and become unsightly. It should never be allowed to bloom as that saps the vitality of the foliage, destroying its color and beauty.

Salvias, so much used for bedding, do far better when raised from seeds than from cuttings, blooming earlier and making

are one or more inches high they will have developed definite colors and markings and the most promising colors may be selected for planting. Better effects are produced by alternating light and dark colors in the bed than by all light or dark shades, though beautiful results follow plantings of all dark varieties.

The coleus develops its colors better in full sunshine, but should be kept well pinched back and not allowed to grow straggly as in this case it will shed its lower stockier plants. The culture is the same as that given the coleus, but unlike the coleus they do quite as well in the shade as in full sunshine. They should be given rich soil, peat and manure suiting them admirably, and abundant room, the plants set from two to three feet apart each way for best results.

Vincas, which are seldom seen in private gardens, require exactly the same treatment as the coleus and will do well in any good garden soil. They have the merit of being most ornamental at any stage of the growth.
their dark, waxy foliage being quite as handsome in its way as the exquisite blossoms of white, rose and white with crimson eye. They have the additional merit of making excellent house plants and may be lifted in the fall and brought into the house or conservatory where they will continue to bloom all winter. They are admirable for massing for social functions and bank a staircase most effectively.

Abutilons are most attractive and interesting summer bedders which may be easily raised from seed and well repay the care bestowed upon them, but there is probably no one flower which will give the wealth of bloom that the lantana yields. I have grown plants from seed that when five months old were nearly three feet in diameter and a mass of bloom. Such plants make delightful hedges between city lots when platted in the open ground, but do equally well, if not better, when grown in large pails or tubs and liberally supplied with water. They should have rich soil, of leaf-mould, fibrous loam and old, well decayed manure. Their treatment as seedlings is the same as that given the salvias and other plants described.

Geraniums grow readily from seed sown in the house or hot bed—preferably the latter, they should be planted in drills dropping the seeds which are rather large and long an inch apart in the rows. They should be kept rather dry and as soon as they have attained to their second leaf be potted off into small pots—not over two inches, and plunged into a box of damp sand, and given considerable sunshine from the start. As the plants increase in size they should not be kept constantly wet but be watered thoroughly and then allowed to become nearly dry before watering again, this alternating of dry and wet spells encouraging a more stocky growth than would be the case were a constant moisture maintained.

The young plants should be pinched back repeatedly keeping the growth as near the ground for the first few months as possible. If started early they will give some bloom the first season, or they may be pinched back and debudded and carried along for winter blooming.

**Kewanee Fire Box Boilers**

for heating large residences, flats, office buildings, schools, etc., are considered standard. They are built of steel and are absolutely safe.

Insurance Companies will not insure cast iron boilers. They will insure **Kewanee** Boilers without question—just think about that a little.

**Kewanee** Fire Box Boilers are easy to install, easy to operate, easy to clean, cost less and require less fuel than any other boiler made. A strong statement but absolutely true.

We will tell you some interesting facts about steam or hot water heating, if you will ask for our book "**Kewanee** Heating Methods." Write for it today.

**Kewanee Boiler Company** 140 Franklin St., Kewanee, Ill.
The Transmission of Disease Germs Through the House Drain.

At the present time we find that the views of those best qualified to judge respecting the dangers which come from sewer air in our homes have been very much modified. We now know that two of the most deadly of the communicable diseases, typhoid fever and tuberculosis, are not communicable through such a channel.

Respecting other communicable diseases, there is not yet a complete concurrence of opinion as to whether the germs of certain of them, perhaps diphtheria and scarlet fever, may not possibly be carried through the air, although most authorities agree that there is little if any probability of infection through drain pipes. Many of the most eminent students of the subject would endorse the statement of Dr. Charles V. Chapin, superintendent of health of Providence, who says, "I am sure that the infectious diseases are never transmitted in sewer air."

In view of the changed opinion regarding these scientific aspects of the case it is quite proper to again consider in detail the arguments which have so frequently been discussed as to the necessity which now exists for an intercepting main trap.

Favoring the Main Trap.

1. It has been generally assumed that the use of the main trap is necessary to prevent the intrusion of air into the house pipes from the main sewers, because such air may be the conveyor of germs of disease, in case these germs are present in the sewer from some infected source. If disease is not communicated from one house to another by means of open connections to the main sewer the argument falls to the ground.

The studies made in recent years of the characteristics of air found in the main sewers have proved that although...
Slight quantities of the gases arising from decomposition were to be found, such air in well built and copiously ventilated sewers is astonishingly free from disease germs, these organisms being much less frequent than in the street air near the surface.

Experimentation shows the extreme difficulty with which bacteria pass through even short straight pipes having moistened interior surfaces, and justify the conclusion that specific germs will never be carried by ordinary air currents through more than about twenty-five feet of straight house drains of the usual sizes. If bends are interposed, the distance traveled before the bacteria become attached to the sides of the pipe is much less.

If it were proven that communicable diseases were propagated from germs flowing in sewer air, would it not be best even then to discharge them at the upper end of a properly located soil pipe than at the ground level, perhaps in the middle of a street, or in a footway pavement? In the absence of reasonable proof that any danger at all exists in a direct communication between the house and main sewers, shall we continue to endure the many recognized inconveniences which are inseparable to the running trap?

2. One of the most important of the secondary arguments for the use of the trap is the statement that the air from the public sewers passing out at the tops of the stacks will prove objectionable by its odors, especially in cases where a stack in a low building has above it the windows of a higher building.

To this it may be justly replied that the air from the sewers is no more harmful, and probably is even less infectious, than if the air of the house drain only is discharged from these stack terminals.

Whether the trap be used or not, no soil pipe outlet should be so related to openings above it in an adjoining building as to cause nuisance. With the progress of public opinion in this regard, our laws will ultimately admit the reasonableness of the proposition that the person who creates a nuisance of this kind, either by building a high building above an...
existing low one, or by constructing a low building next to a standing tall one, will be compelled, as is the case with chimneys in some states, to remove the cause of nuisance by carrying the pipes entirely above the walls of the taller structure. This, however, should be required in all cases, whether the main trap be installed or otherwise.

A further argument sometimes used to bolster up the retention of the trap is that the varying pressures of air in the public sewers will cause the seals of the fixture traps to be endangered and allow foul air to escape into the rooms. It constantly occurs that the intrusion of storm water into a main sewer during heavy rains causes compression of the air therein to such a degree that the water seals of main house traps are blown in with considerable violence, but there is no possibility that trap seals will be broken in this way when connected to a main sewer having its ventilation assured thru fifty openings in every city block.

4. An erroneous claim has been sometimes made that if the trap is left out, the tendency to clogging at the top of the stack by frost will be increased. The contrary is the case. The constant current of warm air from the main sewer will resist low temperatures at the stack opening much more effectively than the sluggish partial movement which will prevail if a trap is in place. It is well known that an untrapped rain leader (sometimes permissible in sound design) will resist freezing effects in a surprising manner as compared with one trapped at its foot.

5. It is sometimes urged that it is not a part of the duty of the private citizen to assist in ventilating the public sewers through his house plumbing, but that provisions should be otherwise made by the city authorities for the necessary air supply to the sewer mains.

The argument is founded on a misconception of the intimate relations which the officials sustain to private property. The cheapest and most efficient operation of every public utility is advantageous to the interest of every householder. Lack of adequacy in the means heretofore employed to ventilate the street sewers is a demonstrated condition. The trial of
any other remedy than the proper one will involve the property owner in increased expense. The application of the only satisfactory method of solution cannot fail to benefit every resident by increased security against the serious dangers from the befouled air contained in tightly closed sewers.

NOTE—The negative side of this question will be given in our August issue.

Parquetry

Floor Work

Parquetry floor work is not, as many think, a comparatively new thing, but is simply a revival of an old idea, originating in Hungary some two centuries ago. From thence it went into England, France, etc., and finally into our own country. John Evelyn, in his diary under date of August, 1678, describing the Duke of Norfolk's residence at Weybridge, says: "The rooms are wainscoted, and some of them richly parqueted with cedar, yew, cypress, etc." Germany has many ancient floors parqueted.

The modern builder finds the floor question one of large importance; I refer to the individual who is about to build. There is the pine floor that may be covered with carpet. Then there is the hardwood floor that may be polished and laid with a rug or rugs. Which shall it be? Then the handsome albeit somewhat costly parquet floor. The latter is available in many cases where otherwise the floor would have to be replaced with a new one; I refer now to old work. It is here particularly that the parquet flooring comes in. It can be laid over the old floor. It furnishes a floor, so to speak.

NOTE—The negative side of this question will be given in our August issue.

Paint, for exterior use, on an average painted surface, will take about one gallon to cover 600 square feet.

Priming coat, average surface, about the same.

Red lead paint, on structural steel work, from 500 to 700 square feet to the gallon.

Enamel paint, for interior use, will cover about 400 square feet to the gallon.

Floor paint will require about a gallon to 400 square feet of average floor surface.

One gallon of ordinary roof paint will cover about 500 square feet of surface.

Ochre priming will cover about 400 feet to the gallon.

Oil stain will cover from 700 square feet to the gallon and upwards, depending on nature of surface.

Liquid wood filler will cover about 550 feet to the gallon.

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Ochre priming will cover about 400 feet to the gallon.

Oil stain will cover from 700 square feet to the gallon and upwards, depending on nature of surface.

Liquid wood filler will cover about 550 feet to the gallon.

Hard oil will cover about 600 feet, over liquid filler, and sometimes less over paste filler.

This includes complete working drawings and specifications, prepaid. This house has furnace, concrete foundation, gas and electric lights, plumbing, complete. Cost to erect from $2,500 to $3,000. Send 50¢ for our portfolio of photographs and plans of sensible, practical, artistic Homes. They have no superiors. Send stamp for our sketch offer.

Varnish stain will cover about half the surface that an oil or spirit stain will cover. The cheaper grades of varnish are not lacking in body, nor in brilliancy, and in some instances they will wear very well, inside. Never so outside. The finer and costlier varnishes are thinner bodied, as a rule, and may be spread out very thinly, and here is where a mistake may be made by the user. If a good effect, and not mere economy, is desired, then do not spread a good varnish too much, but get as full a body on as possible. Given a well-filled wood, and a full coat of heavy bodied varnish will give a very good job. But the expert varnisher will take the thinner article and achieve the full effect with that. The finish is always richer for several coats of good, well-rubbed varnish; they give depth to the effect, and besides which the varnish acts as a buffer for the beautiful wood that it covers. But the varnish should all be alike, from the same lot in fact, so that there will be no danger of having two or more shades of varnish, and which would cloud the luster.

It will take about 6 gallons of raw linseed oil to mix 100 pounds of dry white lead. For keg lead, five gallons will be enough to mix it into paint. A half-pint to a pint of good liquid driers should dry this much paint.

From three to four gallons of raw oil will mix 100 pounds of dry red lead. Prince's Double-Label Mineral Brown, dry, will absorb 15 gallons of oil, to bring it to a paint, and the same material in oil will take 8 gallons to thin to the usual consistency for application.

**Exterior Finish.**

Roof stained a dark moss green with red pressed brick foundation. Red mortar joints will prove very satisfactory. Entire exterior vertical wall stain a wood brown or the lower story brown and upper story silver gray (to imitate slightly aged shingles) or, only the body of the second story gray with projection parts and gables brown. Wood trim should be a dark mission brown or a bottle green.

---

**Your New Residence Will Not Be a HOME**

**Unless it is Properly Heated and Ventilated**

**The Jones System**

**Oil Required in Mixing Paint**

...502 White Bld
GOOD JUDGES of Comfort endorse the JACKSON VENTILATING GRATE. In addition we sell Mantels, Andirons, Gas Logs, etc., all at wholesale prices. Send for Catalogue.

IN PLANNING FOR HEATING A HOUSE

1st. The heating system should be under easy control. Most families either suffer with cold during the autumn because of entire lack of fires, or are uncomfortable because of excess of heat when the furnace fires are lighted.

2nd. The system should be economical in its running expenses. The cost of the installation generally comes but once in a life-time; the fuel bill is an annual cost. Many a cheap furnace wastes its whole cost by excessive use of fuel within a few years. Every unnecessary foot of space between the source of heat and the room to be heated is paid for in wasted fuel.

3rd. The heating should always be combined with the even more important function of ventilation. Every system of heating is defective that simply heats the air of the living room over and over. For perfect health every breath should be of pure air such as nature provides outside the house.

4th. The perfect system of heating includes that which does more than warm the body and keep pure the blood. The house life needs influences that will bring gladness and cheer to the heart. For this an open fire has no rival. It is a center around which the young delight to gather, and from it are radiated elements of strength that bring health to the invalid.

The Ventilating Grate fills all these requirements.

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ALSO FOR CATALOGUE OF MANTELS, ANDIRONS, ETC.

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25 Beekman St. NEW YORK

NOTES ON PRICES.

The wage scale and current lumber prices in force in Minneapolis, June 15, is as follows:

Carpenter labor, per hr. $0.42 1/2
Painters, per hr. $0.42 1/2
Masons, per hr. $0.50
Plasterers, per hr. $0.50 per day of 8 hrs.
Lathers, per hr. 50
Plumbers, per hr. 55


Girders, 6x10, 16 ft. No. 1 $35.00
Posts, 6x6, 15 ft. No. 1 29.00
Floor joist, 2x10, 14 ft. No. 1 29.50
Studding, 1st, 2x4, 10 ft. No. 1 28.00
Studding, 2d, 2x4, 16 ft. No. 1 26.50
Roof, 2x4, 18 ft. No. 1 28.00
Boarding, S. I. S. No. 3 27.00
Sheathing, D. & M. 6 Fencing No. 3 27.00
Flooring, beaded, 4 in. Fir 45.00
Ceiling, beaded, 4 in. No. 1 36.00
Siding, 4 in C. Pine 30.00
Birch, flooring, 2 1/4 in. Face. Clear 46.00
Shingles, Ex. and at Best Red Cedar 4.25
D. stock boards, 4 to 10 in. 45.00

 Reported by E. B. Sanders, Amarillo, Tex.

Dimension stuff (2-4, 2-6, 2-8, etc.) to 16 ft. in length inc. $27.50
Dimension stuff, other lengths 28.50
4x4 and 4x6 32.50
No. 1 boxing (1x10 and 1x12) 30.00
No. 2 boxing (1x10 and 1x12) 28.00
No. 1 ship lap 28.00
No. 2 ship lap 26.00
No. 1 flooring and drop siding 35.00
No. 2 same 32.50
1x4 sheathing 27.50
Shingles 5.00
Lath per M. 6.50
Building paper per roll of 500 sq. ft. (best) .90
Brick per M. ( Coffeyville, Kas. burned) 12.50
Cement Iola, Kas., or Independence Portland per bbls. 3.25

Reported by Edgar E. Brown, Rumford, R. I.

Carpenters, per day. 3.00
Masons, per day, with helper 8.00
Spruce, for top floor, per M. 35.00
Spruce, per M. 35.00
Hemlock, per M. 25.00
Shingles, per M. 4.25

Reported by W. H. Hamblett, Fontanet, Ind.

Pine flooring 3.00
Pine flooring, 2x8. 2.75
### Notes on Prices—Continued

<table>
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<tr>
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<td>Masons, per hr.</td>
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<td>Laborers, per day, 9 hrs.</td>
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Reported by J. M. Wilson, Plainville, Kan.

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<td>Pine flooring, No. 1</td>
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<td>Siding, W. W. Pine</td>
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<td>Stock Boards</td>
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<tr>
<td>Shingles <em>A</em></td>
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<tr>
<td>Cement, Portland, sack</td>
<td>$0.80</td>
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<tr>
<td>Cement, Plastering, sack</td>
<td>$0.05</td>
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<tr>
<td>Lime, bbl.</td>
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<tr>
<td>Brick, per M.</td>
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<td>Masons, stone</td>
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<tr>
<td>Plasters</td>
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<tr>
<td>Painters</td>
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</tr>
<tr>
<td>Carpenters</td>
<td>$2.50 - $3.00</td>
</tr>
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Note—All trades work ten hours, no extra time for overtime. Country work includes board and lodging. Building operations are fair and plenty of work for good men.

Reported by H. A. Whitney, Tacoma, Wash.

<table>
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<td>Flooring, A grade</td>
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<td>Bricklayers</td>
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<tr>
<td>Cement workers</td>
<td>$5.50</td>
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<tr>
<td>Mill men</td>
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<tr>
<td>Plasters</td>
<td>$5.00</td>
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**SEDGWICK**

**THE ARCHITECT**

Send One Dollar

For my latest book

**BEST HOUSE PLANS**

You are Going to Build and

WANT MY BOOK

It contains 128 Designs

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WRITE FOR ANY INFORMATION REGARDING BUILDING

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**A METAL SCREEN**

At a price within your reach.

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**A GOOD HOUSE DESERVES A GOOD WINDOW SCREEN.**

Durable, Reasonable in Price and will last many years. Made in Black, Pearl or Copper Cloth. Saves expense of putting on and taking off, as it is put on and taken off from the inside. Write for prices and descriptive circular.

THE METAL SCREEN & MFG. CO.,

315 Rice St., ST. PAUL
appeal to those who are looking for not only price, but quality. Years of experience, cheap hardwood and labor-saving machinery enable us to sell strictly high-grade dependable mantels at prices you cannot duplicate elsewhere.

**IT WILL PAY YOU**
to write for our free book, "Evidence," which is a "show me" book that talks; or if you will state the number of mantels needed and enclose 12c. to pay postage, we will mail our beautiful 72-page catalogue (12x14 in.) and include our book, "Colonial Beauties." These books cost us 50c. delivered, and are gladly sent to those intending to purchase mantels, but not to idle inquirers. Write today.

**KING MANTEL CO., 531-533 West Jackson Ave., Knoxville, Tenn.**

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**ATTENTION TO DETAILS**

**Will INSURE COMFORT in Your Home.**

See that your doors are hung with

**STANLEY'S Ball-Bearing Hinges**

No creaking of doors
No need of oiling
No sagging

**ARTISTIC BOOKLET FREE**

**THE STANLEY WORKS**
Dept. T, NEW BRITAIN, CONN.

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**Plumbing Supplies**

**AT Wholesale Prices.**

Everything in the Plumbing Line.

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**IXL Rock Maple FLOORING**

**BIRCH, RED BIRCH**

Cherry and Bird's Eye Maple FLOORING

Thoroughly air seasoned and kiln dried, steel polished, end matched, bored and bundled.

**Made By**

**Wisconsin Land & Lumber Co.**

HERMANSVILLE, MICHIGAN.

**WRITE FOR BOOKLET**
The principal objections to the old time stable have been done away with by the arrival of the automobile, viz: odor and size. It was often an actual deprivation to place a stable on the rear of a small lot, but the stable of an automobile requires so small a space upon the grounds that the smallest lot can accommodate it without the owner feeling the loss of room in his back yard. It will be noticed that some of the garages in the illustrations are only 14 ft. by 14 ft. This size will accommodate only one car comfortably (two crowded) but few have need of more. The planning of a garage is not without its problems; the principal one is to get the proper size. Experience seems to indicate that the best space to allow for an auto is eight feet in width and fourteen feet in length. This will take a large two seated car with comfort. Smaller automobiles can, of course, stand in a smaller space, but no man knows what size machine he may have next year and it is best to provide for the large ones when building. The doorway should be eight feet wide (seven will do but is close) and not less than eight feet high. Some automobiles are seven feet nine inches high with the top on.

A garage built wide enough to accommodate two autos should have two doors to it, unless it is built long enough to let the last auto in make a turn to one side behind the first one. This is done in sev-
eral of the houses illustrated and is without a doubt the most practical way of building an entrance to a garage. For the reader's convenience I will designate the houses by number.

Number one is a very pretentious building made of twelve-inch brick walls. The design of the garage is in keeping with the design of the owner's house. This is a good plan to follow. Having the buildings in harmony adds to the splendor of all. This garage is completely stocked with tools and general machine and tire repair outfits, the owner having an experienced machinist to look after his machines. This garage boasts some very fine autos.

Number two is a less pretentious, but still elegant, building for the accommodation of two machines. It has two sliding doors, each one sliding past the other when open. It is better to slide the doors when permitted than to swing them. Where it is necessary to swing them it is best to divide the door into two parts and swing them out, having a small post to each side to hook them back to. Number two has a ventilator on the top, which is a splendid feature.

Number three is a little too ordinary in appearance for a man who can afford an automobile. It serves the practical side of an auto house very well, but with very little more expense could be made more sightly.

Number four is another splendid brick garage for two automobiles. When one owns one or two machines costing from three thousand dollars up it is well worth while to consider the little extra expense of making the garage practically fire-proof. This garage (No. 4) is built of common brick, selected, and having a cement floor and pitch and gravel roof is therefore as fireproof as it is necessary to make a one-story structure.

Number five is a modest structure converted to the service of the "horseless carriages."

Numbers six to nine are practical little houses costing within the means of any automobile owner. They are similar but all different in some detail affecting the appearance.

Number ten is a good-sized garage with a loft of an ordinary but neat appearance. The floor of all auto houses should be either of plank or cement. It is best to make it of cement as the wood floor soaks
up a great deal of oil which simply waits for a carelessly dropped match or cigar to set it ablaze. It is best to have the floor graded or grooved to the center with a bell trap connected with either sewer or cesspool. It is surprising how much oil drips from a standing automobile. If the garden hose is not handy it is a good plan to have a water faucet and stopper sink in the garage so that both machine and floor can be easily washed. A thirty-inch bench across one end of the garage is a very handy thing to lay things on when the space is available.

In order that this article may be of a very practical character I have detailed the material required for the construction of auto houses No. 2 to 10 inclusive and have estimated what each would cost.

### AUTO HOUSE No. 2, Foundation 18 ft. x 18 ft., COST $375.00

<table>
<thead>
<tr>
<th>MATERIAL REQUIRED FOR CONSTRUCTION.</th>
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<tbody>
<tr>
<td>1000 ft. 4&quot; D. &amp; M. No. 1 pine for sheathing.</td>
<td></td>
</tr>
<tr>
<td>45 pcs. 2&quot;x4&quot;x10 ft. S-3-S for studs.</td>
<td></td>
</tr>
<tr>
<td>22 pcs. 2&quot;x4&quot;x12 ft. No. 1 pine S-3-S for rafters.</td>
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</tr>
<tr>
<td>4 pcs. 2&quot;x6&quot;x16 ft. No. 1 pine S-3-S for hip rafters.</td>
<td></td>
</tr>
<tr>
<td>4000 white cedar shingles.</td>
<td></td>
</tr>
<tr>
<td>500 1 in. ft. C. white pine lap siding 16 ft. lengths.</td>
<td></td>
</tr>
<tr>
<td>12 pcs. 2&quot;x4&quot;x18 ft. No. 1 pine S-3-S plates.</td>
<td></td>
</tr>
<tr>
<td>2 pcs. 2&quot;x8&quot;x18 ft. S-4-S, D. lintels.</td>
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### AUTO HOUSE No. 3, Foundation 12 ft. x 20 ft., COST $280.00

<table>
<thead>
<tr>
<th>MATERIAL REQUIRED FOR CONSTRUCTION.</th>
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<tbody>
<tr>
<td>54 pcs. 2&quot;x4&quot;x10 ft. S-3-S No. 1 pine studs.</td>
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<tr>
<td>5 pcs. 2&quot;x4&quot;x8 ft. S-3-S No. 1 pine gable studs.</td>
<td></td>
</tr>
<tr>
<td>188 lin. ft. 2&quot;x4&quot; S-3-S No. 1 pine plates.</td>
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</tr>
<tr>
<td>38 pcs. 2&quot;x4&quot;x8 ft. S-3-S No. 1 pine rafters.</td>
<td></td>
</tr>
<tr>
<td>400 ft. 6&quot; S-1-S No. 2 roof boards and gables.</td>
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</tr>
<tr>
<td>3,500 cedar shingles.</td>
<td></td>
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<tr>
<td>300 dimension cedar shingles. gables.</td>
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</tr>
<tr>
<td>240 shaped cedar shingles. gables.</td>
<td></td>
</tr>
<tr>
<td>17 pcs. 2&quot;x8&quot;x12 ft. No. 2 pine floor joist (sleepers).</td>
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</tr>
<tr>
<td>50 pcs. 2&quot;x6&quot;x10 ft. S-1-S No. 2 E plank floor.</td>
<td></td>
</tr>
<tr>
<td>800 lin. ft. of 4&quot; D. &amp; M. &amp; y'd No. 1 pine for siding.</td>
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### AUTO HOUSE No. 5, Foundation 18 ft. x 18 ft., COST $380.00

<table>
<thead>
<tr>
<th>MATERIAL REQUIRED FOR CONSTRUCTION.</th>
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<tbody>
<tr>
<td>65 pcs. 2&quot;x4&quot; S-3-S No. 1 pine studs.</td>
<td></td>
</tr>
<tr>
<td>45 pcs. 2&quot;x4&quot; No. 2 pine roof rafters and joists.</td>
<td></td>
</tr>
<tr>
<td>4 pcs. 2&quot;x4&quot;x12 ft. S-3-S No. 1 pine plates.</td>
<td></td>
</tr>
<tr>
<td>9 pcs. 2&quot;x4&quot;x12 ft. No. 2 pine rafters.</td>
<td></td>
</tr>
<tr>
<td>4 pcs. 2&quot;x4&quot;x16 ft. No. 2 pine hip rafters.</td>
<td></td>
</tr>
<tr>
<td>16 pcs. 2&quot;x10&quot;x18 ft. No. 2 pine floor joists.</td>
<td></td>
</tr>
<tr>
<td>48 pcs. 2&quot;x6&quot;x12 ft. S-1-S &amp; 2E No. 1 pine plank floor.</td>
<td></td>
</tr>
<tr>
<td>1200 ft. 4&quot; D. &amp; M. No. 1 pine for sheathing.</td>
<td></td>
</tr>
<tr>
<td>530 ft. 6&quot; S-1-S No. 3 pine roof boards.</td>
<td></td>
</tr>
<tr>
<td>5000 white cedar shingles.</td>
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<tr>
<td>220 ft. 2 1-9&quot; D. &amp; M. &amp; B. pine ceiling cornice.</td>
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<tr>
<td>2600 lin. ft. 6&quot; &quot;C&quot; white pine lap siding.</td>
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### AUTO HOUSE No. 6, Foundation 14 ft. x 14 ft., COST $260.00

<table>
<thead>
<tr>
<th>MATERIAL REQUIRED FOR CONSTRUCTION.</th>
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<tbody>
<tr>
<td>27 pcs. 2&quot;x4&quot;x16 ft. S-3-S No. 1 pine 8 ft. studs.</td>
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<tr>
<td>24 pcs. 2&quot;x4&quot;x10 ft. S-3-S No. 1 pine rafters.</td>
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<tr>
<td>4 pcs. 2&quot;x6&quot;x14 ft. S-3-S No. 1 pine hip rafters.</td>
<td></td>
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<tr>
<td>12 pcs. 2&quot;x4&quot;x14 ft. S-3-S No. 1 pine plates.</td>
<td></td>
</tr>
<tr>
<td>700 ft. 4&quot; D. &amp; M. No. 1 pine for roof boards and sheathing.</td>
<td></td>
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<tr>
<td>3000 white cedar shingles.</td>
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</tr>
<tr>
<td>1700 lin. ft. of 6&quot; &quot;C&quot; white pine siding.</td>
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### AUTO HOUSE No. 7, Foundation 14 ft. x 14 ft., COST $270.00

<table>
<thead>
<tr>
<th>MATERIAL REQUIRED FOR CONSTRUCTION.</th>
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<tbody>
<tr>
<td>25 pcs. 2&quot;x4&quot;x16 ft. S-3-S No. 1 pine for 8 ft. studs.</td>
<td></td>
</tr>
<tr>
<td>24 pcs. 2&quot;x4&quot;x12 ft. S-3-S No. 1 pine rafters.</td>
<td></td>
</tr>
<tr>
<td>4 pcs. 2&quot;x6&quot;x16 ft. S-3-S No. 1 pine hip rafters.</td>
<td></td>
</tr>
<tr>
<td>12 pcs. 2&quot;x4&quot;x14 ft. S-3-S No. 1 pine plates.</td>
<td></td>
</tr>
<tr>
<td>700 ft. 4&quot; D. &amp; M. No. 1 pine for roof boards and sheathing.</td>
<td></td>
</tr>
<tr>
<td>3500 shingles.</td>
<td></td>
</tr>
<tr>
<td>1300 lin. ft. of 6&quot; &quot;C&quot; white pine siding.</td>
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</tbody>
</table>
AUTO HOUSE No. 8, Foundation 14 ft. x 16 ft.,
COST $250.00.
MATERIAL REQUIRED FOR CONSTRUCTION.
28 pcs. 2"x4"x10 ft. S-3-S No. 1 pine 5 ft. studs.
26 pcs. 2"x4"x10 ft. S-3-S No. 1 pine rafters.
4 pcs. 2"x3"x14 ft. S-3-S No. 1 pine hip rafters.
6 pcs. 2"x4"x14 ft. S-3-S No. 1 pine plates.
6 pcs. 2"x4"x16 ft. S-3-S No. 1 pine plates.
780 ft. 4" D. & M. No. 1 pine for roof boards and sheathing.
3500 white cedar shingles.
3000 ft. of 10" fir boards S-4-S for siding.

AUTO HOUSE No. 9, Foundation 14 ft. x 16 ft.,
COST $270.00.
MATERIAL REQUIRED FOR CONSTRUCTION.
28 pcs. 2"x4"x16 ft. S-3-S No. 1 pine for 8 ft. studs.
26 pcs. 2"x4"x12 ft. S-3-S No. 1 pine for rafters.
4 pcs. 2"x2"x16 ft. S-3-S No. 1 pine for hip rafters.
6 pcs. 2"x4"x14 ft. S-3-S No. 1 pine for plates.
6 pcs. 2"x4"x16 ft. S-3-S No. 1 pine for plates.
800 ft. 4" D. & M. No. 1 pine roof boards and sheathing.
4000 white cedar shingles.
3500 ft. of 6" "C" white pine siding.

AUTO HOUSE No. 10, Foundation 14 ft. x 18 ft.,
COST $270.00.
MATERIAL REQUIRED FOR CONSTRUCTION.
34 pcs. 2"x4"x16 ft. S-3-S for 8 ft. studs.
36 pcs. 2"x4"x10 ft. roof rafters No. 2 pine.
1 pc. 2"x5"x20 ft. ridge.
6 pcs. 2"x4"x14 ft. S-3-S plates.
6 pcs. 2"x4"x18 ft. S-3-S plates.
800 ft. of No. 3 S-1-S boards for roof and gable sheathing.
500 ft. of 4" D. & N. No. 1 pine for wall sheathing.
16 pcs. 2"x3"x14 ft. S-3-S loft floor joist.
280 ft. 4" D & M No. 1 pine for loft floor.
4,000 white cedar shingles.
1,500 lin. ft. of 6" "C" white pine siding.

PRIVATE GARAGE AT TARRYTOWN, NEW YORK, ENTIRELY OF REINFORCED CONCRETE WITH WALLS FACED WITH FIELD STONE.
The remaining styles for exteriors are in various combinations of masonry. Masonry walls are of three classes. The solid wall of one material. The masonry wall backed with one material and faced with another and the veneered wall with frame construction for the support of the floors. The most permanent and satisfactory job is of course a solid masonry wall, but this is at the same time the most expensive. When a solid masonry wall is used it is best to furr in from it on the inside with one-inch nailing strips for the lath and plaster instead of plastering directly on the wall. It insures a dryer and warmer wall.

Masonry walls are some times used in combination with frame walls as for example a cobble stone, brick or cement on brick for the first story and a shingled wall for the second story with a wood belt course between and wood cornice. Then too, one often sees the brick and cement combination. A beautiful example of this is shown in the illustration of Architect Hewitt’s imposing home. The writer has had several views taken of this house but is unable to obtain one which will do it justice because of the inability of reproducing the artistic combination of colors on the exterior. Attention is called to the rustic manner in which the brickwork is laid. Many attractive combinations can be had in well studied brickwork. Some of these are obtained by using one or more of the many different bonds in brickwork and others by a contrast of color between the bricks and the mortar joints. It is in the latter that the architect so often falls short of his expected successful combination. It is not enough to select...
bricks of fine texture and color, they must be laid right with joints of the proper color and well pointed up. Very beautiful combinations are some times obtained by using very ordinary bricks if they are properly laid. A rough paving brick of varigated color were used in Mr. Hewitt's house, but the effect is charming. The writer recalls a very beautiful and palacial home in the English style in which an ordinary and uneven sized brick was used called "raindrop" brick. It is a brick of a very dark color and is so called from the fact that its surface appears as tho it had stood out in a hard rain when it was soft. This brick was used in combination with massive hand carved wood work and dressed stone. The effect was at once unique and beautiful. Bricks should never be laid up in mortar of their own color as it gives the wall a too tame and ordinary appearance. Varigated bricks are often hard to select the proper color of mortar for. Here is a pointer from personal experience. Varigated bricks are usually of two predominating colors. Match your mortar to one of them, preferably the lighter shade and you will have mortar joints which will contrast with the general appearance of the bricks and at the same time be in harmony with them. I will cite an example. In a recent commercial building erected the writer selected a beautiful brick with a spotted or varigated face, the varigation running from light yellow to light and dark tan or terra cotta shades. Mortar was mixed to match the light yellow and a reddish tan standstone was selected for the sills and other stone trim. The combination proved to be an entire success. The construction of a brick veneered wall is too well known to discuss in detail. We will therefore pass to the cement forms of construction which are becoming so popular but which have met with so many failures in recent years.

The great forward march of cement products and the many methods of applying them has called for a higher class of workmanship and greater study on the part of designers than any other building material with the possible exception of steel construction.

The three principal methods of applying cement plaster with a "slap-dash" exterior to frame work is to use expanded metal lath, wire lath and wood lath. In choosing between them two factors are paramount. The best foundation for cement plaster is the one which is the least flexible, that is, the one which will allow of the least "come and go" with the wood construction of the wall. The other factor is the permanency of the lath used. More or less moisture gets thru cement. The metal lath must therefore deteriorate or rust in time. This is the reason why many constructors prefer wire lath as it can be more easily galvanized. On the other hand it is not so rigid a foundation. It is regrettable that the cheapest and best way of applying cement plaster is not practicable except in southern communities. It is to lath directly on the studding (which should be placed twelve inches on centers) the first exterior coat is then applied, after which the inside of the lath is given a good coat between the studs. The two external coats are then applied, making a stiff solid veneer of cement, capable of resisting the tendency to crack with the shrinking or settling of the studs. The great drawback of this method is of course the omission of the exterior wall sheathing which with the paper and furring upon it not only makes another air space to check the cold or moisture but is an important factor in the stiffening of the structure in severe winds. One annoying fault seems to be common to all exterior plaster work and as yet no method, not barred by expense, seems adequate to overcome it, and that is the appearance in due time of fine hair line cracks in the exterior surface following the line of studs. This occurs usually from the middle to the top of the wall. One sure method of avoiding this is used a great deal for the best class of work in the east when expense is not an item up for consideration. That is the use of tee irons or other shapes as furring, fastened to the outside wall sheathing in such a manner as to allow for the expansion and contraction of the wood structure without disturbing the furring strips. The metal lath is thus fastened to these strips and then plastered upon. To plaster on wood lath laid in the same manner as applied to inside walls is not practical. The early English way however of criss-crossing the lath is good and has served well in England since the adoption of plastered exteriors. The wall is boarded and papered in the usual way. Furring strips are then laid nine or ten inches apart. On these the first layer of lath is laid diagonally, the second layer is then laid at right angles to the first layer and diagonally to the furring strips in the opposite direction. This method furnishes a clinch for the plaster which can not be excelled. The principal advantage of this form of construction seems to be the fact that the lath forms a ground flexible
enough to resist the come and go of the larger timbers behind and not communicate it to the plastering. The foundation being a continual criss-cross there is no place in the surface where a crack can fall on a direct line without meeting a contracting force from the lath crossing in the opposite direction. The lath are placed about an inch apart and it requires only about a third more lath than the usual way and while it should only require about a third more lath it usually requires about twice as much time in nailing, owing to the method of laying being new to most lathers.

While it is cheaper to use wood construction for the frame, masonry is sometimes used as a body for the cement. Thus in Mr. Hewitt's house, which is illustrated, the second story wall is made of hollow tile with a three-coat cement slap-dash exterior. Before applying the cement, however, Mr. Hewitt had the tile given a good coat of Dahydratine, a tar-like paint which prevents all moisture from penetrating into the tile and also prevents any salt or magnesia from coming thru onto the cement surface. While most cement exteriors are left the natural gray, it is often thru lack of the knowledge of proper methods of using coloring matter in the cement mixture. It is difficult to determine beforehand without considerable experimenting the proper proportion of the color pigment to obtain the desired results. Vegetable colors should never be used. Neither should colors be sprayed on the outside of the cement. Brick dust is often used as coloring matter. In Mr. Hewitt's house a pleasing tan shade was obtained by mixing red and ochre with admant and cement for the dash coat. In the west a popular foundation in the way of solid masonry wall is to build the wall of brick projecting alternating courses, sometimes only every fifth course and then applying the cement. The brick work should always be thoroly wet before doing so.

Types of Modern Furniture.

By J. Taylor.

It was the London Exhibition of 1861 that made possible a new era of furniture making in England, by calling attention to the general decadence of design and construction, in comparison with the great period of an hundred years before. Little however, resulted then from the movement initiated by Wm. Morris and his coadjutors and another interval was to elapse before the English artist and craftsman would thoroughly appreciate the idea of producing rational furniture. No blame attaches to Morris for this tardiness of achievement, further than in attempting a task for which he lacked the technical qualification; yet
it may be questioned whether but for Morris and the impetus he gave to the advancement of decorative art, there would be produced today examples of the cabinet making craft, in every respect, worthy to stand beside the best productions of the eighteenth century.

Two years ago when on a visit to the United States, I was shown "a corner of the best cabinet makers in America." If I had been inclined to accept this somewhat biased estimate, I would have marveled that these skilled craftsmen were content to spend their days over a far from faithful imitation of past French styles, that had little in common with the interests and requirements of a progressive people in the twentieth century.

America has been too long content to rely on Europe for inspiration, or at all events, guidance, and the World's Fair at St. Louis helped to demonstrate how far from being self-reliant America is in this matter today.

In some factories that boasted a plant of general up-to-dateness I asked to see the designing room; as a separate intelligent department it did not exist. It is fair to say, however, that this applied more particularly to such factories as ran mostly for repeats of well known types of American furniture, any stamp of individuality and lacked the simple dignity that is one of the first essentials of true modern art.

But even today much of the furniture coming under the description "modern" is grotesquely designed and badly made, because many architects following the spirit of the times, have taken to designing the furniture for the houses they build.

A certain French master in an English art school has a method all his own, he gives...
as subject to his class the designing of a room with its decorations, furniture, carpet, fabrics, wall covering, metal work and ornaments, a tall order forsooth calling for great technical skill and experience on the part of the designer.

This is a conception of modern art requirement to which we are indebted for most of the examples that have in a degree damned the new movement, and so long as teaching of this kind is permitted in art and technical schools progress will be retarded.

The best training for the furniture designer is some years' experience in factory or workshop, or such a close relationship with the craftsman that he will get to know his methods, the nature of the various woods he handles, and the capability of the tools and machinery that do his bidding.

By some this is considered too slow for eager, hustling times, hence we are from time to time offended by examples of furniture that outrage some of the proprieties of good design and sound construction.

Simplicity in art is the rational outcome of the simple life, and the straight line with the elimination of all excess of ornamentation is sufficient evidence that the new school interprets the spirit of the time.

The three examples given of modern furniture, specially designed by John Ednie for this article, are constructed in oak, slightly fumed and waxed. The design is eminently simple, and to the skilled worker the construction will be quite apparent, but a word or two on some of the special features may be interesting to other readers. The doors of the sideboard have framed ogee styles, with a panel fixed in on the covetta principle; this gives ample strength, with an absence of all moulding or dust-retaining contrivances, and is unconventional in a degree.

The pierced hafits suggest lightness, and the sliding fronts of the small upper cupboards, with sunk carving, balance the raised carved ornament in the centre panel at the top.

The metal mountings are of copper, while the ware is of the Ruskin type, in that dull Dutch green color that forms a natural contrast to light oak. The table is not of the extending order, an order unbeloved by the modern designer.

The top is framed up like a drawing board with feather and tongue, a round 3-16 bead covering the joint, which when it opens as joints have a habit of doing, does not show objectionably.

The lower rail is somewhat unusual, it is placed so for convenience and to give it some correspondence with the chair.

The chair is intended for dining, it has a high seat and straight back, the upper panel is of plain oak, slightly hollow, and pierced with the shape of the diamond.

The cross rails under the seat are strong in principle, and interfere not with the freedom of the feet.

The covering for the chair is a dull green leather, or corduroy.

The simplicity of the modern school of design reaches to the carpet and table cover, in fact, nothing relating to the furnishing or the decorating of the room is considered too unimportant to receive careful attention. The table cover may be of green hand loom linen, with little light grey squares of embroidery, and a grey flaxen fringe. The rug or carpet of similar coloring, a shade darker laid over a plank oak floor, stained to the tone of the furniture.

The walls might be panelled in oak to the level of the door head, quite a simple design being consistent with the character of the furniture.

On the deep white fringe a restrained stencil in shades of green and grey, with touches of deep rose color will be sufficient ornamentation under the plain white ceiling, for the modern dining room. As an alternative scheme of wall decoration a
THE modern mantel piece is a much adorned feature of the room and occupies such a prominent place in it that it is well calculated to set off to advantage the material used in its structure. The highly decorative materials such as wood, marble and the clay tile are naturally those most frequently chosen for does not convey to the eye the idea which is naturally associated with a fireplace.

On the other hand tile is neither inflammable nor cold looking. It is, from its nature and appearance, in harmonious keeping with the character of any mantel piece. It is itself, a product of the fire. When it passes into the fire, it is only a plastic clay,

the mantel, and each of these materials though widely different from the other makes a beautiful setting for the fire.

With regard to wood, it is best used in conjunction with tile, and that because of its inflammable properties. Tile facings on the wooden mantel piece protect the wood from coming into close contact with the fire, and they do not in any sense detract from the beauty of the wood, but rather by the contrast they present with it, serve to show up to better advantage. Marble is beautiful, wherever applied and suggestive of dignity and coldness. This latter feature in its appearance is the only thing to be said against its use for a mantel piece; it and after being subjected to a temperature of 2,500 degrees Fahrenheit, it emerges as solid as a rock. Contact with the fire gives it color as well as hardness, and the fire itself scarcely shows more wealth of color than does the baked clay in its finished form of tile. The whites alone are a variety in themselves, and require the most careful sorting before used in order to prevent a patched appearance in the work, for snow white cannot be placed side by side with ivory and there are many less easily distinguishable grades of white between.

For the mantel piece, the darker shades are best, because of their warmth of appearance in a place which suggests warmth.
The darker shades lend themselves to an ideal fireplace, and apart from their suitability from the point of view of appearance, the fact that they cannot suffer discoloration or alteration of any kind through their further contact with heat, makes them a thoroughly safe and economical structure. The color should be chosen with regard to the purpose of the room. It should harmonize with the painting of the wainscoting and general decorations of the room.

The beauty of such mantels can be still further enhanced by the painter's art. A special kind of paint is used, and when the picture is finished, the tile is again subjected to a high temperature which burns the colors in and thus renders them absolutely indelible. The accompanying illustration is an excellent example of such work.

These colored tile may be used in many places other than hearth and fireplace facing, but they are never more fittingly placed than where decorative effect alone might leave no suggestion of warmth in it. There is sufficient variety to satisfy every taste and caprice. Painted upon by the painter or worked upon by the designer.

The ornamental stoves used in Germany give more scope than the simple mantel piece for the display of artistic taste on the part of painter or designer. They reach from the floor to the ceiling and are common to every household and every room of the household. Nor is the practised side of this artistic form of stove lost sight of by the thrifty Germans, for they serve the double purpose of regulating the temperature by absorbing the immediate heat of the fire and giving it forth gradually, as well as of beautifying the room.

With the people of Holland, France and England, the use of tile for fireplaces is extensive, for steam-heating has by no means superseded the open fireplace. The blue and white varieties are favorite ones with the Dutch and their Delft tile have made the Dutch painters famous.

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**How to Warm and Ventilate the Home.**

A GOOD home is made warm in winter, but seldom is any attention paid to ventilation. Good ventilation means plenty of pure fresh air and the changing of the air in the house without the direct opening of doors and windows. We can only give a brief outline in a few words. First and imperative is a good large independent chimney flue, located central if possible. A good round tile flue with space left around the outside for vent shaft is the best way, then a small round galvanized iron or tin flue is taken from the floor line of each room down to basement and gathered into a larger flue and thence carried to and connected with the vent space around the smoke flue, which being heated makes a suction on all the vent flues and draws the impure air out of the rooms. The heating is accomplished most successfully by the use of hot water or steam radiators placed in front of the windows and then a small amount of cold air can be allowed to flow into the rooms through and over the radiators, this is the economical method, the indirect method of placing radiators in basement and passing the cold air over same, warming and conducting the warmed air up into the rooms, is a first-class way to accomplish a good flow of pure air but is expensive and in our judgment is not necessary in the heating of homes of moderate cost. If good provision is made as described for taking out the foul air, the fresh air can be admitted without causing draughts and you will have a healthful home.
HOMES having the free, easy air of a cottage but at the same time having practically as much room as a full two-story house are always a popular type. To obtain this low-roof type of house but without too great a sacrifice of space on the second floor, the builders and architects have resorted to the use of large dormers, many of them a whole room in size. Thereby completely satisfying the owner's desire for a cottage home with plenty of room in it.

This house is one of these modern homes which fulfill the specification of "A cottage home with plenty of room in it." The appearance of the exterior is very pleasing. It is a house that will sell well on sight. The porch is a large one which is a decided luxury. The windows are well placed on the exterior and there are plenty of them. The main dormer on the front is a predominating feature. The rear is a decided exception to most houses, it is even more attractive than the front with its two large shingled dormers, projecting bay and stoop. It has a decided cottage appearance.

The house as built has siding on the side walls, shingled roof and dormers, and concrete block foundation. It would, however, look very well indeed if the side walls were shingled, or better still, covered with cement plaster on metal lath with preferably a rough cast finish coat. Or a more substantial wall could be obtained by laying it up with concrete blocks, adding the extra thickness of wall required to the over all dimensions instead of taking it off the rooms.

The hall is entered thru a vestibule on one side of which is a coat closet and on the other side is an alcove with a seat which makes a delightful cozy corner. The hall is large, well lighted and adapted for use as a sitting room.

The second floor has three good-sized chambers, closets, bath room and linen closet. One chamber in particular is very large. It also has a very large closet. The closets are not cut down by the slant of the roof (except on the far end of two of them) but are full height. Most closets built under the roof are totally useless. The bathroom has the usual fixtures and is easily accessible from all of the rooms.

Estimated cost to build $2,625, exclusive of heating and plumbing. Height of first floor 9 ft., second floor 8 ft. 3 in.
Description of Southern Colonial Home.

The second design we present this month is that of an interesting Colonial home built in Atlanta, Ga. It has an unusually large number of windows and most generous porches, otherwise the house does not differ materially from many seen in the northern states.

The whole interior gives evidence of the generous hospitality of the Southerners, the rooms all being large and opening freely into one another. Customary fireplaces are provided in each room which is the means of heating the house during the chilly months.

A house of such generous proportions as this, built in the south, would probably cost not less than $14,000.

First Floor Plan.

Second Floor Plan.
Description of a "Cottage Home."

The gambrel roofed house is undoubtedly the most generally liked type among builders of moderate sized cottage homes. A house with a gambrel roof, shingled walls and white trim is decidedly domestic in appearance. A gambrel roof should always be stained, using creosote stain only. It is best to dip the shingles, but a very good effect is obtained by merely brushing them with the stain after the shingles are laid. The foundation walls to this house are of concrete. Using concrete poured into forms up to grade and concrete blocks above grade. The first story walls are sided. Shingles can be appropriately used instead of siding and will give a pleasing effect. Another very good and substantial effect can be obtained by using concrete blocks up to the frieze board. The photographic view given shows the home built with too small porch columns.

This design contains many comfortable rooms, considering its size, 26 ft. 6 in. by 29 ft. 6 in. The front porch is nine feet wide and almost the length of the house; there is an entrance vestibule of ample size to the side of which is a cozy corner or alcove with seat. This seat has a hinged top, making a convenient place to keep raincoats and rubbers. There is a large entrance hall, 12 ft. by 14 ft., containing a combination stair. Two of the windows in the dining room have been arranged so that a wall space is left between for a sideboard. There are three bed rooms and a bath room, besides two large closets, a hall cabinet and linen closet. All rooms are full height. There are no ceilings or walls cut off at an angle. The rooms are of sufficient size, have considerable wall space for the bed, etc., and are well lighted with windows. There is a scuttle to the attic. The attic is not large, but has ample storage room. It is altogether a very roomy and complete home. Estimated cost, $2,825, exclusive of heating and plumbing. Height of first floor, 9 ft., second floor 8 ft. 3 in.
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A continuation of the prize designs in concrete construction of which three were published last month, we give a very attractive design for a double or two-family house. The privacy secured by having the principal entrances in the center of opposite side of the houses is good and the general proportions are pleasing. This plan secured the third prize of $60 in class B 2.

The walls to be furred and stripped inside and finished outside with a stucco or cement wash.

The cellar walls to be of stone, concrete or brick.

Joisting of hemlock, also rafters.

Interior partitions of 3-inch concrete blocks.

Cellar walls above grade to be faced with brick to height of first floor.

It is suggested to set the glass between pergola rafters immediately opposite front door; this will protect the approach against wet without loss of light.

Items given to make up cost:

- Excavations, foundations and brickwork ........ $300.00
- 6-inch concrete walls, including furring, stripping, plastering and exterior treatment ....... 720.00
- Lumber and carpenter labor ...... 900.00
- Hardware ................. 70.00
- Plastering interior .......... 400.00
- Tinwork .............. 40.00
- Mantels and fireplaces ...... 50.00
- Painting and glazing ......... 180.00
- Cement pavement in cellar .... 50.00

$2,710.00
Lapsiding, Paneled Cement and Red Tile Roof.

Harris & Shopbell, Archt.
Good Design for a Country Bank.

Harris & Shopbell, Archt

FIRST FLOOR PLAN

SECOND FLOOR PLAN
This plan presents a somewhat unusually open arrangement of the first floor, but this was brought about by the physical afflictions of the owner who, together with his wife were both deaf mutes.

They seemed to feel that to have the house thrown entirely together so that the eye had as wide a range as possible was something of a compensation for the absence of hearing and speech.

The first story is finished in white ash, in the natural color and the floors are of oak. The dining room is fitted up with corner china closets closed with doors glazed with clear leaded glass of special design, the china closets making almost an octagonal room.

The living room is made cheerful by the bay and conventional fireplace. All of the wide opening connecting the different rooms are enriched by the use of columns.

The upper story a finished in North Carolina pine with finished floors of the same. Hot and cold water plumbing throughout with the usual nickel plated and enameled fixtures.

The lower story (exterior) is clapboarded and painted a dark bottle green with white trimmings and the gables are shingled and stained a dull red and trimmed white. This building was erected in 1904 at a cost of $2,600.00.
HERE are few more decorative assets than one of the large Empire sofas, of the sort denominated swan neck. The antiques are rare, and very expensive, but reproductions are attainable. The best shape has arms which spread out at a wide angle. Set at an angle to a fireplace, or, in a long, wide hall, against the side of the staircase, one of these sofas has a delightful suggestion of old time dignity. Those found in the shops are almost always upholstered in plush of a rather vivid green, the Empire color, but they can always be had in the muslin and upholstered to suit individual tastes. Some of the petit point tapestries are admirable for the purpose or, for a handsomer covering, furniture brocade in a plain color is better than the prevalent plush, and when economy must be considered, mohair damask, in a reproduction of the conventional designs of old, Italian fabrics is, quite in keeping with the style of the sofa. It is a mistake to load a couch of this kind with pillows. One at either end, of generous size, covered to match the upholstery, and finished with a cord, is quite sufficient.

Arm chairs are made to accompany these sofas, matching them, in every detail, but lacking the grace of the long lines of the back. What they lack in grace they make up in comfort.

While the average portable china closet is not often artistic enough to add much to the beauty of the dining room, it is possible, at moderate expense, to have really beautiful cupboards built in, or at least arranged so as to seem an integral part of the room.

In the house of a well known collector of Shakespeareana, the similarly placed chimney piece, in the drawing room, has been pieced out with low, inclosed cupboards, with sliding glass fronts, in which his especial treasures are kept.

Plain glass, leaded in a good design, is a most effective addition to a room. Chippendale used glass doors latticed in Chinese patterns, for the fronts of his china closets and secretaries. The additional cost of leaded glass might, with great profit, be balanced by omitting the popular mirror backs and substituting plain wood, which is a much better background for china or glass than mirrors. Anything more glacial than a choice collection of plate glass, in a cupboard lined with mirrors, can hardly be imagined.

There is a great deal in choosing the right shaped picture for the right place. In the very narrow space between two windows, nothing looks better than a long pointed oval, preferably a picture in strong coloring, as the light there is poor. Sometimes, with heavy curtains, it is so bad that nothing but a mirror, or a wall cabinet, can hang there.

A hard place to fill is the bit of wall at a right angle to a longer one. Often it is well to leave it empty. Otherwise a plaster medallion, or a sconce, is better than a picture. Like leading trumps, one is generally safe in hanging a well framed mirror in a dubious corner.

Rather an unusual combination, for decorations, is of the light yellowish shade called champagne with mauve. It is used with brown woodwork and a rug of brown tones, like the Chinese ones. The champagne color is used for the walls, the mauve, in some heavy silk fabric for hangings and loose cushions.
A good many of us find our aspirations after beauty limited by the length of our purses. Yet we need only go into an artist's studio, to realize that beauty and expense are by no means sisters. Some of the very ugliest things one ever sees are very costly indeed. So let us take heart of grace and look about to see what is the best we can get for our pennies.

Suppose we are in love with the colored mezzotints, which are so alluringly present in all the picture shops. Now a mezzotint, costing forty or fifty dollars, has a very real value for a connoisseur but, for most of us, its beauty is that of the subject and of its reproduction of the colors of the original. Two years ago, an English art magazine published a number containing half a dozen reproductions, in color, of mezzotints which, for most people, had as much beauty as the originals. That number was sold in the department stores for fifty cents. One American magazine publishes exquisite reproductions, in color, of the portraits of the English school of the eighteenth century, at a cost of twenty cents apiece. In second-hand book shops, in New York, you can buy for fifteen cents copies of the leading English art magazine, every number containing several color reproductions, as well as numerous really fine blacks-and-whites.

But, some one says, it is not the picture which costs but the frame. Does it? Suppose you go to the nearest moulding mill, and buy fifty or sixty feet of plain, inch-wide, rabbed moulding. Get a boy who has had a little training in bench work, to mitre the joints and nail them together. Stain and polish them yourself and see how expensive your frames are. Indeed a very moderate amount of skill will enable you to mitre them yourself.

Or in default of frames acquire the art of making a neat passe-partout. Mount a colored print with a mat of duplex in-grain paper, folded over a cardboard foundation, using some tone repeating one prominent in the picture, finishing it with a very narrow black binding. A very delicate plate looks well with a white mat and binding, as do copies of etchings. Watercolor reproductions in strong tones of color need gold mats. No one begins to know how much can be done in this line, until she tries, but once learned it is great fun. There is always the temptation to multiply insignificant little pictures, with
the effect of a dreadful spottiness to one's walls. But exercised with discretion one gets good results at small expense.

Another use for these fine tapestries is as mats surrounding paintings or prints of a certain style. For instance, a water-color, of a court scene of the Louis XV period, has a two-inch mat of tapestry and a very elaborate frame of bow knots and scrolls in dull gold. Or a mezzotint, in color, has a mat of the tapestry and a wide mahogany frame.

A too frequent error is made these days in the placement of architectural columns to any order of residence architecture.

In Prof. Grant's lecture on "The Orders of Greek Architecture," he said that, "The architect of today seems possessed to put a little dash of Greek into many things he builds," continued the lecturer, "and, while sometimes it is very well, it is often an offense to good taste. How often we see a stick of basswood, supposedly a column, put before a frame house to which it bears no relation, and capped by a clumsy attempt at a capital. This may do if one has never seen anything better, but to those who are accustomed to see the real thing it is a distinct offense to good taste."

A new idea is to have a Morris chair, matching the bedroom furniture. This is easily found in oak, mahogany or birdseye maple. The cushions are covered to match the other furnishings of the rooms. When the woodwork is enameled in white, or a color, the varnish can be removed from a cheap Morris chair and enamel applied. Recovering the cushions is a very simple matter.

In a famous New York house the drawing room walls are panelled in the palest gray and white and the curtains and furniture coverings are bright yellow, brocaded with small bright colored flowers. The polished floor is laid in a pattern and is entirely bare except for white bear skin rugs before the fireplaces.

A rise and fall of the Oriental cozy corner for use in all varieties of rooms was what might have been expected. The real beauty of things Oriental led to their wide use, and the Oriental "corner" became ex-
Decoration and Furnishing—Continued

ceedingly popular; in fact, it became so very popular that people tired of it. In the proper place the Oriental corner is a desirable form of furnishing, but the faddist overdid things, and at present the Oriental cozy corner is not having the vogue it had a couple of years ago.

Aside from the difficulty of getting a harmonious, or even tolerable general effect from several rooms, each in a different positive color, each one visible from all the others, a one-color scheme gives an illusion of spaciousness much needed by the average house.

It is well to get rid of the idea that any one color is appropriate to one room more than another. The only exception to this is in the case of the drawing room, where a certain convention demands light colors and a formal style of furnishing unsuitable in rooms which are in constant and familiar use. Even this convention is often set aside, with happy results.

Copper red is having a certain vogue, at present. It is used by fashionable decorators, in silken textiles, as a wall covering, with an effect of great splendor. It can be had in excellent shades, in grass cloth and in an imported cartridge paper. The effect of large masses of it is rather overpowering. It is best for a room whose walls are much broken, and where the light is abundant, but not sunny. It needs very dark woodwork, weathered, or Flemish oak. In its duller tones it combines well with blue of a pure deep shade, and the combination can be found in Wilton rugs. The brighter copper reds contrast well with low toned greens and with a blue sage.

People who do not practice the Arts and Crafts are likely to ignore the possibilities of the pyrographic goods displayed everywhere. One can find a great variety of small articles for the toilet table or desk which, with the aid of good enamel paint can be made very charming. One should use the English enamel which comes in all sorts of delightful tones, not known to our native manufacturers. A set of paper rack, tray, hand blotter, folding book rack and stamp box in pink, gray, or green enamel, is a charming addition to a dainty bedroom.

New shirt waist boxes are of hard wood stained brown, with panels of lighter wood, decorated with conventional pink poppies.
Answers to Questions on Interior Decoration.


Q. Please supply us with a scheme for the interior decoration for our home as well as suggestion for exterior painting. We enclose diagram of the floor plans and information concerning the facing of the house, light, etc. The living room is finished in quarter sawed oak, piano mahogany, Dining room furniture dark golden oak. Would it be advisable to finish living room and dining room in anything but golden oak?

Ans. As the style of the house is Colonial, the wood of the second story may be painted a light buff, which will harmonize with the grey of the concrete, with white trimmings and a green roof.

For the living room, with eastern and southern exposure, and mahogany furniture, give the oak wood-work a mahogany stain. Paper the walls with a medium green paper, with a well covered design in self color, having a tapestry rather than a brocade effect. Finish at the ceiling with a mahogany moulding. Stain floor mahogany and tint ceiling ivory or cream.

In the dining room, with dark golden oak furniture and red and green rug, use a tapestry paper, in verdure style, combining green and brown. Tint the ceiling light tan and bring it down the side wall to the plate rail, unless there is a wainscoting, in which case omit the plate rail and carry the paper to the ceiling. Stain floor dark oak.

Forest green is rather dark for a north room, like the den. I would prefer using a duplex ingrain, in copper color, giving the wood-work a brown stain, the floor rather darker than the window and door frames. Tint the ceiling a deep cream color with a redish tone. A poster frieze, in rather low tones of color, greens and browns predominating, would be appropriate. Have an Oriental rug combining tan, brown and blue, or an Axminster or Moquetter in green and brown.

In the guest chamber, on the second story, with white wood-work, and eastern exposure use a floral paper, in soft pinks and greens, with hangings of cotton, or linen, in the green of the leaves, and green and white rag rugs on a stained or painted green floor. Have white ceilings on all the rooms on this floor.

In the north bedroom, use a striped paper in two shades of buff, and stain the wood-work and floor a warm brown. Use a rug in brown tones and get a cretonne for hangings and furnishings, which combines blue, old red, russet and tan.

In the south bedroom, have plain walls of light willow green, green stained wood-work and floor and a green and blue rug. Use a blue and green printed linen, or cretonne, for curtains and cushions.

H. N. O., Aurora, Mo.

Q. I have an eight-room house under course of construction. Desire economy on inside finish, furnishings, etc. Would like to finish all wood-work, which will be hard pine, natural color. Following I give the required information as to exposure, etc., and would ask your assistance. What wood work would you advise and what colors?

My bookcases, rockers and center table are all dark oak. Dining room table and chairs are light oak. Want to get a nice mantel for parlor.

Ans. It is advised to use low toned greens as the color tone in both parlor and living room, with warm tans and golden brown in the dining room. The mantel is usually of the same wood as the finish of the room, but as a mantel of natural pine would have an inferior appearance, it is suggested to treat the mantel as a part of the furniture and to make it dark oak on the order of the center table, etc. Unglazed green tile will be the best choice for facings and hearth.

There are many styles of nice looking but inexpensive curtains. A curtain of plain, heavy ecru Brussel Net, with an insertion of cluny lace inside the hem, is always refined and suited to inexpensive furnishings. The curtains should hang from the top of the window without regard to the leaded lights, unless the upper sash is long and narrow, when a separate valance curtain may be used over it.

The floors should be treated with an oak stain, shellaced and waxed.
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The most trying hour in the housewife's week or month is that in which, in the absence of her maid she inspect the kitchen. If she is philosophical, she is moved to wonder how even barely tolerable results can be had out of such a chaos of dirt and disorder as generally greets her. If the reverse, and few women are really philosophical, she barely refrains from tears, does what is absolutely necessary, and escapes to the upper regions as soon as possible.

The economist once had an illuminating experience, which she has never forgotten. She found herself in a tenement house room, with a sick woman and a crying baby, and the urgent necessity of getting the place clean before the doctor came. She accomplished it, but ever since she has had a lively sense of the difficulties of orderly housekeeping in the class from which our servants mainly come.

The principal enemies of orderly living, in the tenements, are darkness and clutter, and nine servants out of ten reproduce them, as nearly as they can, in the kitchens in which they work. They delight in closed blinds and petition for a substantial sash curtain across the lower half of the windows. They are fundamentally opposed to throwing anything away, and their closets, with their accumulation of disabled utensils, suggest a home for wounded veterans, only that nothing is quite so undignified as a leaking and battered saucepan. Dish towels have a short lease of life but there is usually a fine collection of antiques, in the shape of venerable scrubbing cloths, dishcloths and mops. Into the recesses of the closet under the sink, the space under the stairs of the back porch, and the dark closet in the kitchen hall, only a very courageous housekeeper penetrates, and she emerges sadder and wiser, though hardly thankful for her illumination.

Until we have in this country some systematic method of training women for domestic service, it is idle to expect dainty, or even reasonably clean, housekeeping from the average general servant. Patient training, line upon line, precept upon precept, will correct some of her most glaring faults. She will wash and iron fairly well, she may become a fair cook. She will feel that you are quite reasonable in expecting her to acquire so much of skill. Beyond this she will hardly go, nor will she appreciate the necessity for the order and far-reaching cleanliness which, to you, seems so essential. The only way to attain it is by management of a sort which will not arouse her suspicions.

Resolutely eliminate from the kitchen closets every article not in everyday use. If there is a doubt refuse to consider it. Put the toast rack or oyster broiler away safely, but decline to allow it to cumber the kitchen on the chance of use once a year. Do the same thing with duplicates. Possibly a kind providence will send a rummage sale your way and your surplus will gladden the hearts of people who can ill afford to buy new utensils. A barrel in the attic may well receive those ancient articles to which some sentiment of association bids you cling, if indeed one may associate sentiment with saucepans.

Worse than the accumulation of dilapidated and useless pots and pans is the mass of old cloth, used and unused, wet and dry, clean and dirty, which is apt to fill up pantry drawers and be stuffed into
the bottoms of closets. Much of it is saved with the mistaken idea that the flap of a shirt or the end of an old pillowcase is suitable material for dusters and scrubbing cloths. Worn woolen waists are kept for use as a mop and a colored shirt waist is frequently employed in washing windows. Almost every washing adds a garment or part of one to the pile, which is never substantially decreased.

My dear sister, there are two uses for old muslin. One is as rags for carpet weaving, the other in illness of various sorts. I might make an exception in favor of using old sheets to cover the ironing and bosom boards, if new unbleached muslin were not so much more satisfactory. If one is twelve miles from a lemon, it may be necessary to use old underclothing for dusters, but not otherwise.

Therefore eliminate all of Bridget's array cloths, on pretense of getting her something better. See that she has a string mop, and replace it at frequent intervals. Instead of great wisps of close fibred cotton cloth, give her the heavy Kersey floor cloths, dear to English housemaids. Make her dishcloths of four thicknesses of cheesecloth quilted together and hemmed, and hem also her cheesecloth dusters. Let the tools of her trade be such as command her respect sufficiently to be taken care of. Bridget has a respect for stitches, seldom taking them herself.

And, having equipped her, watch her. Insist upon the kitchen being kept light. Make it as cheerful as you can, with things which will not collect dirt. Note every week what goes into the wash and see that it comes out and upstairs. But do not make the mistake of thinking that the average maid has an instinct for the most elementary cleanliness, or will achieve it without constant care on your own part.

The art of making palatable warmed-over dishes is very little understood. Everyone uses up cold roast meat for a stew and not one in ten succeeds in making it more than barely edible. But, for that matter a stew of fresh beef is seldom good. The secret of warming over cooked meat is to barely heat it through. Longer cooking makes it hard and tasteless. It should be cut into very thin slices and the fat taken off. Gravy of
Household Economics—Continued

some sort is necessary, that of the roast, if possible, although one can be improvised with beef extract, and it should be highly seasoned. A good seasoning for a small quantity, half a pint, more or less, is pepper and salt to taste, a teaspoonful of tomato catsup, one of mushroom catsup and half a teaspoonful of curry powder. The sauce, or gravy, should be about the consistency of thick cream, have all the fat removed from it and be enriched with a good lump of butter. When the flour in it is thoroughly cooked, it should be left to simmer for ten minutes closely covered. It is best cooked and served in an earthen casserole. For a similar preparation of fresh meat, long, slow cooking, below the boiling point is demanded.

* * * * *

There are some fallacies about corned beef. One is that it is very nutritious. As a matter of fact, its proteid value is very much lower than that of fresh meat. Another is that it is economical to buy the fat and bony pieces, costing only a few cents a pound. The most economical and palatable piece of corned beef is the under cut of the round which has been corned less than a week. If one likes the fat a pound or two of brisket may be boiled with it or the cut of the rump next the round, which has considerable nice fat at one end of it, may be bought instead of round.

The secret of having good corned beef is to find a butcher who changes his brine frequently and to cook the meat very slowly. Rapid boiling hardens it. An unpeeled red onion boiled with it is said to be an improvement.

* * * * *

So many people do not seem to realize that keeping a house cool in very hot weather is very largely a matter of excluding the sun. If windows and blinds, on the sunny side of the house, are kept closed until sunset, and then widely opened, the house will be delightfully cool for the evening. Some people have porches and window sills sprinkled late in the afternoon. On a heaven kissing hill one may disregard such precautions but they add largely to the comfort of life in most localities.
AUGUST may be characterized as the picnic month, even if the excursion is no further than to the piazza. It is also the month of the whole year in which the satisfaction of the material wants of the body is most irksome. No one is exactly hungry and yet extreme heat makes demands upon the system which must be balanced by abundant nourishment. The temptation is to make the food supply so light in quality that people become run down without knowing it, the gradual depletion of the bodily forces, paving the way for typhoid fever, if one chances to be exposed to unfavorable conditions.

With some planning it is possible to increase the nutritive value of ordinary articles of food very perceptibly. For instance, the quantity of oil in a salad dressing may be double the usual amount, without any perceptible change in its taste. Eggs added to any of the ordinary receipts for ice cream convert it from a mere gratification of the palate to a valuable article of food. Bouillon capsules or extract of beef in greater or less quantity can be incorporated into almost any preparation of meat. The various preparations of gelatine are highly nutritious as are arrowroot and Iceland moss, any one of which form the basis of any number of cold desserts. An important point in summer cookery is the substitution, as far as possible, of vegetable for animal fats. Hygiene, as well as taste, recommends the liberal use of salads dressed plentifully with oil. The vegetable oils are much more readily digested than fat meat, as well as more appetizing to the average palate. But whatever the means adopted, the temptation to the sort of makeshift living which is only too common in hot weather should be resisted. Vegetables and fruits are valuable articles of food, in their place, but are wholly insufficient for proper nutrition. Even zealous vegetarians add nuts and cereals, in large proportions, to their dietary.

To prepare and serve a successful picnic lunch is a very good test of one's culinary abilities. Few of us recall many such meals with pleasure. Yet it is not really very difficult if the menu be not too elaborate. Abundant and varied sandwiches, salad kept crisp in a damp napkin, with the mayonnaise in a separate jar, and a jar of cream packed in a tin pail filled with ice, with some provision for making hot coffee ought to satisfy the most exacting guest. The late summer fruits, peaches, pears and plums are easily packed, and as easily eaten. Paper napkins and plates are matters of course, and paper drinking cups are to be had, as well. With the greater part of the edibles packed in pasteboard boxes, a single splint basket holding ice and fruit, a picnic meal ought not to be a difficult undertaking.

The prettiest way of serving raw tomatoes is to make them into cups. For this
Table Chat—Continued

purpose the tomatoes should be regular in shape, round rather than flat. They should be peeled, the centres scooped out, sprinkled with salt, drained and chilled. The filling may be almost anything, so long as it is crisp or savory, or it may be merely a spoonful of mayonnaise or sauce tartare. Little neck clams, or shrimps, with a cocktail sauce, are sometimes put into tomato cups for a course at the beginning of a dinner, or they may hold any sort of salad.

Tomatoes are excellent with fish of almost any sort. For this use, they are merely cut in dice and dressed with salt, pepper and lemon juice.

There is a frozen tomato salad, which has at least the merit of novelty. Ripe tomatoes are peeled, chopped and rubbed through a sieve. A cup of boiling water is added to two tablespoonsful of soaked gelatine, strained and added to the tomato, with a teaspoonful each of salt and paprika and the juice of two lemons. The mixture must be beaten till cold and poured into a melon or other closed mould, and buried in ice and salt for several hours. Turn it out on a bed of lettuce leaves and surround it with a mayonnaise which may be either white or green. A novel variation is to mould it in layers with nut meats. Italian chestnuts boiled are particularly good.

Tomato jelly is common enough, but is apt to be rather flavorless. As little gelatine as possible should be used, and the tomato should be very well seasoned. Two tablespoonsful of Chili sauce, the sort made without spice, added to the tomato is an improvement. Spiced Chili sauce will spoil the color. Tomato jelly is better for a ring mould inclosing some other sort of salad than by itself.

Italians make a tomato paste, in large quantities, using it for tomato sauce for macaroni and various meat dishes. It can be bought in cans, as Salso di Pomodoro, but is cheaply made at home. Ripe tomatoes are peeled and boiled for half an hour or more, with salt and a little garlic. The mass is then poured into a bag of stout muslin and hung over a pail to drip. When it will drip no longer every particle of moisture is squeezed out of the pulp in the bag and the residue is the paste. It is then spread out on a wooden tray and set out in the sun to ripen for four or five days. It must be protected by a piece of netting and taken in every night. Finally it is packed in jars, paraffine run over the top and tightly sealed. For tomato sauce it is diluted, and strained. The juice which drains from the pulp, with the addition of meat stock, makes an excellent soup.

The trick of moulding croquettes easily is to let the mixture get thoroughly cold, if possible on ice, before trying to shape it. It may help someone, to whom the directions of the cookery books are a little mysterious, to remember that essentially

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A croquette is nothing but a mass of were possible. Eggs, upon which some authorities insist, make the mixture a little stiffer but add nothing to its goodness. Chopped meat, held together with a very stiff cream sauce, made with twice the usual quantity of flour. With this in mind, endless variations on the theme. The ideal croquette is as soft as possible inside and crisp on the outside, and plunging in deep fat is essential. Rissoles, often confounded with croquettes, are spoonfuls of any croquette mixture folded into circles of thin pastry and fried. Both are a sort of glorified hash, borrowing much from their names.

* * * *

For a very delectable sort of breakfast bread, take two cups of rye meal, not flour, half a cup of molasses, two cups of milk and half a teaspoonful of soda, dissolved in a little hot water. Bake in muffin pans, in a quick oven.

In this case the acid of the molasses and the alkali of the soda supply the raising agency, and the relation of acid and alkali is always the same. It is different when the same process is attempted with buttermilk. Its acidity varies so much, in different circumstances that it is almost impossible to give a definite rule as to the quantity of soda needed. For this reason, it is the part of prudence in making buttermilk biscuit, to use rather less than a struck teaspoonful of soda to the pint of buttermilk, and to add a teaspoonful of baking powder to the flour. The product may not be the genuine article, but at least it will not be green.

* * * *

The charms of the piazza tea are somewhat diminished by the difficulty of keeping things hot. If there is a gas jet on the porch, a tube may connect it with a single burner gas stove, upon which a portable oven is set, which is a capital hot closet.

Another convenience is a champagne hamper lined with oil cloth, with rope handles at either end, into which soiled dishes can be packed and carried to the kitchen en masse.

A draught screen of four leaves of binder's board is useful to protect the flame of the chafing dish. The leaves should be two feet high and a foot wide, covered with wall paper or cretonne and hinged with cord or ribbon passed through holes and tied.
To the Editor:

You give some good advice on the proper method of building a firepalce, and wisely suggest that if a damper is used at the throat, it should open so that there will be no flat spaces to obstruct the smoke. As I have given some study to this subject, may I offer a few suggestions?

When building a large fireplace, it is a safe rule to have the height four-fifths the width of the front opening, and the depth two-thirds the height. If the height is more than this, or the depth less than this proportion, the fireplace will probably smoke; while if the reverse, most of the heat and the beauty of the fire is lost.

A convenience to the builder as well as a saving to the owner, is to build in a dome damper. This is made of cast iron of the proper shape, in different sizes to fit large or small fireplaces. The flange at the base is built into the brickwork so there is no shoulder to stop the easy passage of the smoke. With such a damper, the mason has no difficulty in building a perfect throat, and the owner can easily open or close the damper.

J. P. N., S. Dak.

Q.—I would inquire if a 2 inch outside and 2½ inch inside wall is thick enough for a 8 inch hollow block. Material is very high here. Sand and gravel $2.00 a yard and cement $4.00 a barrel. What weight will such a wall carry and can a two story building be erected upon it?

Ans.—If the block that you desire to manufacture is a single air chamber block 16 inches long, 8 inches high and has a 2½ inch inside wall and a 2 inch outside wall and is connected with three webs 2 inches thick, the amount of material in the block would be about 744 cubic inches. The total area of the block is 1,024 cubic inches. You will have about 72 per cent of material and 28 per cent of air space. The building laws of most any city will allow 30 per cent, so it will be strong enough. If the block is made on a one to four mixture, it should stand on an average of 2,000 pound pressure to the square inch.

In putting up a two story building, we would prefer to use a block 12 inches wide for the first story and a block either 8 or 9 inches wide for the second story.

Q.—Please explain the union’s regulation governing the rule of “waiting time.”

Ans.—The requirements imposed upon employers by waiting time are as follows: The money to meet the pay roll on pay days must be on the spot 12 o’clock noon on pay days—which is every Saturday—then there is what is called “waiting time,” which means all hands sitting down, laying down or standing up, as they may select, and for this the employer must pay double wages: this is imperative; from this there is no escape, and you can imagine what effect it had on an employer who...
might by some mishap fail to show up in time on pay day.* * * *

C. H. J., Cal.

Q. No. 1.—I should like a method of producing the finish known as fumed oak. The particular finish I have in mind is a rich brown. Kindly say how the ammonia is to be used and should white or red oak be used?

Q. No. 2.—How thick a wall of reinforced concrete (outside wall) would you consider safe for a one-story cottage? What size rods, vertical and horizontal, should be used as a general rule. I have a number of periodicals on building trades but none to take the place with me of your Journal of Modern Construction.

Ans. No. 1.—Any of the various oaks may be fumed with the vapor of ammonia, the darkening of the wood being due to the presence of tannin and the action of the ammonia upon the tannin. As a matter of fact, mahogany and some other woods will develop a rich color under the process of ammonia fumes. Usually, however, oak alone is treated this way, lime water being preferred for altering the color of such woods as mahogany. The fuming of oak is not frequently done, owing to the fact that it requires a closed room or smaller enclosure, say a large box, and it is not at all practicable for wood already in position. The advantages of the fuming are that it greatly enhances the beauty of the wood's natural color, and while imparting this so-called antique effect, it does not raise the grain of the wood, as water stains do. Various shades may be produced, from light to quite dark. It is really the way to produce Flemish oak finish, and which must be wax finished. Given an air-tight room or large box, place several dishes of strong ammonia (26 deg.) on the bottom or floor, and then fasten the place up tight for a half day or so, according to the depth of color wanted. After which open up and let the wood be well aired, to rid it of the ammonia, after which it ready for the finish. The wood should be made quite smooth before fuming, as this cannot be done afterwards.

Ans. No. 2.—An 8 inch wall is thick enough. Reinforce with rods over and under all openings, say 4½ rods. A 3 inch wall could be used with liberal reinforcement and skeleton ribs for stiffness and to support joist. * * * *

F. W. L.—Denver.

Q. I wish to put up a business block
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sonry and we are inclined to concur with our very efficient building inspectors opinion in this regard. We would suggest for the first story an eight-inch wall bonded inside wall a two-inch air space and then a four-inch veneer of face brick well tied to inner wall by your metal ties.

J. W. C., Memphis.

Q.—Are not concrete houses with solid walls damp in wet weather, and if so how can this be remedied? What is the difference between this kind of a house and the plaster houses shown in the December Keith’s Magazine? How are the latter constructed and what is meant by a “rough-cast” finish?

Ans.—The outer walls in concrete construction should be provided with air spaces. This is perhaps best accomplished by the use of concrete blocks. These, as made under the best patents are provided with practically continuous horizontal and vertical air spaces.

The plaster exterior construction you refer to, is applied over a suitable “foundation” attached to regulation studding as in frame construction. Air space is had in thickness of studding, as in an ordinary frame house.

The “rough-cast finish is applied over the first cement coat, the scratch coat, and is simply the cement mixture thrown onto the wall with a wire brush, “spattered” on, so to speak, the idea being to do away with the uniformity of a smooth surface or the monotony of lines as in a laid-up wall.

A. H. G., Estancia.

Q.—Do you know of any one making forms for building cement walls right on the foundation, which will make a hollow wall and which is a good practical outfit? Such forms should not be too cumbersome and should make a good outside appearance.

Ans.—We do not know of anything of this kind for residence work, but have seen advertised forms for warehouse walls, retaining walls and other rough work where the exterior finish was not of importance. Can any reader give us further information?

We are inclined to think that you would find it less expensive and the results far better to operate a concrete block machine, making blocks with the proper air spaces.
NEW GLORY OF THE PHLOXES.

By Ida D. Bennett.

THERE was a time, not beyond the memory of the gardeners of to-day, when the phlox rioted in untended splendor along the garden paths of the old-fashioned demesne and escaped, hand in hand with that coarse publican beloved of the humming-birds—Bouncing Bet, and that other commoner so dear to the heart of the children, who, by some magic of its touch, revealed one’s most secret hankering for butter, butter and cheese over the fence, into the fields and highways there to brighten the summer solstice and the early autumn’s haze a wealth of crimson and white.

Only two colors were in common cultivation in those days—the rather faded purplish crimson and a most excellent white—and where grown to gather the white served to greatly righten and clear the dullness of the red.

To-day the roster of the phlox includes many high sounding names and many fine shades of color are represented. It is a question, however, if more than a dozen or less are worthy of being separated and distinguished by name, so largely do they partake of mere shades and deviations from some standard sorts. Even the most strongly colored will in the course of a season or two materially change color and form and it has been my experience—and I grow the phlox in large quantities—that certain bright and deep colored crimson forms are the only truly reliable forms of the flower. Exceptions may be made to the whites when grown alone and to the rich salmon colored phloxes under various names and the brilliant scarlet Coquelicot, which is a very dependable color. No one of the various named sorts, however, will give the magnificent panacles of bloom produced by some of the more common sort, but for individual planting and for massing in beds in the foreground where the individual plants come under close observation, some of these newer varieties are beyond compare.

It is well, however, in selecting plants of these new varieties to choose as far as possible those of distinct coloring rather than those of more delicate shadings and markings; especially is this the case where two or more colors are blended in one flower as these delicate gradations are likely to become merged and lost in one or two seasons.

Where great masses of color are wanted, as in a long border of the plants, it is best to select the strong colored carmines, crimsons and white as these will give far bolder masses of color than the finer individual sorts.

I have had for a number of years a wide border of these hardy phlox forming the north boundary of my lawn and they excited much comment and admiration among flower lovers until, becoming enthused with the finer named sorts, I removed all but the finest of plants and substituted the best of the named sorts and awaited with much pride and anticipation the time of their florescence. The border had scarcely burst into bloom before its erstwhile admirers began to ask "What ails that lovely border of phlox?" and although I proudly piloted them to a personal inspection of each choice variety, they continued to stoutly maintain the superiority of its former state. Some three years have elapsed since then and as most of the varieties have reverted to the fundamental strains the border has regained much of its old time beauty. It has spread, too, the newer varieties seeming to be somewhat more prolific in the manner of seed and the self sown seeds have overleaped the low fence which formed their northern boundary and have covered with a mass of bloom a tract of land twelve feet in width during the past season.

It is a peculiarity of the hardy perennial
phlox that it does not respond readily to seed culture, the seed rarely germinating, however carefully sown, but left to itself it comes up freely wherever the ground where it falls is left undisturbed. In this connection it may be well to suggest that where these self-sown seedlings are desired it is well to remove the heads of immature seeds from all the plants but those which it is desired to reproduce. The young plants will usually be found some four or five inches in height the following spring or summer and may be taken up and set where they are wanted.

Owing to this penchant for self sowing it is not well to plant phlox among the peonies or other plants which resent root-disturbance as they will drop their seeds into the crown of the plant and not be discovered until they have become quite well established, when the separation of their roots from the peonies without damage to the latter is attended with considerable difficulty.

The best time for setting the perennial phlox is in the spring but very good results follow fall planting. The ground should be deep and rich and the plants set about eighteen inches apart.

After the tops have died down in the fall a top dressing of coarse stable manure may be given and this will be all the protection needed. In the spring the roughest of the manure may be raked off and the finer left for a summer mulch.

It is not necessary to water the perennial phlox during the summer unless in case of drought when a very thorough wetting should be given once a week; it is better that this should be done thoroughly once than a mere sprinkling given daily.

About every third year the phlox should be taken up and divided. This may be done either in the fall or spring and at this time all inferior or desirable color may be culled out and their places filled with more desirable sorts. A large proportion of white will greatly enhance the beauty and effectiveness of the bed and should constitute at least a fourth of the mass; especially is this the case where many shades of red are employed, as these may not always be harmonious and the presence of the white will nullify any clash of color.

Among the newest of the hardy phloxes may be cited such fine varieties as Bridesmaid—a pure white with large crimson eye, Edmund Rostand—a large flower of a deep
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Home Grounds—Continued.

rose color and an exceptionally large white center. F. G. Van Lassburg—the finest white in cultivation, the individual flowers being twice the size of any other in cultivation and the plant a very strong and vigorous grower. Von Goethe, a fine salmon rose, Percheur d'Island, another fine salmon scarlet; indeed there is a most excellent range of the scarlet and salmon shades and these have the merit of not deteriorating as rapidly as the more delicate shaded and flaked varieties.

Champs Elysee is a fine rich purplish-crimson, and Indian Chief, a deep magenta, is another of the darker, richer colored types, while Von Hochberg may be considered the ideal crimson phlox, though I have grown some seedlings which have quite cast this fine variety in the shade.

There is some little diversity in the time of flowering and by careful selection one may have the flower in bloom over a much greater period of time than is usual. A few of the varieties, notably some whites, are quite dwarf in their manner of growth and so may be used to edge the beds with excellent effect, and where the bed is raised or occupies an elevated position as the crest of a terrace, the creeping phlox subulata both crimson and white may be used to carpet the bed, thus giving a symphony of color from early in spring until late in the fall.

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Arguments Against the Installation of the Main Trap.
(The Affirmative Side of this Question was Published in July.)

It is a fundamental principle of the disposal of liquid wastes that they should flow with uniform velocity and as rapidly as possible from the fixture in which they are created to the ultimate point of treatment or dilution of the sewage. If house sewage reaches the outfall within twenty-four hours from the time it is discharged from the fixture, little decomposition ensues and no foul gases are generated. The odor of the sewage during this early period is fresh, entirely distinct from the putrid smell which results from advanced decomposition.

The ideal sewage conduit has certain characteristics, as (a) a smooth and impervious service; (b) few and thin joints; (c) good and uniform gradients; (d) straight alignment with easy curves; (e) an adequate, but not excessive, size of pipe; and lastly (f) a means of efficient ventilation. In order to secure these important features much care is taken and heavy expenditures are made in the construction of city sewer systems, and similar care and expense should not be spared in the installation of the drainage lines of the separate buildings.

Assuming that the conditions above specified prevail to a reasonable degree, the introduction of a main trap into the house drain creates at once an anomalous circumstance, because it (a) disturbs the course of flow of sewage, (b) decreases the velocity of flow, and thus (c) hastens the deposit of suspended matters and eventually is likely to (d) cause obstruction in the pipe. All these effects are directly opposed to the other costly provisions made for the prompt carrying away of the liquid refuse.

A recent statement by Mr. J. W. Hughes, of Montreal, a well-known practical authority, forcibly expresses this. He says: "Omit the intercepting trap; there must be no interception of sewage. Once it leaves the fixture the quicker it raches the end of its journey (the main sewer) the better. The basic principle of the water carriage system which we use is the rapid removal of solid and liquid sewage matter from the premises by means of an adequate amount of water, and any checking of this is deviating from the object desired to be attained."

Experience Agrues Against the Trap.

"A number of towns and cities have had experience of some years without the use of this appliance. In Corning, N. Y., where exists a separate system of sewers, constructed in 1887 with automatic flush tanks and ventilated manholes, no house trap has been required. It was stated in 1896, "This plan works to perfection here." A recent letter from the Master Plumbers who install most of the work in Corning, corroborates the statement made ten years since.

In Newton, Mass., since 1894 a like opinion has prevailed. The inspector of plumbing says: "Most of our drains are connected without the running trap and there has not been a single complaint. We advocate omitting the trap wherever the plumbing is O. K." The practice of Newton is so convincing that a number of neighboring cities have adopted the same requirements.

On June 4, 1894, the plumbing regulations of Montreal, Canada, took effect. A recent letter from J. E. Dore, the city sanitary engineer, says: "There are very few intercepting traps in our drainage system. Sewers are ventilated by manholes acting as inlets and plugs and stacks through the roofs as outlets. In my humble opinion, that mode of ventilation for sewers is the best."

The experience of the city of Chicago is in point. Mr. Andrew Young, for many years chief sanitary inspector, was an early and strenuous advocate of the main trap, believing that it was an absolute necessity. After some years of observation of its operation his approval weakened and finally he became convinced that it should be left out. It has therefore not been required in Chicago for at least ten years. The present occupant of the position, Perry L. Hedrick, C. E., framed the section (1650) of the Municipal Code of 1905, which prohibits the placing of any trap upon the house sewer or house drain. He says: "The argument of the main drain trap advocate has been analyzed and found faulty, and therefore if we follow our reason the trap upon the house sewer is a useless nuisance."

Up-to-date testimony comes from Mr.
F- Splinters and Shavings—Continued

Alfred Gawthrop, the well-known plumber of Wilmington, Del., in the words: “Our experience leads us to favor the thorough ventilation of the drain and waste pipes, and to do this it is necessary to do away with the house trap at the curb,” etc. This “has been prohibited in this city for several years with good results.”

Hopefulness in the Situation.

It is significant that Mr. John Eisemann, building code commissioner of the city of Cleveland, determined after a prolonged investigation of the merits and demerits of the main trap, that its use was unwise.

The general trend of opinion is shown in the statement made by Mr. William Jacobus, of Newark, N. J., at the last meeting of the Master Plumbers' Association of his state. He says: “The use of the intercepting filth retaining trap on the main drain as demanded by the plumbing ordinances of today is a flagrant violation of good plumbing practice, and inimical to the preservation of health in general, as is proved by the absence of retarded filth and the clean, flushed or scoured seals of the drainage system where main traps are not in use.”

Mr. F. W. Tower, the well-known plumbing inspector of Springfield, Mass., argues against the use of a main trap as an appliance which tends to accelerate the syphonage of traps located in the lower stories of a building, asserting that syphonic action is very much lessened if it is not used.

Let us hope that the question of the use or non-use of this appliance may be discussed so candidly, in view of the present clear light upon the subject, that sound and indisputable conclusion may be reached.

Protecting Wood and Metal Surfaces with Celluloid.

Wooden veneers are now being coated with a very thin layer of celluloid, by machine; after this the coating receives a lustrous polish in the usual way, whereby the grain of the wood is thrown up in relief, giving a very handsome appearance. Any desired color may be added to the celluloid without interfering with the beauty or structure of the wood. It is claimed for this process that the celluloid finish and polish is more durable than the ordinary shellac polish. Shellac is easily affected by hot water, but the celluloid finish is not, for it can be cleaned off with hot water without any damage whatever to the wood's coating.
Splinters and Shavings—Continued

These celluloid coated veneers may be used for many purposes, as they may be laid like paper anywhere, and they may also be pressed to make a relief, without injury to the gloss.

Solutions of celluloid and similar proxy-lin preparations in acetone, acetic ether, etc., are now recommended for covering iron to protect it against moisture and rust. Small articles may be dipt in the solution at a temperature of 40 degrees Centigrade, repeating the dipping until a sufficient coating has been deposited upon the article. In order to facilitate the operation the article may be slightly roughened, or given a coat of paint, which serves as a foundation for the celluloid coating. Larger articles may be coated with an ordinary paint brush.

RUBBING INTERIOR VARNISH WORK.

When the architect specifies that the hard wood finish shall be rubbed to an egg-shell gloss he means that it is to be rubbed with oil and flour pumice stone until the natural luster of the varnish has been removed. Why is the operation not thus definitely stated by the architect? What is the difference between an egg-shell gloss, and a dead finish. None whatever. In very cheap jobs there will be no rubbing to a dull finish at all, but a flating varnish, so called, will be used; this varnish is made to dry without gloss. It is no more than it pretends to be, a cheap finish.

Simple as the operation of rubbing a varnish seems to be, it is one that requires extreme care and skill in the doing. The expert will use oil with the pumice stone, but the man who is not an expert had better not use oil, for the reason that unless the varnish is hard-dry, and which it never is, at least not on new work, he will rub up the varnish, the oil softening the varnish and causing it to give way in small spots; the water rubbing is the safest for him, for instead of softening the varnish it really tends to harden it. The operation is substantially as follows: Have a shallow dish of fine flour pumice stone, using the best, for there is an American variety that will scratch and is not good for finework. It is usual to mix some water with the pumice, in the dish, but it may also be used dry, soaking the piece of felt in water, then dipping into the dry powder. Rub lengthwise of the wood, and with an even and not hard pressure, be very careful to not rub too hard at the edges, where it is liable to cut through. Start at one side of a panel, say,
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**Splinters and Shavings—Continued**

and gradually rub over to the opposite side, rubbing no more in one place than in another. Once in a while you will need to dip the felt in the pumice, and be careful to not let the rubber become dry. Use plenty of water and pumice, which is not costly. After rubbing a while clean off with a wet rag and examine the surface; a little practice will determine when the varnish has been rubbed enough. Be careful not to rub too much, as this decreases the coating of varnish, impairing the wear; rub only enough to remove the gloss from the varnish. After having rubbed enough and cleaned off the surface with plenty of clear water, using sponge and chamois, a semigloss may be restored, if desired, by rubbing with a little crude petroleum oil, or with linseed oil, though the rock oil is the better. Rub this dry, and you will have a fine egg-shell gloss.

**Influence of Weather on Exterior Painting.**

Undoubtedly the weather has much to do with determining of the durability of outside painting at the time of its application. It has been proven in one case at least that paint applied to a tin roof in the autumn was more durable than a coating applied at the beginning of hot weather; it lasted some months longer, in good condition. But this was, of course, an extreme case. Paint has a hard experience on a flat tin roof, though the relative merits of summer and fall painting of such surfaces was shown. In the absence of any test but that of personal and casual observation, I should say that paint applied in the early spring, or in the early fall, will do better in the long run than when applied at other times. I prefer the fall for all latitudes of our country excepting those of the extremes of north and south. The paint that is applied in the early spring, after hard freezing is past, has time to dry moderately and naturally before the hot sun catches it. It is the hot sun that is so damaging to outside painting. But if we apply the paint just as the sun is waxing hot, as in summer's beginning, saying naught of the midsummer and later days, the paint will oxidize so rapidly as to lose its life. If we apply paint in freezing weather it will not penetrate the wood well, on account of the thickening of the oil; true, this may be overcome somewhat by adding, as painters often do, a little benzine or turpentine. Freezing does not seem to injure paint, for
work done in extreme cold weather, midwinter, I have found to give equally good results with that applied in warmer weather. The trouble to be apprehended, however, is that the painter will thin his paint in freezing weather, instead of simply warming it, the result of which is that it does not carry pigment enough, and when the work has had a year or so of exposure it will show signs of weakness.

The three best months for outside painting is, in most of our country, May, September and October. If done in warm weather, be careful to not use much driers, as linseed oil paint in warm weather will dry with very little such assistance, and driers are like the sun in killing the life of the paint. It is also advised that outside painting in warm weather be done as much as possible so that it will get little or no sun until quite dry. **

**The Fire-Proofing of Wooden Residences.**

This fire-proofing is accomplished after the furring and studding of a building have been erected and is obtained by making every partition in the house, and space between ceilings, a dead air space.

This is very economically done and the application of this patent for fire-proofing partitions and ceilings thoroughly prevents fire from attacking the interior of the partitions, preventing currents of air between the wooden studs which carry the flames up thru the building, and out from under the eaves.

The studs are set up 12 or 16 inch centers, 12 inch preferred. They are very easily erected, the lath being applied on both sides of the stud with the projecting prongs, which are made out of No. 14 annealed wire. After being bent down into position the lath is there to stay as long as the building lasts. Both sides are then plastered and finished up with good hard mortar, resulting in hollow partition of any desired thickness from 2½ up to 4 or more inches; leaving a dead air space in the middle of the partition, which makes these hollow partitions more fire-proof than any other on the market. These partitions will not crumble and fall to pieces after being heated and cold water thrown upon them as tile partitions will. The dead air space acting as a preventive against their destruction.

These are well-known facts having been proven in different places in America where large and fierce fires have taken place.
Splinters and Shavings—Continued

A Very Durable Red Paint. It has long been known that blood makes a very lasting medium for an outside paint. In an old number of the Gentleman's Magazine I find this interesting account in which blood is mentioned in this connection: "Observing recently a painter busy oiling the south door of York Minister, and knowing it to be the only door which retains its ancient vermillion color, I asked him what the composition was with which it was colored, and he told me red (a sort of red chalk) and bullock's blood. This, on further inquiry I find was an old tradition among the vergers in the Minister. A composition of red chalk and bullock's blood is still used by the farmers and villagers for coloring their doors and window shutters in a circle of twenty miles around York at the present day.

Ready-Mixed Paints. A ready-mixed or factory-made paint is always to be preferred to the shop-mixed article, provided the ready-mixed paint is high-grade, and of which the market offers some very fine examples. It is very finely ground, pigment, base, medium and all, and is ready for use when you open a can, requiring no straining, and being perfectly free from anything calculated to mar a smooth effect. The finer ground a paint the better will it wear, and the finer will its color be. Fine grinding improves the color of almost every one of the painter's tinters. Another of the many good points of the ready-mixed is, that you may always depend upon getting the same color if you happen to run short on a job. Some painters, the writer included, can match tints or shades perfectly, but many others cannot, and in any case it takes time and a good deal of it, to do so; hence the economy of ready-prepared paint, it is always there.
A most practical work for architect and builder is now ready for your order and this book is the kind we should all have. In a measure it will tend to at least help us to improve the condition of a very important and much neglected feature of our homes. Although that portion referring to a provision for chimney sweeps is of no particular service at the present day, yet the author states he has had ample opportunity to test to the fullest extent a fireplace 5 ft. wide placed in the center of the interior long side of a room 17x28 ft., exposed on three sides, with eight large windows and no cellar. The house was built on Long Island, where it occupies a high knoll near the water, fully open to the most rigorous weather, the structure being an ordinary frame shingled house carried down to within 2 in. of the ground, so as to leave the under side of the floor beams exposed to the outside temperature. The house was provided with no other heating device than fireplaces, of which there were seven, and all giving a temperature of 70 degrees, with the thermometer at zero outside.

The author gives a few perspective views to afford a clear conception of the proper form which calls into favor the forward slope of the back and its return at the throat to the back plane of the flue, thus giving a shelf at this point, and it may be mentioned that the nearly 200 illustrations include original Rumford drawings, diagrams for fireplace construction, numerous ancient and modern mantels and fireplaces, together with andiron designs and other details and fixtures.

The author points out that the great fault of most of the open fireplaces for burning wood or coals in an open fire now in use is that they are too large or rather the throat of the chimney or the lower part of its open canal in the neighborhood of the mantel and immediately over the fire is too large. He refers to the principles upon which fireplaces ought to be constructed, and the entire matter being presented in a way to appeal to a wide circle of readers.

The Bridgeport Wood Finishing Co., of New Milford, Ct., has just issued a little booklet intended particularly for furniture manufacturers. In a brief but explicit manner this book explains how essential it is to have a proper foundation before finishing wood work of all kinds, and gives much information in regard to wood finishing. It will be sent free to any furniture manufacturer or finisher who writes for same.

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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**Glimpses of Books**

**Fire Places and How Made.**

A most practical work for architect and builder is now ready for your order and this book is the kind we should all have. In a measure it will tend to at least help us to improve the condition of a very important and much neglected feature of our homes. Although that portion referring to a provision for chimney sweeps is of no particular service at the present day, yet the author states he has had ample opportunity to test to the fullest extent a fireplace 5 ft. wide placed in the center of the interior long side of a room 17x28 ft., exposed on three sides, with eight large windows and no cellar. The house was built on Long Island, where it occupies a high knoll near the water, fully open to the most rigorous weather, the structure being an ordinary frame shingled house carried down to within 2 in. of the ground, so as to leave the under side of the floor beams exposed to the outside temperature. The house was provided with no other heating device than fireplaces, of which there were seven, and all giving a temperature of 70 degrees, with the thermometer at zero outside.

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Results of Adaptability to Location
Illustrated
By Una Nixon Hopkins.

The Modern Home, [A Series.]
Paper one—"Leaded Glass Work"
Illustrated
By J. Taylor.

An Interesting Denver Bungalow
Illustrated
By Ora W. Alford.

Little Journeys With The Architect
Illustrated
By Carlos de Gouex.

The Rock Garden
By Ida D. Bennett.

Modern Designs for The Home Builder

The Keith Magazine
Minneapolis.

15¢
Good Club Houses.

By Una Nixson Hopkins.

If one were arranging a scale of architecture, whereby to weigh the importance of different branches, domestic architecture would, of course, hold first place, and a comparatively speaking new species would crowd it for close second—that of modern club house architecture. Unfortunately or fortunately, according to the point of view, a great deal of time is spent by both men and women at the various clubs, which are half home and half hotel. And since for the most part their situations and the social prominence of their members are such as to attract attention, the appearance of the club is very important, just as the appearance of a person continually in the public eye is vital.

The diverseness of their requirements makes them difficult to plan. They must be suitably arranged, when they cater to women, for every sort of entertainment from the discussion of ethics to the giving of card parties, luncheons and balls; and when designed for the sterner sex, they need be equal to their rather cosmopolitan requirements, and men more than women, perhaps, include the opposite sex in their various entertainments.

It is necessary to have spacious entrances and rooms of reception, and the dining and culinary departments must be as near perfection as possible. The club house, though capable of entertaining people in large numbers, should be able to accommodate a few in a cozy fashion, requiring small rooms as well as large ones, or, if only large ones, they should be so arranged as not to appear bare and lonesome with but a few people in them.

It is taken for granted that out-door features will receive their due consideration in the planning of club houses, where the pleasure of so many persons is concerned. This includes the arrangement of porches, pergolas, walks, drives and where space
permits, small houses for the serving of tea or other refreshments, and, of course, a carefully planned garden.

The lighting and heating, always problems in an ordinary house, are doubly important in such large buildings. The heating which is done in the main by furnaces, may be augmented by fireplaces which give opportunities for highly decorative features; that is, a good fireplace is highly decorative in itself, not that it must be decorated. In spring and fall they supply all the heat needed, possibly, and will likely be brought into requisition for evening functions throughout the winter adding a cheering warmth that all the furnaces in Christendom could not give.

The walls of the club house would better be in plain neutral tints, which can not offend in any instance, for where the taste of so many is to be taken into account, experiments in color schemes will prove positively dangerous.

The old English brick and half timbered club house pictured had for its motif the Ann Hathaway cottage at Stratford-on-
Avon, though very much modernized and modified to be sure, and unlike the Hathaway cottage, which is on the side of a small, sloping hillside. The club house is in the centre of a busy town, on a plot of ground as flat as the proverbial griddle.

The gables of the club house are picturesque, and the half timbering is simple and good, even though it is not worm eaten as yet. The windows, too, are of excellent proportions—small and leaded. The architect has taken the liberty of projecting a few with good effect. The ivy growing over the walls is a suggestion from the original, and the garden is laid out with old fashioned flowers, such as grew in the garden where Shakespeare probably did some of his courting, for it is doubtful whether he always sat in front of the famous fireplace, where he is usually pictured with Ann Hathaway.

The interior of the club house carries out the English ideas in the detail. There are large fireplaces unornamented, the ceilings are low and beamed and there are a good many doors into the garden from the various rooms.

Another hint for a club house comes from Lower California. It has taken to its environment as naturally as a mushroom takes to the cellar, being low and rambling, with a not very great width on the front. The facade shows the mission influence which creeps insidiously into the South-Western architecture, both domestic and otherwise. It is a building of no pretension, yet it is perfectly rational in form and color and fits into the setting admirably.

A second pattern in plaster is that of the club house with the repeated arches, which is almost classical in its simplicity. It stands flush with a city pavement, yet the long wide patio-like porches give it a secluded air not to be expected in such environment. The floor of these porches is paved and their excessive widths make them verily outside rooms. The rough plaster is a pleasing gray with a bit of yellow in it to take away the coldness, and it has weathered into a tone like natural plaster. The roof is of tile,—real tile, not the prevailing tin imitation that so cheapens any structure it happens to cover. You enter the center of the facade—a long hall, and on either side are the reception rooms, one to the right and two to the left, with the assembly hall at the end. The plan, but for the assembly hall, would be very much like that of the old colonial house.
fifty thousand dollars, and occupies a prominence in the landscape, commanding a superb view of the mountains and the valley round about. The rotund veranda showing in the photograph affords a glorious panoramic view, and besides a veranda runs across the front of the building. The photograph was intended to show the general plan as far as possible, and does not illustrate the detail to any extent, giving, rather, outlines of the building. The two wings depart naturally and gracefully from the main structure forming a long courtyard in the rear. The immense living room opens along one whole side into the courtyard, with French doors, the doors being flush with the court pavement. From the end of this courtyard, pergola walks extend, but it will be necessary to wait for the growing of vines before the beautiful effect planned for can be attained. The natural declivity of the ground has been nursed into terraces in the foreground and in the rear there will be extensive gardens. The exterior is of brown shingles with foundations and chimneys of buff sandstone. The interior woodwork, too, which is very heavy, warm toned brown, with fireplaces of the same buff sandstone used outside. The living room wall of rough plaster is stained a soft olive green and the immense rug is green and brown. The furniture is the so-called mission, which with a few exceptions finds a more congenial atmosphere for its straight, heavy lines in club houses than in homes: then there are a number of wicker and grass chairs in green and brown. Aside from the courtyard, windows look out from two other exposures of the room. And while the room is immense, so many pleasingly curtained French doors and windows relieve it of bareness and dullness. One of the dining rooms set aside for small functions opens with wide doors from the living room. The walls are buff and look well opening off the green room, the wood work in both instances being finished alike. The large café is in the basement under the rotund veranda, with plenty of windows to give light and cheer. Hid by the house in the photograph are some picturesque automobile sheds with pergola arrangements forming the attractive feature.

The last illustration is rather a distinctive piece of designing, showing an inclination toward the modern German. And while the exterior is entirely of shingles the house has the effect of buttresses at the corners, and the chimney built to match them is smart indeed. You enter generally from the door beneath the porte cochere, which opens into a hall to the right of which is the formal reception room, the outside door of this room being usually closed. The assembly hall is to the left. The natural construction shows throughout, and the whole color scheme is different shades of buff and yellow with brown woodwork again which seems to be a wise choice for such rooms. The sloping roof is in evidence inside as well as out; within large timber brackets are used for support after the old Norman fashion. The stage at the one end of the big assembly room is balanced by a balcony at the opposite side.

For so large a building this club house is distinguishable for its homelike, cozy characteristics.

LITTLE JOURNEYS WITH THE ARCHITECT—(Plastering.)

By Carlos de Gouex.

There is no part of the construction of a house or building that can be called the most important part of the structure either in design or from a purely structural standpoint. Each part has its duties to perform and all must be carefully and relatively studied to bring about a harmonious and perfect whole. There is one part of the work of which the public in general knows very little and that is the plastering. While it may not be as important as a good foundation, it is very essential that good work should be done and the best materials used in order to insure safety to the household and a neat appearance to the interior of the home. The average home builder studies house building enough to be fairly well informed on the materials that are used for foundation work, on the proper proportions to be used in his concrete cellar floor, the best kind of flooring for the upper stories, the best kind of finish for the interior, etc., but he seldom takes the time or trouble to look up the plastering subject and be satisfied in his mind that the mason is using the best and applying it in the proper manner.

There has been considerable advancement in the methods of applying plaster and the materials used during the last ten years. The old method was to use lime mortar. This was slacked, mixed with
hair and sand. This took considerable to say the least, but the worst feature was the strong temptation to some unscrupulous contractor to use too great a quantity of sand and too little hair and lime. This made poor work which after resulted in a constant annoyance and menace to the members of the family. Anyone who has had to go thru the ordeal of having their ceilings torn down with the subsequent ruination to the finish of the floor, casings and furniture, no matter how well protected, would even take their chances again on a cheap job of lime plastering. Then too, there are localities where sand can not be obtained except thru shipment, or long hauling; this was also another constant source of trouble to contractors so situated. As the result of these various troubles, there have been invented and placed upon the market several makes of prepared plastering. Undoubtedly the most practicable plastering for house work is a wood fibre plaster. This comes in one hundred pound sacks and each sack will cover about seven and a half square yards, or one ton from one hundred and fifty to one hundred and sixty square yards, depending upon how thick the coat is spread. If you are interested in seeing that you obtain the best results from wood fibre plastering, see to it that the following directions are observed.

"Mix in water-tight box about 3½ x 7 feet, raised about 4 inches at one end. If any old box is used, be sure that it is free from dirt and lumps of old cement or plaster.

"Put water in box and throw in the amount of wood fibre plaster that you have decided to use for one mixing. Now allow the plaster to soak in the water for 10 or 15 minutes without hoeing.

"It has been found from experience that this period of soaking is necessary, owing to the peculiar composition of wood fibre plaster and the great avidity with which the wood fibre takes up the water. If not allowed to soak at this stage, the resultant mixture will prove 'POOR' and will not work satisfactorily.

"After this period of soaking has elapsed, work up the mixture in the usual manner, adding sufficient water as you go along to bring it to the proper consistency. Apply as you would any hard plaster.

"Use rod and darby, then float to knock off bumps and fill up cat-faces. In floating, however, do not drench the work with water. Use damp brush only, and do not attempt to float after material has set, as you will KILL the FACE of the wall.

"The work can be left under the trowel for papering, or under the float for frescoing, but can be hard finished, or float finished in the customary manner.

"If the work is to be hard finished, however, the base coat should be lightly broomed before setting. Cut off joinings at angle of 45 degrees.

"Under no condition should any sand or other material be mixed with wood fibre plaster.

"Do not retemper mortar after it has once set. You will kill the work. Do not mix more material than you expect to use in about one hour. Clean box after each gauging, AND DO NOT MIX ONE GAUGING WITH ANOTHER. Use clean water only, and KEEP YOUR TOOLS CLEAN. Keep temperature above freezing in winter, and keep out hot blasts of wind in summer. Should, however, your work show soft white spots after drying, wet up with a clean brush and water until these spots set up and harden. Always wet dry lath, whether new or old, before applying mortar, as you will thus avoid BUCKLING. Brick or tile work should be liberally soaked with water before plaster is applied."

If these instructions are carefully followed by your mason, there will be no tearing down of the work for repairing during your lifetime.

Three-quarter inch grounds should be used for plastering in a frame house and one-half inch if plastering is on brick or tile. It is not advisable to plaster on brick walls that are exposed on the other side to the weather, as the frost is almost sure to penetrate and spoil the decorations. The walls should always be stripped with inch strips as a nailing base for the lath and then plastered in the manner specified. Back plastering is seldom used now days. It has its merits but there are other and cheaper methods of accomplishing the same results. There are two parts of the house that are usually left unplastered that should be so. They are the basement ceiling and the attic. One can hardly realize the dust and cold that comes up thru the first floor until after they have had their basement ceiling plastered and note the difference. If a coarse coat of plaster is put on the attic roof rafters, the attic will be cooler in summer and warmer in winter, influencing the temperature of the second story accordingly.
A House on a Hillside.

HOW THE PROBLEM WAS SOLVED.


THE designer an unusual problem of the right kind is a source of satisfaction. The photographs show a house which comes under this classification. The lot faces north on a street which runs east and west for miles across the city and is just about to dip downward to the west to the level of a narrow lake. To the south and west the lot slopes rapidly towards the lake and the parkway at its northern end. About a mile due south is a narrow strip of high land which separates the lake from still another lake and yet another beyond. There is no finer view in the city than this long strip of silver, framed by the green foliage of splendid oaks and studded with a wooded island. The owner realizing that he must have a plan which specially fitted the lot, and an elevation in harmony with the surroundings, adopted a method which many clients would do well to emulate. He took his architect to the lot, and told him what room he required.

He next furnished the architect with a survey of the lot, showing its size, grade at every point and the position of every tree upon it, and then gave his architect plenty of latitude for working out a design.

As to plan it was obvious that the living-room must be toward the street but still commanding a view of the glen. The dining-room also must look out upon it. The view to the east was good, but somewhat spoiled by a row of saplings planted on the front of the adjoining lot. Owing to the grade of the lot it was possible to place the garage beneath the living-room and porch with a billiard room to the front, with laundry and boiler room to the rear, all well lighted.

The second floor was more difficult and required frequent revising to meet individual requirements. The attic commanded
the finest view of any room in the house and could not be passed by lightly. The architect found in his client a veneration of the Fatherland and a progressive spirit. Given a commanding site and the above mental attitude, a style embodying the progress of the new world and the atmosphere of the old was naturally suggested. It was therefore, decided to build the basement wall of cobble stones backed up with concrete. This was accomplished by building up a plank form at the back only, then setting a course of stone in front of it and pouring in the concrete between, came being taken to avoid any regularity in the texture of the wall. The exterior walls above the basement are made of four and six-inch hollow tile laid in cement. The house is plastered directly on the tile inside and out. For the exterior the gravel was put through a screen and then mixed with sand and cement to which imported ochre had been added. It was then dashed on with a paddle giving a rough surface of an olive tint. The trimmings are of troweled cement, without color and can hardly be told from Bedford stone. Those portions of the house in which the half-timbering occurs are plastered smooth and pointed white.

The half-timbering would be more successful if it had been of wider boards, about seven-inch instead of five-inch. All the exterior wood-work is detailed on simple, primitive lines and including sash, is stained a burnt wood brown in an attempt to give a sixteenth century atmosphere. The roof is of red tile, German pattern, with plain flat shingle tile on sides of dormers. The glass is often old ideas set in wide lead lines with a moderate use of color.

The design externally would be improved by the absence of the Oriel from the side wall of the battlemented one-story portion, but seen from the interior it does give an air to the end of the living room which would be difficult to achieve by any other method suggesting itself, besides affording a more extended view to the west. In the east gable is an Oriel window which is made to represent as nearly as possible an old time watchman's lantern with large, band ring and sloping top. Its sides are cut up into small squares by wood muntins and the glass is a ruby color, giving a pleas-
ing effect without when the room is lighted. Immediately back of the garage and leading up to the fountain is a space paved with cobble stones, which gives the rear of the house an old world flavor which the front with its modern smooth cement walks, utterly lacks.

Taking up the interior, finish, the hall, living-room and dining-rooms have heavy beamed ceilings, the joists being doubled and spaced twice the usual distance and then cased with wood, thus giving extra height to the rooms without adding anything to the whole height of the building. The floor lining of the second floor is of two-inch planks for strength, heavily insulated above and below for deadening. Between the beams are frames on which is stretched artists canvas, for decorating. The hall is finished in dark quarter-sawed oak rubbed to a dull finish. The dining-room is in quarter-sawed oak, a little darker than the hall, with panels of Japanese leather in the wainscoting. The room is lighted almost entirely by the casement windows in a large square bay which extends into the second story. The fountain is just outside the window and its splash can be plainly heard inside.

Folding doors open directly onto the porch from the dining-room. Porch is screened and glazed in, the windows being arranged to slide partly up and partly down into pockets, much like a modern street car, thus leaving the window space entirely open. The ceiling is beamed and ceiled in slash grained Washington fir in dark golden oak stain. The floor is of 6-inch square cement tile in red and grey. The living-room is finished in mahogany, all the detail of the woodwork being as simple as possible allowing the natural beauty of the wood to appear in broad surfaces.

The mantel is faced with faience, representing a rural Holland scene, with a broad shelf above and a wide fireplace below. There are cased openings to both hall and dining-room and folding glazed doors to the porch. The stair is in three flights. At the first landing is a square bay with leaded glass in Gothic arches, and a wide seat. On the second floor are three chambers and bath.

The finish of the hall below is carried up the stair and about the second story hall, but on entering the chambers the finish changes to eggshell white allowing the use of dainty bedroom paper in line and
In deciding to build a house, one of the most important considerations is the style to be adopted; following hard upon this is the establishing of a certain unity between the outside and the decoration and furniture.

I suppose one of the most complete houses to be found anywhere is that of Charles Schwab, in New York, a faithful and millionairish copy of an old French chateau. I have not seen the house, but made a study of some of the furnishings for it at the World's Fair at St. Louis and could well imagine that an American would feel more comfortable, nay more happy, in a good colonial environment, than surrounded by the ghosts of some of the worst periods of monarchical government in France. But let each man gratify his particular predilection in the matter of the home, remembering if he will, that the splendor of elaboration, is no guarantee of artistic refinement, nor the most rigid simplicity any indication of the lack of it.

It can be said of the Schwab mansion, that it is one of the most faithful modern examples of a popular French style extant, and at a time when there is such an amount of bastard reproduction this is no mean compliment to pay it.

Of quite another character is the Andrew Carnegie residence in the highlands of Scotland, where the wintry snows linger on the hilltops till well nigh mid-summer and the angry waters of the North Sea make curious indentations on the coast line to within but a short distance of the great rambling Scotch baronial pile, known as "Skibo," that shows a white freestone front to the sun. In this case the old castle decided the style of the new, in point of fact the present entrance and outer hall belonged to the older house.

It cannot be objected to, surely, that the outer hall of "Skibo" should be characteristic of the Bryantine style, for the Gothic followed closely on the style that centered around the city on the Bosphorus, and but for Gothic the old Scotch style would never have been evolved.

Stepping inwards the great inner hall is reached, with its lofty ecclesiastical roof; broad stairway leading to the upper chambers and organ gallery; two massive chimney pieces over which is carved the old Highland welcome.
“Hame’s hame, but a heilan’ hame’s mair than hame.”

Reading this in an American Journal every expatriated Scot will understand and in imagination will find himself back again in the old familiar home, in the bonnie glen, where the purple heather clad hills rise steeply, and the deer shout to one another as the moon lights up the stillness of the highland night.

But “Skibo” is one of those big, roomy houses in which almost every variety of style has been pressed into service.

The dining room is a fine apartment in the Jacobsen style, with floor, walls and ceiling all of fine Austrian oak, finished in natural color, three tons of the timber having been cut up for the purpose.

The panelling on the walls is quite simple until the frieze is reached, where a beautiful scroll design is carved all over the whole, construction and craftsmanship are of the highest quality, and it is quite conceivable that the room may yet become historical as an early twentieth century example of a seventeenth century style.

The drawing room is in Louis Serize style, but will by no means compare with the Jacobsen room as an artistic apartment. A charming room is the breakfast room, designed in the popular Adam style, and carried out in mahogany, stained to a shade mahogany would assume after being in use for something like a century and a quarter.

It is a tribute to modern American method, that the business parts of the house are fitted on the latest American plan, for all things are conducted in an orderly way at Skibo.

In the bedrooms there is no fixed style, so that the house, which outside is a fine example of the old Scotch style, inside is something in the nature of a medley.

Now, this is not what one would expect at this time of day, yet it is what is to be found in almost every European house outside of France, that is to say, in houses of any pretentiousness. In the New England States, and in some of the southern and western states of America the Colonial and Mission styles offer due relationship between the outside and the inside requirement of the house, and now that the English Modern style is so quaintly interpreted its best features may with advantage be associated with either.

In point of fact some of the leading exponents of the new idea in Europe are combining a simplified reproduction of eighteenth century Queen Anne style of furniture with a modern art environment, very much like placing Colonial furnishings with up-to-date decoration. Eighteenth century French and English styles were never more popular than now, and some of the finest cabinet factories in England are running all the time producing, or to put it more correctly, reproducing fine furniture of that interesting period. In America something akin to this is going on, but you work on simpler lines than we do, some of the Louis XV. and XVI. reproductions having but the most distant relationship to furniture of the Jacobsen period, and that succeeding, when straight lines became the order of the day.

'Tis better so, for the elaborate marquetery work in some of the English reproductions is out of harmony with the spirit of simplicity so prevalent today, and only suited to such an atmosphere as that at the Schwabe mansion at New York. Sheraton offers a delightful compromise between the elaboration of the French and some of the early English styles, and the rigid, unbending simplicity of the modern style, as interpreted in some quarters. The lines of the eighteenth century designer, cabinetmaker and lay preacher are graceful in the extreme, and when adopted for dining room, parlor, or bedroom, may be used with the most satisfactory results. This desultory chat on the styles may set some readers to study them more deeply for themselves. The subject is interesting whether it be limited to the period beginning with the eighteenth century, or extended to earlier times, to that renaissance, or mediaevalism that have inspired so many minds in the construction and beautifying of the home. Farther back takes the student to the cradle of all the domestic arts, yet so careful has been tradition that it is possible to study today complete styles that were successfully practiced long before the dawn of the Christian era. By studying these carefully the mind is stored with knowledge that may be drawn upon when working out the every day problems of modern civilization.
A Children's Pleasure Resort.

By E. Mey, Architect.

In our last number we represented to our readers a farm house, forming a dependency to a rural residence. Today we wish to put before them a smaller object, designed for the abode of children of the family. What delightful hours may be spent in such a retreat, where occasional shouting and frolicking will not disturb the quiet of a suffering mother nor interfere with the calculations of an anxious father. The little folks are safely housed in a place adapted to their diminutive size. They can play at happy family in a way impossible in their parents' house, and we all know that the nearer the play resembles the reality, the greater the fun. The kitchen lends itself delightfully to the preparation of teas and luncheons to be served to the young friends, who come on a visit with their parents. Or the young people may treat their elders, as they have so often been treated by them. Through a cov-
erased veranda you enter the room; its walls are wainscotted, the beams of the ceiling remain visible, and the floor may be plainly boarded, to be covered by a carpet or oil-cloth, or it may be parquetted. The disposition and nature of the windows are indicated in our drawing, and so is the disposition of the furniture, characteristic of a Swiss chalet. A bench runs along part of two walls, and a table is set before it. Along the unbroken wall may be placed a cupboard or dresser; a bookcase will also find room, and against the place in the wall, marked in black, a fireplace may be constructed. This will add to the comfort in chilly or rainy weather, when such a place offers special attraction. Through another door you reach the kitchen; here the walls and ceiling are plastered, the floor being formed of plain or ornamental tiles. That part of the walls marked in black in our drawing is constructed in brick, as is also the flue placed against it; the place of the cooking stove is also indicated. Thus firing for heating and cooking purposes is possible without danger of fire. The roof is covered with wooden shingles, on which are placed heavy stones, which form a protection against the wind in stormy weather. On whole this little building bears the character of a Swiss farm house. Placed in the garden of a small country house it will form a pretty little ornament of the family residence.
HERE is an increasing demand among home builders for homes of the unconventional cottage type. That does not mean that homes of the classic type and palatial size will some day cease to be built but as classic architecture requires a considerable financial outlay to do it justice and is more applicable to structures of dignified size than to small ones. Details from

Design No. 63.

Lowall A. Lamoreux, Archt.
"the first orders" are still used in modest homes, but they are greatly modified and simplified to meet the modern American ideal.

This pleasing home by Lowell A. Lamereaux, architect, has the misfortune of being planned on a hillside lot, but the designer has handled the various difficulties that arise in building a home so situated in an admirable manner. For example, the living room bay is made to appear as an oriel on the outside instead of extending it down to the grade which would give it a tower-like appearance. The house is of the gambrel roof cottage type, but the roof up to the gambrel joint is steep enough to allow for full height side walls in the chambers. There is a beautiful Colonial porch on the front of considerable size including the terraces on each side. The entrance is into a central hall which allows of a simple grouping of the rooms on either side.

With hardwood finish on main floor and pine finish second floor, heating and plumbing included, the house is estimated to cost at this time $5,500.

This little cottage by Long & Long, architects, is the product of good taste and simple home comforts. Nothing could be simpler than this little home. Even the usual round columns on the front have given way to plain square
posts with no caps and little base. One would naturally expect to find the front rooms on the second story cut off on a slant by the roof, but such is not the case in this house. If a line were drawn up the front corner to the roof line it can be seen that this is really a two-story gabled house with the roof extended down over the porch. Light and air is brought to the front rooms by projecting dormers. The principal feature of the first floor is a large living room twelve by twenty-seven feet and to make it homelike a large fire-place is provided in the middle of south wall. Opposite this is good wall space for a lounging davenport.

No back stairs are required. Second floor gives four very comfortable chambers.

Coming to the question of expense, the sum of $4,500 is required to build this design and provide the usual interior finish of hardwood in hall, living room and dining room with pine painted in balance of house.

THE next three houses are in concrete and the first for a single dwelling in Monolithic construction is desirable for its simple outlines, giving it a dignified and somewhat imposing appearance, and compact plan. This is one of the prize winning designs submitted in the competition of cement house plans as mentioned in our last issue and is the design which won the third prize of $60.00 in the class of single dwelling not to exceed in cost $3,000.

We show in addition to the front elevation and floor plans, a view of the rear elevation on the following page. The foundation, walls, piers, porch floors and rails, steps, areas, window mullions, etc., are to be of concrete, laid up monolith in wooden forms.

Cellar under whole house.
First story partitions, 4-inch hollow concrete blocks, plastered.
Second story partitions, stud frame lathed and plastered.
Roof, wooden rafters, boarded and slatted.
Ceilings, lathed and plastered.
Inside of exterior walls to be furred, lathed and plastered.

OUR next design is for an all plaster exterior and is also designed very plainly. What a relief it is to see the irregular stone treatment in the porch piers, more plainly brought out in the detailed photo view of the front entrance.

The finish coat of exterior cement
work was applied rough cast. The base construction being frame and metal lath. The design is practically a square house, 37 feet in depth by 32 feet in width. The vestibule entrance opens direct into the main living room, doing away with the customary hall, the main stairs being in the rear middle portion of house.

The inside finish of the living room is birch. Dining room, birch. Library, birch. Hardwood floors thruout. Height of first story rooms 10 feet, height of second story rooms 9 feet. Number rooms finished off in third story, two. A hot water heater is used for heating purposes.
The third concrete house is a most admirable design and is winner of the first prize of $100.00 in the competition of designs for cement houses in the $2,000 single dwelling class. It has an individual charm in both plan and elevation and this applies particularly to the arrangement of the entrance, stairs and living room. The use of a single chimney is economical as is also the simple outline of exterior walls, the recessed panels of which can be readily formed in monolithic construction by boards nailed to the inside of the forms. The drawings as shown by accompanying plates were exquisitely rendered. The specifications designate rough cast finish for the exterior and outer walls and porch posts to be of monolithic construction. Cellar and porch floors to be of concrete. Outer walls to be 8 inches thick, cemented on the outside and furred with wood furring strips and plastered on wood lath on the inside. Chimneys to be lined with flue tile. Cellar under whole house.

All piers in basement, partitions on first floor, and main bearing partitions...
on upper floors to be of hollow cement blocks, plastered.

All floors double with hard pine upper floors. Trim to be cypress stained. Sash of white pine, painted. Fireplaces of selected hard burned brick.

THE south furnishes many unique styles of houses both in general appearance and plan, but it is in that low roofed plan of houses which have come to be known as bungalows that she excels in originality and uniqueness. We think that a strictly bungalow design, in general, is planned for living all on one floor and in this respect the problem is somewhat like our modern flat. A room or
two is sometimes obtained in the attic space by placing low broad dormers on two or more sides of the roof.

Our present illustration belongs to the Southern type of bungalows and was built in Southern California. This does not mean, however, that it should only be built in a southern community. This picturesque little home would grace any neighborhood in any state.

The foundation is of native cobble stones. A little better effect could have
been obtained if a larger sized stone had been used, also if the stones had been laid in the wall more irregularly, the appearance would have been improved. The siding is laid eight inches to the weather and is three-quarters of an inch thick on the lower edge. The walls are painted brown with a white trim and the effect is good. The roof shingles are a natural gray from exposure to the weather. One odd feature of the house is the absence of the usual covered porch and in its stead, uncovered terraces. One of these is across the front onto which opens doors from both living room and reception room, and another on the side leading to the reception room.

The reception hall and living room are practically all one room, the division being merely a columned opening eight feet wide. The stairway leads up from the living room. The plan is a very informal one and intended for a wife, who altogether, or at times, does her own house work. On the second floor are two small bed rooms with closets, a sewing room and a bath room. Also a linen closet built into one corner of the hall.

Height of ceiling on main floor 9 ft., 3 inches. Foundation 31½ x 20. Estimated cost of plumbing and heating, $2,745.

The seventh or last design will certainly please a great many, specially those who are partial to a limited use of cement on the exterior, in combination with frame construction. It is a design which may well be termed typical of modern residence building and the detail is well carried out.

In construction, white pine lap siding exposed four inches to the weather is used up to the belt course, 14 feet in height, which runs directly beneath the second story window sills. Above this and into the gables cement work is used, paneled off with light strips embedded in the cement, the finish coat of which is smooth. The usual method of metal lathing over wood furring strips directly applied to the sheathing boards, covered with tar felt is used in this case. On the inside the sheathing boards over entire house are also covered with tar felt which was used in place of back plastering.

The inside finish through the lower floor is fir, care being taken that it was well dried before putting on. This has proven exceedingly satisfactory to the owner. It is stained, varnished and rubbed to a dull wax finish.

The second floor is finished in white pine, enameled.

Basement has finished laundry with plastered walls, and vegetable cellar. The foundation of the house is concrete, faced with Menomonie brick from the water table up to the drop siding. Below the ground level the foundation wall is painted with coal tar on outside. This construction has produced a very excellent smooth surfaced foundation wall and a dry cellar.

Dimensions are 28 feet wide by 36 feet deep. Height of first floor 9 feet, second floor 8 feet 6 inches. Height in clear in attic at ridge roll 9 feet 6 inches, with one room finished off. Heat installed, hot water system, and total cost including heating and plumbing $5,200.
A Most Pleasing Combination of Frame and Plaster.
FOLLOWING IS A TABULATED LIST OF PARTICULAR SUBJECTS AND SPECIAL CLASSES OF DESIGNS TREATED IN FORMER NUMBERS OF KEITH'S MAGAZINE.

ALL FULLY ILLUSTRATED

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KEITH'S MAGAZINE, - Minneapolis, Minn.
The writer is moved to say a few words on the subject of curtains, which seem to her to assume a dis-proportionately large space in the house furnishing calculations of most people. She has at hand, as she writes, a large number of pictures, showing more or less artistic interiors, in the houses of the well-to-do, and in almost every one of them the general effect of the room is ruined by the curtains. In some cases the fabric of the curtain is utterly out of harmony with the furnishings of the room, in others, they are of material too stiff to hang in graceful folds, again they are improperly hung and too long.

A curtain has two functions, concealment and protection. In windows opening directly on the street, some sort of screen from curious eyes is needed. The Holland shade is excellent for concealment but shuts out too much light and air. Some sort of a thin curtain, screening the inmates but not darkening the room becomes almost a necessity. It should be washable and easily adjusted so that the room can be readily aired, hung within the casing of the window so as not to conceal the constructive lines of the room.

In cold weather and in exposed situations, long curtains of heavy material, running on poles and reaching to the floor add greatly to the comfort of a room as well as to its dignity. Their color may emphasize the dominant color note or they may furnish a foil for the other contents of the room.

Where in this classification does the average lace curtain stand? It has precisely one function, to drape the long windows of a room furnished in the formal French style, under more or less elaborately draped and festooned curtains and lambrequins. It is expensive, it is a source of endless care and trouble, it reflects the light in a most unpleasant fashion and it is quite out of harmony with its usual surroundings. Yet, with all these limitations, it represents the goal of many a woman's ambition, whether she aspire to Irish point or only to the humble Nottingham.

Leaving out the lace curtain, with a pious hope that sometime the average taste will be better educated than to desire it, let us consider the materials for curtains at the command of the short purse.

For thin curtains, there is first of all cheesecloth, not the finer quality, but common five-cent, unbleached cheesecloth, cut by a thread, carefully hemmed by hand, and growing more beautifully soft and crapy with every washing. A line of hemstitching, if one has the patience, is greatly worthwhile. With reasonable care a set of cheesecloth curtains will last almost indefinitely. The stencilling, in colors, so often recommended, is hardly an improvement. The fabric loses its distinction and becomes a coarse printed cotton. Cheesecloth dyes admirably, its loose texture absorbing the soft tones of green and brown vegetable dyes. The sleazy qualities of unbleached muslin, a little too heavy for white curtains can be dyed with good results. A simple and effective decoration for such curtains is a conventional border outlined with the sewing machine, with heavy white silk. A great many nets by the yard are available, the best of them being Brussels net, in white, cream or grey, the tone called Arabian. Fish net, exceedingly pretty when new and fresh, gets very stringy in time. Some of the Nottingham nets, by the yard are very good, especially one with a pattern of elongated hexagons, but once the Nottingham nets attempt a curve they are hopeless. So too are the cheap qualities of Madras, but those at six-
Decoration and Furnishing—Continued

ty or seventy-five cents a yard are good enough for any room. The very expensive imported Madras, in large designs and very beautiful colors is beyond the limits of moderate purses, but is so decorative as to be worth a sacrifice in some other direction for the sake of having it illuminate a shady corner.

The frilled and tied back curtain which gives such an air of freshness to a bedroom demands a material which will take starch well, preferably some sort of muslin. It is well to remember that a fine plain muslin costs no more than a coarse embroidered one. When some color is wanted, a plain curtain with a wide figured frill is very pretty. So are whole curtains of figured dress organdies, which can be bought very cheaply at the end of the summer, and are sheerer than silkoline.

The long curtain falling to the floor is a very considerable item of expense, particularly if the upholsterer makes it. Making a heavy curtain is very largely a matter of courage, once the cutting is done, a business readily managed with a "T" square, or failing that, a large blotter pad. In most cases a lining is unnecessary, although an edge of gimp or cord adds to the furnish.

Cotton rep, at fifty-nine cents a yard, double width, is about the cheapest thing to be had, if one excepts denim, which is much narrower. Mercerized tapestries are about a dollar. Arras cloth and Craftsman canvass are a dollar and a quarter. Cretonnes and taffetas cost less but require a lining, as do the more expensive cotton velvets and velours. Mohair damask is reversible and answers for a portiere unlined, but against the light of a window needs a lining. It costs about a dollar and seventy-five cents, a finer quality copying the designs of old Italian fabrics being two dollars and a half. Of all the moderate priced materials this is the most satisfying.

A word as to the proper hanging of curtains. All thin curtains should be sill length and hung inside the window casing, on a brass rod. If they are to be tied back, the rod should be run in a casing, if to hang straight, an abundance of small brass rings should be sewed to the curtain, an inch from the upper edge, and these run upon the rod. That is, if the curtain is to be run back and forward. Otherwise the casing arrangement is best.
In exceptional cases, when the embrasure of the window is very deep, long window curtains can be hung inside the casing. The ordinary arrangement is with a pole supported by brackets. Pole and brackets should match the other woodwork of the room, and the size of the pole should bear some relation to the weight of the curtain. In purchasing fixtures for heavy curtains, extra rings should be bought, as the manufacturers never allow enough for graceful folds.

When as in closely built city streets windows are within a few feet of the sidewalk, a fashion prevalent in New York is a good one. This consists in hanging next the pane, without any fullness, a length of handsome lace, with an all-over pattern. The lower edge is weighted, the upper edge has a casing for the brass rod. The interior of the room is absolutely concealed from curious passers-by and the effect is very good. Almost any reasonably heavy lace may be used, even a Normandy Valencienes of good design, and in default of lace a handsome white Madras is an excellent choice.

People are apt to think of wicker furniture as exclusively for summer use, but in red, green or brown, it is an excellent investment for permanent use. The dweller in city apartments, where moving day comes often, is thankful for easy chairs so easily carried about. Of course only loose cushions are used, but it is quite permissible to depart from the time-honored chintz and cretonne and to substitute figured silk or worsted fabrics. Corduroy and velour seem a little out of keeping, but Craftsman canvas is an excellent substitute, its greens, browns and reds harmonizing well with the tones of the wicker. For cushions for red wicker furniture, there is a beautiful English cretonne, with a tan colored ground and conventional designs in red and blue, which looks serviceable and is very stunning. This same cretonne is immensely effective on one of the tall eared armchairs, which Dendy Saddler loves to paint. It costs sixty cents, single width.

The newest development of the rag rug is the Betsey Ross. It has a plain centre of a neutral tint, generally brown or a dull green, and a border at either end of bright colors woven in a sort of crazy patchwork pattern. Whether it is beautiful enough to

Many people constructing a residence do not realize the importance of giving careful attention to the finishing of same.

If the pores of the wood are not filled with a proper wood filler and the foundation properly prepared, the finish in a very short time will sink or pit and become unsightly and a disappointment.

To give information as to the very best and most economical method of preparing the foundation is the object of our little booklet—Modern Wood Finishing. It will be sent free on request.

The Bridgeport Wood Finishing Co.,
warrant the increased expense is a matter for individual taste.

Recent experiences with rag rug weaving may be passed on for the benefit of others. One is that it costs rather less to buy cotton material and have it cut and sewed properly, and according to one's own ideas than to get the ready-made affair, by whatever name it is called. Also that the inch width which the authorities all prescribe as the right thing, is too much; half inch rags give a much better surface and the colors blend better.

When blue is to be used in connection with other colors, anything approaching a purple shade should be avoided. The best blues for the purpose have a gray tone and are not too dark. Nothing helps to harmonize a medley of colors better than a little golden brown. The most effective rugs are those in which are various colors are all of about the same relative intensity.

Never trust to the weaver's statement as to the size of the rug to be had from a given weight of rags. At best, he is guessing. Give him the largest size you are willing to have for your rug and make him return any rags he has left over. This counsel is prompted by the recent delivery of a rug three yards long and thirty inches wide, where the weaver had thought it possible he could get out a rug a yard and a half long and twenty-seven inches wide, and the consequent necessity of making it into two rugs with a waste of several inches.

* * *

A matter, which affects summer comfort greatly, is the position of any extensions to the house. There are houses so situated that a kitchen extension shuts off all the summer winds from the living rooms. There are others, in which the position of doors and windows is such that a direct circulation of air is impossible.

There are other houses which seem to have been built without the slightest regard to the placing of furniture. They would suit the Japanese but are inconvenient for Occidentals. There is a house, in a country town known to the economist, in which every stove, and there are several, stands between two doors and just on the direct line from one room to another, so that the unlucky persons who essays in the dark is sure to fall over the projecting hearth of the stove.

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J. C. B., California.

Q. We are building and I enclose a plan of our new house which shows the living room 17x18 with 8-foot openings for double doors into the dining room. Is it necessary that the wood work and walls be exactly alike? We have 10-ft. ceiling, cove, and intend to tint the walls. Have a handsome Oriental rug with three large squares, the base colors being different; one old blue, another in old red and another in gray blue, suggesting pale green. What should I put on the floors? Also kindly advise if it will be good taste to have dining room in blue. Should I have silk or cretonne curtains instead of old fashioned shades?

Ans. In such a cottage, the wood finish in the two rooms with wide arch openings should be the same. The Oregon pine will take a soft brown stain admirably and this will be more in harmony with the rich tones of your Oriental rugs than ivory wood-work. The bed room may have the ivory finish and more delicate tones in rug and on wall. A rich old blue would be a good choice for the dining room wall, while a dull gray blue or green in the living room would tone in well with it. The cement facings of fireplace should not be just the same color as the wall, but could be a grayish shade and marked off in squares while wet, as if square tile. The cement should meet the mantel shelf. A plaque will not look well below the shelf but would be preferable to the mirror above it.

There is no better treatment for your Oregon pine floor than a brown oak stain, shellacked and waxed.

Do not see how you can dispense with shades under the window draperies. It will be perfectly proper to use small diamond shaped panes in upper portion of large window. Or if an oriel be used, all the panes can be small. Art glass would not be appropriate. The sash doors may have the entire upper half glazed in small panes or two rows across the top only, depending upon the amount of light desired. The door leading from dining room into pergola-porch might well be entirely of glass.

Page 130 in our book "Practical House Decoration," price $1.00, gives a picture of a window thrown out as you desire. This book will also give you many charming ideas for your house which want of space forbids here.

M. J. S., Piper City, Ill.

Q. What would be a good color to tint living room, south exposure, red brick fireplace? Wood work Georgia pine. Dining room finish of wood-work, Flemish oak. I prefer old blue for tinted side walls and drop ceiling to plate rail of ochre. Please give me some information for beam ceiling. How deep should beams be and how far apart?

Ans. In dining room, with Flemish oak finish, tint ceiling and side wall to plate rail a warm, light gray, as nearly as possible the color of fresh putty. Below this use a very soft old blue, with a good deal of gray in it.

For the living room, with red brick fireplace and Georgia pine woodwork, tint the side walls a light olive, rather dull in tone, and not much, if any darker than the wood-work. If the wood-work is not varnished, is merely oiled, would it not be possible to give it a greenish, or brown, tone? In that case, you could use a deeper green, or golden brown for the walls.

The depth of the beams for a beam ceiling depends somewhat upon the height and size of the room. Assuming that your living room is of ordinary size we advise you as follows. If the ceiling is nine feet from the floor make the beams six inches by six inches. If the room is nine and a half feet or ten feet high make beam six inches wide by eight inches high. It is best to not place the beams nearer together than three feet as it is hard to miss them with the end lights on a gas chandelier. They can be from three feet on centers to four feet with good effect dividing them equally in the space across the room. They should be a half beam all around the room at the sidewalls, placing the picture moulding one-half inch just below. Run the beams the long way of the room for the best effect.
Is it pure air that heats your home?

Keeping your rooms warm in winter does not necessarily mean that you are heating your house hygienically. *What kind of air* is the important question. Is it fresh and pure and constantly changing like summer atmosphere? Or is it dead and vitiated—the same air heated over and over again. Steam and hot water systems simply heat the air of the room without making any provision for *ventilation* or fresh air supply. Ordinary furnaces on account of their construction cannot supply an adequate amount of fresh air and *must* fill the house to a greater or less extent with an overheated, lifeless atmosphere that is the cause of many winter colds and headaches.

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KEITH'S MAGAZINE
ONE of the matters which face every woman who is at the head of a household, is the question of a fair rate of payment for the various services which she is compelled to hire. In the case of domestic service, the matter is settled for her. Not their most zealous friends will venture to assert that domestic servants, general or special, are not amply paid. Having no living expenses to meet, except for clothing, they are far and away the most prosperous section of any community of laboring people. If not exactly a form of union, their interests are protected by the law of supply and demand, and their wages increase from year to year, in a way gratifying to themselves and disquieting to their employers. The conditions of their work, doubtless, might be improved but, as to its adequate remuneration, no one need disquiet her soul.

But there is another class, of what may be designated occasional help, whose pay is very much below anything which can be called a living wage. Women who cheerfully hand out twenty-five dollars a month, to a very ordinary cook, will jump at the chance of getting napkins hemmed by hand for thirty-six cents a dozen, when the department stores charge a dollar and a quarter to their own customers, and more to outsiders. One woman, in a New York suburb, is kept busy hemming table linen, at these remunerative figures, and woe betide the unfortunate person who endeavors to get a higher price. It may be stated, as a fact of general acceptance that all hand work done by women is poorly paid, and the finer the work the poorer the pay. Among men, the same thing is true of unskilled laborers. The man who has no specialty is in exactly the same situation with independent female workers, though for a different reason. His plight is a matter of supply and demand, and hers is due to her readiness to work for a pittance.

The instinct of the average woman is to save money, one way or another. Every woman has her pet economy, although it may march with great extravagance in other directions, and few of us can resist a bargain, whether in taffeta silk or labor. On the whole, the impulse is a good one, when indulged within bounds, but it should not be allowed to conflict with one's plain duty to one's neighbor. If one is not willing to pay a fair price for work done, better go without hand-sewed linen or embroidered shirt waists, rather than be responsible for lowering wages below a reasonable point.

It may not be possible to avoid partaking in general economic injustices, but one can refuse to perpetuate particular ones, even at the expense of denying one's cherished instincts for saving.

* * *

Nothing so simplifies the labor of housekeeping as a habit of order. This habit has numerous manifestations, punctuality, regularity, tidiness, all of them necessary to the systematic disposal of time and energy. Of the three, although it may seem a hard saying, tidiness is the most essential. Without it the domestic wheels are hopelessly clogged, mistress and servants wade in a constantly gaining tide of rubbish. It requires, it is true, considerable firmness to dispose of things as one goes along, but it saves time in the end.

The bookish household is almost swamped with the constantly accumulating mass of papers and magazines; the specialty of another sort of family is rags, wrapping paper, string and paper boxes; still another revels in what may be termed junk.

Entitled: "The Bookish Household"

A household which is not swamped with the constantly accumulating mass of papers and magazines; the specialty of another sort of family is rags, wrapping paper, string and paper boxes; still another revels in what may be termed junk.
Every family has to formulate its own system of dealing with useless things, not necessarily rubbish and possibly of use to other people. In the large cities the Salvation Army makes a specialty of collecting papers and all sorts of household debris. An occasional rummage sale relieves some people of their possessions, only to unload them upon someone else. The Charity Organization Societies have ways and means for many things which are no longer of use to their owners. The hospitals cry out for magazines, while barrels of periodicals and books sent to the nearest quartermaster’s department will receive free transportation to distant posts. There are also recognized agencies for supplying outgoing sailing vessels with cast-off literature. The systematic mailing, week by week, or month by month, of a paper or magazine to some far-off clergyman or teacher, confers an amount of pleasure and profit utterly out of proportion to the slight effort involved.

In smaller places, channels of distribution must be hunted out. Discreet inquiry of the maid or the washerwoman will often elicit valuable information as to the needs of other people, and the rubbish of one class is sure to be the treasure of the one beneath it. There are almost always old women who make patchwork or silk or woolen rag carpeting, who are enchanted with bundles of pieces. The washerwoman, who cannot read, or the Italian cobbler welcome a package of old newspapers. The small storekeeper, on a back street, can make excellent use of your accumulation of wrapping paper and string. The heavy iron utensils, which have been discarded for lighter enamel ones, are exactly the thing which some poor mother of many would buy, for herself, if she had the money.

For the things which are absolutely worthless to anyone there remains the swift and thorough destruction of the furnace fire. Laid on its bed of glowing coals, with all the draughts wide open, how quickly the unwholesome and the unsightly is transmitted into clean white ashes. Failing the furnace, the empty kitchen range can be used, a wad of paper saturated with kerosene, placed in the middle of the mass to be burned, greatly assisting the process.
As a daily distribution, or destruction is out of the question a supply of scrap baskets is essential. Every room should have its receptacle for matches and scraps of all sorts. Other things should be conscientiously collected each day and put into some retired place to await distribution. System of this sort is the only refuge from intolerable confusion, and it should be enforced upon children as well as on their elders.

So much for clean rubbish. As to the deleterious sort, soiled and odorous cloths, and the like, instant cleansing or destruction should be its portion. To effect this is one of the greatest difficulties the mistress of servants has to contend with. A disposition to procrastinate in such matters is inseparable from the notions of the servant class. The floor is cleansed but not the scrubbing brush, the dishes but not the dishcloth. As for burning up a soiled dishcloth or a worn brush, it may be that poverty has inculcated a tender feeling for anything which has cost money.

* * * *

As autumn is becoming more and more the season of removals, it is quite likely that a number of our readers are anticipating a change of domicile. To them the economist extends her sympathy, and would also advise them upon some points, in reference to which a melancholy experience has made her wise.

For instance she would suggest a comparison of the relative sizes of bath tub and hot water boiler, as it is not unusual to find the latter so small that a really hot plunge bath is an impossibility.

Again she would advise a study of the position of the cold air box of the furnace, as a good many of them are so built as to conduct the northwest wind to the furnace, and with such an impetus that they do not pause long enough to be heated before dispersing themselves through the house.

The inclination of bath tubs and wash tubs should be noted. In many cases it is so slight that there is a continual accumulation of stagnant water, neither clean nor healthful.

Unless one is anxious for a case of diphtheria, it is imperative that the waste pipe connecting with the sewer main should be carried through the cellar above ground. A buried waste pipe may leak for years without detection.
A little thought has been taken earlier in the season, there will be a profusion of flowers for table decoration, in early Autumn. Nasturtiums, are of course, the principal reliance, and their range of color is so wide as to fall in with almost any scheme of decoration. Delicate pink verbenas and mignonette are a quaint and somewhat old fashioned combination, and mignonette is charming with ferns. An old fashioned flower which blooms so abundantly that one may indulge in great masses of it is coreopsis, a tall vase of it giving a delightful note of warm color on a chilly day. Gillyflowers and wall flowers have the same delightful brown and red tones and mass better. Later in the month, cosmos sends up its profusion of delicate blossoms, which last until chrysanthemum time.

When it is desirable to use ferns or other plants growing in some receptacle which would be likely to soil the tablecloth or centre-piece, a bit of thin sheet brass, which can be had at any hardware store, can be fitted to the bottom, allowing half an inch to bend up around the edges, making a sort of tray, quite unnoticeable but protecting the table perfectly.

Early autumn is the season for crab apples. They make the best sweet jelly there is, if one excepts old fashioned apple jelly, which no one has the time to make in these hurried days. The flavor is much improved by the addition of two or three rose geranium leaves to the boiling jelly. That is if the rose geranium leaves can be found. Florists seldom have this once popular plant. It is worth while getting and keeping one for the sake of having the leaves for finger bowls.

The large Siberian crab apples make a good pudding. The fruit should be washed and cored, not pared, and cooked with a little sugar and water until tender. The cooked apples are arranged in a baking dish or pudding mould and covered with a rather thick batter, made with prepared flour. The pudding is steamed an hour and a half and eaten with a hard sauce.

A point in table furnishing too often overlooked is the harmony of the table service with the furniture and decoration of the dining room. It is taking people a long while to learn not to use Limoges china in an Arts and Crafts dining room, or blue china with red walls. When one has a variety of china it is well to have the dining room scheme to some extent a neutral one. Almost anything looks well in a golden brown room. For a blue and white room one must have blue china. Blue china itself looks equally well in a yellow, a blue, or a green room, always provided that the green is the right shade. Green India suggests a green room, and a certain ornateness of finish and decoration. With the ordinary Arts and Crafts room, some of the brightly colored English wares, of which Queen Wedgewood is more or less typical, are very satisfactory. In this as in all other matters of the sort it is well to avoid a jumble of colors and styles. One of the most satisfactory dining rooms the writer knows has a plain light gray wall, with an upper fourth of a blue and white Morris paper, a blue and white rug, blue and white plates on the walls and a table
service of cheap blue and white Japanese china, reinforced for platters and covered dishes with plain white porcelain.

* * *

At a recent cooking school exhibit, the salads were unusually attractive. The limit of novelty has probably been reached, but some of our readers may like to be reminded of things seen but forgotten.

An individual service of fruit salad was arranged in a ring, made by cutting a thick slice of pineapple, with the peel left on, and scooping out the pulp leaving a wall about an inch thick.

A salad of whole bananas peeled, rolled in mayonnaise, then chopped nuts, each banana laid on a lettuce leaf, had the dressing heaped up in a cup of lettuce leaves in the centre of the platter.

Poinsettia salad was made from large, ripe, but not soft tomatoes. The skin was divided with a sharp knife, into four sections, carefully peeled off and turned back to form petals. The same thing was done with the layer of pulp just below the skin. A tablespoonful of mayonnaise formed the centre of the flower. A number of these large red blossoms were arranged upon a bed of lettuce.

* * *

In making dressing for a fruit salad, an important point is the use of lemon juice instead of vinegar. Only fruits with a certain amount of acidity should be used for these salads, which are most appropriately served as a separate course at luncheon, or supper. Also, it is well to be sure of one's public, as, like a good many other modern inventions, they are caviar to the general.

* * *

For an easy sauce for a suet or apple pudding, try the old-fashioned dark brown sugar, carried by fancy grocers. It is almost as good as maple sugar, and much cheaper. There are two kinds, the very darkest being used only for fruit cake or plum pudding.

Beautiful and expensive table linen, for great occasions, is loaded with lace and embroidery. The lace is often of two kinds, old Italian filet, or its modern reproduction, and Cluny. The embroidery is of the eyelet sort, a plain space left for the insertion of a monogram or an initial. Lace-trimmed and embroidered napkins accompany these cloths which are nearly all circular, and whose price mounts up into the
Table Chat—Continued

...hundreds. They demand the most elegant appointments and are, of course, utterly out of place in any ordinary establishment.

The majority must content themselves with satin damask, more or less heavy. As everyone knows, it pays in the long run, to buy double damask, but too often though the spirit is willing, the purse is weak. The coarsest of pure linen is a better purchase than the much advertised Mercerized fabrics, which deteriorate with every washing and have a most undignified old age. Linen, on the other hand, looks better every time it comes out of the tub. It should never be allowed to get dirty enough to need hard washing, which is more destructive than actual wear. It should be ironed with as few folds as possible and these should be frequently changed.

There is very little change in the designs of table damask. As for several seasons, the patterns are almost exclusively floral. The old-fashioned set patterns, like the Duke of Leinster and the Queen’s Household, seem to be no longer made, or at least not imported.

Circular tablecloths are embroidered in the center of one side, just above the border, the monogram or letter being in script. Square or oblong cloths are marked in either of the right hand corners. A similar and smaller initial adorns the napkins, and is placed straight and not diagonally.

Speaking of scissors, how many kitchens boast of a really serviceable pair? Yet there are endless things which can be done with them much better than with a knife, besides the fact that a women uses her own especial implement much more effectively than she does a knife. For shredding anything, for cutting very narrow strips, for seeding raisins, or for cutting fine herbs, the scissors are preferable in every way. They seem too to retain their sharpness longer than a knife. The well equipped table is supplied with grape shears but, in default of them, a pair of rather large surgical scissors need not offend the most fastidious taste, and they can be taken apart and thoroughly washed and polished.

Norwegian pot cheese may be experimented with by people who live within range of a Norwegian settlement. It is like Roquefort in taste, with an addition of caraway seeds, although its texture is different. It is very good for sandwiches of brown bread or pumpernickel.
Q. Kindly state in your columns what constitutes a one-and-a-half story house. This question is up for debate here.
Ans.—We will probably meet with as much trouble in trying to define clearly to you what constitutes a one-and-a-half story house, as the carpenters you have already consulted. We will give each of these gentlemen credit if their ideas differ from ours, by saying that it is largely a matter of opinion. It is merely a trade expression which has never been clearly defined.

Our idea is this regard is as follows: The first story should be full height and should be from eight to ten feet high. The second in that the upper portions of the outside story differs from other “two story houses” walls are cut off on a slant by the roof, leaving the vertical walls below this slant from three to six feet high. They should be at least five feet high to allow for the placing of furniture against the wall. If this vertical wall is higher, doors can be placed in it and the space behind used as a closet. The ceilings in the center of the rooms are of course full height.

* * * *
Mrs. W. F. G., Missouri.
Q. I find in building that after fireplace is in, there is not enough room to put mantel and shelf as planned without crowding the passage way at side of fireplace. Had thought to leave mantel in rough brick and either run shelf around the room and across mantel sufficiently high to be well above head or leave fireplace in rough brick ceiling. Can hardly decide. Can you offer some help?
Ans.—The difficulty which you have encountered with your fireplace built corner wise is often met with in a fireplace of this description. It is not at all essential to have a shelf or mantel to your fireplace. In fact, many of the finest looking old time fireplaces have this feature omitted. Since the fireplace is in the dining room, we would suggest placing a shelf in the nature of a plate rail on a line with the top of the casing of adjoining door. This should be grooved on top to receive the plates.

We do not think you would be pleased with a common brick facing unless your common brick is of a much superior quality and of a different color than those we obtain here. We advise you to go to the little additional expense of a pressed brick facing in some shade pleasing to you. Painted brick never looks well as it always smacks of imitation. If you desire it, you can place a secondary shelf about four feet from floor which will be some shorter then, and return against the face of the fireplace. The brick facing should run up to bottom of the top shelf or plate rail.

F. N. Y.—Kendallville, Ind.—
Q.—I have a brick factory chimney 65 ft. high to construct for 45 horse power boiler to use a cheap grade of soft coal. Please give outline and description through your columns as to the proper method of construction for same.
Ans.—A chimney 65 ft. high for 45 horse power under forced draught, should be built only from detailed drawings. Its construction involves important engineering problems that makes it almost necessary for you to engage the services of a competent architect or engineer. We are pleased to recommend to you Mr. ing.

* * * *
A. T. M., Cincinnati.
Q.—If you are able to give me the address of a house which sells canvas, or whatever material it is they use for the outside of buildings under gables and such places, I wish you would be kind enough to do so.
Ans.—We cannot recommend the use of canvas for this purpose, even though in places where there is protection such as in gables and cornices. It is bound to get wet and rot out. The fact that it is suggested to paint this would not remedy the matter.


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O OWN a purling, rippling brook whose course may be made to stray aside and form a pool of still water encircled with rocks and sedges is indeed to be envied, even to own a stagnant pool of muddy water is a condition by no means to be despised for the presence of stationary water, however ful waste of opportunity than the letting go unimproved these little natural water bodies, whether of marshy land or running stream. Left to themselves they frequently breed pestilence, certainly they breed mosquitoes, while if cultivated, planted with water-loving plants, especially the nymphaeas and lotus, they noxious, evidences the presence of a clay or water tight bottom and surface conditions are usually susceptible of improve ment or amelioration.

And as still waters are the conditions loved by the fragrant lotus and water lily, and as the presence of any growing plant clears and purifies the element in which it grows, one has but to combine the two in sufficient quantities to set free natural forces which shall make for beauty.

It seems to me that there is no more will-
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Home Grounds—Continued.

upon they usually take the form of the
more or less conventional basin or pool,
the construction of water gardens along
natural lines involving an expenditure rath-
er beyond the means of the majority of
people. The possession of a conventional
pool of even limited area is by no means
to be despised and may add a subtle charm
to the lawn or garden impossible of achieve-
ment in any other way.

The open lawn affords a lovely setting
for the lily pool, where it glimmers like a
jewel on the green expanse. Or it may be
fittingly made the center of the flower gar-
den or form the motive for a garden walk
or pegola.

The best form of construction for the
formal pool is the concrete one. This, if
well constructed, will defy frost, be water
tight and attractive in construction. It
should be constructed with a wall of not
less than eight inches in thickness, laid with
seven parts sharp sand and gravel to one
part cement and coated inside and out with
a three to one coat. The excavation for
the pit should be about three feet deep,
this will allow for a cement floor about
six inches through and the wall extending
above the level of the ground about six
inches will give an inside depth of about
three feet, which is sufficient for the pur-
pose. All water lilies do better in shallow
water, the nymphaeas doing best in two
feet of water, while the stately lotus re-
quire but one foot of water over their
roots.

Quite simple provisions for drainage suf-
fice and indeed give better results than
more elaborate achievements of the plumb-
ers. In my own pools an arrangement that
has worked satisfactorily consists in a deep
hole dug in the bottom of the pool before
the bottom was laid and filled with gravel—
there being no natural gravel deposit avail-
able. Into this a five-inch tile two feet long
was sunk and the bottom cemented secure-
lly about it. It was then fitted with a
wooden plug and this too cemented se-
curely. A half inch hole was bored in this
with an auger and a rod of hard wood,
long enough to extend above the water, was
thrust tightly therein, the swelling of the
wood making it absolutely water tight. Be-
fore the earth was filled in the pond a
twelve inch tile was placed over this outlet
to prevent the earth settling about the plug
and working it down when it was removed.
This has worked perfectly, the only trouble
occurring when it is necessary to remove the plug for the escape of the water in the fall, but that is accomplished by wrapping one end of a wire around the plug and the other around a crowbar, held over a block so that the rod may be pulled in a vertical manner and the presence of the tile in the pond serves as a hiding place for the fish who are very fond of lurking in its cool, dark depths.

The question of getting water into the pool will depend upon the water supply, if city water is available or there is a water system upon the place the matter resolves itself into a simple matter of piping, but where there is no water system the question becomes more complicated. If the pool is lower than the well which supplies the house with water, water may be piped from there, or if the distance is not too great, it may be pumped through a hose, the preliminary filling in the spring being the only serious question, as in a well constructed pond where there is no leakage, the usual rainfall will generally be sufficient to keep the pool full.

One such pool which I know of has a water pipe laid below the frost line from the well to a stand pipe near to but hidden from the pool by a tall clump of ornamental grasses, from whence it is conveyed to the pool by a hose. This arrangement proved very satisfactory and inexpensive.

About a foot of soil should be placed in the bottom of the pool, and if possible, this should be placed as soon as the cement is set, as the more quickly the water is gotten into the pool the more satisfactory will its construction prove, in any case the cement must be kept covered with wet carpets or blankets continuously until the water is in, otherwise it will dry porous and the water seep through, causing much annoyance, this is especially the case where water must be pumped in by hand as any leakage then proves a serious matter, with city water a leakage is of less consequence, tho not to be desired under any circumstances.

The best soil for the purpose is marsh earth with old, well rotted cow manure thoroughly incorporated. Over this it will be well to spread an inch of two of fine white sand. This will prevent the dark earth rising and fouling the water and will prove very attractive when seen under the glamour of the flickering water.
In planting a pool with lilies one must guard against overcrowding and select those varieties which will do well in restricted quarters.

It is not advisable to try to grow the nymphaeas and lotus in the same pool, but if this is done the pool should be divided by a low partition of wood, cutting it off as much as one desires to devote to the lotus, otherwise the lotus will quickly take possession of the pool to the exclusion of everything else.

The lotus prefers shallow water—not over a foot deep, and where they are to be grown in the same pool with the nymphaeas the soil on that side should be raised at least six inches to afford them the shallow water they love. There are many beautiful varieties of the nymphaeas but it is doubtful if the amateur can do better than to invest in a few roots of the older form N. Speciosum, but if one has a pool devoted to the lotus one may add the pure white Shiroman and the deep red of the Perkinensis rubrum.

The most satisfactory white nymphaeas is found in Tuberosa Richardsoni which is more generally admired than the pink and rose varieties even. Marliacea rosea is a very satisfactory pink of loveliest color and unceasing bloom, being found in bud when the ponds are opened in the spring and continuing until late in the fall.

Its manner of growth is very satisfactory as it spreads out and makes room for itself, and does not crowd back upon itself as is the habit of M. Chromatella, a pretty lemon colored variety, a free and continuous bloomer, but inclined to stay in one spot and hide its flowers with too rank a growth of short stemmed leaves which need to be frequently thinned out to allow the flowers to show. Indeed it is necessary to clear away the leaves frequently during the summer after the pond has been established two or three years and all imperfect or faded leaves should be severely thinned as leaves standing up in the water are not only ugly of themselves but invite the attack of the troublesome louse, the bane of the water garden, as long as the leaves are kept floating there is little trouble to be apprehended especially if the plants are washed thoroughly every day with the hose. When the lice do appear the remedy is to remove as many of the leaves as possible and then to apply kerosene emulsion with a force pump and to do it thoroughly, seeing that it reaches everything above water. Kerosene emulsion...
should never be applied when the sun is on the bed but rather after it has sunk below the tops of the trees, otherwise it will cause much damage.

In considering the removal of the leaves the question of reaching those near the center of the pool will naturally arise as only a limited number can be reached from the curb. The most satisfactory way I have found is to place a stout ladder across the pool from curb to curb, over which a board can be laid to stand or kneel on, this need not necessarily be as long as the ladder but it should be securely placed and one should avoid stepping on the ends as an involuntary bath in a miry lily pond is anything but a pleasant experience as I have found from experience, it is also bad for the pool and not to be encouraged.

Most of the white and pink nymphaeas are hardy but one must go to the tender nymphaeas if one desires the blue or violet shades and these may be purchased of the florists who make a specialty of water lilies or may be grown from seed, flowering the first season if given an early start, but of course the flowers will not be large, however, if the roots are taken up and wintered in a greenhouse of warm conservatory they will give fine blooms the second year and are always greatly admired. The blue Zanzibariensis are very desirable varieties of this color as also is N. Capensis—beautiful of flower and of the easiest culture.

In the fall after the weather has become cold enough to freeze the surface of the pool, the water should be let off and the crowns of the plant protected by turning shallow, loose boxes over them; the basin should then be filled with dry leaves piled high and the whole covered with boards to keep off the rain. A regular cover high in the center and sloping to the ground on all sides such as are used to cover fountains, or a frame covered with canvas which is painted or oiled is best, or a frame made in two straight sections like the sides of a roof, as long as the width of the pond and a little more than half as wide may be used, or even a stout pole, supported in the middle may be laid across the center of the pool, the ends resting on blocks of wood or stones to elevate it somewhat higher than the curb may serve to support boards placed to shed rain and covered, if possible, with oiled canvas, oil cloth or anything that will shed water, as unless the leaves are kept perfectly dry.
they will not keep out the frost, but with a sufficient supply of dry leaves the pond will endure the most severe weather untouched by frost.

When the pond is opened in the spring and the leaves removed it will be found that a thick layer of black mould has gathered on the surface from the decaying vegetation of the year before. This may be peeled off and used to enrich the lily pond, as if left on it will in time raise the earth in the pool too high so that sufficient water cannot be supplied.

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Painting Over Cement.

After a cement surface has stood exposed to the weather for a year it is safe enough to paint over it. But it will not do to paint a cement surface under much less time than that, unless the surface has first been sized with acid water, to kill the alkali, and even then there is some danger of bad results. Here is a somewhat tedious method for preparing and painting such a surface, but it has the sanction of some of our best painters. Slack one-half bushel of fresh stone lime in a barrel, and add in all 25 gallons of water; when slacked, and cold, add six gallons of the best cider vinegar and five pounds of best dry Venetian red. Now mix well and then strain through a fine wire strainer. Use it when about the consistency of thin cream. Give the cement surface a coat of this, and after standing a day or so apply a coat of red lead and linseed oil paint. After this has dried you may paint the surface any color you wish. Some jobs require two coats of paint over the red lead paint. In this case make the second coat of paint serve as filler and paint both. This second coat may be made with plaster of paris and oil, of the consistency of buttermilk. Then break up some white lead and oil to make a paint the same consistency as the plaster paint. Now take equal parts of each of the two mixtures and "box" them together, and thin to a working consistency with turpentine. This second coat should be applied as heavy as possible, or as heavy as you can spread it well. After this coat is dry apply your next and finishing coat of paint, which should be quite glossy, or about as you would for the last coat on woodwork outside. The object in giving it this plaster paint is to prevent the running and wrinkling of the paint where considerable paint is to be applied to the surface. And it must be made to dry quickly, so that you will not likely give the finishing coat before the second coat is dry enough, for if you do that there will be blistering or cracking. Observe particularly that no plaster is to go in the last or finishing coat.
Splinters and Shavings—Continued

Improved Varnish Oil. A German inventor has patented a process for preventing the formation of coagulum, due to the impurities in oil when boiled for varnish. A small proportion of an alkali, preferably quick or fresh slacked lime in powder, though other alkalies or their carbonates may be used, is added to the oil, the amount ranging from one-eighth to one-half per cent of lime, and that of the other caustic alkalies or carbonates varying in accordance with their molecular weights. Under this treatment oil can be heated to temperatures of 250 degrees C. to 300 degrees C., and will furnish a clear varnish, free from turbidity or coagulum.

Artificial Linseed Oil. A substitute for linseed oil must contain rosin to give it the proper specific gravity, and this causes a crude precipitate that manifests itself when the oil is used with mineral pigments. A recently patented process gets over this difficulty in this way: 1,750 pounds of American K rosin is heated with 116 pounds of concentrated acid (sulphuric) until all frothing has ceased. This gives sulphoabietic and other sulpho acids, together with other matters. The product is mixed with 2,500 pounds of second-rate kerosene, yielding an excellent article of about the same sp. gr. as linseed oil, and very much cheaper than the real thing. It has no action on white lead nor mineral coloring matters, and it keeps perfectly well and has good drying qualities. All of which, if true, is of the utmost importance to the paint world.

Fireproof Paint. The best that may be said for the so-called fire-proof paints is that they can retard, or at least not assist the fire’s progress. Many paints have appeared on the market, claiming to be unaffected by fire, but these claims have not been well established in fact. A recent patent has been issued for a fire-proof paint that consists of equal parts of finely powdered carbide of silicon, and semi-liquid silicate of sodium, and from three to ten parts of calcium carbonate in one hundred parts of the composition. Such is the formula in the rough.

Again, is there a very considerable demand for a fire-proof paint? With most of our modern construction of iron or
Splinters and Shavings—Continued

Steel, and concrete or cement, with very little really combustible parts, what need for the fire-proof paint? Reasonably efficient fire-proof paints have been placed on the market in recent years, but the demand for them does not seem to have made the business a paying one. Not long since a western concern that was advertising a fire-proof paint somewhat extensively, and whose products seemed to have proved satisfactory, got into involuntary bankruptcy, owing no doubt to the lack of sales.

**Water-Oil Paint.**

A paint combining the advantages of oil paint with those of a water paint has long been needed for certain kinds of painting, and we have at last found it in a product of the Muralo Co., of New York. It has long been known that oil and water would mix, contrary to the popular impression that they would not, but it is only now that we have secured the right article in a commercial way, and the results from its use are perfectly satisfactory. There are many cases where the water-oil paint can be used to save the expense and other disadvantages of oil and turpentine paint, though it can never take the place of the latter entirely, of course, nor perhaps to any very great extent, but the field of usefulness for the water-oil paint is a wide and growing one and there is no doubt of its success in both a decorative and a financial way.

The Importance of Putty.

Pure linseed oil and whitewashing putty is essential to the good result of painting as the paint itself, almost at least. It is made and is not difficult to buy. But there is much false putty on the market, and as it is usually a penny or so cheaper than the good article there is danger of the contracting painter using it. The best putty is made from the best finely bolted gilders' whiting, or English Cliffstone whitewhite, and pure raw linseed oil, usually in the proportions of 85 pounds of whiting to two gallons of oil. But it is important that the two ingredients be well kneaded together, for upon this depends the working and wearing qualities of the article, in addition also to a sweating that it must have after it has been sufficiently kneaded; this consists in allowing it to lie in a mass for two or more days in a warm room. To make a putty that will harden and dry quicker, add some dry white lead.
Splinters and Shavings—Continued

to the whiting. A still harder putty is made by the addition of dry red lead. For sky-lights add white lead and some glycerine, to make the mass somewhat more elastic.

* * *

White spots on furniture that are not due to the action of alcohol may be the result of the action of water. But this could be possible of varnish containing rosin, though not in the case of varnish not containing rosin; rosin being easily affected by water and alkali. When a varnished surface shows these white spots from the action of water or dampness the only remedy lies in revarnishing the wood.
Results of Adaptability to Location.

By Una Nissen Hopkins.

"There is no excellent beauty that hath not some strange proportion."

O successfully introduce a house into a pastoral landscape is a difficult task, and demands the most careful discrimination in the selection of plans, material, mode of construction and even color. The best method is to adhere as closely as possible to nature.

The house illustrated gives hints that may lead in other instances to a pleasant realization in the erection of suburban or country homes with somewhat similar setting.

This house is built in the country where acres are as cheap as very small lots usually are in cities or large towns, so that its rambling proportions are of no consequence.

The varying line of the roof conforms with the wavy outline of the foothills behind it, and still above, rises the snow-capped peaks of the Sierra Madre Mountains. In the foreground is a grove of live-oaks, though the house is not cast in its shadow, but far enough distant to receive the full benefit of the sun, since it was built primarily for the health of a family that had been housed in a large city.

In color it is a soft wood-brown, including the roof, and the lichen colored cobblestones used for chimneys, foundation and fire-places were found in the immediate vicinity. The chimneys begin with very large stones, virtually boulders, and are used in natural graduation, the smallest stones appearing at the top, the chimneys being finished by cement caps. Likewise these
boulders form the base of the foundation, being graded in the same manner; and at each corner of the house a particularly large one is conspicuous. Neither in the foundation, the chimneys nor the fire-places has more cement been used than was positively necessary, giving the impression that the stones have simply been piled up. The only expense in connection with securing the cobblestones was the labor. They have been most generously used in each instance, which is fortunate, for what is more deplorable than a compressed stingy looking chimney or a small inhospitable fire-place in a country home, to say nothing of the hazardous results likely to follow economy of material in the building of foundations.

The house is constructed in a manner that is finding no little favor in the erection of, comparatively speaking, inexpensive suburban homes and country houses of one story. It is boarded up and down—inside and out and battened. While this construction certainly furthers the notion of simplicity, it is very effective and less expensive than the regulation finish for exteriors—or interiors of lath and plaster. However, the lumber seasons. On either side of the studding heavy building paper has been placed to insure warmth in winter and coolness in summer.

The roof of the house, of which there is sufficient to satisfy the most exacting of Ruskins, and wherein much of its charm lies, is of shakes; and though low it is carefully ventilated. At a first glance the roof appears as a continuous line, but it is pleasantly broken in three heights.

As to the interior, so perfect is the harmony-with the exterior, the house might be turned wrong side out and yet be a perfect note in the landscape.
The fire-place in the living-room suggests, really, the outside chimney inverted. It is, however, better described by the photograph,—built of cobblestone with a heavy beam for shelf—which, wisely, only holds a jar for wild flowers and an Indian basket. The splendid effect of the great living-room, which takes up the whole center of the house, and is some thirty feet long, would be ruined by a number of foolish ornaments on this heavy shelf, so important is detail. The hearth is cement in which are embedded heavy stones—the same as the porch. The utter disregard of things gone before in the designing of the fire-place is refreshing. A boulder on the one side, protrudes into the room sufficiently to serve as a seat, and is covered with a small Navajo blanket. The seat opposite, which appears as a part of the wall, runs into the fire-place as it were, and is an interesting bit of detail. You enter this room from the open porch which fits into the angle of the house, through a large door, the whole of which is set with small panes of glass. The formality of a hall or vestibule has been done away with. The wood of the living-room is pine chosen for its beautiful grain, it is surfaced and stained a lighter brown than the exterior, but no attention was paid to knots—they were considered desirable rather than objectionable.

The floor is of hard wood, a little darker than the side wall, and Oriental rugs are used reservedly—enough of them to relieve any bareness in so large a room, nor so many as to give an impression of luxury, which would also be detrimental to such a house.

The book-cases, only one of which shows in the corner of the picture, do not reach the floor, but stop within the width of a shelf from it. This has the advantage in a saving of the books, for where cases are not covered with glass, books near the floor become very dusty.

The furniture is heavy, simple and abounds in straight lines. In color it is several tones lighter than the wood of the room. The library table, for instance, is very large, and the jar of flowers and bright covered magazines that are always there, make color and add to the livableness of the room. A very few pictures are suitably framed in plain wood frames. In fact there is nothing in the room that does not show regard for the fitness of things, and a care for detail. It is in the matter of furnishing that homemakers most frequently err. For it does not take so much ingenuity to build a good house as it does to furnish it successfully. And the interior, after all, is so important, and outside show is poor substitute for inside worth. The outside is casually commented on by the casual passer by, but the interior has to be dwelt with every day in the long year.

The dining-room is in the wing to the right, and has three exposures. The arrangement here is not usual. If this dining-room ran at an exact right angle with the big living-room in the center, it would be cheated of much of the sunshine it now receives, for the house faces south, but by throwing this wing at an obtuse angle with the house, the sun shines on the face of the room in the morning, still at noon, and in the afternoon the last rays reach its western exposure. This is a land where sunshine is cherished, but for that matter sunshine is important everywhere, and a positive necessity in a dining-room. This room is finished like the living-room “boarded up” or panelled with wood, as you like. The furnishings here, too, are in the mission style. The color and form of table and chairs is the same as in the living-room,
resulting in a continuity that is as restful as the woods without. Back of dining-room is the pantry and the kitchen, with the requisite cupboard and screen porch, etc.

The left wing, which runs at an exact right angle with the long dining-room, is given up to sleeping apartments. They are certainly far enough from that of the culinary department to exempt one from the annoyance of noise or unpleasant odors. Here are three good bedrooms with baths and closets. They are simply furnished as befits such a house, being somewhat Japanese in character. Japanese cotton crepe is used for draperies, the strong, clear blue white prevailing. All the necessities of comfort are here, but there has been no attempt at mere prettiness—suitable to a house of entirely different character. It is a house that might be built to advantage in the Eastern woods, especially for a summer house, or where ever there is a desire to conform to nature, and use material at hand; in the lumber regions of the west where wood is more available than plaster and wall paper, or in districts where stone may be had for the labor of gathering it.

The house was designed by architects Green and Green of Pasadena, who are particularly fortunate in their adaptation of houses to environment.

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**Little Journeys With the Architect**

**Concrete Blocks.**

*By Carlos de Gouex.*

T HAS only been a few years since we commenced to consider seriously the construction of houses and buildings out of various forms of concrete. The first experiments along this line were far from successful, but owing largely to ignorance on the part of workmen in the uses of cement and partly to the insane desire to build imitation stone houses at the price of a frame one with the consequent reduction in the quantity of the cement used, and the labor put upon the construction of the building. These "get-rich-quick" contractors who first jump at the chances of promoting, this "fad," as it was then supposed to
be, have done the concrete block business so much harm that it will take honest men producing a worthy product years to overcome the stigma of suspicion which has leech-like fastened itself to the concrete business. The concrete block business is going through the same experiences that terra-cotta went through some years ago. The early manufacturers first tried to get rich by making terra-cotta imitation stone. They failed at this and so they then tried to cheapen the material, tried mixing paint and plaster and various other methods. The result was that it took honest manufacturers many years to establish confidence with strength. We must therefore acknowledge the limitations imposed upon us and evolve a style adapted to concrete block constructions, building honest concrete block houses in the same spirit that we build brick houses and not attempt imitation "stone" (?) ones. Concrete products are as different from stone in appearance as bricks and no matter what shape or mould the blocks are made in they are not a true imitation of stone. No manufactured material ever looks quite like an original material from mother earth. Cut glass is a high art, yet the most adept at it have never been able to imitate a diamond. This fact does not, however, detract from

A Concrete Block House, with Concrete Porch Columns.

architects and laymen in the true building value of the product when properly made, but today we are proud to erect terra-cotta buildings that are put up with no idea of imitating stone ones.

This ought to be a lesson to concrete block manufacturers in at least one respect. No matter how hard and honestly they try, they can not imitate a stone house with concrete blocks. No one with any judgment has ever admitted for an instant that concrete from the mould bore any resemblance to rock faced rock work. If properly made however, there is not the slightest doubt about the equivalent of the beauty or worth of a finely cut glass dish.

It is not the intention of the writer to attempt to evolve at this time the style adapted to concrete block construction. This style, the same as all others, must be born of long experience with the article by many men. In the writer's opinion, however, the best looking house that can be obtained of the blocks on the market is one made of six-inch by twenty-four in smooth faced blocks with paneled alternated corner blocks or quoins and a smooth block foundation. There should be a beveled water table, ten or twelve inches high and the foundation
blocks would look best if larger than those above, preferably twelve inches by twenty-four inches. The quoins or corner blocks could be twelve inches by twenty-four inches with good effect. These will bond with the six-inch blocks. I would advise making all cornices and columns of wood for the present, as there is no machine that will turn out columns in their correct proportions on the market. It can be seen in the illustrations that the columns are perfectly straight and have no architectural proportions to them. The diameter of a column at the top should be five-sixths of the diameter at the base and the lower third of the shaft should be straight with the remainder diminishing on a curve to the smallest diameter at the cap. In time, no doubt, machines will be made for making columns along architectural lines. There are some materials that never look well when carried over one story high. For example a cobble stone wall looks very picturesque if but one story high or built up in the form of a chimney, but looks very monotonous if carried over an entire wall surface. So it is with concrete blocks as we have them at present. It is best to use them only up the first story and then if a second story is to be provided for, either shingle or side it up. I have stated that there is no doubt as to the strength of concrete blocks. I refer to well made blocks only, for unfortunately there are a few unprincipled contractors still left in the business who have no scruples about giving a man an inferior article provided they can make a sale, through having a lower bid on the work than a competitor. There is much dispute as to the proper proportions and materials for concrete blocks. Concrete blocks made in the proportions of one cement to four parts sand and gravel are good blocks if properly cured. More than five parts of sand should not be used. Some manufacturers use as high as ten parts sand but they have no right to do so, and sell their blocks as a reliable building material. Most city ordinances place the limit at five parts sand and insist on the using of Portland cement only. There are five important conditions on which depend the successful manufacture of concrete blocks; viz: The materials, the mixing, the quantity of water used, the condensing and the curing. The manufacture of blocks will not be gone into in detail, but stress is laid on the necessity of proper condensing. It takes 25 tons of pounding pressure to properly condense concrete blocks. The more water that can be used when mixing the
better. The water which is put on them while curing does little good except to prevent them from drying too fast and becoming lined with map-cracks; the chemical action of the cement takes place immediately after the first water is applied and the more that is used at the start the better are the results. As in bread making, enough water must be used to bring about the chemical action of the yeast. "Concrete" illustrates a novel use of concrete blocks in Nebraska. Normandin blocks were used, face out, for curbing, and plants were placed within the hollow spaces on top making a combined curb and flower bed. Five different styles of concrete blocks are illustrated; besides these are the veneer blocks. Blocks are made for 8, 9, 10 and 12 inch walls and are 6, 8, 10 and 12 inches high by 16, color they are made in red, brown, buff and other colors.

The Modern House.

PAPER I.—LEADED GLASS WORK.

By J. Taylor.

WAY back in the earliest civilization, when Art was in its infancy, staining glass for decorative purposes was practiced; and there be those who are fond of saying that then it was practiced as cunningly and successfully, as now.

Like a great many statements not too flattering to the times in which we live this is not borne out by fact as those intimately acquainted with modern development in leaded glass work know. Let those who have opportunity study well the decorative glass on the Cunard ship "Lusitania"; as I write it is being placed in position, and if it fail to beguile many a long hour on the broad Atlantic, the crossers must be set down as devoid of the artistic temperament, concerned only with the ship's cuisine, or her log, or the issue of the daily coni.

paper made possible by the genius of Mar-

Etching by hydro-fuloric acid, enameling and cutting, besides staining, and other processes, are employed to make the glass one of the special features on the ship, and the artist being of fertile imagination at once original and steeped in legendary lore, has made the interest of the whole thing great. Oscar Paterson has a personality well suited to this particular field of decorative art; the British Government, architects all over Europe, as well as the great transatlantic shipping companies consult him and hand him commissions, the result invariably being a scheme that would never have entered into the mind of any other artist.

There is yet a craving for novelty, for originality; the designer who can offer this never lacks employment.

Modern art has given a new impetus to the use of leaded glass, and work of this kind that formerly was considered artistic is now looked upon as utterly commonplace.

One of the new features is the skillful way in which the lead lines work out the design, set in masses of clear glass to emphasize the pattern, after the manner of the Japanese. The glass for a casement shown illustrates the style referred to, it introduces a touch of interest in a conspicuous quarter without diminishing the transparency of the window to any appreciable extent. The panels might be described as a study in black and white with touches of blue, green and yellow.
The lead lines give the black, the clear glass the white; the small squares along the centre line of each panel form a blue outline for a white leaf; the leaves along the inner circular line are a bright emerald green, while the flower at the top of the elongated stem is a yellow rose. Now all this is so simple that anyone with the slightest genius for drawing could design a window suitable to any special requirement, and it only calls for the services of a clever craftsman to carry it out.

Oscar Paterson makes a specialty of black lute bar to success, in his actually stimulated it.

Today I had a chat with the little man with the big mind. All around his studio there are evidences of a strong magnetic personality. Cartoons, striking panels, clever drawings, examples of new processes for stained glass, and other items of interest. But what struck me as perhaps the subtlest piece of decorative art in the glass medium, was a charming panel for a client in Switzerland, chiefly in black and white, with the legend "Come little black spinner and spin me some silk." The spider-like web of gossamer tissue, the busy little insect the central figure—a little Cupid with all the accompanying lines were as complete and rhythmical as a sonnet. I did not begin this article, however, to talk of Oscar Paterson; it was the association of ideas that switched on his personality and work. Stained glass, my recent visit to the Blythswood Square Studio, the lead lines and the clear glass in the drawing before me, conjured up Oscar Paterson.

Memory and mind are ever active, we should keep them busy in a worthy way;
thinking out schemes for beautifying the home answers to this in a pre-eminent degree.

The second illustration has a rich note of color, through which the morning or afternoon sun would be reflected cheerily into the hall.

The peacock shows against a dark blue sea; from a saffron hued sky, the orange colored moon is reflected in the water; for the rest the purple spots in the tail are conspicuous against a background of apple green, while the wall is white like opalescent glass, corresponding to the breast, neck and head of the bird.

This sounds and appears difficult, but to anyone acquainted with the art of leaded glass work it will prove simple enough.

I watched an expert at work the other day. He was engaged on a series of tiny panels 3 1/4 inches square, each of which was made up of eighty-one separate pieces of colored and silvered glass, all embedded in a grey cement, and forming the most curious mosaic imaginable. The idea originated with one of the cleverest modern decorative artists at Glasgow, and formed part of one of his original conceptions that from time to time startled the art and decorative communities over the whole continent of Europe. This might be somewhat fantastic, and in no way so decorative as the landscape panel to the right of the peacock.

The sky, and the sea, and the wall are much the same as in the other, the tall trees are rendered in dark grey green, the stern of the rose bush is dark grey, the leaves light green and the flowers pink, while all the background from the blue sea downward is opalescent, for transparency purposes. The whole subject is so fascinating, it is difficult to stop at this point. But there are other interests that call for attention; again it may be resumed, on which occasion some of the delightfully original designs of Oscar Paterson may be introduced there is nothing quite like them either in ancient or modern stained glass art.

An Interesting Denver Bungalow.

By Ora W. Alford.

A GREAT wave of Bungalow building is sweeping the country, Bungalows in all forms of construction. In the plaster finish, we have in this new western home, an ideal city residence where one's purse permits a corner lot. Built on a plot of ground about 75 x 125 facing southeast in beautiful “Country Club Addition,” it is one of Denver's points of interest.

The cement plaster is giving perfect satisfaction—it is plastered on a 9 inch brick wall—and is certainly a welcome relief from the miles of red brick so common in fireproof city districts.

The entrance proper is at the south,
opening into a hall, from which one passes to a living room at the east. This room has its own entrance at the east. The recessed book cases are a pleasing feature, also fireplace of dull rose, red satin face title. A grand piano also finds a place in this spacious room. The inside wood work is pine, finished dark brown.

From the hall one descends to the real family comfort room, a room even a trifle larger than the immense living room above. Here stands a piano for the musical members of the house party; it also makes music for nimble feet. The open brick fireplace is an ideal spot for roasting apples and telling ghost stories. Of course, the basement also contains a heating plant, storage and laundry rooms.

The cool north dining-room opens into the hall, also the bedroom wing. This southwest wing contains three chambers, closets galore and a bath with every modern luxury. The south-west chamber commands a magnificent mountain view.

From the exterior one would imagine it impossible to have any room in the attic but a visit there reveals a lavatory and three spacious chambers. One of these rooms with its electric appliances is a model sewing room.

Of course, this house cost a deal of money but the owner and his guests get value received for every cent expended. Just solid comfort at every turn. No useless lavender and gold drawing room not even white enamel is permitted to annoy one. In the chambers just a pine trim in natural finish.

For a person contemplating the erection of a real home the bungalow offers many attractions. Two and three story houses may safely be left to the new rich, the speculator and to the tenement quarters.

"One need not necessarily be rich to give grace and charm to his habitation."

—CHAS. WAGNER in "The Simple Life."
PROBABLY there is nothing in the line of wall decorations in paper to excel the English Landscape Friezes. The example here given, is called “The Elms,” and its natural landscape tones are restful and pleasing. The soft browns of the tree trunks and the greens of the foliage form interlacing arches in the foreground through which, as through a frame we see the distant, misty, blue-gray hills, with glints of water between. The two-toned decoration below is in rich and commanding tones and may be utilized for many situations. It is called “The Fiamene,” and has a handsome weave. It comes in several colorings and combines excellently with either the frieze shown above, or other designs. The black and white reproduction of course gives but a faint idea of the beauty of the decoration which must be seen in the beauty of the color effects to be appreciated.

The Use of Light Colors.

In the treatment of a room with light colors provision must be made for high lights. There must be a certain amount of lustrous surface to catch the light and reflect it. This may be supplied by the sheen of silk or the glitter of gilding or brass, preferably the former. Otherwise the whole room will be characterless. The range of ornament, too, is limited. Water colors, old prints or mezzo tints in gold frames, miniatures and mirrors and French or Dresden porcelain are about all that should find a place. The absolutely correct formal drawing room which fashionable decorators turn out has no pictures at all and very little bric-a-brac.

Violet seems to be the one color which does not combine successfully with any other. An exception is sometimes made in favor of green, but without striking success. It is better to confine oneself to white or cream color, also to choose the pinkish shade of lilacs or Parma violets rather than the blue tones of the iris.
Modern Designs
For the Home Builder

Expressing Sentimental Ideals.

Cecil B. Chapman, Arch't.
Bertrand & Chamberlain, Arch'ts.

The Semi-English Domestic Style.
Unique, Original, Artistic.
A Good Colonial Front.
From Way Down East.
A Vine-Covered Cottage.
Simple and Home-Like.
KEITH'S MAGAZINE

A Modern Conception.
In "A Modern Conception"

J. Lowell Little, Architect.

Dining Room.
HERE is something about English Architecture which adapts itself readily to the home spirit. The reason for this is sentiment. Sentiment pure and simple. The family life consists largely of the living out of sentimental ideas and making the exterior of a man's home, an expression of sentiment and unconventionality will establish a common bond of sympathy between that home and its owner. English architecture is sentimental no doubt for the reason that it is necessarily of a rambling nature, not being confined by any hard and fast rules to certain designs or proportions as is the case with the classic styles. Being of this rambling nature, it allows for a large variety of plans that are somewhat out of the square box order, thus allowing more individuality to each home of an English style.

Expressing Sentimental Ideals.

WITH these remarks we introduce two very home-like studies of the English and semi-English domestic style. The first by Cecil B. Chapman, Architect, is a simple design of good proportions and in its plan is very complete, having arrangements and conveniences that would challenge the most exacting house-keeper. This house would cost complete today about $5,000.

The Semi-English Domestic Style.

IN THE second design of a semi-English style by Bertrand & Chamberlain, Architects, we have a somewhat more American conception of English Domestic architecture. True to the principles of English home building, this house has in the first place been located upon the lot in a very unconventional way, having the entrance and porch on the side with living room and fireplace place to the front. This is quite a relief indeed and would indicate that the owner prefers his porch in seclusion for himself and not as a means of displaying the best wearing apparel of the family wardrobe. The large living room is planned with reference to the family’s comfort more than mere display. Along one end are arranged book cases and a seat. At the opposite end is a broad seat and in the middle of the room opposite the main entrance to the hall is a broad old fashioned fireplace. In addition to the usual rooms on the first floor there is a den for the owner’s private use. On the second floor are four chambers, sewing room, and many closets. $5,500 would build this home under the prevailing prices.

Unique, Original, Artistic.

THE next two homes are decidedly modern in every respect, having cement exteriors, adapted to houses of Colonial detail, which necessarily calls for a rectangular plan. While a house planned within a rectangle has not the home-like charm of the rambling plan of English style, they have the advantage of obtaining much within a small space as is often required on a city lot and are also economical in construction, thereby saving cost. The home by Long and Long, Architects, built by the Senior member of that firm, is one of the most unique homes on the broad avenue on which it stands. It was built to rent to a real estate man as a winter home and as such it was found that there would be little use for a porch, the owner preferring to enjoy the privileges of out door life at his summer home in the suburbs. There is no basement to this home, it being three stories above the ground. The entrance is into a reception room on first floor, at the end of which is a broad stairway leading to the second floor, on which are the living rooms, kitchen and dining room. The balance of the space on the first floor is used for storage, laundry, heating plant, etc. The bed chambers are on the third floor. The object of this unusual arrangement is to raise the living floor or second floor above the roofs of houses on the hill below. On the exterior of the home are many unique features, which differentiates it prominently from the surrounding homes. The roof is of slate. The wall of light gray cement. The foundation is blue lime stone with several courses of bright red brick above it. The wood trim of the house is white, making the combination in which these colors have been used very pleasing. The house was built at a cost of $12,000.

A Good Colonial Front.

THE next home by Arthur C. Clausen, Architect, built on the top of a prominent hill, is in a style which is not new to an observing layman, but in correct proportions and details as a Colonial front with two story columns and pediment, it succeeds where numerous others of similar design fail to meet the approval of one with an artistic eye. The exterior is of cement on metal lath and the plan is an economical
arrangement which consists of a stair hall through the center of the house with the rooms on the first floor on either side, thus allowing the bed rooms to be arranged in the same manner on the second floor. Probably no plan could be made in which one would get more for their money within the over all dimensions that would be better than the arrangement shown by this plan.

From Way Down East.

A BEAUTIFUL New England home such as we would find up in Vermont and Maine, is the home designed by Harry W. Jones, Architect. It illustrates admirably the object of looking carefully into the details of a design. The principle character of this home, that which gives it its personality and differentiates it from others of similiar style, is nothing more nor less than the broad siding used. This siding is made of 12 inch boards exposed 10 inches to the weather, and gives it that simple character which predominates in the earlier New England work. In other respects this home is a neat Colonial design, not out of the ordinary run of houses in this style, but with careful attention given to the details. In the plan we find a very home-like living room, having in it a large fireplace and a roomy bay, just across the hall from which is a large dining room with a bay at one end and a loggia connected with it at one side by French windows. The stairway is unusually broad, but very simple. On the second floor we find an extraordinary bed room, having a columned opening to an alcove with a fire place in it at one end and a large boudoir with a bay window at the other. Besides this there are two more chambers and a bath room. This beautiful home of simple frame construction would cost to build today about $4,500.

A Vine Covered Cottage.

TH E next two houses are model little cottage homes. Not so little by the way, when you consider the many rooms that are within them, they are built on that low Georgetown gambrel roofed Colonial style that bespeaks a cottage home at a glance and which always surprises us at the amount of room there really is in the interior. The first of these, taken from the Journal of Modern Construction, has proven to be a very popular design, owing no doubt to the fact that besides its handsome appearance and splendid proportions, it has eight rooms in it. How this is done in a

house of apparently so small dimensions, is shown in the plans. Cost to build this house complete would be $3,000.

Simple and Homelike.

THE next home in this series is a simple gambrel house by A. M. Worthington, Architect. We have come to expect from Mr. Worthington, houses of simple home-like appearance and in this instance we certainly have not been disappointed. The house is in no special style of architecture, but certainly bespeaks a cozy home in all its lines and this, after all is the principle object to be obtained. This house could be built from Mr. Worthington's plans at a cost of about $3,200.

A Modern Conception.

THE model American home is becoming simpler in its construction and design every day. There are undoubtedly two good reasons for this. The American people are adopting simpler ideals for their home life and it therefore naturally follows that the home is built in keeping with those ideals. Also, the very high price of labor and material nowadays compels us in many instances to build in a simpler way than we were wont to do a few years ago.

It may seem strange but to build a home at once simple and beautiful calls for more ingenuity on the part of the architect than to design it elaborately beautiful. As Ruskin says, "Simplicity is the terminal point of all progress." The more progressive an architect is the simpler are his designs.

The house by J. Lowell Little is built after a simple plan, both in the arrangement of its rooms and the design of the exterior. It is indeed a typically modern, American home. The first story is of wide siding, stained a chocolate or Mission brown. The upper story is shingled. These are also stained brown of a lighter tone.

Even the dormer, which so many designers fail to keep in the general style of the home, is admirably designed in the unassuming, simple style of the balance of this house. In the interior is carried out the same simple tone that distinguishes the exterior. Look at the stair balustrade. What a relief this is from the usual spindle, ginger bread affair we have become so accustomed to see, and yet, how admirably it serves the purpose, and beautifully, too.

To build this house today would cost about $7,000, including heating and plumbing.
BEAUTIFUL INTERIORS
A Very Choice Collection of 112 Interesting Rooms

This is One of Them, Shown on Page 34.

There is a fascination in seeing the inside of other people's houses, particularly where taste and the artistic atmosphere prevail. We have examined hundreds of interior views and selected from them 112 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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We have just issued an eight page folder containing a number of New 1908 Combination Offers.

FREE ON REQUEST
In the taste for more positive schemes of coloring, gray has suffered an undeserved eclipse. For the average room, the room in everyday use, of uncertain lighting and nondescript contents, it is hardly a happy choice and under such circumstances, deserves all the obloquy which has been heaped upon it by decorators to whom its delicacy and refinement did not appeal.

But gray has its uses. As a vehicle for "texture" it is unsurpassed. In silk or brocade, it shimmers, in Japanese grass cloth, it gives exquisite, silvery reflections. It is the most satisfactory of background for delicately flowered fabrics. This in its cooler tones, and who that has seen the great "Diana and her Nymphs", aglow with splendid color, against a wall of warm gray stone, in the Metropolitan Museum, could wish a better foil for the vivid hues of painting or porcelain?

The old French furniture makers, of the period of Louis XVI, understood the value of gray. They painted their exquisitely carved and finely proportioned furniture in two tones of gray, the lighter hardly darker than the inside of an oyster shell, using it as a setting for coverings of pale tinted brocades, or for panels of fine cane work. Sometimes they used a much darker shade, what used to be called stone color, picking it out with white, and this special coloring has been much employed by the makers of reproductions of French furniture of that period.

For ordinary use, the most practical thing is a wall paper, with a satin surface, in two tones of delicate gray, in a room with white woodwork. Most of these papers are striped, although one sometimes finds an all-over pattern. When a very cool tone seems desirable, there is a paper of the buckram style, in which the gray effect is produced by a clever arrangement of black lines of varying width. This is especially good with floral borders, in bright colors, being made specially for use with a crown frieze of pink roses and blue ribbons. The striped papers, which are rather old fashioned in effect, should not have a frieze, but lend themselves very well to the use of a nosegay border, at the surbase and around the doors and windows. This treatment is only suitable for a bedroom. In a parlor, only a white picture moulding should be used.

These cool grays demand pink in combination with them, preferably in a floral effect. Plain rose colored fabrics with gray are apt to give the sort of millinery result, which is to be avoided in decoration. Miladi's drawing room should not suggest her best bonnet. The heavy repped English chintzes, with their riot of flowers, and the primmer but not less beautiful French cottons, look equally well in contrast with the cooler tones of gray. Blue is seldom happy, and only in delicate shades, with no suggestion of green. One does well, also, to avoid curtains reflecting too much light. Cream colored or Arabian shades are more successful. In a bedroom, curtains of gray organandy, flowered in color, are pretty and unusual.

Gray has other uses than for bedrooms and for the formal rooms of the house. In rough cast, for the hall, or living room, and contrasted with a warm-toned, dark wood work, it is a delightful background for pictures, and is specially good above a high wainscoting, where a figured surface is apt to dwarf the room. This is of course a warm tone, which should always be used with dark wood. A still more agreeable tone can be produced with paint, and there
Decoration and Furnishing—Continued

are excellent shades of gray, in the imported cartridge papers. A couple of years ago, there was a very artistic German paper to be had. It had a gray ground, of excellent tone, checked off by fine, wavy lines of black, and was a delightful background. One fancies it may have originated with the Secessionists who do such wonderful things with black and white. A dealer in imported wall papers might have it, although the largest jobber in New York disclaims any knowledge of it.

For the small room, used for a den, or to house the spoils of travel, a gray wall is exceedingly satisfactory, being inconspicuous and restful. In its warmer tones, it has the advantage of not showing dirt, and it sets out the contents of a room to the best advantage. Japanese prints, so often horribly incongruous against an ordinary wall paper are quite at home on a gray wall. So are one's foreign photographs and plaster casts. The possessor of much blue china will find that an upper third treatment of putty colored paint, or plaster, with a white plate rail and a lower wall of low-toned grayish-blue, will shrink her treasures to the best advantage, always provided her furniture is anything but golden oak, which swears emphatically at gray and all its works.

The use of gray offers a suggestion to the domestic mechanic. Does there reside, in the attic, a set of haircloth furniture, of reasonably good outlines? Remove its sombre livery and repair the springs. Get the frames down to the bare wood, with a varnish remover, and paint them a pale gray, using two shades of the English enamel, which has so much less gloss than our native article and, incidentally costs twice as much. The first coat, under the enamel may be of gray paint, laid on very smoothly. With a covering of handsome cretonne, or light colored tapestry, the old furniture will hardly recognise itself.

For the closetless room, not so rare as it ought to be, a fair makeshift is the high, wooden screen, with solid panels, four or six in number. The folds should each be made of a single board, and should be rounded at a single board, and should be rounded at the top, and substantially hinged. The front sides only should be covered, the back and edges being painted, or stained, and varnished or waxed. It is astonishing how much can be hung on a six-foot, six-fold screen, as two rows of hooks can be screwed into each panel, and pockets for shoes and

The Selection of Wall Coverings

In choosing wall coverings due consideration should be given to the color relation of furnishings and the finish of the woodwork. The most artistic and pleasing effects are produced in interiors where walls are covered with FAB-RI-KO-NA

The rich shades afford a wide variety of harmonious color combinations, while the strength of the fabrics, their durability, sanitary value and economy all combine to make FAB-RI-KO-NA Fabrics the ideal Wall Coverings.

Fast Colors

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For the closetless room, not so rare as it ought to be, a fair makeshift is the high, wooden screen, with solid panels, four or six in number. The folds should each be made of a single board, and should be rounded at a single board, and should be rounded at the top, and substantially hinged. The front sides only should be covered, the back and edges being painted, or stained, and varnished or waxed. It is astonishing how much can be hung on a six-foot, six-fold screen, as two rows of hooks can be screwed into each panel, and pockets for shoes and
papers nailed at the bottom. Burlap is a satisfactory covering, so is Japanese crepe. Or some artistic person may be tempted to try his skill on the inviting surface of the panels. Such a screen answers the double purpose of carrying clothes and concealing the toilet arrangements of the room. It is specially useful in the room, which must be used for a sittingroom by day and a bedroom by night.

Not everyone who is interested in Colonial interiors knows of the Pendleton house in Providence, Rhode Island. Mr. Pendleton who died within a year or two, had a famous collection of beautiful old furniture, some collected, some inherited, in a fine Colonial house. This house, with its carefully arranged contents, he bequeathed to the Rhode Island School of Design, with an endowment, to keep it in perpetuity, as an exhibit of American domestic art. It is interesting, not only historically, but also as a valuable example of the proper contents and arrangement of a house decorated and furnished in Colonial style. As Providence is one of the most accessible of Eastern cities, being on the most direct line between New York and Boston, it seems as if a great many people ought to avail themselves of the opportunity to see what is, probably, the finest public collection of the sort, in the country.

Who remembers the oval, gilt frames, which used to inclose funeral wreaths, preserved by some process, and cherished by the country housewife? Many of them, doubtless survive, often outliving the memory of the dead man, for whom the wreath was made. The simpler ones can be transformed into receptacles for miniatures, silver, and small curios. Everything but the sides of the frame and the glass should be removed, and an oval board a trifle larger than the frame fitted to it. This board and the inside of the frame are to be covered with velvet, either olive or dark old rose. The oval board is fastened to the top of a small table, the curios arranged, and the frame slipped over them, tiny gilt hooks and screw eyes holding it in place.

To the same period belong oval, gilt photograph frames, in which a small sized face swam in a sea of white card board. Often the gilding is still bright and the design fairly good, and they can be used for mirror frames. If the gold is badly tarnished, white enamel paint comes into play.
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Answers to Questions on Interior Decoration.

W. J. R. Beverly.

Q.—Do you consider maple flooring good for hall and den? Also, in my dining room should the plate rail necessarily go all around the room? I would like to know whether adjoining rooms may be done in contrasting colors like blue and green?

Ans.—The maple floors are too light for den and hall, but as the flooring must be the same thruout, it is best perhaps to leave it natural. It is not absolutely necessary that a plate rail should run all around the room. You might leave it off in the corner where the high side-board stands. If you get the right shade of soft dull old blue, and the right shade of soft dull greyish-green for parlor, the rooms will go together, but a Nile green—never.

H. B. S., Lincoln, Nebr.

Q.—Our house is about ready for tinting and we are not able to get a man who will promise a tint which will be satisfactory. As you speak of tinting so frequently in your magazine, please tell us what is used and if it is satisfactory on skin coat. Also, if wainscoting in dining room and drop-ceiling are passe. We hope we have received many good ideas from your magazine.

Ans.—Tints can be used on a hard plaster finish but the effect is not so good as upon a sand float finish. The sand finish is ordered where it is intended to tint and a hard finish where it is intended to paper. Certainly, wainscoting is always desirable in a dining room. Drop ceilings are used whenever a better effect is obtained by them.

Mrs. O. M., Jr., Iowa.

Q.—We have received so many helpful suggestions from your magazine in building our new house that I feel sure you can help us in decorating it. The woodwork and floors are to be of oak and the walls of rough plaster. As the rooms are so open I thought it would be best to finish all the woodwork in weathered oak; in the dining room a darker shade as I have the Early English finish furniture. I wish the rough plaster walls all tinted. Would these colors harmonize well, and if not, will you suggest better combinations? In the dining room dark green below and then shades lighter above, leaving the ceiling a pale green tint. There is to be panelling between dark green and other. The walls of the hall and living room I want a golden brown and shaded to a tan color. The fireplace in this room is of a redish brown brick. The furniture of mahogany. The den a rich red. The furniture is all of Mission and the ceiling of broad beams. What paint or stain is best used on rough plaster? I would like some suggestions as to the window draperies for these rooms.

Ans.—Your interior as planned will be a very restful and harmonious one. It is suggested, however, to make the walls of living room one shade of green and that not too dark. A satisfying green is the hardest color to get in tinted plaster. The dark shades are apt to be muddy. If a 12 inch frieze were used of very rough finish, with a narrow wood molding below the frieze and in the ceiling angle, and this frieze tinted a shade lighter than the wall—sufficient variety would be given.

In regard to the use of paint or stain on the plaster—one of the high grade tinting preparations on the market would be our choice. Paint is more durable, but even the dull finish has a hard and cold surface impossible to blend in with anything.

As to draperies, some of the many new weaves in ecru nets, or the Madrax goods are better than lace in such an interior. Pages 116 to 125 in Practical House Decoration give helpful advice on draperies, and this department in the current issues of the magazine will certainly prove helpful.

E. K. R., Cleveland:

Q.—We are just completing an 8 room
Colonial style house. Living room and hall are white enamel and birch mahogany stain. The opening between center hall and living room is 8 feet, with fluted white pillars. Dining room will be finished in fumed oak. May we ask for your suggested scheme of decorating? I might add further that in the living room we have a corner mold. Would you have that painted white or the color of the mahogany trim? Will fumed oak finish give good service?

Ans.—The molding in ceiling angle should be white. It is difficult to suggest colors, as nothing on the floor plan indicates the exposures of the rooms. In general, soft greens are pleasing for a living room wall with white woodwork and mahogany furniture, and old blues with the fumed oak of the dining room. The wearing qualities of fumed oak in furniture would be equally good with early English.

* * * *

E. E. P., Streator.

Q.—I have a dark red Oriental rug in the parlor. The rooms have a northwest facing and would appreciate a suggestion from you as to wall treatment with this rug in mind. Also, on the second floor, the woodwork is dark and I would like to know if I may use wall papers with white back ground?

Ans.—It is advised to use the dark red Oriental rug in the hall rather than in the parlor, if possible, with warm red, two-toned paper on the hall walls. In the parlor and living room treat the walls in tones of soft tan, using a paper with tapestry effects in the living room with a more delicate two-tone stripe in the parlor. Make ceiling in both rooms light tan. This scheme would rather require a new rug for the parlor. For the bed rooms with the woodwork dark, it is not advisable to use papers with a white ground as the contrast would be too strong. You might use in the northeast chamber a plain ingrained paper in Dutch pink, with a three inch floral stripe defining the top, base and corners of the room. The Northwest chamber a design of red poppies on a cream ground. The west room a nasturtium paper; the east back room a narrow stripe in tans and yellow. There is nothing better in curtain materials than the Arabian or Colonial nets or the washable, cream Madras.
ONE OF our exchanges alluded, recently to a musical young woman who, during her vacation, had had a heavenly time washing dishes. Of course one understands that, in her case, the charm was in the rest afforded by change of occupation. After the demands upon the nervous system of many hours a day at the piano, a merely mechanical task was a rest. But why choose dishwashing, to most people, the most disagreeable of all the minor labors of the household?

Possibly the young woman had discovered that there was a way of washing dishes at once easy and pleasant. Possibly, she did it mechanically, with her thoughts elsewhere. Which was the case we may not know, but it is certain that dishwashing need not be the bugbear it generally is. Our great-grandmothers dignified it almost to the level of a function. Probably Martha Washington washed her fine china and silver herself. If she did not, she was quite unlike her neighbors, in "Old Virginia." In many old houses, North and South, one still sees the small, brass-bound, wooden tub, which was borne into the dining room, after breakfast, and set on a tray, before the mistress.

The old custom has passed away, with much else that was dainty and desirable, and today, we wash our dishes in an iron sink, with the assistance of various chemicals. If we are very prosperous and enterprising, we invest several dollars in a dish-washing machine. But no matter how the task is achieved, it is a good deal of a bore and has to be repeated disgustingly often.

The economist admits that she is not properly enthusiastic about doing things in the conventional way, and that she is apt to figure out a way of her own, when confronted with the various household problems. As to her mode of dish-washing, she only claims that it is expeditious and effective. She is quite conscious that it cuts a poor figure beside the exploits of those conscientious people who spend an hour over their dinner dishes, but she gives it in the hope that it may be helpful to someone who, like herself, regards housework as a means and not an end.

In the first place, she washes the cooking utensils, the minute they are emptied. A good cook doesn't burn her saucepans. Hot water, a little sal-soda and a minute's scrubbing with a sink broom, kept for the purpose, will clean any pan or kettle, and it can be wiped out and set on the range to dry, until the meal is over.

As the table is cleared, for the dessert, forks and spoons are dropped into a pitcher of pearline suds, or hot water and ammonia, and left to soak till the last thing. As soon as the meal is over, the plates and vegetable dishes are carefully scraped, each in turn held under the hot water faucet and scrubbed clean with a small brush. Cups and saucers and fruit plates will need only rinsing. As the dishes are scrubbed they are set at the end of the sink farthest from the drain, but not in piles irregularly arranged, so as to expose as much of their surface as possible. Needless to say, this method involves a scrupulously clean sink.

The next step is to pour over them, a few at a time, boiling water, from a teakettle of generous size. Wiping them is a short matter. In the meantime, the silver has been washing itself and only needs to be drained out and rinsed in boiling water. Save a dry towel for it and for the glasses, twirling each of the latter round in a dipper of boiling water.

The secret of easy dish-washing is the
plentiful use of boiling water. Scrupulous souls may prefer to pour it through a soap-saver, but it is not really necessary. In an emergency, the dishes may be left to drain, not wiped. After a good many trials, I incline to a plenty of cotton dish towels, as being softer and more absorbent than linen. They show strains worse, but are cheaper and can be renewed oftener.

* * * *

The Sunday dinner becomes a very real problem in the family without a maid. Even the family with one or more servants is touched by it. The traditional, midday dinner interferes horribly with church-going, also with digestion, in the case of people who dine at night, six days of the week.

* * * *

The essential thing is the necessary amount of food, not its distribution. Then why have a heavy dinner at all on Sunday? Here's a plan which works well with some people the writer knows. Breakfast, of cereal, fruit and eggs, is at nine. Prepared on Saturday, and set away in the refrigerator, is a liberal supply of some salad, chicken, lobster, or Russian, also a loaf of thin bread and butter, wrapped in waxed paper and further insured against drying up by being wrapped in a well wrung out damp napkin. These refreshments are consumed, on the bare table in the dining-room, after the family returns from church. They are supplemented, in cool weather, by cocoa, in warm weather by lemonade or root beer, or mineral water. At half past four, there is a cup of tea, with a loaf of cake, for the stay-at-homes. At half past six it is a matter of a very few minutes to cook a steak or chops, which is accompanied by a dish of spaghetti, prepared on Saturday, and merely browned in the oven, before dinner. For dessert, are fruit, crackers and cheese and coffee. All the family help in "washing up." A special effort is made to have everything specially good and abundant and, if possible, a little different from the week day food.

* * * *

In this age of dyspepsia, or perhaps of rheumatism, potatoes are so frequently tabooed that it becomes imperative to find some acceptable substitute. Rice is probably the best, hominy appeals to some tastes and macaroni to others. Dried Lima beans, soaked over night and cooked very gently, so that they will keep their shape, are very good.

Cooking rice properly is quite an art, as every grain should be separate from every other. The proper mode is to wash the rice in several waters, and cook it in boiling salted water, about fifteen minutes. At the end of that time, drain it into a colander and pour cold water over it, shaking the colander rapidly. Return it to the empty sauce pan, cover it and steam it for ten minutes, on the side of the range.

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SOMEONE says the essentials of hospitality are food, shelter and welcome. Judged by this canon, how easy is the exercise of hospitality, and yet how rare a virtue it is. The fact seems to be that the spirit of emulation, in itself so admirable a thing, and so inseparable from our native character, has very largely killed the hospitable instinct. The servant question, too, is responsible for a great deal. All of which seems a pity, for our ordinary social life is none too rich a one, and can ill afford to miss any of the amenities of cordial human intercourse.

Part of the trouble with all of us is that we are too sensitive to the opinions of other people. We are horribly afraid of the critical, cost-appraising glance of some matron better placed, socially or financially than ourselves. The servantless woman wonders if her modest festivity is not trenching upon the prerogative of some mistress of maids. The employer of one servant measures possibilities with the household where two or three maids are kept. All of which results in a very considerable social paralysis. Its only remedy seems to be in the cultivation of a certain independence of what theologians call "the sentiment of human respect." Difficult as it seems, it can be achieved, in some measure, by a resolute consideration of comparative values, a deliberate setting of annoyance and possible discomfort against present and future gains.

I say future, because so many people tend to slip into a more or less selfish isolation, regardless of its effects in later years. The disuse of the habit of social contact, of course, is responsible for many a disgruntled and unhappy old age. The ability to adapt one's self, which only social intercourses can supply, is never so much needed as in the partial dependence of old age. As for the children of the family, the benefits of a recognized social position, of an established environment into which they slip naturally, at maturity, cannot be estimated.

This, of course, is a very commercial view of hospitality, applying to its exercise as the foundation of a more or less formal social life. Any such conception of it should never be allowed to interfere with the informal welcome to one's house of those who need us more than we need them. Such disinterested hospitality may be the only form of work for others which circumstances leave open to some of us, and surely cannot miss its reward.

** * * *

Among minor aids to hospitality, may be classed the possession of dainty table furnishings. We may well take a lesson from Colonial times in this matter. The notable housewives of those days spent no money on inconsidered trifles but they invested their savings in great stores of fine linen, of china and of silver and glass, which are the joy of their descendents. One may be quite sure it was not necessary to calculate whether the cups would go round, when they had sudden influxes of company. If at all well-to-do, they tasted the pleasures of possession, in a large degree, nor was it altogether a selfish delight, for they left their treasures behind them, for the enjoyment of future generations.

It seems to be a characteristic of the pres-
ent day to spend liberally and transitorily. Our houses are filled with trifles which, at best, merely reflect the passing caprice of the moment, and a year or two later are merely useless clutter. Here comes in the value of a hobby. Given the mind intent upon one object and the silver tea-service, the dinner service of Chinese medallion ware, or blue Canton, the outfit of Bohemian, or baccarat crystal becomes an accomplished fact sooner than one has ever dared to hope.

As the holiday season draws on, a suggestion, along this line is that of the composite, Christmas gift. The writer recalls a very beautiful four-o'clock tea service, to which each of several children contributed a cup, an aunt adding, added the teapot someone else a sugar bowl and cream pitcher, and still another a cut glass tray for slices of lemon. Another woman is accumulating, by degrees, at the hands of her intimate friends, a treasure of blue Nankin.

A barn party is a suitable festivity for Hallowe'en. Illumination, with Jack-o-lanterns, and decorations of pumpkins, sheaves of wheat and ears of corn naturally suggest themselves, and there is always the treasure trove of the woods.

The bare boards of the table should be set with wooden plates and earthen steins, or mugs. The centre-piece should be a large cabbage, into which is stuck a flower for each guest, with his fortune for the coming year written on a slip of paper curled about its stem. The witch cake, a dial and hands pointing to midnight traced upon its iced top, occupies the place of honor, and each place card bears the figure of a black cat.

The salad should be served in hollowed out red apples, accompanied by sandwiches of chestnut paste. Apples, cider and doughnuts complete the menu. A great variety of souvenirs can be obtained from houses in the larger cities. There are witch-head lanterns, tiny brooms, candlesticks, pitchforks, witches, and ghost and devil candy boxes. It ought not to be difficult for someone with clever fingers to improvise some equally good, at much less expense.

The witch cake, of course, contains the traditional ring and thimble. Some sort of fortune telling is the essence of the occasion. Nut cracking and candy making is an acceptable ending to the evening's jollity.
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O. H. T., Lawton, Okla.—Q. In constructing a cement floor for veranda 9x30 ft. would it not be correct to groove the floor in blocks 18 or 24 inches square so in case it should settle or crack it would follow the grooves, or would it be better to trowel it perfectly smooth?

Ans.—Considerable experience in the construction of concrete floors has proven to us that it does little good to merely groove or mark the blocks off in squares for the purpose of making the blocks crack at these points when the floor settles. The cracks go to random just the same. The only safe way is to build the floor from wall to wall of reinforced concrete or on brick arches. If your concrete floor is all made of sand and cement and no rock or gravel, the trowel can be cut clean, then if you can get a workman careful enough to do the work and not damage the surface of the floor, this will accomplish the desired results fairly well but not entirely.

S. E. H., Idaho. Q.—I am about to have a new chimney built in my house and the man who builds the chimneys here, I think knows very little about mixing the mortar. I want to know what kind of lime, what kind of sand, and all there is about the mode of mixing it.

Ans.—Lime mortar should be of one part slacked lime and not more than four parts sand. The lime should be thoroughly burned and properly slacked before it is mixed with the sand. That is, lime which has had water poured upon it until it ceases to throw out vapor or boil. Course sand is the most desirable. It should be clean and free from grit or it will hurt the hand and not feel smooth. The mortar should be as rich as specified. A rich mortar will slide off of the shovel, leaving it smooth and clean. We recommend the use of some cement for good work. Using the proportion of one part cement to two parts of lime mortar.

G. M. L., Grantwood, N. J.—Q. I am building a suburban home and wish to provide a ventilating system. The house is to be heated by hot water and I figure on using two flues, each 10 inches round, one for boiler and one for fireplace. Will the four corner space between round tile flue and square chimney flue be sufficient to ventilate the house? What size should the two flues be to give proper service?

Ans.—The space around a round tile flue inside of a square brick casing is ample to ventilate a house of the size you mention. The heat in the smoke pipe creates a strong upward current of air around it, that makes splendid ventilation. Run from baseboard a 3 3/4 inches tin pipe from each room down outside walls to basement. Vent pipes to be brought through beam filling and run separately across basement ceiling in to ventilating flue, entering chimney in a bunch.

N. J. N., Nashville.—Q. Is there any instruction I can get on how to mix cement stucco and get a light French gray color? Also please suggest the best way to finish between walls and ceilings.

Ans.—Finely crushed lime stone and Portland cement make a light gray stucco. Crush marble scraps being still lighter. Both have been used in Minneapolis with satisfactory results and a pleasing effect. We recommend an artistic cornice at the angle of walls and ceilings of your principle rooms with the picture moulding as part of it and the lower part forming the architrave. A design for this, your fireplace, stairway, beam ceilings, etc. should be made for you by some one competent to do so.

G. B. H., Chicago, Ill.—Q. I have read somewheres about building a concrete wall without using cement but in place of cement lime was used successfully. The wall was afterwards plastered with cement. What is your opinion of such a wall?

Ans.—Have had no experience with a wall constructed in this manner but my opinion in the matter is, that a wall so built in Chicago would not be worth much after the severe test of one winter
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Architect's Corner—Continued.

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* * *

M. E. G.,

Will you kindly tell me how to treat the house, lower story red brick, buff sandstone foundation, upper story to be shingled. Would like an artistic color scheme.

Ans.—We would suggest that you use on the shingles a woody brown stain, C. No. 247, would give you the right shade. For the roof we would use a red such as C. 320 and would paint trim Russett B. 302.

There is no reason why wax cannot be successfully used on your floors. Any average intelligent workman can certainly supply it if you secure the clear and full instructions from the wax people as to methods of putting on. We are unable to give you an intelligent answer to the rest of your inquiries as they are not sufficiently complete in information.

* * *

Q. In a dwelling house 33x35, can you advise me what slope a barrick roof should have in order to obtain the effect shown in the Spokane, Wash., house published in your issue of February, 1907. Keith's Magazine?

Ans.—The house referred to has what is known as a "third pitch" roof. The height or rise of roof is obtained by dividing the least diameter of your house by three. Hence if your house is thirty three feet wide, the rise of the roof will be eleven feet, measuring from your plate on which the roof rafters start to top of ridge.

* * *

A. P. C., Plula.—Q. Can you tell me anything about waterproofing concrete with linseed oil, also is cold tar and lard a success?

Ans.—Recent experiments have been made on the effect of mixing oil with concrete resulting in that it was found it did not seriously effect the permanent strength although it made it slow to harden.

Oil or tar will prove useful for waterproofing provided no cracking takes place.
THE ROCK GARDEN.

By Ida D. Bennett.

Not the little tumulus of stone which so often is seen adorning the country door yard but a bonafide rock garden constructed on the lavish lines which nature indulges in, restricted indeed to the limits of the country estate or, in skillful hands, to the constricted area of the city lot, the effect of broadness and space being given more by the size and disposition of the rocks employed than by the amount of ground covered. Small stones piled in a heap are to be avoided as they give the effect of being left over from some building operation rather than the natural outcroppings of rock to the surface of the soil.

It is difficult for those who live on prairie soil where rocks are comparatively unknown to grasp this idea, but if the disposition of rock strata could be studied in the New England states where rocks are the rule and soil the exception more artistic creations would result from our efforts to create a rock garden.

The rock garden should be long and comparatively narrow rather than round and heaped. It should have its beginning masked by some natural object if possible as a clump of evergreens or shrubbery or trees. Failing these it may start from the walls of a building or boundary. In any case it must appear to crop out of the soil and not to be merely deposited thereon. Large boulders should be employed for this beginning and the space between should be of sufficient size to accommodate a small tree or large shrub at the least.

From this fortunate beginning the rocks may decrease in size and frequency until they lose themselves in the grass of the lawn.

For some of the larger stones or boulders it will be found necessary to excavate sufficiently to sink them into the earth to a depth to insure a natural effect and the ground should be well dug between them and enriched with leaf mould and old well rotted manure according to the requirements of the plants to be received. On the north side ferns may be planted, the maiden hair doing best on the hill-side or where they can over-hang a miniature precipice. On the more arid southern slopes use a good mixture of loam, sharp sand and old manure and colonize the hardy cacti there.

At the beginning of the rockery plant feathery larches and cut leaved weeping birch and the paper birch, lower down the flowering dogwood may be introduced and as the rocks grow smaller and the spaces between them less various hardy perennials and rock-loving plants may be grown.

Low down against the turf plant sweet alyssum, golden saxatile, phlox subulata and various rock-loving creepers. In the spring the scilla and the snow drop may brighten its edges with their starry bloom and even in winter bits of bright color will make picturesque the rocky masses if those evergreen perennials of ruddy color are planted liberally. The English ivy, saxifragas, sedums, senecios, the plumbago, phlox subulata, pachysandra, nepetas, are all desirable plants for the front of the rockery, but it must be borne in mind in planting the rockery that the taller plants are always placed near the top and the low-growing creepers near the foot or between the taller ones. The reason is obvious: if the taller were placed near the floor of the rockery they would effectually hide those back of and beyond. By sinking a tub in the soil between the rocks, various water-loving plants may be successfully grown. The papyrus, cyperus or umbrella plant and sagittaries will do admirably in any half shaded position where a moist soil can be secured and I have never had the umbrella plant do anywhere near as well as when planted in a tub on the rockery. Grown in this man-
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How to Train Bittersweet.

The bittersweet of our woods, Celastrus scandens, makes a pretty winter picture when trained up a three-inch iron pipe, having at its top a four-spoked iron wheel about twenty inches in diameter for the vine to run up into and droop over. Make a good deep hole for the vine and fill with rich soil, then dig out, in the center, enough soil to allow the insertion of a topless and bottomless box, eighteen inches square and as high. Set it so that the top is some six inches below the level of the surrounding soil, set the pipe in the center a foot below the bottom of the box, and fill the box with cement. The pipe will then be three feet below the surface, and on account of the cement block, will never be tipped over by storms. Plant the vine close to the box, which will decay in time, and help it along whenever its top is inclined to wander from its support.

My vine is a glorious sight in winter, where we are sure to see it three times a day, for it is in full view from our dining room window. Mine is eighteen feet high, the vine drooping freely from the wheel at the top.
The Drying of Hardwood.

A NEW theory in the drying of hardwood lumber has been advanced by Z. Clark Thwing, general manager of the Grand Rapids Veneer Co., in the Furniture Journal. Mr. Thwing claims that the swelling or shrinking of wood from moisture is due to foreign substances in the sap and that, when these are once removed, lumber will not swell from moisture or shrink from its extraction by heat. These foreign substances in the sap must not be confused with pitch, turpentine, etc., for they are something more element than these and enter closely into relation chemically with the sap in the functions that it performs in the body of the tree itself. The gist of the new theory is that when sap has been evaporated by the ordinary drying process it leaves behind in the wood certain substances in a more or less solid state and that, when moisture comes, these elements, having been a part of the sap, take kindly to the liquid, and absorbing it, swell out. The wood itself does not expand; the swelling is confined entirely to these substances. This foreign matter varies greatly in its nature in different woods and is also found in greater or less quantities, thus causing in some lumber only a slight expansion and in others giving very serious trouble. There seems to be no relation between the quantity of sap contained in the wood and the quantity of these foreign substances found in the sap. The solving of the drying question hinges on the possibility of extracting these elements from the wood, and the man who advances the theory claims to have a process by which it can be done and that, after the wood is treated in this way, a piece of dry oak, for instance, can be taken and thoroughly soaked in a bucket of water all night without swelling perceptibly.

Compound Lead Paints.

The history of paint ready for use dates back to the time that Averill's emulsified ready-mixed appeared on the market, some thirty odd years ago. It was simply an alkali-oil emulsion paint, with white lead for its base. Then a host of ready-mixed paints sprung up, for it was recognized at once that the thing was destined to be popular. Then paint making became a science. Now it became necessary to devise methods that would enable paint makers to compete in price, if not in quality, with each other. Materials of lower cost than lead and zinc must be used. This was found in whiting, China clay or talc, and most important of all, barytes. This latter mineral has the specific gravity of lead carbonate, and when in the dry state, ready for paint use, is about impossible to distinguish from dry white lead. But add a little oil to it, and at once the difference becomes manifest. It becomes darker, while the white lead will remain white in oil. It is also gritty under the palette knife, while lead is smooth. Barytes unites with the oil in a mechanical way, as sand unites with water; but lead forms a chemical union with oil, forming a perfect paint material. It is impossible here to go into all the details of the matter, but it will suffice our purpose to say that the usefulness of barytes is acknowledged, and that with lead and zinc in oil it gives us as near a perfect paint compound as can be made. The lead is soft and needs a little zinc to harden it; and the zinc is brittle, and needs a little lead to temper it; the barytes is neutral and prevents chemical action between the oil and lead and zinc—at least that is the theory. Then it is thought that the barytes makes the paint porous, so that all possible vapors from dampness under the paint, or any gases forming in the paint, are enabled to find a way through the mass of the paint and escape, avoiding what would otherwise be a blister in the paint. Theory again, with some grounds to stand upon.

A Dutch Method of Preparing White Paint.

An Amsterdam paint maker advances the information that the zinc white commonly used with oil is altered by the action of oxygen and carbonic acid so as to become grey and peel off. So he adds small quantities of zinc chloride, forming some oxychloride which is then converted by the addition of some alkali carbonate presumably to zinc carbonate. Such briefly is the method, the result being a more stable paint.
You can make your new home look beautiful, dignified and cordially hospitable by using KOLL'S PATENT LOCK JOINT COLUMNS. They meet perfectly every requirement of art, beauty, classic truthfulness, strength and durability. Write today for our free illustrated catalog.

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Splinters and Shavings—Continued

of everyday paint chemistry, whereby better and more satisfactory paints are being made.

** A New Damp Wall Remedy. **

The plaster of new walls is not fit for paint, either oil or water color, no paper, for at least a year, no matter how well the plastering may have been done. But in many cases, as in that of houses built for ready sale, and which often owe their selling qualities more to their interior decoration than to anything else, it is necessary to paint the walls at once, on what we may call the green plaster, and there is always danger that the walls will shed or ruin their coverings before sold. I once went to look at a new house with the owner, with a view to renting it, and while we were looking at the front second story room we noticed a corner of the ceiling paper loose, whereupon the owner took hold of it and the entire ceiling, a beautifully panelled effect, came down; shortly afterwards I went to see the house again, and the ceiling was repaired and looked “as if nothing had happened.”

The trouble comes from the hard drying paste pulling the white coating from the rough plaster. Now a French painter claims to have succeeded in preparing green or new walls so that they may be safely papered. He dissolves five pounds of pure olein in five pounds of benzine, with which mixture he coats the walls, with one coat only. The solution is colorless, and very penetrating, sinking deeply into the mortar, forming with the free lime a greasy substance that is essentially water-proof, so the claim goes. I have not tried this, but will, and will then report upon it. It is stated that other fatty or resinous oils may be used, and instead of benzine, other solvents of the nature of benzol and either may be used. The resinous acids form with the lime hydrate a resinate of lime having the same water-proofing qualities as fat lime. Any of these preparations will dry out rapidly, and allow even damp walls to be papered at once, or to be coated with oil or water paint, as the case may be. So at least it is claimed.

Concerning Shellac in Finishing Woods.

Where work has to be done in a hurry it is well to use shellac varnish as an undercoat for the varnish, as it dries at once, and no time is lost, the job being finished up at once.
Splinters and Shavings—Continued

Shellac is particularly useful on pine, preventing sap and stains from coming through paint.

It is the opinion of some of the foremost painters that varnish is less liable to crack over shellac than over any other coating.

Where a very hard surface is required, as on desk tops, etc., where there is hard usage, and in cases where there is trouble from water, soap, acids, etc., nothing is as good and useful as shellac varnish. But such work should be well filled, and have not less than three coats of shellac, and four coats is still better for great durability. Then rub down with oil and pulverized pumice; this will give a harder and more durable surface than any other varnish will give.

But shellac costs more than varnish, is more difficult to apply, and does not give the brilliant surface of other varnishes.

Examination of Paint.

It is not at all difficult to examine paint for quality, so as to ascertain its merits. Many paints depend for their quality not upon the exact amount of oxide of iron present and I have in mind the oxides now, but upon the firmness of their tone and opacity. The same thing is true of many other colors, especially those which occur naturally. With white lead the purity may be easily determined by means of the simplest blow pipe, so that no doubt at all may exist as to its purity. The slightest amount of adulteration in white lead will reveal itself under a blow pipe by forming a flat mass, whereas, if the lead be pure the lead will form into a globule.

Comparative Qualities of Bricks.

That the comparative fire-resisting qualities of bricks made from different materials can only be determined by subjecting them to the same conditions of test to which they would be subject in practice, was demonstrated by experiments recently.

A common fire brick of a quality used only for flues and chimneys placed in the hot bottom of a heating furnace, with the gas flame passing over and around it at 2400 degrees F., did not show any perceptible effect at the end of 24 hours.

A silica brick, such as is used in the reverberatory arch of an open-hearth furnace, where it is subject to a continuous temperature of 3,000 degrees F. plus, was destroyed when placed in a position similar to the fire brick, but subject to only 1,000 degrees of temperature for the same length of time.

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1210 Michigan Avenue, Chicago.
Splinters and Shavings—Continued

The fire test should be made with the brick in such position that the direct heat reaches only the edge, as in a wall.

The specifications made by the Building Department of Manhattan are entirely reasonable for a “new structural material.” Neither sand-lime bricks nor cement bricks can be so considered. They have both been used for many years in countries where inspection is much more rigid than in the United States, and have been subjected to the fire tests many times both in laboratory and conflagration. Any such material passing the other tests will surely resist the action of fire.

* * *

Practical Notes.

When it is desired to make a color putty to match a hard wood finish, use dry white lead, and not whiting, for whiting does not give clear tints of color, but lead does. A little whiting would do no special harm, but it is not necessary. To make this putty, use boiled oil, and mix the whiting and oil to a stiff mass, and then add some coloring pigment in oil. Make the putty about the general color effect of the wood, not matching any particular part.

A very good method of treating shingles is to dip the part that goes to the weather in a solution of persulphate of iron, making 2 to 2½ Baum. After they have been on the roof a while apply a coat of hot linseed oil. The hot oil alone is also very good. The creosote stains are better still, as they not only preserve the wood, but their colors are very durable, and pleasing also from an artistic standpoint.

* * *

A fair estimate of the covering powers of shellac and varnish is as follows: One gallon of shellac varnish will cover 400 square feet of white pine, first coat; it will cover 500 square feet on second and succeeding coats. Interior varnish will cover from 350 to 400 square feet to the gallon, first coat; and nearly 600 square feet for succeeding coats. On hard wood, filled with paste filler, interior varnish will cover from 50 to 75 square feet more of surface than on the unfilled wood.

* * *

Aniline stains have about done away with the vegetable and mineral stains of former days, because they are so easily prepared and are so satisfactory to the
Splinters and Shavings—Continued

finisher; they penetrate well, and have a very good color. Some of these stains are soluble in water, some in alcohol, and some in turpentine. The solvent should be hot or at least warm. The rule for making stain is an ounce of dye or stain to three quarts of water, where water is to be the medium; the water must be boiling hot. Turpentine is a good solvent for its class of dyes, but it has been found that equal parts of oil and turpentine make a better solvent than either alone.

* * *

A stained surface may be made brighter by this method: Nitric acid one ounce; muriatic acid quarter ounce; tin in grains quarter ounce; rain water or distilled water two ounces; place these ingredients in a bottle and shake; let it stand several days, after which it may be used by washing over the stained surface.

* * *

It is safer to rub hard wood finish that has not stood many days with water and pumice stone, and not with oil, as the oil acts as a solvent on varnish that has not become quite hard, and the result will be seen in the rubbing through of the varnish in spots, spoiling the work. Water, on the other hand, tends to harden the varnish.

Maple wood floors should have two or even three coats of white or unbleached shellac varnish, rubbing coats between smooth. The first coat should be very thin. The wood should be sandpapered very smooth before being coated with shellac, and then be kept smooth, finishing with a coat of hard copal varnish, if shellac finish is not desired; or prepared wax may be applied on the shellac.

Cypress does not take kindly to paint, and many painters do not understand its peculiar nature. The priming coat should be of white lead in oil, adding quite a lot of turpentine and not very much japan driers; the paint should be rather stiff, and should be well brushed into the wood. As the wood does not take up oil greedily, at least not over the entire surface, it is best not to use too much oil, which will not penetrate readily, but the turpentine will, while too much driers will cause the paint to dry too soon on the surface, preventing it from soaking into the wood. The second and subsequent coats of paint may be made in the usual way.

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Out of the Beaten Track.

By Henrietta P. Keith.

It is invigorating to find individuality expressed, whether in the life, the work, or the building of the home. A fresh point of view — how stimulating it is, and what a green oasis in the dreary wastes of common-placeness and servile copying of the regulation thing — as nearly as we are able.

Not that one would commend mere oddity, or a frantic juggling with forms that have no meaning in themselves or relation to each other.

Mr. Russell Sturgis laments that "the discouraging tendency of our architecture is its individualistic character." And there has been much recent work to provoke the complaint.

But individualism is far from meaning mere revolt against accepted forms. On the contrary, it may be a fine, imaginative handling of well understood laws.

There is a freshness that is entirely sane and reasonable; that merely does the thing that has been done with wearisome monotony, over and over without variation or change, in a different way, a way which has some of the worker's own particular ego expressed in the working out.

Such a fresh and stimulating point of view, such original, yet wholly sane, practical and sympathetic treatment of ordinary materials, we have in the interesting photographs of the seaside home of Mrs. Adelaide Tichenor, Long Beach, Calif.
The exterior was photographed before completion, in order to show the construction, which is without nails, wherever it is possible to dispense with them. The mortise and tenon method of fastening timbers has been used throughout, and this construction has been carried out in the furniture of the house, which was all specially made to order after designs from the architects, Messrs. Greene & Greene, of Pasadena. Even the fence enclosing the rear grounds is built in the same way.

These grounds now include a paved court in the quadrangle, filled with blossoming shrubs of trees in tubs, the walls softened with clinging vines; a Japanese garden occupies the remaining space, the little rustic bridge in the foreground being the only portion in being
at the time the photograph was taken.

The front of the house faces the sea, and the exterior woodwork left entirely to the mercies of the salt-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. The tiles on the roof are of a dull, gray-green. The warmish purple of the clinker brick of the first story and chimneys just gives the exterior enough color to save it from coldness. The first story frame is of red-wood. The sills and posts mortised and pinned with oak pins, and all spaces between are filled with nogging, of the same kind of brick used in the foundation. No nails are used in any of the construction. The second story walls are covered with redwood shakes. From the low windows, one can step out upon a wide balcony extending nearly around the house, and utilized for sleeping porches in the rear. All the woodwork of this balcony is likewise mortised and pinned with oak pins. The soft shadings of the untouched wood, the dull purplish tones of the brick, the gray-green of the roof tile, combine to form a color scheme of soft amethyst and gray inexpressibly pleasing and harmonizing with every subtle change of the changing sea and sky.

In the interior the same sympathetic treatment of finish and furnishing prevails. The floor beams are of 6x12 inch Oregon pine and the floor is of 2-inch planks with a 2-inch space above and deadening felt. The finish floor is of white oak for the whole house. The living and dining rooms, which open into each other, are finished in ash, but the ceiling beams are exposed and the rough planking of the ceiling is covered with white cedar. The whole is chemically treated to reduce the color to a general tone of soft grayish-brown. The differ-
over the mantel. These are made like the old Italian Majolica ware and are slightly iridescent. At the end of the mantel is a clock of wrought brass finished very dull gray-brown, except the hands which are of silver. The hours are represented by twelve sea gulls in flight around the disk, between the rays of the sun which extend from the top of the dial. Gulls are also used as a motive of design in the glass panel of the front door.

The finish of the rooms in the second story is white cedar treated to harmonize with the prevailing tone. The owner's own bedroom is a dull kind of lavender, her favorite color.

The owl design is also worked into the metal back of the washstand in the guest room.

This unique and beautiful room is an example of the art which can evolve delicate and refined effects from simple, almost severe surfaces and outlines. The entire wall is simply paneled in white cedar, treated to harmonize with the furniture, which is of ash. At the foot of the brass bed is a camphor wood chest slightly mounted in brass. Even the brass drapery rings carry out the general outlines, being square oblongs instead of round. The draperies themselves are of green Japanese crepe lined with pongee silk. The silk bed spread has a design of water-lilies in green and white. The ceiling is rough plaster with a border of darker and still rougher plaster. Both are slightly stained green, the same stain being used on centre and border. The same stain was used in treating furniture and woodwork, so that there is a perfect harmony of color tone in the room which is yet relieved of all sense of monotony by the tone differences which the different materials produce. The window decorations are simple but extremely suggestive, viz.:—flights of sea gulls across the panes. The motifs for the stained glass, as well as the fittings and furnishings, were designed by the architect, and the resultant harmony and fitness, the relation of each part to every other part and to the whole is most satisfying. Few are the architects who are willing, even if the artist's intuitive feeling for color and form be not lacking, to trouble themselves with these details. In this case the architect even mixed the stains, that the desired harmony might be assured.

Speed the day when more of our architects shall arise out of the rut of the easy and the commonplace. When they shall strive to make their work meet the needs of the people they design for. When common everyday things and materials shall be so treated as to be a pleasure to have and to use. When materials shall be honestly treated, each true to its own nature and not disguised as something else.

When our architects shall strive for such ideals, we, the people, will have houses that are interesting in lieu of the deadly commonplace.
Planning the Home.

Editor's Note:—A valuable and authoritative series of articles on planning the home of which this is the first paper by Architect Arthur C. Clausen will be a feature each month of the coming year.

There is probably no happier time comes to a family than that period which witnesses the preparations for, the planning of and building of a home. "A home of our own!" What a thrill this exclamation gives us. It might well be called the inspiring motto of this nation of home loving people, for behind all our commercialism is the knowledge that we are providing for our own home, either the existing one or the home of the future which stands in its material beauty before us, above and beyond the commerce built under favorable conditions and not be restricted to the proportions of that wonderful American creation, the modern flat building, because of the size of the lot.

It is truly wonderful how many combinations can be made in planning a home to meet various requirements and still more wonderful the many conceptions of what a model home should be. The writer's ability to plan a home has often been questioned, on the ground that he was a man and "knew nothing about house keeping," by well meaning ma-
my homes within a rectangle. Years of practice have failed to find an improvement on this method. Not only are most plans built after this simple rule quite desirable but it is really difficult to make a plan within a rectangle that is not a simple arrangement. For both interior and exterior appearance it is best to plan the hall down the center. This allows the rooms to be conveniently arranged on either side on the first floor and makes a central hall accessible to all rooms on the second floor. This arrangement will give more rooms of desirable shape and size within a given space than any other, whether the house be large or small. Outline "A" shows the central hall in a rectangle idea giving a living room on one side with a kitchen, pantry and dining room on the opposite side. The stair is at the rear and should be placed next to the kitchen so as to allow the cellar stair to go down under it. The space under the stair landing often serves admirably as a kitchen vestibule with an outside door. Another door leading to the hall makes it convenient to go out the back way to the cellar or to the kitchen from any part of the house. Embellishments can of course be made to the plan as putting a fire place at one end or side of the living room, also a bay window in the living room or dining room. The second floor is along the same simple lines, giving in an ordinary sized house, four bed chambers, a bath room and a closet for each room. By increasing the size of the house, a fifth chamber can be added, also a linen closet as shown in the illustrative sketch. In outline "B" another arrangement is shown, requiring a somewhat larger house than outline "A." In this house we have added a library on the first floor and a sewing room and linen closet on the second floor. The dining room has been placed in the rear as has also the bath room. These outlines of course do not show the complete plan in detail, but the elements, however, are all that should interest the layman who desires to indicate to his architect what he wants. The rest of the details should be left to the architect. The principal advantage gained by this simple rule for planning is the economy of construction, the saving of labor and material, also the increased strength of the house over one that is built with the partitions running haphazard. The two hall partitions extend from attic floor to basement floor and make a very strong house by furnishing a good backbone. In the basement the same convenience is realized by this arrangement. The Architectural Review published a plan by Foltz & Parker, architects, that merits attention. It is built along the simple lines of outline "A" with the various details shown that would appear in the finished plan of any competent architect. Careful study will prove this to be a very model plan, giving considerable space within a moderate cost. (Continued)
Cheapness of Brick Construction.

Progress before precedent, as applicable to the construction of homes as to national legislation. We can easily understand why our forefathers in their primitive way, built their habitations of wood. It was necessary to clear the land of timber, in order to obtain open fields for cultivation, and as there were no contractors in those days, each man hewed his own home, out of the forest, thereby making his labor serve a double purpose. Clay products were unknown in the country at that time. These primitive homes were not beautiful, but there gradually evolved from the necessities of frame construction, a classic style distinctly American, sometimes called the "Carpenters' Renaissance" but more specifically, it is the Colonial architecture in wood. They are beautiful homes in their way, but we have as a nation outgrown them and necessity has brought out other and more durable materials with which to shelter our families. Our stately forests are fast disappearing before the hand in search of gold, but old Mother Earth still remains and from her bottomless clay beds, we must obtain our building material in the future, the uses of which are so well known in the present day and have long since been tried and not found wanting.

The wooden age of house building belongs to the past. It is as fitting and proper from every view-point to make our houses of brick today, as it was to make them of wood in the olden times. It is unquestionably a more durable construction and therefore more economical. A perishable material must be very cheap indeed if it is less expensive in the long run, than a more durable substitute, but wood construction is not cheap under the prevailing prices of lumber. In addition to the durability and economy of brick construction is the wider range admitted in the matter of beauty. Even age adds to its beauty, instead of gradual deterioration and final decay.

A brick house will command immediate respect, even when poorly designed in an architectural way. How enduring and substantial it looks with its solid walls and deep reveals, and how much strength of character is expressed in the very color of brick work, which only becomes the more beautiful with age, and it lasts unrenewed for ages. It pardonly wears a blush of vanity which will not come off under blasting frost or driving rain, or blister beneath the summer sun. Its beauty is not "skin deep" but four inches deep of good, sound, old Mother Earth, baked to withstand the heat of the hottest sun and with a fineness of texture which makes it impervious to other climatic attacks. Moisture does not affect brick work. It is true that it is more or less porous, but there are so many simple ways of preventing the moisture from penetrating the inner surface of a wall that this is not a point to be considered. Brick will not disintegrate when it is frosted, as is the case with many kinds of stone. Having already been burned in the kilns until opaque, it will withstand the hottest fire and will not crack and crumble under the severe test of alternate intense heating and sudden cooling with water. Marble becomes chalk under this test and but few kinds of stones will stand it. Since stone will not stand as well as brick, the varying conditions under which it is often placed, it is not strange that the life of a wood frame house, is so much shorter than that of a brick one. Wood will rot when damp. It will deteriorate when dry and "dry rot" when excluded from the air. Looking back over the annals of our youthful country, how many of the wooden houses are still existing, in which were planned its freedom? It is safe to say that not one is standing in a good state of preservation. All have met destruction in the flames, at the hands of man, fallen into unrestorable decay or stand tottering on the brink of yesterday. Thanks to progressive spirited citizens, we still have with us to awaken our patriotic feelings, the old but sturdy brick buildings of Faneuil Hall, the Old State House in Mass., and Independence Hall, though the exterior wood ornaments and mouldings have had to be replaced many times. In those days, they had no moulded brick and were limited as to color, but the brick manufacturers have been equal to the situation. They have prepared a large number of shapes suitable for any number of cases that may arise in the designing of a home or building and most
companies are prepared to supply these mouldings in any quantity and color.

When one comes to compare the actual difference in cost between a brick walled house and even an entirely fireproof house, with an old style of frame construction, it is surprising (owing of course to the rapidly rising price of lumber.) What little difference of cost exists between them and when one comes to consider the saving of repairs, the feeling of security, the beauty gained and the durability of a brick house, to say nothing of the saving in heat and insurance, one should stop and think twice before building a frame house at the present time. We will take for example a small house (all principles of same applying to a large one.) As the cellar foundation and plumbing will cost the same in a frame house or brick house, we will not consider them. This house should be built complete of all wood construction, painted three coats outside, lathed, plastered and finished in Minneapolis for $2,280. The house being 36 feet long by 21 feet wide and the porch 12 ft. by 36 ft. These figures include a brick fireplace and chimney. This house is built for a 4-inch brick veneer of $2.00 brick instead of painted siding, it will cost $2,479.50 or, $199.50 additional. We obtain for this nominal sum, a considerable saving in fuel and heat, but more of this later on. It has many advantages as to beauty and warmth over the ordinary frame construction, but it is to be questioned, owing to the little difference in cost, whether it is best to substitute it for a solid brick wall with its many advantages. If the exterior walls are built solid, 12 inches thick, as required by the ordinance with 4 inches of $2.00 face brick and 4 inches of hollow brick or tile on the inside face of wall, the house will cost $2,580.00, an increase of $300.00 over the cost of the frame house. Now it will cost about $100.00 a year at the least to heat this house by stove and grate with frame walls. By using brick walls, we will have a saving of 15 per cent on our heating bill, or $16.50 a year. If we insure our house and household goods for $4,000.00, the rate with the frame structure would be 40c and 30c per hundred with brick walls. Thus we have a saving here of $4.00 per year in insurance. Altogether we save $20.50 a year on these items. At this rate one would pay up in actual money saved, this additional $300.00 in about fourteen and one-half years. The $300.00 investment would therefore bring in about 7 per cent interest per annum. Compounded this would almost pay for the house during the life of the owner and this is not taking into consideration the cost of continual repairing after the tenth year to a frame house and the repainting every two years from the start. If we will build the house with a 12-inch brick wall as just specified, using the same $20.00 face brick and should also build the interior partitions of hollow brick or more preferably of 4 inch by 12x12 inch tile, including the cost of wrought iron beams to carry the tile partitions, this house would cost $2,745.50, an increase of $465.50, the same saving in heat, a greater saving of insurance with a more durable and salable house. To make the house entirely fireproof, would cost about $3,000.00 with a saving of $.25 on the hundred on insurance, the rate being $.15. To install a heating plant in any brick house, which will heat it to 70 degrees in coldest weather, it is saving of 15 per cent in the cost of the plant under the cost of a plant in a frame house. To build the interior partitions of tile has many advantages. Besides having no space for the nesting and passage of mice and vermin, they carry less sound, are stronger, more durable and fireproof. It is the cheapest to use hollow tile in preference to hollow brick, the latter are cheaper per M., but the former are far cheaper when laid in the wall, as they go farther and it takes less labor to lay them. Most houses nowadays are built on thriftless principles of economy. The prospective home builder loses sight of the fact that for a slight increase in cost and more care in construction, the life of a house can be greatly prolonged and that the saving in repairs alone will more than offset the additional expense. A brick house will greatly increase the value of the property on which it stands and the property around it. To build a brick house, is to build a house which your children and their children can enjoy. Fireproof, a thing of beauty to them as it will be to you, to say nothing of the added security, the appearance of substantiality and ready salableness. The additional cost is nominal.
A New Plaster House.

By O. W. Alford.

No PHOTOGRAPH can do this house justice. The smooth plaster walls outlined by rough brick corners, foundation to the window sills and rough brick for porch pillars, present a picture both new and beautiful. The picturesque effect is enhanced by the gnarled trees surrounding it. When vines cling to the rough surfaces and gay flower boxes adorn the sunshine. It is necessary to remember overhanging eaves require many more windows and windows of larger size.

Much is gained in this house by the grouping of windows, they are all double or triple casements in the second story, and mostly triple, double hung windows below.

The front door is glazed with small square panes that reach from top to bot-

windows the effect will be charming indeed.

The construction of the roof is admirable, being so perfectly balanced. The slanting roof of the porch on the left end of the breakfast room on the right form a perfectly symmetrical building. The dormer windows are interesting, though in my opinion the extension of main roof between the dormers is artistic. A different arrangement of the dormers would not only add to the beauty of the roof but would do away with so much shadow.

Overhanging eaves, if not carried to excess, are beautiful indeed, but the builder must remember they cast deep shadows. Notice the depth of the shadow cast at high noon in the accompanying view. The windows at the west get almost no

tom, as the outlook to the south is so pleasing it were a pity not to make it a part of the interior.

The entrance from the south is made through a small porch having cement floor and seats on either side. Entering the spacious living room the stairs are directly in front. The huge fireplace of red brick with its book cases and seats occupies the entire north end. Casement doors open on the living porch at the west. The rafters of the floor above are dressed and stained, making the structural portion of interest. The finish of the room is of oak, stained brown. The furniture is along the severe craftsman order. Walls of rough plaster are tinted a light coffee shade, ceiling in cream, the floor of quarter sawn oak is a lighter brown than trim. The rich strong color-
ings of Oriental rugs blend harmoniously with the soft browns and reds of the mantel and walls.

Opening from the living room is the dining room, beautiful with its triple south windows and its view through the breakfast room or conservatory. The wall portion below the plate rail is panelled by a three inch strip of wood every three feet. The plaster panel thus formed is filled with blue burlap. Could anything be prettier than brown wood with blue burlap? Above is a cream tinted wall and ceiling with a stenciled design in browns and blues at the angle. Craftsman furniture is matched in color in the trim which, however, is of pine. A domestic rug of blues and browns completes the beautiful but inexpensive scheme. Triple windows at east and south give the breakfast room unlimited sunshine.

A small kitchen, with a place for everything, is another of the comforts of this livable house.

The basement has hot water heating plant, laundry and stove room, also a man's room, for this household keeps a Jap or nothing.

The living porch has a board floor for dancing, the projecting eaves protecting it well from the weather. At a small expense casement windows could be placed here and pipes run in from the heating plant but it is hardly necessary for all the lower floor rooms are prodigal in sunshine.

The bedrooms above all have cozy window seats. White enamel trim with smooth plastered walls are used in all rooms except study. A feature of the closets is their shallowness; each room has two closets; one of them consisting of a set of drawers, the front of the drawer left off. When the door is open, behold the contents of every drawer before you.

The study is interesting with its fire place under the slope of the roof. The trim is pine, stained a moss green; the walls left rough are tinted a light chocolate. The furniture consisting only of a kitchen table of pine stained green, and a few green stained wicker chairs. Book cases are built in under the roof slope each side of the fire place, making the room in the clear of good height.

The cost—always an item of interest—was about $6,000.

Realizing that the setting of the house has much to do with the comfort of the inmates the site selected for this house is a corner fronting south and west.
STEP from an old fashioned house, furnished forty or fifty years ago or more and well cherished all the time since, into a home of typical modern style and perhaps the most marked difference will be found in the carpets and window hangings, two conspicuous features in the decoration of a room.

The design and coloring of a carpet produced in the sixties, looks today something atrocious. This was made evident the other day when a woman in search of a new carpet for a morning room that had not been shocked with any new thing for half a century, had to abandon the quest and be content for yet another season with the “bones” of the poor old brussels carpet.

The case of the hangings is no less drastic, all the sumptuous festooning, all the extravagance of fold, are but memories to the upholsterer, who, when looking at his meagre year’s balance, deplores the spirit of hygiene and simplicity that in the interests of health and nationality has robbed the furnisher of a big percentage of profit.

I am not disposed to quarrel with the new order of things, although half my professional life time has been spent in arranging cunning folds of draperies; the style of thirty or forty years ago of shutting out the light of heaven that blazed in at the window and of smothering the air that should have been permitted to break freely around the sleeping couch was absurd, and excepting on the score of profit indefensible.

The ideal floor is a hardwood one, parquet or plant, waxed and polished to prevent disfiguring from tear and wear, with a rug or a series of rugs in convenient places. These should be of such a quality as to require little or no fastening, making the removal of them for shaking an easy process.

This idea has received great encouragement of late years, by the manufacture of the “Donegal” and other similar types of rugs on quite an extensive scale.

At the World’s Fair, St. Louis, this interesting carpet was shown in process of manufacture, a group of Irish girls having been sent specially from Donegal to show America how it was done.

Modern carpet manufacturers adopted the hand tufted method of the Orient for the new rug, but they use a better wool than that put into the ordinary Persian or Turkey rug and greater care in designing and coloring.

One great point about the “Donegal” is that it can be made to any shape, in any design and of any combination of colors. In modern decorative schemes, the artist designs the carpets and sug-
suggests the colors, so that every part shall conduce to complete harmony.

The Donegal rug illustrated is an example of that used in modern furnishing; it would be suitable for a parlor or bedroom, in which the color scheme was green and grey and pink. The body of the rug is in fresh apple green, the central part worked in a lighter shade than the rest, the small squares are in light grey, while the corner roses are in a soft, delicate pink. A rug of this description 6 ft. x 3 ft. would cost something like $20.00 in America, but there would be no limit to its wear, while the finest Aubusson procurable in New York at a cost of $450 would not be more artistic.

The carpet shown is quite an original design, the colorings are dark grey, orange and cream, a combination suited to a dainty parlor or bedroom. Blue, orange and dark grey, try the scheme in a favorite room, arrange the colors in any way and you will have an effect of a striking character. Grey is a color neglected in decoration by every school but the modern one, yet it can be made more servicable than most colors, because being of a neutral tint any other color may be successfully combined with it.

A portiere curtain, or a decorative panel is sometimes used as embellishment for a parlor, the one illustrated might be used in a variety of ways for window or door curtain, or on a con-
venient wall space hung on a roller like a Japanese print. The floral and festooned work might be done by applique and needle work, while the medallion could be arranged by hand painting or might be a small enameled disc, hung from the center. This would be nothing unusual in a modern decorative scheme. In one house arranged under the hand of one of the greatest designers in the new school, all the pictures are hung with broad ribbons, two ribbons to each picture, suspended vertically from the picture rail and falling about and in under the lower edge of the frame. Above and below the picture the ribbon is studded with a nicely contrasting enamel, quite a novel and interesting way to hang pictures.

There is quite a craze in England at present for embellishing curtains by stencilling; the illustrations accompanying this article are capable of being carried out by this method. Silk, linen, cotton and other fabrics are treated in this way and some of the most delightful results obtained. When it is remembered that some expensive gowns, fans and other articles are made beautiful by hand painting, it is not to be wondered at that curtains should come under this treatment.

Carpets and curtains are both interesting and important separately, books have been produced about them and it is difficult to confine attention regarding them within the limit of a short magazine article.

Perhaps Mr. Editor will permit a continuation of the subject at a future date, meantime the readers of Keith's Magazine can think out the matter along individual lines.

A BEAUTIFUL LEADED TRANSOME LIGHT.
Describes.

Here are many things that must be weighed and considered in the mind of an architect and his client before the plans and design of a home are perfected; climate, size and grade of lot, water supply and drainage, amount of building funds available, the size of the family and its social requirements being but a few of them. As these conditions and the many others that arise always vary in each case, so homes vary in plan and design. Homes are the product of several individualities—the architect, the owner and his family. Sometimes the one individuality predominates over the others. Such should not be the case. There should be perfect harmony in order to obtain the best results.

Modernized Dutch Colonial, page 244.

Consciously or unconsciously the average prospective builder of means, as he piles up his thousands for the erection of a home, pictures that home in his mind as a classic, palatial affair with a carved stone front and all the other accoutrements that indicate the habitation of a rich man. To model his home after their dignified homes and be placed with distinction on their social scale seems to be the height of his ambition. It is therefore a great relief to see a house of more than average cost, whose owner had the courage regardless of its size and aristocratic surroundings, to make his house a cottage with all its homelike qualities and charming simplicity. Of modernized colonial style, it has a touch of the picturesqueness that hovers around the old Dutch settlements of Sleepy Hollow. Nothing new was attempted in the design of this house by its architect, William C. Whitney; it simply follows out the old general idea of a gambrel roof house, but the execution of the design has resulted in a home with dignity of style and broad treatment. The entrance, placed where it best suited the interior arrangement, is not prominent or obtrusive, but at the same time it is generous in its treatment and seems to extend an invitation of warm welcome to all the pleasures of a model home. It will be noticed by referring to the plan that the house is a double one, a separate little home having been provided in connection with the large one for the owner's mother. The total cost was $8,000. The body of the house is dark brown, shingled, the trim is white and the foundation is of cobblestones. A broad expanse of green lawn completes the color scheme.

The American Ideal, page 245.

No collection of homes in an American magazine would be complete that did not include at least one house designed in the style which appeals so strongly to every man's patriotism—the colonial style of architecture. There seems to be something about this refined version of the classic orders that expresses to the average American all that he requires in an artistic, well designed home. While the style did not originate in this country, it being derived from the Georgian style of England, its general acceptance in the new world and its abandonment across the water has caused it to become known as the “American renaissance.” It is the only classic style that looks well in wood.

The porticoed house by Lowell A. Lamoreaux is a thoroughly modern colonial frame house having an ideal setting. It is on a level lot, which best suits this style of a house, and is surrounded...
by large old oak trees, which seem to add romance and antiquity to the place. Four large Corinthian columns mark with dignity the entrance and approach. These are regularly spaced and surmounted with a broad, low pediment. The entrance is through an entrance of the Palladian style with a compass window over and side lights. The plan is well arranged. Desirable combinations are always possible when houses take on a rectangular form. This fact is well illustrated in the colonial house published in this department last month. The nearer we can get to a rectangle with a central hall the surer we are of a well planned house. Cost to build $4,000.

A Pasadena Home, page 246.

SHAKESPEARE said that "the secret of beauty is suspect." It is not so much what we see but the hidden beauty of what we expect to see inside of a home as indicated by the beauty or oddity, as the case may be, of the exterior that charms us. It is the inside of a home which, regardless of the outside, receives the stamp of the owner's individuality. We have come to know this and to expect unusual things inside of a home whose exterior is out of the ordinary. This characteristic home by Greene & Greene, architects, is not considered eccentric in its proportions or design in Pasadena, where it is built. In this beautiful resort houses of individual character are more the rule than the exception. The result is that in some instances architects have gone to radical extremes, but such is not the case with this unusual but beautiful home. The exterior is of light brown shingles, and all the millwork is stained a dark mission brown. The foundation is of large field stones in which brown and gray predominate and the whole is set upon a broad expanse of green lawn making an ideal combination of colors. The main feature of the plan is a large living room with its great fireplace and artistic panel beamed ceiling. Off one end of this is the dining room. A kitchen, bath room and bed room complete the first floor arrangements. On the second floor are two chambers and another bath room, making in all accommodations for a family of five or six. It will cost to build about $4,000 without plumbing.

An Ideal Cottage Home, page 247.

THIS is a very picturesque little home for the suburbs. It is what we call an ideal home. A home with plenty of sentiment in its makeup. Since sentiment is the foundation of the best ideals in the family life, a home which can best express those ideals, a cottage with the home spirit pervading its exterior is necessarily the most appropriate home for one whose love of homelife with all its poetry carries him beyond the mere selfish desire to outdo his neighbors along mere conventional lines. This is not a conventional cottage. Its charm lies in its utter unconventionality, in its straight-forward expression of simple needs. It is simple, reducing the cost. It is home like, increasing its value. It is well proportioned, forestalling criticism, There is no back to the house as we are in the habit of accepting the term. The house is all front and the rear is even more picturesque than the front and as well designed and proportioned. Part of the first story, the chimney and the foundation are of large field stone random laid. The balance of the exterior is shingled. The entire exterior can be shingled or sided as desired. Another combination would be to make the entire exterior in rough cast cement. The shingle and stone combination would however be the most appropriate and carry out the homelike touch given it by its architect, Arthur C. Clausen, producing the effect he desired to obtain. The entrance hall is very cosy and simple. It is connected directly with both living room and dining room thro broad openings making an "altogether like" assemblage of the rooms. The kitchen window sill onto the porch is high, merely to get a circulation of air, as the light is not needed. On the second floor are three chambers; a bath room, linen cupboard and plenty of closet space. Altogether it is an ideal cottage home.

On Prospect Hill, page 248.

WHEN an architect designs a home for his own use you can usually expect to find it decidedly out of the ordinary. There is always something very unique about it, even at times a bit eccentric. Either the plan is unusual, the exterior very original or the location seemingly impossible as the site for a
home. The home of architect Geo. W. Bullard seems to be a component of all three of these conditions, all of them growing out of its location, however. Its location (which would not be a desirable one in a community subject to cyclones) is very beautiful, even imposing to grandeur. From it can be seen the broad expanse of Puget bay. Just below it is the beautiful little city of Tacoma, while beside it in a rugged gorge gurgles a babbling brook the year round. As will be seen by reference to the plan the arrangement of the rooms are very informal, being designed for home comfort with due regard to the commanding view afforded. The living room with its broad windows overlooking the bay is the principal room on the first floor. (Whether this is to be regarded as the
The American Ideal.
A Pasadena Home.

first or second floor depends upon which side of the house you stand while expressing an opinion.) According to the architect’s drawing the kitchen and dining room are in the basement, that would seem a gloomy place to eat breakfast, but as a matter of fact, this dining room has an outlook over mountains, cities and bay, which is rare. It was to obtain this magnificent view from all of the principal rooms that led Mr. Bullard to design his home three stories high on the rock hillside. It is indeed a home well adapted to its location. Cost $4,500.
An Ideal Cottage Home.

Arthur C. Clausen, Arch't.
There is an increasing demand throughout the country for houses with cement exteriors, either entire or in part. There are two good reasons for this. First, the high prices of millwork and lumber products are fast bringing the cost of frame houses up to the price of more substantial ones in some form of masonry; the second reason being that the American tendency is toward more permanent homes patterned after the simplest styles of architecture. The fantastic L'Art Nouveau was the climax to the "strenuous life" in architecture from that we have had a reaction to the simplest styles conceivable. The all-cement house designed by A. R. Ellis, architect (just nearing completion at a cost of $9,000) is a decidedly up-to-date American home. It is simple, very simple, both in the plan and exterior. It is this very simplicity, this total absence of unnecessary millwork that gives it its charm and differentiates it noticeably from the over-laden exteriors of a few years ago. A few trailing vines on the pergola and along the walls is all that is
Good Fire Places with Built-In Seats.
Basement Dining Rooms.

In some of our older cities, the basement dining room is still to be reckoned with, and is too often a very hopeless proposition. Seldom more than eight feet in height, and nearly twice as long as it is wide, it invariably suggests a packing box, if nothing worse. But the alternative of a dining room on the first floor, connected with the kitchen by a dumb waiter, involves a good many complications in the way of service, and it is often a case of clinging to known evils, rather than chancing worse adventures. There is one consolation: the basement room affords an excellent field for the amateur decorator who enjoys surmounting difficulties.

If it is possible to modify the lighting of a basement room, a great step in advance has been taken. A single broad window substituted for the two narrow ones will do wonders for a dark room. If, moreover, the new window comes short of the ceiling by a foot or so, and projects sufficiently to allow of a deep seat, a good deal of the subterranean aspect of the room will disappear.

For the north room, the best choice of color is yellow, for a southern or eastern room blue, both colors, in combination with white, giving an illusion of space. Dark woodwork should be strictly tabooed.

The plain papers, which are so successful in better proportioned rooms, are not to be recommended for a room whose defects must be disguised. Any sort of a border is out of the question, and the most satisfactory design is one of the Morris ones, without too much contrast of tone. English papers of this sort can be had in both blue and yellow, mixed with more or less white. If the chair rail must be retained, it and the space below it should be painted white, or the lower space can be covered with white burlap. It will be necessary to retain the door into the kitchen, or pantry, but the effect of space will be increased if the doors into the hall are taken off, and curtains hung within the door frame. A great assistance to this sort of room is an open fireplace, as it gives an excuse for an arrangement of the furniture which will quite transform the room. If the space above the mantelpiece can be completely filled with a mirror, framed in a narrow white moulding, so much the better. There is already an illusion of additional width. In the matter of floor covering, a considerable expanse of bare floor, with several small rugs, rather than one large one, is desirable.

In order, as much as possible, to break the long lines, the dining table and chairs may be placed in the square space between the fireplace and the windows. Sash curtains at the lower part of the windows will screen the table sufficiently in the day time. Then the sideboard and serving table can stand at the rear of the room, back of the door into the hall, which is usually opposite the fireplace. A short sofa, placed at an angle to the rear end of the chimney piece still further breaks the lines. A tall screen, partially concealing the door at the rear, and carrying out the general color tone of the room, is another help.

In such a room, it is best to depend entirely upon the color and the pleasing arrangement of lines for effect, and to have few pictures and no bric-a-brac, ex-
Decoration and Furnishing—Continued

except a pair of candlesticks and a tall jar upon the mantel, although the effect of a suitably placed plate rack is always good.

This sort of treatment is best adapted to a room, whose furniture is either mahogany or, possibly, dark oak, on French lines. With golden oak furniture, unfortunately the prevalent sort for dining rooms, the best color to use is a cool sage green, painting the woodwork in a grayish olive. Old fashioned black walnut furniture looks very well with a light terra cotta wall, although the effect of space will be rather sacrificed.

A Small Conservatory.

When it is not necessary to use the front door of the basement, a very good small conservatory can be improvised in the area space below the stairs to the upper door, by filling in the sides with glass. Such a tiny conservatory makes a delightful bit out of the lower hall, besides adding to the supply of light. Naturally, it is only adapted to rather hardy plants, but geraniums will bloom profusely, if protected by newspapers, in very cold nights.

Black Walnut Furniture Again.

A reaction is setting in, in favor of black walnut. After years of contumely, people are beginning to realize that our native black walnut is not greatly different from the highly prized walnut of old French furniture, and some survivors of the seventies are emerging from the rubbish room. Naturally one prefers modern oak furniture stained to the rich brown of the French pieces, but in default of it black walnut really looks very well, and its warm tone of color is delightful, while furniture of that period is often very comfortable, especially its easy chairs and rockers.

It goes without saying that in renovating furniture of this type a style of covering not too modern should be selected. A blue and green Art Nouveau tapestry on a black walnut chair is decidedly incongruous, but almost any of the tapestries with floral designs are suitable or, for a bedroom, English cretonnes. The Wilton and Axminster rugs, in brown tones are very good with walnut furniture, as are those combining brown, cream and rose. In fact walnut seems to require a touch of pink somewhere.
Judicious subtraction improves some of these pieces. The cabinet makers of the day ran to excrescences. Much of their ornament was only glued on and can be pried off and the wood refinished to its great advantage. The bedsteads have almost always lofty headboards, and it is a simple matter to take a foot or more from their height. It is always an improvement to apply a varnish remover and to refinish with wax and turpentine. A coat of stain will modify the color agreeably, in the case of pieces the wood of which is unusually dark. Of course these survivals are not to be mentioned in the same breath with Circassian walnut, which, exquisitely marked and elaborately carved, costs a good deal more than mahogany. A bedroom set of this wood, of twin beds, bureau, chiffonier, table, dressing table and somnole, with drawer handles of mother of pearl, costs in the neighborhood of eleven hundred dollars.

**And the Marble Top Table.**

Among other revivals of old fashions is the marble topped table. So far, it is confined to small sizes, coming in white enameled wood, to match sets with cane seats and backs, in the style of Louis Seize. The frame of the table is carved and the marble, set into the top, is Italian, a variety with gray markings on a white ground. It is not in the least suggestive of a tombstone, as were the marble slabs of our childhood, and has an air of great refinement. One of these tables was shown with a set of drawing room furniture which had cane backs and upholstered seats. On the back of each chair was a thin cushion about six inches deep, following the outline of the frame, its lower edge cut in deep scallops, probably five. A narrow fringe combining all the colors in the delicate tapestry, used for covering, outlined the scallops.

**The Toilet Table.**

A draped toilet table, which is an agreeable change, has an oval top. The mir-
Decoration and Furnishing—Continued

The drapery, cheesecloth finished with a broad hem, has a strip of filet net, in squares, let in just above the hem. This net imitates old Italian filet, being woven in squares, which are very effective when inserted in a thin material. They should be laid upon the ground, basted in place, by a thread, and secured by a row of buttonhole stitches. Afterward the ground is cut away beneath them.

A draped toilet table is as pretty again when it is accompanied by a chair with a low back, upholstered to match the table, and a footstool. Nor should a pair of candlesticks be forgotten, either in china or metal, unless those of pressed glass are preferred.

Picture Frames and Tapestry.

Small standing photograph frames copy exactly the old-fashioned, gilt-framed mirrors, with a painted panel framed in at the top. A tiny copy of Guido's Aurora is used in one of these, for the upper panel, and the remaining space is just large enough for a cabinet photograph. Some have gilt frames, others a three-quarter-inch band of mahogany, curving out at the center of the moulding.

Egyptian tapestry is a cotton material, two yards wide, mercerized and very heavy. It comes in a variety of vegetable dyed colors, as well as ivory white, requires no lining, and costs two dollars a yard. It is used for draperies and couch covers, and its surface is more agreeable than that of Craftsman canvas, though it would probably soil more readily. It is, however, wider, and can be used for hangings for a very wide opening, without piecing.

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The bath-room, kitchen and vestibule should always be tiled. Tiling is also appropriate in the hall and dining room and on the porch floor.

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M. G. "I should be very grateful to you for a little advice regarding the decoration of my new home. The dining room is to be finished and furnished in Early English, and I should like to have a plain, blue paper in a soft medium tone. What shall I use for a "drop;" and what will harmonize in carpet without having much, if any, blue in it? Also what shall I choose in tile for the mantel? I had decided on a dull, satin-finish blue tile, but I am afraid it will be too dull with the blue wall. Besides, if I should ever change the color scheme, it would be rather hopeless. The room is 14x17, 9 foot ceiling, western exposure with a bay on the south, and opens from the parlor by a large sliding door. The latter room is in green and mahogany. The reception hall (12x14, eastern exposure) is to be Flemish oak. Kindly suggest color for the walls and carpet."

Ans. It is suggested, in view of the green and mahogany living room from which the dining room opens, that the latter room should combine dull blues and low toned greens. For instance: let the wall be a soft but dull blue up to tops of windows; above this use a landscape frieze in dull greens with bluish tones in the distance. Exactly the right thing is shown and described on page 183 of the October, 1907, issue of Keith's Magazine. Let the ceiling be a greenish tint harmonizing with the background of the frieze. Of course, you can if you wish drop the ceiling tint down to meet the wall, but the effect will be very plain. Have your fireplace tile of unglazed, dull green and your rug a combination of greens and blues in a small, all-over design. Such a scheme will suit the southwest exposure and harmonize with the living room. There is nothing better than the warm, coppery reds in an east hall with dark oak woodwork.

T. J. A. Desires suggestions as to draperies, paper, rugs for interior in which all rooms have colonial mahogany furniture except mission for library. Prefer brown Flemish finish in all rooms except mahogany for dining room. Could living room be blue with silver gray walls—dining room yellow with gray rug—hall and library shades of brown? All rooms have large openings so I desire a very harmonious effect. Can have oriental rugs for all rooms except dining room.

Ans. Such a handsome interior deserves careful consideration. A silver gray wall is more easily harmonized with white woodwork and delicate furnishings. But I think the effect you desire could be realized. There is a grasscloth that comes in a soft gray with a sheen to it which perhaps would not be too delicate, and there is a fabrica fabric extremely appropriate for a living room wall in a gray moire effect. The blue must be very carefully chosen. It should be a deep but not dark blue, rich but not bright. Such a blue in a ribbed velvet or corduroy or a colonial worsted would be excellent on the mahogany davenport, Morris chair, etc., and in cushions on the window seat. But use your blue with reserve. If door hangings are used they should harmonize with the wall, though there could be blue side curtains at the windows if desired. Have one or two wicker chairs with cushions of bright-flowered cretonne. The dining room, with its gray rug, could be made charming by introducing panels of gray and yellow cretonne in a wood wainscot up to plate shelf, with a gray wall above and a champagne colored ceiling—a sort of ecru-yellow, with window and door hangings like the wainscot panels.

Shades of brown would be excellent in hall and library. These should have warm color introduced in rugs, Madras curtains and small accessories. Oriental rugs are not always most desirable. You could probably get better color combinations for living room in a domestic rug, though there are Persians with just the blue you want, mixed with
old rose, grayish cream, dull green, etc. The Donegal rugs also offer many inducements.

H. L. B. "Please advise me with a scheme for decorating my hall and drawing room. The trim is mahogany and the ceiling is nine feet high. Would like to use red in hall. What kind of paper, rugs and stair carpet? The furniture is mahogany and covered in reds, greens, and golden browns. What kind of curtains?

Ans. It is difficult to use red with mahogany. A paper having a white ground with design in red might be used in the hall with a white ceiling and red rugs. In the drawing room use a handsome satin-striped ecru or golden brown on the walls with light ecru ceiling. If possible re-upholster some furniture pieces in plain ecru or golden brown. Ecru lace or net curtains.

N. H. Please give suggestions for our living room, 14x18; a southeast room with two large windows. Carpet is a dark green slightly olive. Have looked at many samples of paper but cannot decide; we see many samples of paper with large set figures and great scrolls and flowers in gilt, such as our grandmothers put on their walls. Are these patterns coming in again?

The dining room is opened into this room by a large archway and is a southwest room. We want to paper living room and hall alike, but want the dining room different, using colors that will blend with those in the living room, dark maroon is the predominating color in the dining room rug.

Ans. It is unfortunate that you have a dark red rug for southwest dining room, as this room opening into living room should harmonize in treatment. Answer to M. G. in this issue will give you suggestions for such conditions. Can you not use the rug in the hall, with warm red upon the hall wall? The samples of paper shown you must have been refuse stock. Such designs are not used by up-to-date decorators. You should choose quiet colors and if figured papers are used, let them be two tones of the same color. Gilt is particularly objectionable. In case the maroon rug must be used in dining room, the best thing to do is to paper living room in dull...
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Answers to Questions—Continued

olive green, with a deep, plain blue paper on dining room wall up to high plate shelf, and above this a decorative paper in dull greens and copper reds, with a light greyish green ceiling.

Mrs. A. B. We are building a square hipped house, upper half is shingled, and we intend to stain the shingles green. Would like to have your advice as to color of lower half. The house faces east and is on a lot which as yet has no shade. Please give me a good color scheme for enclosed floor plan, etc.

Ans. If the lower story is siding, a tobacco brown is advised, and the same for all the trim. The roof shingles may be either green or brown as preferred. In regard to color scheme for interior, the hall and living room should be treated in the same color tones, though if paper is used the style may be different. In the northeast living room warm tans or golden brown would be a good choice. The dining room could be in warm coppery reds. If your plaster is hard finish, it is better to paper. No, in a small house the wood mantel is quite as good a choice.

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Dress for Your Work and Not for Style.

The portion of labor," to quote Miss Wilkins’ happy phrase, is apt to be a certain dishevelment of appearance. The outward semblance and equipment of the housewife in too many instances is entirely out of keeping with her immaculate kitchen and her very modern utensils. The woman who does her own work need not look shabby or untidy, but she generally does and, it must be confessed, very much more so now, than before the gospel of relaxed muscles was preached by M. Delsarte and his following, some twenty years ago.

Women, who are obliged to do housework, might well take a lesson from trained nurses and teachers of domestic science. Not everyone may emulate the example of the well-known cooking teacher, who instructed her classes and performed all the operations of getting the most elaborate dinner, in a black silk gown, with neither cuffs nor apron, but a short skirt and a Peter Pan waist is an eminently practical working dress. Three hooks and eyes attaching waist and skirt to each other, at the back, and armholes of generous size secure ample freedom of movement, for any ordinary process. A skirt of the corselet variety, with one point of attachment at the back, gives still more freedom, and obviates the need for a belt. Of all the cotton fabrics on the market, not one is so satisfactory, in the long run, as a plain, blue-gray gingham, or chambray, which never fades, however hardly used, besides being pretty in itself.

In winter, an apron and long cuffs of heavy butcher’s linen, or white table oil-cloth, enable one to use a woolen dress for all but very dirty work. It may be an audacious suggestion, but, in the privacy of one’s own kitchen, bicycle bloomers are a great comfort, particularly for tasks which require much movement. With a skirt at hand to slip on, one is presentable in a moment.

The matter of appropriate and becoming dress may be a trifle, but it adds wonderfully to one’s comfort and self-respect, to feel that one is suitably and becomingly dressed, when engaged in distasteful tasks. It is not well to look a guy to one’s own little world of husband and children who, quite possibly, compare and criticize, almost unconsciously. Someone has said, in reference to this very matter, that most women are remembered as they appeared in the work and pleasure of everyday, not as on the rare occasions when they dressed up and went abroad. Which of us would care to be recalled as hurrying about household tasks in a cotton wrapper, with a design of gaily colored Japanese fans, a choice garment for sale everywhere in this year of grace?

* * *

Pure Canned Goods.

Among the encouraging things, to be seen by the student of human progress, are certificates of membership in the local Pure Food Association, conspicuously displayed in the windows of various grocers. One may not choose to patronize the grocers belonging to the association, but a glance about their shelves is instructive, as to the quality of various brands of canned goods.
Household Economics—Continued

In the matter of canned goods, let no one jump at the conclusion that the more expensive articles are, of necessity, any more carefully prepared than cheaper grades. What is probably the cheapest brand of canned soups, on the market, has been officially commended, as well as that of the company whose laboratory is one of the show places of New York, its products costing several times as much as the humbler brand.

The purchaser of prepared foods should remember that very often the difference between two grades of the same article is merely a matter of some trifling detail of manufacture, immaterial to the nutritive value of the produce. Beans or peas all of exactly the same size are very pretty to look at, but the regularity is not worth enough to a short purse to pay for. The flavor of an expensive soup can be easily added to a cheaper one, while an additional cup of sugar added to the syrup of canned fruits transforms them into preserves.

* * * *

Preserving in November.

If, as often happens, one has been rather lazy about making preserves, in the summer, November is not too late to remedy the lack. Quinces, late pears and sweet apples are still abundant, to say nothing of late plums, barberries and some sour apples, of the pippin variety. Preserving seems less of a task in the cool days of autumn, and the results are more satisfactory than with the strictly summer fruits.

The economically inclined will find some of the rather coarse-fleshed, rough-skinned pears, which are cheap and abundant in October and November, excellent for preserving, either alone or in combination with quinces, or green ginger. The secret of getting good results from them is to cook them long and slowly, until they turn to a light red. They have the peculiarity of absorbing a stronger flavor than their own. When cooked with a half, or a third, of their bulk of quinces, the two fruits can only be distinguished by a slight difference in texture.

A very good imitation of preserved ginger can be made from pears. The fruit should be peeled and sliced, a pound of sugar, a lemon, thinly sliced, with the...
Household Economics—Continued

peel left on, and an ounce of crystallized ginger being allowed to each pound, also a cup of boiling water. Cook very slowly, for at least four hours. The water should disappear entirely in the process. It may be necessary to add more before the preserve is finished. Thinly sliced green ginger, tied up in muslin bags, may be substituted for the crystallized sort. This preserve is very delicious to eat with ice cream. With brown bread, it makes a delicious sweet sandwich.

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Soaking the Socks.

When the small boy gets his stockings hopelessly dirty try soaking them in kerosene, for half an hour, taking them out at the end of that time and soaking them a second time in a solution of ammonia and water, finally washing them in hot suds. This drastic treatment is warranted to be effectual. Black or brown stockings which have faded can be restored by a bath of black pepper tea, soaking them for an hour. Lace stockings should never be washed in soap and water but cleansed with benzine or naphtha.

The most effectual way of renovating black lace is to dip it in beer. It will come out perfectly black and with its original stiffness. White silk lace can be cleaned with gasoline and immersed in alcohol to stiffen it.
The Thanksgiving Turkey.

The necessity of having the turkey carved upon the table rather precludes elaborate decorations for the Thanksgiving dinner table. Pater familias requires ample space in which to wrestle with his task, unless he is a very expert carver, which few men are, nowadays, and an elaborate centrepiece is very much in his way. Therefore it is well to have one's decorations high rather than spreading, very possibly nothing more than a bunch of chrysanthemums in a tall glass vase, set on a mirror and with a wreath of ferns at its base, depending largely for effect upon one's best china and glass.

For the table, where a more formal service is demanded, a charming scheme of decoration can be arranged with chrysanthemums, of the old fashioned sort, in pink and russet tones, massing them in a great glass bowl, flanking them with brass candlesticks, with pale pink candles and shades, and brass bowls for nuts and bon bons. Bunches of chrysanthemums, at each cover, and a tiny pumpkin favor, with the guest's name written upon it, or on an attached card, complete the arrangement.

More About the Turkey.

If of generous size, and if the weather is sufficiently cold, the Thanksgiving turkey may very well supply a dinner for the next Sunday, as the main dish for a cold meal, or reheated, possibly with an oyster sauce. The remnants may be made into individual pies for Monday's dinner, lining small dishes with a rich paste and filling them with the odds and ends of turkey and dressing, moistened with gravy, baking them just long enough to cook the paste. Use puff paste or ordinary pie crust, but never a suet or biscuit crust and roll it very thin.

The inevitable turkey soup, which finishes up the bird, is much improved by the addition of a couple of bouillon capsules or two teaspoonsful of beef extract.

A Capon With Mushrooms.

For the family of two who have no guests, and elect to eat their Thanksgiving dinner at home rather than at a restaurant, a capon, although proportionately more expensive, is a better choice than a turkey. It should be roasted just like a turkey, although there are many elaborate ways of preparing it, demanding the skill of a chef and many ingredients. After the gravy has been made, add to it half a can of mushrooms and half a cup of Madeira, cooking closely covered for fifteen minutes. Accompany the capon with macaroni, browned with cheese, and boiled onions, in cream, also with some acid jelly, plum, gooseberry or currant. A capon, being very rich, should be preceded and followed by the lightest of soups and salads.

If It's Good, Eat It.

Few people realize the importance of training their children to eat everything that comes along. One must recognize that there are certain constitutional antipathies, to special articles of food, but these are exceptional, and, with a little pressure, a normal child will learn to like all the ordinary articles of food.
from the benefit to health of a varied diet, the person who has numerous anti-pathies, in the way of food, is a social nuisance. An acquaintance of the writer prides herself on the possession of a very fastidious taste, refusing almost all of the ordinary articles of food. On a recent occasion, the husband of an intimate friend asked her to dine at the table d'hote of a famous restaurant. Not one article served could my lady eat. She thought she could eat some roast turkey, also some asparagus, neither of them on the menu of the table d'hote. Both were specially ordered, at considerable trouble and at more expense, only to be rejected on the ground that they were undercooked. Needless to say, she has had her last invitation from those people. Another woman spent four years in Italy, in a continual struggle to find something she could eat, as she never touched cheese, oil, wine, onions or eggs, not to mention minor articles like olives and fish. As the circumstances of both of these women compel them to live in other people's houses, one may be allowed to sympathize with their hostesses.

**Russian Tea.**

The proper thing for Russian tea is, of course, a samovar, but when circumstances deny its possession, the tea is just as good in a china pot. In collecting an outfit for Russian tea, one needs the thinnest of tumblers, which stand heat perfectly if a spoon is put in to break the descent of the tea upon the glass, a tall brass pot for additional hot water and a tray and fork for slices of lemon, as well as the teapot and sugar bowl. For iced tea, hardly demanded in November, the prettiest thing is a high, narrow glass pitcher. Cut glass should never be used for hot tea, as it will not bear sudden changes of temperature. A teapot, bowl and lemon tray of Chinese Medallion ware are specially pretty for Russian tea.

Now that the drawing-room tea table has retired from view, the maidless hostess finds it convenient to keep her tea equipage behind the glass doors of a cabinet, or even in a section of a bookcase in the living room, where its color gives a pleasant variety, as well as a hospitable suggestion. The ultra fastidious
have been known to complain that dust gathered in the cups always at attention upon a tea table, and it may well be that they should seek the friendly protection of a sheet of glass.

**Home Churned Butter.**

Allusion has been made, in these pages, to the fashion of making one's own fresh butter, at the table, in small china churns. Only a very small quantity is made at a time and it is not worked, being eaten immediately. When a day's supply is to be made, it should be thoroughly worked. The process, by the way is admirable for the hands, butter milk being one of the best cosmetics known. The slight acid whitens the skin and the other ingredients feed the tissues.

**Always Have Some Dessert.**

A great many people say, with a virtuous air, "We never have desserts," as if some insidious vice lurked in pie or pudding. As a matter of fact the simple sweet at the end of a meal has a very considerable nutritive value, besides gratifying a normal craving for sugar. When, as in the case of suet puddings, there is an addition of animal fats, the food value is still greater. Another point in favor of puddings, if not of pies, is that they add materially to the contents of the stomach, producing a comfortable sensation of fullness, whose absence is one of the most trying sensations of hunger.

With a child, whose appetite is fitful, necessary milk and eggs can often be administered in the form of a pudding or custard, when they would be refused in their ordinary forms. Too often such children will only eat cereals when they are smothered in sugar, to the injury of their teeth, while the cooked article will be eaten without question.

The pumpkin pie, of our childhood, without which no dinner, on Thanksgiving, was supposed to be complete, has met with modification, not to say glorification. Our ancestresses would not recognize the pumpkin mixture cooked into a custard, heaped in pastry cases from the bakers, and covered with a delicate browned meringue. They might, however, appreciate the absence of a sodden undercrust.
Every day the editor of this magazine receives letters from people who desire definite information on the cost of this or that house published in the previous issues. To all such people the editor must necessarily reply that the cost estimates given in the magazine each month for designs are not in all cases accurate. Many of them are received from the architects whose designs appear, and are based upon his best judgment with due regard for prevailing prices. Even the price guaranteed to build the home in Minneapolis or elsewhere would not necessarily built it in an entirely different part of the country. In your city it may cost more or less depending upon your material supply, the prevailing price of skilled labor, the amount of building being done in your city, also the amount of competition you secure when taking figures for the work.

For the convenience of our readers we publish each month prices on labor and material in different parts of the country. What are the prevailing prices in your city? Send us an accurate list and we will be glad to publish it.

The United States consul in Tsingtau, China, reports to us the following prices on material in that country. They are interesting for comparison with home prices.

Stone of the better class can be obtained here at about 75 cents per cubic meter, second quality at 60 cents per cubic meter, and third quality, known as gravel, at 50 cents per cubic meter. Sand is available at 40 cents per cubic meter. Lime costs $2.50 per 1000 pounds. Cement, which comes in casks from Germany, sells at $2.50 per cask. Nails cost $3.25 per 100 pounds. With an agent on the spot there would, I believe, be an excellent opportunity to introduce the re-enforced concrete buildings now becoming so general in the United States.

Wages of mechanics here are as follows: Carpenters, stonecutters and masons, each 40 cents a day; tanners, 50 cents; blacksmiths, 35 cents; painters, 25 cents; and coolies—that is hod carriers, etc.—12½ cents.
N. B.—Questions on construction and specifications will be answered promptly here.

W. H. E., Yankton.
Q.—Will you kindly inform me what a “16 Extra” Pine or Cedar Shingle is? We are building a new home, shingled all over, and the architect calls for this sort of shingle in his specifications. Are the “16 Extra” thicker than ordinary shingles? Also, what are Quarry Tile? And where can they be obtained in size 8 inches in two colors for floor of sun parlor?

Ans.—“16 Extra” means 16 inches long and extra quality. We advise you to obtain white cedar shingles in preference to pine. “Quarry tile” comes only in sizes 6 in. by 9 in. and 6 in. by 6 in. This you can obtain in red of the Northwestern Mantel Co., of Minneapolis. They also carry this tile in green, but it is very expensive.

A. J. K., Michigan.
Q.—Our Los Angeles representative writes us as follows:—“The Y. M. C. A. building of this city is a reinforced concrete building, with the space of 3⁄4 in. between the floor and the cement. The question arises which is the most effective in preventing the flooring from absorbing moisture—to cover the strips first with tar paper, or to fill that 3⁄4 in. space with asphaltum. If any information of this kind is in your possession, from other jobs, you probably could give us some aid in deciding what course to pursue. We are a little slow to give advice in the matter, therefore, take the liberty of asking your opinion.”

Ans.—In the laying of floors in reinforced concrete buildings throughout the Northwest no provision is made to prevent the moisture from being taken up by the wood floor from the concrete base. By the time the finished floors are laid the concrete floor has been in long enough for all moisture to have evaporated. It is customary, however, to put down a pine matched floor first and on this lay the maple or birch floor in order to obtain a firm, unyielding floor. This would seem to me the best plan and you could put a layer of tar paper, well lapped, between the two wood floors. To answer your questions directly, asphaltum would be more effective than tar paper in preventing moisture from penetrating the wood floor.

Geo. G. P., Bozeman, Mont.
Q.—I am building a house from a plan that I saw in your magazine, and for which I obtained drawings from the architect. As a substitute for black plaster, the specifications call for the use of tar felt paper between the studding in addition to the paper between the sheathing and siding. I had intended to back-plaster the house, but the carpenters, following these specifications, have used the tar felt paper, putting it around the house outside the studding before putting on the sheathing, and are also using ordinary red rosin building paper between the sheathing and siding. I am in about $15 or $20 for this tar felt paper, which was, of course, unnecessary if I am going to back plaster. I now find that the back plaster will cost me about $75 (the outside dimensions of the house being 25 by 32), and it is a question with me as to whether I would be justified in incurring this expense after using the tar felt paper. I shall probably put on storm sash anyway.

Ans.—As regards the article to which you refer, it is correct in stating that back plastering is little used nowadays, owing to the fact that it is not deserving of as much credit as a means of keeping the house warm as it has been receiving. One reason for this is that being out of sight the mason is often too careless in its application and another is that back plastering as figured by contractors is usually cheap plastering and being of a porous nature the cold penetrates it easily. If hard gypsum plaster was used, applied in as careful a manner as the inside plastering, then back plastering would do considerable good. Even the usual poor job of course helps some. It is generally agreed among builders that the best method of constructing a frame wall is to use plaster board on the inside with two thicknesses of sheathing on the outside and rosin paper between and tar felt of good thickness on top, all paper well lapped and at least one thickness of the sheathing matched.
No, the omission was not in the original design, nor yet in the blueprint. The design was perfect—the detail complete. Yet there was a glaring omission—which cost the home builder much repair expense, discomfort, unnecessary doctor bills and many a shock to his artistic instinct.

The error in this case was unwittingly made, although in some similar cases with other architects it was due to lack of appreciation of the vital importance of a certain item, rather than lack of information.

Happily, leading architects now a-days seldom if ever overlook this vital matter—yet even where the Plan is perfect and complete it may be, and often is, upset by the Contractor, and in these cases, the error is seldom chargeable either to lack of appreciation or lack of information, but to Self-Interest.

In any case, do not accept an Unfinished Plan. Prospective Builders, or persons with buildings under erection (especially private residences) who are particular as to perfection in every detail, would do well to write us (addressing our nearest office) and learn just what was omitted in the Unfinished Plan. It will save you much after discomfort, dissatisfaction and needless expense. Told in attractive form. Just ask—"What was Omitted in The Unfinished Plan?"

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Modern Tools.

When Captain Cook sailed into the South Seas he was amazed at the avidity with which the natives grasped at iron. A nail bought a good-sized pig, and on one occasion he purchased four hundred pounds of fish with a few old knives improvised from an old hoop.

In exchange for iron tools he could have brought away anything on the islands. In fact, scraps of iron were as useful in paying for food as gold coin is today in America.

Anyone of the natives who was so fortunate as to obtain a nail became at once a man of power and took on the airs of a capitalist.

An old chief in possession of two nails made an excellent income in the things he needed by renting them out for the purpose of boring holes, which made methods with which they had been satisfied seem tedious.

The gouge or tool used by them for drilling a hole was made of bone from the human arm. Their knife was a shell, or a bit of flint or jasper. A shark's tooth fixed to a piece of wood served as an auger, a piece of coral was a file, and their saw was made of fish's teeth fixed on the convex edge of a piece of wood. Their stone tools were a laborious work. They were fashioned by rubbing one stone upon another, until brought to the required shape, but they soon became blunted. The delight of these people over a piece of iron which was capable of taking a sharp edge and keeping it was dramatic.

It requires some thinking to appreciate the fact that iron is of far more use to men than all other metals combined. Its various qualities make its use possible in a steel pen and in a railroad, the needle of a mariner's compass and a Gatling gun, a surgeon's lancet and an engine, the mainspring of a watch and an ocean liner. The various improvements in the tool line read like a romance. The saw was considered of such importance that its inventor was honored with a place among the gods of Greek mythology. The inventor saw a man dividing a piece of wood with the jaw of a serpent containing the sharp teeth, and proceeded to make a saw which, according to ancient tools on exhibition, differs very little from the saws of the present day, except in material.

The first sawmill was erected in England in 1663, but had to be abandoned on account of the hostilities of workmen. More than one hundred years passed before another attempt was made, when a mob assailed the plant and destroyed it. The government, they were not the iron and steel of the present time.

A tool is now a chisel, a drill, a hammer, a saw, a punch or plane, but a machine tool is quite a different thing. A machine tool is a power-driven tool that cuts metal. It may be a delicate machine that can form a little brass screw for a watch movement, or it may be a thing as high as the house, weighing hundreds of tons, that bores and planes great steel ingots with as much freedom as a man whittles a pine stick.

Machine tools are made in their cutting parts of a tool steel of great strength and hardness. A wonderful tool steel is now made that continues to cut cold steel after the tool is red from intense heat.

One of the most highly developed machine tools of the present day is the automatic screw machine. The milling machine and a variety of milling machine called the automatic gear cutter are also machines that have the appearance of doing a heap of thinking when at work. When the interesting machine of American ingenuity called the automatic gear cutter was introduced government made good the loss, another was built and protected by the government soldiers. At a much later date new inventions received the same kind of opposition, and when the Sankey Canal—six miles long—was authorized to be built near Warrington, England, it was on condition that the boats plying on it should be drawn by men. This was about the middle of the seventeenth century.

The old-time man dressed his metals to a proper dimension with hammer, chisel and file. Though those metals were iron and into Manchester, England, the British workmen resented the innovation, and the unions passed a decree that a man must be placed at every machine. In the United States six gear cutters are operated by one workman. The result of this opposition to labor-saving machines is that the West-
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In the wonderful automatic screw machine the work is done without guide of human hand or brain. The attendant feeds the long, thin rod of brass or steel to the machine, and the feeding mechanism carries the rod forward to its work. The turret advances and puts the first tool at work on the end of the rod. Each cutting tool has its work; one cuts a thread, another shapes a head, still another puts on a point and another drills a hole, while the turret automatically brings each of possibly as many as six tools into action until the screw drops into the pan, completed.

The Open Shop

To those familiar with the principles of the open shop an explanation of them may seem superfluous. Yet, strange though it may appear, there exists much misunderstanding as to the true meaning of the open shop and the motives of those who most strongly approve of and support it. This is especially true in many instances where the daily press, either through a misconception or a wilful perversion of facts persistently insinuate that the policy upholding the open shop is inimical and opposed to the interests of the laboring classes. Recently, when it was announced that the National Association of Manufacturers had subscribed to a fund of a million and a half of dollars, the erroneous conclusion was advanced that this was a war fund with which to wage a hostile campaign against organized labor. No statement could be further from the truth. The National Association of Manufacturers has no quarrel with organized labor. Mr. James W. Van Cleave, president of the association, has given his views on this subject in a paper published in the Engineering Magazine, and entitled “True Meaning of the Open Shop.” Under eight several captions he concisely sets forth what the Association means by the open shop. They are:

1. The open shop.
2. No restrictions as to the use of tools, machinery or materials, except as to such as are unsafe.
3. No limitation of output.
4. No restriction as to the number of apprentices and helpers when of proper age.

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Splinters and Shavings—Continued

5. No boycott.
6. No sympathetic strike.
7. No sacrifice of the independent workingman to the labor union.
8. No compulsory use of the union label.

There is nothing in this platform which can be construed as inimical to organized labor. The members of the association simply reserve to themselves the right to regulate the business in which they have their capital invested, allowing the unions to in like manner regulate their organization affairs, provided they do not interfere with the interests of employers. The intelligent member of any labor union, if he considers the proposition, must admit this is but a reasonable and rational demand of the man who has invested his capital and conducts the business. The open shop has no intention of interfering with the labor unions. If the workingman elects to belong to such an organization, well and good; but he must not expect to carry the ideas of the union into the workshop and seek to force the employer and other employes into adopting them as the rule in the conduct of that particular business. The open shop does not oppose the organization of labor unions, but it is opposed to the labor unions running its business. As individuals the open shop recognizes the right of every man to sell his labor, but it does not recognize any right of organized labor to interfere with its affairs.

It is to establish and maintain this independence of action that the National Association of Manufacturers has been formed, and to aid in carrying out the work proposed, the fund of $1,500,000 has been subscribed. Of this fund it is proposed to expend annually $500,000, or as much of it as may be necessary, in the maintenance of a council "to serve as a means of harmonizing and federating the various national and state organizations of citizens, merchants and employes, to the end of utilizing them in a vigorous educational campaign in the interest of industrial peace and mutual good will. It is proposed that the several organizations throughout the country shall continue their autonomy, but with representation in the national body, which, through its council, will handle all the concerns common to all the associations, and will go promptly to the defense of any of its members who need assistance, provided the member assailed is fighting for a principle favored by the council, and fighting by
methods and with weapons which the council recognizes to be just. In brief, the object of the association is to establish a righteous industrial peace, acceptable equally by employer and employe. The propaganda will not be against labor unionism as such, but against the various practices which have fastened themselves upon some of the unions—the practices which embody themselves in the public mind when the names of such leaders as Sam Parks, Debs, Martin Irons, Shea and Schmitz are mentioned. Mr. Van Cleave declares that the gospel to be preached will be that of peace between rich and poor, between capital and labor, between employer and worker, and in this way it is hoped some of the audiences may be taken away from the demagogues and destructionists and their power to make mischief diminished.

Factory Fires.

A lamp hanging too near a beam, a steam pipe or hot air pipe laid too close to woodwork, dust settling down in thick layers on heated vessels or pipes, defective insulating materials around a steam pipe, stove, fireplace, drying plant, etc., which are thereby enabled to radiate heat continuously against wooden articles. All these possibilities may occur in any factory. and under favorable conditions often lead to very perplexing outbreaks of fire. High pressure is unnecessary. Steam under a pressure of 5 atmospheres, equivalent to a temperature of 250 degrees to 300 degrees, being sufficient, the only essential being prolonged action. The same also applies to any hanging lamp. If the action is suspended for some time and the heat comes into play only at intervals this does not eliminate the danger, but merely delays its occurrence for the time being.

The phenomenon of spontaneous ignition proceeds in the following manner: Heat when sufficiently prolonged renders organic matter like wood porous, whereby the wood is enabled to manifest the tendency possessed by all porous substances—namely, to absorb and attract gases. Now the only gas available under the circumstances is air, but a selective affinity is exerted on the two constituents of air, the oxygen being occluded more readily than the nitrogen.
so that the porous wood becomes charged with air in which oxygen predominates. Dried wood is also able to take up a large quantity of gas, about 30-90 times its own volume, and as soon as the action of heat recommences the by no means small accumulation of oxygen in the pores greatly favors the production of pyrophoric carbon. When this alteration of heating and gas absorption is continued for some time a temperature of 515 degrees is no longer essential to the production of pyrophorous carbon, 300 degrees being sufficient under these circumstances, and in the presence of occluded oxygen the carbon quickly takes fire.

How Often to Paint?

“"This is not to be answered arbitrarily. A cottage near the seashore may require painting every second year, while another located in a dry climate can go three or four years without a renewal of its outside coat. It is a mistake to let a house go until it begins to look as if it needed painting. Before the house begins to look shabby the property begins to deteriorate. When the paint begins to be powdery, or brittle, or porous, it needs renewal at once.

The best way is to test the paint with the finger or knife. If the old paint chips off, or soaks up water, or can be rubbed off in a powder by the finger, the time has passed when the paint protects the wood. Underneath the paint the wood is disintegrating. Wood that is properly painted will practically last forever, but if not so protected it rots rapidly. Paint is thus an insurance just as important as that represented by a fire insurance policy. Lumber is more expensive than paint, and carpentry work more than either. The most important part of all paint is the linseed oil which is used to dissolve and mix the pigments, and so long as the oil lasts the paint protects the surface, but when the oil is “dead” the old paint has lost its protective value.

What Is It Made Of?

“The composition of paint should thus be clearly understood in order to meet this question intelligently. The body of good paint consists of either white lead or oxide of zinc, or the two mixed, with such inert materials as gypsum, whiting, silica and barytes, and the various coloring pigments, such as lamp and bone black, red iron oxides, Prussian blues, ochres and chromes,
Splinters and Shavings—Continued

umber, siennas and other mineral elements. The universal solvent of these materials is pure linseed oil. There has never been found an adequate substitute for linseed oil, but many adulterated oils may be employed in cheap paints. Petroleum oil, cottonseed oil, fish oil and rosin oil are sometimes used as adulterants, but they never serve the purpose as satisfactorily as pure linseed oil.

As a rule the paint which requires the greatest amount of linseed oil for its proper application is the most durable in color and use. Where quick drying is essential turpentine and benzine are often mixed with the paints, but these decrease the amount of oil and thicken the coat of pigments, and they give a 'dead' surface which never lasts long.

Condition of Surface.

"The house to be properly painted must be in a suitable condition. If the house is a new one the surface of wood must be dry and all sappy and knotty places covered with shellac in advance. Dryness of wood and weather are essential for painting either a new or old house. Even damp, foggy days will sometimes prevent paint from soaking properly in the wood and thus anchoring the whole coat. In repainting an old house all loose paint must first be removed.

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Write For Sketches.
Three Acres and Liberty.

The revival of interest in gardens and farms, the gathering force of the cry, "Back to the earth!" has brought forth a multitude of rural books, to say nothing of the numerous magazine publications devoted to these subjects. Many of these, while interesting as fairy tales, are of little value to the seeker after real help for real work, in the experience of others and from demonstrated facts.

Mr. Bolton Hall, also author of "Things As They Are," has in the present volume collected a mass of practical and reliable information, which, though innocent of literary style, is presented in a clear and readable manner. While intensive cultivation cannot be studied from books alone, such a record of the results of actual experiments as is contained in this volume can but be of great value. The author not only shows what can be done with "three acres" of land under improved methods and by intelligent and well directed labor, but numerous instances are described and details given of what has been accomplished on an ordinary lot 50x100 feet or less.

Not the least valuable are the several appendixes at the close, one of these giving the cost of a log cabin of good size. From felling the trees to the final touches of paint and screen, every item of cost is specified and exact amount of material required. There are also tables given in clear concise form, the planting time and method of all the vegetables and flowers, for different localities.


Barn Plans and Outbuildings.

Strange to say, there are not many really comprehensive works upon this particular subject, although the proper and economic erection of these buildings requires more care and thought than is usually given to them.

This volume is a revised edition of the book published some years ago by the

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The Orange Judd Co., publishers, New York. Price $1.00.

Madame de Tréymes.

In one hundred and forty pages of large and generously spaced type Mrs. Edith Wharton has achieved in this volume a successful combination of the short story and the complete novel—a rare and unusual success. The undoubted fault of this gifted author is a too prolonged and minute dissection of character, thought, feeling, motive; an introversion carried on to the point of wearisomeness, subtle and skillful though it be. In Madame de Tréymes character and situation receive that brilliant and searching analysis in which Mrs. Wharton is supreme; but not a feint or false move is made in the glittering sword play of words.

How John Durham, whole-souled, upright American gentleman, fares in his efforts to free his early childhood friend and late love from the obstacles that French religion, tradition and family "solidarity" raise to her divorce from a blackguard husband and a union with himself—the reader will best find out by getting the story. We will only assure him that it will be well worth his while.


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Fashions in Houses.

This well-illustrated and well-written article by Mrs. Una N. Hopkins treats of something entirely new in the house building line. Mrs. Hopkins writes from California, where she is surrounded by more unique and beautiful "fashions in houses" than is possible to find in any other state of our country. Mrs. Hopkins will also treat on

Entrees as Architectural Features.

Artistic California Homes.

A House for Three. With a tree growing thru it.)

An Architect's Contribution.

Architects are very busy men these days and we are fortunate indeed to be able to announce two valuable articles from the pen of Architect Chas. S. Sedgwick. In addition to the practical article published this month on "Heating and Plumbing," the following will appear soon:

Building the Home.
Decorating and Furnishing the Home.

Lessons from the Old School.

One of the most valuable features in Keith's for 1908, one which all our readers will fully appreciate as a refreshing departure from the popular run of concrete and mission style of houses, will be a series of ten articles by Miss Edith D. Tunis, on good old Colonial architecture. Miss Tunis hails from Virginia, from whence she has easy access to some of the finest old colonial mansions in the country. Many of these old forgotten gems, half hidden among their oaks, will be illustrated in a series of three articles with twelve illustrations on "Types of Colonial Mansions." The other articles will treat of rare old specimens of Colonial architecture. Each article will have illustrations of four subjects taken under the supervision of the writer.—Titles to be announced later.

Character in Detail.

We are pleased to announce that another series of articles has been arranged for with our foreign contributor, Mr. J. Taylor of Glasgow, Scotland. Mr. Taylor's well-written series of articles illustrated by specially prepared sketches has been a pleasing feature of the magazine during the past year. Mr. Taylor is not only a practical authority and writer on the decoration of homes, but an extensive lecturer as well. The Technical College of Glasgow has arranged with him for two lectures each week and we are fortunate indeed to have claim to his time the coming year. Mr. Taylor will give us a series of articles on various matters of detail concerning the home. As he truthfully writes—"Modern architects are more and more giving thoughtful attention to such details and thus a distinctive character is given to many a home." The articles announced at this time are

Drawing Rooms.
Dining Rooms.
Hall Arrangements.
Vestibules.
Garden Approach.
Enterance Doors.
The Gateway.

Other Contributions.

Among many other interesting contributions will be those from the pen of the well known writer, Miss E. A. Cummins, on "The Hall," "The Living Room" and "Spanish Sittings."

Miss Elizabeth L. Gebhard will write on "Clearing Ground for a Bungalow" and "Near to Nature's Heart."

The contribution by Ora W. Alford will be "Original Homes of Denver" and "My Neighbor's Porch."

An interesting article from the pen of Mrs. A. C. Morrow on the construction of "The Philippine Bungalow" is announced to appear soon.

Other contributors will be Dr. A. H. Linewaver, an enthusiast on classic architecture, Chas. H. Beckel, H. H. Holt, Carlos de Gouex, Geo. F. Parker and many others.

Our Departments.

The popular departments which have been regular features of Keith's will be conducted on the same high plane of merit that has characterized them in the past. The departments on Decoration and Furnishing, (including a department devoted to answering questions on decoration), Household Economics, Table Chat, Notes on Prices, Architect's Corner, Splinters and Shavings, and Glimpses of Books, have all been placed in the hands of the highest authority and will prove of inestimable value to our readers.
"An Old Connecticut Home."

A Splendid Example of Colonial Stairway Architecture.

Article—"An Old Connecticut Home."
Or the initiated, or even less enlightened aspirant for the possession of an ideal home fitted in every detail to show the characteristic lines of the generous Colonial days, no more perfect example could be found in both architecture and furnishing than the building which represented Connecticut at the Jamestown Exposition. While not boasting the massive proportions and severe simplicity of the houses of Southern planters, this structure is one of a type much seen throughout the North, and is, in fact, an exact reproduction of the old Benjamin Talmadge home in Litchfield, the first Colonial mansion built in the Nutmeg State.

Being of frame, and painted white with green blinds; with an uncovered piazza extending its entire length, the exterior of the house presents nothing extraordinary. Great clumps of rhododendrons and azaleas lend beauty to the slight terrace being banked close to the piazza, and showed a blaze of glorious color in the springtime. Green mission tubs, each with its pyramid bay tree, adorn the balustrade, a treatment simple in itself but absolutely in harmony and accord with the surroundings.

In the rear is the delightful little flower garden with its old sundial and quaintly precise squares, laid out and stocked in the dear old English fashion; instead of box, each bed is bordered with low clipped privet, a wise departure, as privet accomplishes a better effect in one year than could the slow-growing box in many. Larkspur, phlox and marigolds are rich in blooms for this tiny bit of a garden, while sentinel hollyhocks stand guard against the house wall, and nasturtiums run riot wherever they may be. Primly narrow gravel walks thread in and out among the flower beds, and an arbor here, or old bench there give the needed tone of homelike comfort.

The front door of the building with its heavy, old brass knocker, leads from the piazza directly into the almost square entrance hall, at the back of which, on the left, runs the stairway. A Sheraton cabinet, with a store of priceless Lowestoft and old Willow-ware, is placed on one side, while a magnificent old Connecticut chest, gate-legged table, candle-stand and numerous genuine Windsor chairs fill the remaining space, and over the doorways are hung racks of choice old pewter plates and trays. The hall is done in a very beautiful plain red, the trim being exclusively of white except the banister rail, which, naturally, shows mahogany. On the left, the long salon runs the full depth of the house adjoining on its extreme left end a little reception room, the soft yellows and rare furniture
of which blend charmingly with the dull, sage green tones of the drawing-room. Rich rugs, and the Louis VI brocades which upholster the Empire sofas and Chippendale chairs relieve the monotone, and altogether the room is a gem and a joy to the lover of antique furniture. The Colonial and Washington mirrors, card tables, sofas, desk, lamp and andirons, each has its authentic history and shows the master touch of those who worked and lived when America was young, for nearly every bit of furniture in the building dates about 1750.

Crossing the hall, one sees first a square little room of a buff color where a Sheraton desk, old table and winged Colonial chairs suggest strongly all creature comforts in a most alluring way. Beyond this and toward the back is the exquisite dining room with its tapestry paper and fringed buff draperies of a curiously coarse pongee; the curtains here, as well as in the drawing room, are caught back with wonderful old four-inch brass rosettes, seldom to be seen nowadays. A massive dining table with two sets of Empire claw feet occupies the central place. The sideboard, with quaint knife boxes at either end, serving table and one or two chairs, show the work of Hepplewhite, but most conspicuously, among the Sheraton treasures, is an inlaid wine box of rare design. A large open fireplace with andirons, tongs and plate warmer completes to the smallest details a room generous in proportions, and faultless in furnishing and design. Needless to say, these fireplaces are repeated all through the house.

The second floor shows a square hall nearly as large as the one below, and the effect of this from the stairway, as well as the charming manner in which all the bed rooms open out upon it, is truly delightful. Here again are seen rare furnishings. The two front bed rooms, each with its old four-poster, are such as would delight the most arrogant connoisseur; the puritanical cradle of one, and matched wall paper and chintz of the other are enough in themselves for unlimited interest and commendation.

In fine, Connecticut has given to the country a superbly illustrated lecture on the beauties and luxuries of the early Colonial days, and, as imitation is said to be sincerest flattery, there will doubtless be many to profit by the lesson which may be learned by all who see the faultless example she has lent Jamestown in honor of her first sons and daughters and of the times in which they lived.
NOW and then some man tries to build his house without plans. Have you noticed the usual result? Have you noticed in what an irregular manner the work proceeds? Have you noticed how many mistakes are made and how much work is torn down and done over all because of a lack of proper plans for guidance and a systematic arrangement of details? Have you noticed how long it takes the foreman to lay out the work and how slow the workmen were to comprehend his orders? Have you ever stopped to consider what the time so spent at the prevailing wage scale was costing the owner? Also have you ever noticed that the second time a man builds he almost without exception obtains complete plans? Would you try to have a piece of machinery made without complete drawings of all its working parts? No. Then why try to erect that most complicated structure, a modern house, which involves not only important structural problems but has an artistic element to consider as well, without complete working plans? Properly drawn plans will save on the cost of the house, forestall the needless care and worry over details and accomplish the building of a house that is strong and pleasing to look upon, in a systematic labor saving manner. Furthermore, completely drawn plans will enable the owner to take competitive bids on the work, thereby saving on the cost and let his contract on a businesslike basis, knowing at the start just what he will get in the finished structure.

If all prospective home builders could only be made to realize the importance of having good plans to build from there would be less unwarranted suspicion cast upon painstaking contractors, less complaint about the “everlasting extras” and more beautiful and saleable homes. I know it to be a fact that every first class contractor in this city has built his own home from architect’s plans. A word to the wise, etc.—A Contractor.
The three topics included in the subject upon which we are writing in this article are so broad and far-reaching in their connection with home building that it will be difficult in the short space allotted us to express in a few words all that may be said with interest upon the subject.

The heating, or, more properly speaking, the warming of a home necessarily implies ventilation. This fact is not understood by many. The interior of a room that is filled with cold air cannot be successfully warmed without circulating the air. The old time method of warming the home with stoves is simple and economical and for such purposes, will doubtless be used for many years to come. Among the better class of houses and for all modern homes, other and better means are resorted to. None of the methods employed, however, have ever proven entirely satisfactory and objections can be found with almost any means employed for warming. Circumstances and location, size of house and exposure have to be all taken into consideration. For a small house of seven or eight rooms, the hot air furnace will usually prove quite satisfactory. The first cost is less than heating by steam or hot-water and the consumption of fuel may not be any greater but the hot-air furnace has some decided advantages. With properly located vent pipes to draw the air from the rooms at the floor line, the warm air coming in from the furnace will flow freely and it will not be necessary to crowd the fire in the furnace, if however, there is not a sufficient number of vent pipes to take the air out, it will be necessary to use much fuel and keep a very hot fire. With proper circulation of air, a good hot-air furnace will warm the house throughout with pure fresh air quite economically, this is greatly to the advantage of the furnace.

Hot-water for heating purposes is not as great a success, in a cold country, such as we have in Minnesota and the Dakotas as it is in a warmer climate. The reason of this is that the hot-water does not attain a high degree of temperature, hence it requires a large amount of radiation. It cools off quickly and is slow getting hot and when the temperature is low outside, you cannot accomplish ventilation very successfully with hot water.

The use of a steam boiler has also its advantages and disadvantages. The first cost is less than hot-water and more than a hot-air furnace. Properly put in, steam can be used to warm a house with direct radiators in the rooms or with indirect radiators located below the floor and cold air brought from outside and passed over the radiators, hence taken up into the various rooms, requiring as in the case of hot-air furnace, ample vent pipes to take the air out of the rooms.

There are still other modes of warming the house, using combination of hot-air and hot-water or hot-air and steam. Some of these combinations have been quite successful, the hot-air and hot-water being the most favored. In all three of these methods of warming, the ventilation is a very important factor. In order that a home may have proper ventilation, there should be an abundance of pure warm air flowed into the center of the house in the first and second story but most necessary in the first story. In all other rooms these vent pipes should be taken down as far as possible from the outside wall. The mistake is often made of getting these pipes too small. They should not be less than four inches in diameter and they may be much larger.

The vent shaft must be warm producing a suction and drawing on all the vent pipes. This can be accomplished by running the smoke flue from the furnace into a large shaft at least 16 to 20 inches square and extending the smoke flue up in the chimney, using the space around the smoke flue for ventilation. The vent flue can also be warmed by steam pipes, in any case, it is very essential to have a well warmed flue for ventilating the house. There are other essential points relating to the proper ventilation; warm air should not be flowed into a dining room, kitchen, bath room, etc., the air should rather be drawn out of these rooms and should flow into these rooms from the hallway and living portions of the house. If this is reversed, as it is in many cases, the objectionable odors will be drawn into the living part of the house. If more attention was put to the ventilation of the home, the warming apparatus would prove more often a success.

Regarding the plumbing of a modern home, this portion of the work is mystifying and is like "Greek" to most people.
About all we know about it is that the pipes get out of order, the plumber makes the repairs and sends in an astonishingly large bill which we pay and wonder when the next will come. If we have too many of these bills to pay, we naturally think the plumbing is not done right which is sometimes the case but not always. Owners are often at fault and should blame themselves entirely for trouble with the plumbing because they were not willing to pay for good material and best work. When the plumbing is being "figured," the owner tries to get it as cheaply as possible. It would be better to have the work specified right, let the work to reliable plumbers, pay a little better price and avoid repairs and bills in the future.

There are two distinct systems of plumbing that are in common use, one is the tank system with gravity pressure and the other is by direct city pressure without the use of tank. This latter way is the simplest, costs less and by far the most common in use. The pressure on water pipes from the city pipes is very uncertain and the fixtures give out very quickly where this system is used. With the gravity system, the pressure is much less and being steady, the trouble with the valves is avoided.

For the benefit of our readers who are not familiar with this work, we will give a short description of pipe and trap ventilation. This work has been reduced to a science among plumbers and the ordinance in all cities requires this work to be done in the most modern way. Every soil on waste pipe has a trap that stands full of water to prevent sewer gas getting into the house. The pressure, however, of gas becomes so great that it forces its way through these traps into the house. In order to avoid this, a vent pipe is connected with the trap and this pipe is carried upwards and increased in size and all traps are connected into this vent pipe. This pipe in turn, is carried above the highest fixture, the main soil pipe being brought into the basement, is carried up in some convenient angle or closet through and out of the roof and the vent pipe is connected into this soil pipe. This affords an escape for all gases that accumulate in the pipes and relieves the pressure on the traps. It also prevents the water from syphoning out of the traps. This in general is the manner in which the soil and vent pipes are run.

In the matter of fixtures, there has been a rapid improvement by the manufacturers during the past ten years and very good fixtures can be bought for small cost. The great majority of fixtures that are used are made of cast iron and enameled white. In expensive homes where the cost is not considered, entire porcelain fixtures are used. A few years ago, most plumbing was done with lead pipes, now nearly all plumbing is done with galvanized iron pipes and all exposed piping is nickel plated. In the modern bath room of the present day, all fixtures are exposed, the piping nickel plated, wash-basins are supported on nickel plated legs or brackets from the walls, the floors are of tile and the walls are wainscoted, either with tile or a hard cement marked off in the form of tile and enamel. These bath rooms are sanitary and with all the beauty of the present bath room, they are not as expensive as the old-fashioned way with paneled wood wainscotings and closed fixtures. The distributing of fixtures through the house with wash-basins for each bed chamber is not done now nearly as much as it used to be, the carrying of water pipes and waste pipes over the ceilings is almost entirely done away with and the plumbing of the present day is more simple, concentrated, less expensive and better in every way.

The lighting of the home as it is usually done in the smaller and less expensive houses is very simple. Lighting by gas is the common method in most of the larger towns and cities. The use of electric lighting, strange as it may seem, is the common method of lighting in the smaller towns and villages throughout the country while in the cities, the expense of lighting by electricity has been kept so high that most of the lighting is done by gas. The means of lighting by electricity are so varied and expensive that our limited space will not allow us to describe the various ways and means. Electricians are putting in wiring for electric lighting so successfully that the danger of fire is very small and the expense of wiring in the most approved methods is a small item of expense so that the first cost of lighting a house by electricity is not more than it would be to pipe the house for gas.

Nearly every owner in building a house at the present time, builds with a view to sell at a profit and having this in mind, he should prepare his house with proper heating and ventilation, thorough plumbing and good lighting system. The expense of these items is small but they make the house saleable and add much to the comfort of the home.
It is the purpose of the writer to take up every phase of house planning, commencing with the simplest and developing them by degrees into the more complexed arrangements, adhering, however, strictly to arrangements which in the writer's experiences have proven the most successful. Last month the convenience of a central hall arrangement was passed over briefly. This month I desire to elaborate on that theme.

For the reader's convenience, the illustrations are marked A, B and C. In Plan "A" we find the central hall somewhat differently situated than previously shown. The porch openings, it will be noticed, are divided by four piers into three equal spaces. Right here let the point be emphasized that an odd number of spaces and an equal number of posts, columns or piers always produces the best effect. In most houses with central hall the porch steps are in the center opening; such is not the case, however, in plan "A"—the divergence is not at all out of order. With the central hall plan the three openings on the porch serve another practical purpose besides external appearance. They allow the entrance and the windows in the rooms on either side to each look out unobstructed between two posts. The entrance into plan "A" is thru a large vestibule, on either side of which is an alcove. In most cases, alcoves so situated are used as coat closets with doors either onto the hall or the vestibule. The coat closet in plan "A" is under the stair, which is somewhat better, as it gives the hall a better outlook to the street thru the alcoves.

Plan "A" produces the best effect. In most houses with central hall the porch steps are in the center opening; such is not the case, however, in plan "A"—the divergence is not at all out of order. With the central hall plan the three openings on the porch serve another practical purpose besides external appearance. They allow the entrance and the windows in the rooms on either side to each look out unobstructed between two posts. The entrance into plan "A" is thru a large vestibule, on either side of which is an alcove. In most cases, alcoves so situated are used as coat closets with doors either onto the hall or the vestibule. The coat closet in plan "A" is under the stair, which is somewhat better, as it gives the hall a better outlook to the street thru the alcoves.

Plan "B" is for a smaller and less expensive house, the idea being a two-story portico with a balcony on the second story. The usual vestibule has been omitted, and in its place there has been provided a double door, giving an air space that serves the practical purpose of a vestibule. The outside door is a counterpart of the inside one, and is provided with spring hinges that always keep it shut. In the summer a screen successfully planned. The walls on either side of the hall are three stories high, thereby greatly increasing the strength of the house and reducing the cost thru an economical distribution of space throughout five rooms. Very large closets have been provided for all rooms. One room has a fire place and another a private bath.
omy of construction. More than this, the walls being so located makes the carrying of hot air pipes to the second story an easy and inexpensive matter, if this system of heating is adopted. The arrangements allow for four chambers on the second floor. This plan is well worth careful study, as it has many points to commend it to the average home builder. It is not necessarily adapted to one style of architecture.

Plan "C" is another and entirely different development of the central hall idea. Here we have the vestibule made a feature on the front. This is perfectly proper, and the effect is not at all like the abominable box vestibule we so often see on the front porch. To the usual arrangement of rooms has been added a parlor. The arrangement of the second story well balanced hall is splendid, and allows of easy and homelike access directly to all of the rooms, of which there are four and the bath room. The sewing room, while unimportant, is a pleasing, well balanced room. (Continued.)
AS the casement window come to stay? Before actually trying its merits I should have said, Yes.

After reading a brisk article on this subject in the House Beautiful I decided that casements, nothing but casements, should adorn our new home. Fortunately the other members of the family had decided on double-hung windows, nothing but double-hung windows, so we compromised on the double-hung window for kitchen and pantry, stationary and casement windows dividing honors for the rest of the house.

No, a casement window swinging out is not a success. How about the screen? And screens we must have seven to nine months of the year. Imagine an American taking time to adjust a screen every time he wishes to open or close a window! Then a shade or curtain of some kind, we must have as long as we try to be civilized, this would be wonderfully in the way of removing a screen. Let us suppose a sudden shower at midnight: You are awakened by the slamming of the casement. You brave a sheet of rain and the blinding lightning—dash your head against that screen. You wrench the screen out. Then, after several attempts, you grasp the casement and latch it. You find your every thread of clothing drenched.

We have found that casements swinging in do not leak, if made as they should be. We also have the deep inner sill, which contributes so much to the beauty of the casement, but which is usually considered conducive to leaking. Having tried the casement on every side of the house, and for about a year, I know the casement swinging in may be built waterproof. However, they do let in a deal of cold and dust; it being impossible to make them as tight as a double-hung window.

To be artistic the window casing of a casement must be unmarred by shade or drapery. The curtain we may hang by means of small rods directly on the window. Now, if the window is hinged directly on to the casing (and at present ninety-nine per cent are so hung) every time the window is opened wide down comes the rod fixture. This is not the deepest affliction, we must exclude light sometimes, and we must protect our sleeping rooms and dressing rooms from the outside gaze. Nothing is prettier than ruffled Swiss for bed room curtains; should we use these we must also use the heavier curtains. Two rods are impossible, so we hang only a straight, heavy dark curtain, which fades in the sun and looks still worse after a visit to the laundry. Below stairs we endure the publicity—because we must. The large windows are hung with a net, so the casements are curtained likewise. Should we wish to darken the room or feel a little privacy at night, papers or a strip of cloth are pinned up.

The effect of a faded, heavy material at the window of a dainty bed room was so inartistic that I have tacked ruffled Swiss curtains directly to the window frames—not very practical, of course. The result is that the heavy curtains hang on the rods in a closet ready for night service.

By mistake in one room a two-inch strip had to be placed above the window just below the casing. On this strip we have placed a shade and hung the curtain rod. If this strip were placed on either side as well as at the top, the difficulties of curtaining would be partially solved. This side strip should always be used for the butts, but I know is generally omitted.

Why should casement windows be so small? They are usually three feet from the floor, so that when sitting the owner has no view of his own grounds. Then they are only from two to four feet high, leaving the ceiling in the dark. This is not bad enough, deep over-hanging eaves must be added to increase the gloom.

Instead of the convenience, the beauty and the comfort of the double-hung window we are sacrificing all to a fad, the fad of a casement which is only a loop-hole.

The casement has its place in home-building,—on a stair landing, or in a corner under the eaves. It also seems appropriate on either side of a mantel or buffet, and its use is especially good over the book cases, but never can it supplant the double-hung window.
A Shingled House.

By Walter P. Crabtree, Architect.

First among the dreams that come to every right-minded young man, at the very threshold of his business career, is that of acquiring a home that he can call his own. The early fulfillment of this ambition furnishes the strongest incentive for constant labor and the chief motive for frugal living. Often as he goes about his work or at its close sits down to rest and think, he sees the picture of that home stand out in his imagination clear and well defined, and whether he be city or country born, the picture is the same. It is not a "brown-stone front" in the continuous line of a close-walled city street; it is not a grand, cold, stately mansion reared by wealth to surpass in size or elegance some neighboring country-seat; it is not a castle on the Hudson or a villa at Newport. It is a simple, home-like cottage, with cosy nooks, inviting window-seats and roomy verandas, surrounded by trees and shrubs and bright green grass. As he dreams of his ideal home he seems to hear the birds singing their carols in the trees, he seems to feel the cool, clear, sweet-scented breeze upon his cheek, he seems to see the landscape bathed in cheerful sunlight and the shadows of clouds flitting across its face; every sight to him is a vision of beauty and every sound a note of music.

In answer to this desire in men of modest means to get away from the unpleasant and unhealthy surroundings in our large cities large tracts of suburban real estate have been opened up for homes within easy reach of all the business centers. This range has been vastly extended within the past decade through the introduction of electric roads and the means of cheap and rapid transit which is thereby offered. The owner of suburban real estate and the builder of cheap houses, realizing the demand for quiet, pleasant homes by men of moderate means, have combined their energies to supply it and the result is to be seen in many a suburban village that has sprung up around the large centers of trade. In the first place, in order that the entire area to be occupied may be made available and that the village may be laid out with mathematical precision, the site has
been prepared though at the cost of destroying every natural beauty that the locality may possess as a place of residence. Trees that have stood for generations past and might stand for generations to come as familiar land-marks are felled without a regret; that carpet of living green that nature spreads for our feet is rooted up and destroyed; hills and valleys disappear that the village may be laid out in compact and regular form. In time the result sought for is attained but every attraction that the country can offer has been blotted out and in its place we see a waste of barren ground laid out in city blocks with rows of box-like structures lined up on streets of tiresome lengths like soldiers on the outer picket-line with distance and alignment well preserved.

The ideal home for which men work and save is not of stereotyped design, each like its neighbor, but of individual design to suit the taste of him who builds it. It is not set upon a barren patch of ground no wider than a country lane, but on a generous plot of land where trees and shrubs have room to grow. Its location is not fixed by rule and line regardless of natural surroundings, but so as to blend and harmonize with landscape, like a jewel in its setting. Let the trees stand where nature has planted them and as they grow and spread their branches they become old friends whom you could not spare. Do not attempt any radical changes in the way of grading; leave the graceful slopes as nature has formed them, but if grading must be done, follow well the forms that nature has set.

The home which illustrates this article is offered as a suggestion of what may be accomplished in house-building with a small amount carefully applied. The principles of good design may be applied as well to a modest cottage as to a more pretentious structure; correct proportion, proper treatment of mass and detail, proper regard to the uses to be served, are as essential to secure a satisfactory result in one case as in the other. People who would never think of making an expenditure of ten or twenty thousand dollars without the advice of an architect seldom think his services necessary in the planning of a cottage, but is not an artistic conception of outline, convenient and effective grouping of rooms, pretty bits of simple embellishment applied with taste valuable to the attainment of a satisfactory result be the undertaking ever so modest? Experienced judgment and educated good taste are always worth what they cost to every prospective builder.

A broad veranda is carried part way across the front of the house and around on one side giving accommodations highly prized by every country dweller. Passing from the veranda into the house we first enter a reception hall from which a good view of the living and dining rooms and a glimpse of the study beyond is obtained. Facing us an easy flight of stairs, broken by a landing, leads to the second story. This reception hall is lighted by the glazed door and by a large window at front. The sitting room contains a fire place where a fire can be lighted in chilly or inclement weather and is of fair size and good form and the wide

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**Showing the Plan Arrangement.**

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[Diagram of the house plan showing the layout of the first and second floors.]
opening between this room and the hall will admit of the two being thrown together when necessity may require it. The dining room is placed across the hall from the sitting room. It is lighted by three small windows on one side and two large ones on the front. The kitchen is most conveniently located and arranged and has all the modern conveniences for easy housekeeping. The pantry is within handy reach of both the kitchen and dining room and has a proper complement of cupboards, drawers, closets and shelves that are needed in such a room. In the second story are four chambers of ample size with alcoves and closets and a nursery connecting with the family chamber.

A convenient bath room is provided with the fixtures necessary to such apartments with water closet in a separate room. In addition to the rooms already enumerated there will be found by a study of the plan, the linen closet, fire place in family chamber and other minor conveniences which space must forbid of further mention.

The exterior of this house was covered with shingles, dressed with a reliable shingle-stain of an approved shade. The interior was finished in cypress finished natural and stained in the different rooms.

The attic was left unfinished, but is large enough to contain two good sized rooms.
Through the eighteenth century the quaint iron and brass hob grate, and the high rimmed brass pierced fender had a character all their own, and collectors of the antique, and those who like to make their surroundings coincide as far as possible with the style of 150 years ago prize them highly.

But after all, there is nothing creative or artistic about them; it is only their association that gives to them a degree of popularity.

At a period subsequent, the metal fittings of the house degenerated to the ugly, until the only excuse that could be urged for their retention was that they were utilitarian.

At the period referred to Art may be said to have deserted the home, excluded from it by the general ugliness bewailed by Morris, when as a youth fresh from Oxford he gave up the cherished idea of becoming a painter and dedicated time and talent to making the home the center of Art and beauty, confident that in doing so he would elevate the people and make life more worth living.

In no department of decorative furnishing has the modern idea worked a greater change than in the metal fittings of the room; so much is this the case that in many instances it is the grate, the fender, the gas or electric fittings that redeem the room from absolute commonplaceness.

I frequently visit the studio of an eminent architect, a man with a wide reputation for classical work and well known as particularly intolerant of anything savoring of modern art. In his vestibule there hangs a lamp very much like the one here illustrated and it is the one thing about the studio of the great man with any distinctive character about it. The lamp here is simple in the extreme and suited for the hall, or for placing over the dining room table, where it is a positive disadvantage to have a strong light.

Satisfaction comes with a good dinner and a man becomes meditative; a strong glare of light will interrupt the train of thought and mayhap disturb digestion. We cannot rid ourselves of the influence of surroundings; it is important then to study the effect of every detail.

If you have not dined in a room where all the light is concentrated on the table, with all the rest of the room in deep shadow, try it! And you will not readily go back to the old method.

In the lamp shown, antique brass is employed, with panels of green and purple, and clear leaded glass. Antique copper might be substituted, with touches...
of emerald green in the panels; or white metal, with rose colored glass; or yet again, dull black metal, with clear and white opalescent glass, divided by black lead lines. Green and purple glass balls are here used to complete the design and scintillate the light. A simple substitute for a lamp of this kind may be made with cardboard sides, on which a design is cut out; the front may be covered with tinfoil paper, or any other material suitable to requirement; while inside, divers colored silks are pasted on to complete design. This, when suspended by thin cords and embellished by large glass beads, may be more effective and artistic than metal and colored glass.

It is only the other day that I was temporarily decorating a fine house for a grand dance. The idea was to give an oriental character to the entrance hall and rooms. Large commonplace-looking gas lamps in the hall threatened to upset the plan, so I took a piece of stiff brown paper, covered it with a dull black paper, cut out an open Moorish design, filled this in behind with varicolored calicoes, and this was the best feature of the whole scheme. There is no end to the variety that can be introduced in this way, and such work affords both occupation and pleasure.

The fire grate accompanying is of simple cast iron construction, the motif of ornamentation being the rose, with stem and leaf.

Only today I called on perhaps the most original modern architect and designer. He makes a special feature of simple chimney pieces, and I sat for some time in front of one that was a great plain piece of cement with a rectangular opening for the fire, kept in position by a few simple horizontal bars in the lower section of the opening.

Surrounding this cement were scooped out recesses that served a utilitarian as well as a decorative purpose, but anything simpler or more unconventional it would be impossible to conceive, and it was admirably suited to the character of the room.

I saw a very pretty parlor grate the other day, made in antique brass with a pierced decoration in three places, into which was let in emerald green enamels, in the form of leaded glass, with lines of block tin, which resembled silver. The fender corresponded, while the lighting arrangement was four, square boxes, with sides of antique brass, pierced and decorated with colored glass and block tin lines, suspended and embellished very much like the lamp herewith illustrated. In fenders the modern designer works on various and interesting lines; a favorite method is to raise the hearth about six inches above the floor level, in which case the fender is made an inconspicuous size.

The fire shovel selected for illustration was made in white metal and was part of a suite for a very pretty parlor in which the woodwork was ivory white, the carpet peacock green, the hangings purple, and the decoration on the white frieze a peacock in full plumage. Purple, green and white—a charming combination with which white metal fittings, or oxidized, harmonize admirably.

Modern decorative art is careful and particular to the smallest detail, consequently even the bell push and electric switch must be in sympathy with the scheme.

What a delightful occupation all this introduces for the nimble fingers of young women, who in some instances produce admirable examples of beaten brass, copper and white metal. Individualistic work such as this gives an interesting character to a room that no amount of every-day decoration could impart; and with other things equal, the American home of today should reflect the modern artistic idea that has come with the greater intelligence of the twentieth century.
English Half Timbered.

This is a nation of many nationalities. This fact more than any other is the probable cause of such a variety of architectural style in our homes. A man may come from England, France or Spain and become thoroughly Americanized in all his customs and habits, but when his thoughts are of home they naturally bring him back to the first house of his boyhood days. How natural this is. After half a century in the court of England, her present queen, a native of Denmark, when asked "In what language do you think?" replied, "Oh, I always think in the Danish language."

The house by Bertrand and Chamberlain is one of these quaint old half-timbered English houses. The location of this house on a hill is such that the street side as shown in one view is really of less importance than the south end of the house. From this end a view is had over a wide range of country. The rooms in front are designated as parlor and library, with a living room in the center of the house, 39 feet long. Provision is made on third floor for a large amusement hall and servants' quarters. Estimated cost, $14,000.

Like a Swiss Chalet.

Like a Swiss chalet, the next house looms up before us. This foreign looking house was patterned by its architect, Lowell A. Lamoreaux, after the mountain inns of Switzerland, the far projecting eaves and long, narrow balconies being especially characteristic of that style. If built in Switzerland, the lower story would be of square hewn timbers tenoned at the corners; as it is built it is of rough cast cement on metal lath. The plan of this house is decidedly American. One of the attractions is a long, spacious living room with a fireplace at one end and a broad compass sun bay taking up two-thirds of one side, lending cheer to the room night and day. The central hall gives ready and convenient access to all rooms. The dining room is of good proportion and attractively arranged. On the second floor are three chambers, one of unusual size. Estimated cost, $4,000.

A Home-Like Cottage.

This model little cottage home, designed by Arthur C. Clausen, architect, is not only a beautiful, original design, but is a splendid six-room cottage as well. The rear of this beautiful little cottage, also the side with the outside fire-place chimney, are still more attractive than the sides shown. This home is built with an all-shingle exterior stained a silver gray. The color, however, is a matter of preference. The exterior could, if desired, be sided, either the whole exterior or in part. The chimney is of red brick with a stone cap, and the trim is white with a moss green roof. The plan is superb. The porch is 14 feet wide, the home-like living room 18 feet long. The sunny dining room is splendid. There is a pantry and coat closet, always a convenience. The rear entrance is a combination one to both kitchen and cellar. On the second floor are two chambers, bath room and linen closet. It costs $2,900 to build this pretty home.

A Splendid Colonial Exterior.

A FINE exterior of colonial style showing many marks of progress along the line of modern colonial homes, is the work of Kees and Colburn, architects. Its details are perfect and quite ornate, there being an ornamental frieze around the entire house. 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 the tapestry, rugs, mahogany furniture and bits of fine statuary to be found within. It is built of dark red pressed brick with white mortar joints, white trim and dark roof. The reception room and stair hall are practically one. The dining room is a most attractive room. To one side it connects with the living room; the opposite side contains the fireplace and china closets.

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.
and on the other two sides are the large compass bay and sideboard. There are five rooms on the second floor, with servants’ rooms in the attic. Cost to build $9,000.

**The Gambrel Roof Style.**

This suburban house, erected on a corner lot facing east, was designed by its architect, Walter P. Crabtree, to meet the requirements of a small family.

Laid out on the lines of the Colonial period it possesses a charm and simplicity which belong alone to this type of architecture, which is always pleasing.

For the exterior of the house clapboards were used for the first story, painted pure white, with shingles above stained a soft brown tone, with blinds painted a deep bronze green.

As the owner’s father, an elderly blind
Like a Swiss Chalet.

The living room, which is the largest room on the first floor, has a large bay window facing the east and nook with fireplace, seat and projecting high windows with bookcase built in below.

The kitchen is conveniently arranged and is shut off from the balance of the house, so that odors from cooking will not pass into other rooms. The pantries contain all conveniences to lighten the work of housekeeping as much as possible. Cost to build complete, $5,000.
A Home-Like Cottage.

T HIS is the design of a well planned house. But first a word or two about the style. This style of a house has been built many times, but seldom have the results been as entirely satisfactory as those shown by this design. The second story overhanging the first story porch is very attractive. The house can be all sided as shown, but it would improve its appearance to shingle it, or at least to shingle the gables. Shingled gables with cement up the first story would be very attractive. Now, referring to the plan again, note the splendid arrangement of the vestibule and entrance hall, the former with its two coat closets and the latter with its direct connection to the kitchen. The parlor is a simple but well proportioned room and the dining room quite attractive. Cost to build, $3,000.
A Splendid Colonial Exterior.
The Gambrel Roof Style.
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- HALL: 11 x 12
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- STOOP
- TABLE
- PANTRY
- CLOSET
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Second Floor:
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Front and Back Parlors.

In Eastern cities, too many people have to reckon with the long, narrow, abnormally high front parlor, and the square back parlor, which would be a well proportioned room, did its excessive height not make it hopeless. When, to the other difficulties of the front parlor is added a strong north light, then the case seems almost hopeless.

Almost but not quite. Rooms of this sort cry out for the divided wall treatment, so much more popular in England than it is here. The same treatment for two adjoining rooms is seldom advisable, least of all in the case we are considering. When the house faces east and west, similar coloring may be desirable, never with a north and south house.

Here is a suggestion for the long, narrow room, facing north, in which no treatment can be used which will reduce the supply of light. In essential principle, it is not widely different from that advocated for the basement dining room, in a recent number.

Assuming the height of the room to be from ten and a half to twelve feet, a panelled wainscoting should be laid, covering two-fifths of the wall, possibly a little more, roughly speaking about five feet in height. Above this, a yellow paper should be laid, a creamy yellow, with considerable depth of tone. It may be a brocade paper, it may have a broken stripe, if the room is not too high, it may even be one of the new, plain surfaced satin papers. Meeting this, with as little emphasis as possible of the dividing line, is a cream-colored ceiling. If the ceiling is covered, so much the better. All that will be needed, at the point of junction, is the smallest of quarter-round moldings.

The wainscoting and all the other woodwork should be painted with two or three coats of white paint, finishing with enamel. The floor should be a dark one and highly polished. If practicable, the system of lighting may well be changed, substituting for the central chandelier double lights a little below the top of the wainscoting, two pairs on each long wall. Already the room will be hardly recognizable.

An overmantel is less desirable than a mantel of marble or wood, white like the other woodwork, and surmounted by a mirror extending to the ceiling. The fireplace furnishings should be of the simplest, but brass or gilt rather than iron.

In arranging the furniture, the effort should be to break the lines of the room as much as possible. If a long couch is admitted, it should stand at an angle with the fireplace and not against a wall. The best furniture for such a room is Louis Seize, in white enamel, with cane backs and seats, depending for color on an occasional upholstered seat, upon the curtains and upon cushions. Or lightly upholstered pieces of mahogany, in Chippendale style, will look well. The proper material is a French tapestry, with a light colored ground and a formal design of brightly colored flowers. Curtains should be long ones, permanently draped, and with festooned lambrequins. In a room fronting on a city street some sort of net, or lace, curtain close against the pane, is almost a necessity, but does not dispense from the heavier drapery.
The floor covering is something of a problem. One large rug is more dignified than two or more smaller ones, but makes terribly for length. One way is to lay a fairly large, nearly square rug at the front end of the room, preferably a made rug of light colored Moquette or velvet, letting it extend nearly to the rear line of the fireplace, where it will be cut off by the sofa set at an angle, or by a high screen. Then in the rear of the room lay a smaller Oriental rug in delicate colors, grouping the furniture so as to make a certain separation between the front and rear of the room. For this use an Indian, rather than Persian or Turkish, rug should be chosen. Two Oriental rugs, at once harmonious with each other and adapted to the size of the spaces would be very difficult to find.

Not many pictures harmonize with such a scheme. Watercolors, in white mats, mezzo-tints, some old prints, or a very delicate and brilliant oil, lightly framed, will look well with the yellow walls, but not the ordinary run of pictures. Similarly, only very delicate bric-a-brac is advisable, in a room whose principal characteristic is light and brilliancy. It is admissible to hang miniatures, or a sconce of two, against the wainscoting, but, in the main, it should be left bare.

On the floor of the other room, the back parlor, the treatment should be reversed. Here the proportions of the floor are fairly good, and the object is to reduce the apparent height of the side walls. This is best achieved by the employment of the upper-third treatment, using a plain side wall, and making a good deal of the dividing line. As this room is most often used as a dining room, this mode affords an opportunity for the successful use of a plate rail which, in many modern rooms, distinctly mars the general effect.

If the room is to be used for a library, some of the darker landscape or figure friezes are admirable. Apropos of their use, it may be remarked that they are very expensive, and that the money spent on one of them might give much more pleasure if employed in some more perma-
nent form. On the other hand, it seems a pity that more people, who have an artistic gift, do not employ it in the decoration of their walls. The work on a frieze is so broad that it may be very rapidly executed, and if the faculty of original conception is lacking, it would not be difficult to copy some of the designs already on the market.

Naturally, the coloring of the rear room must be decided by that of that adjoining. With a front room in yellow, a soft, not too light green is advisable, unless one feels quite sure of carrying out a scheme in gray, which blends exquisitely with many shades of yellow. It is always difficult to convey an idea of color, in words, but someone may be helped by the suggestion that the tone of green employed in the bindings of Everyman's Library, is an admirable one, although a lighter shade is advisable, except in a very brilliantly lighted room. Most of the green wall papers are too vivid to live with in comfort.

With the plain, or nearly so, side wall, the upper-third may be of an English two-toned paper, of a somewhat lighter green, of a tapestry paper in green tones, or, with a figured side wall, of a plain green. This latter is the best treatment for a dining room, as giving a background of solid color for the china on the plate rail. The ceiling should be a deep cream, possibly, in a very high room, a greenish yellow, a light shade of citrine. Floor and woodwork should be dark. Unless the woodwork is hard wood, and can be stained to a desirable tint, it is best to paint it a rather dark olive, contrasting somewhat with the walls. Especially is this desirable, if the furniture of the room is the omnipresent golden oak.

Reversing the treatment of the other room, a large, nearly plain rug is advisable, and less attention need be given to breaking the lines. Any arrangement which adds to the irregularity of the room is desirable, such as bookshelves carried to differing heights or, in the case of a dining room, corner shelves for china. A large picture over a plain mantel shelf, is preferable to a mirror. If the windows are the French ones, reaching to the floor, common in back parlors, a good treatment is to fill the

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Decoration and Furnishing—Continued

lower fourth of the window with a piece of Turkish or Japanese fretwork, or a panel of open work carving in Chinese teak, having long curtains, of silk, tapestry or cotton, hanging to the floor and well pushed back.

When the rear room is the one with the northern exposure, the case is altered. In that case, buff, or a light terra cotta may be substituted for green, using dark woodwork, brown oak or stained mahogany, choosing for the sunny, long parlor a green wall, which will look well with the white woodwork, introducing into the furnishings enough brown or rose tones to bridge the gulf between the two contrasting color schemes. Naturally, the front room will assume a less formal character, and a greater latitude in pictures and ornaments will be possible.

Pillows.
The upholsterer's way of managing the corners of a pillow which has neither cord nor frill on the edges, is a very mysterious, till one knows how it is done. The cover is cut perfectly square, sewed up on three edges and turned. Then a quarter of a circle is cut out of each corner, having a radius of perhaps two inches. The pillow is slipped into the cover, the fourth side seamed up, and the edges of the cuts at each corner turned in and gathered tightly together, under a pompon, or a button. The work is nothing, but the difference in appearance is very great.

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M. L. KEITH, Publisher, MINNEAPOLIS, MINN.
**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. M. N. S.

Q. My husband bought a small house for us to live in thru the winter, with furniture and carpets in. Now they are positively ugly and I come to you for assistance.

The sitting room faces the east with one large window; has a carpet in two shades of green; furniture in dark oak; opens into hall on north and dining room on west with folding doors. The wood work in all rooms is sort of a golden oak color. The dining room is the worst feature. It has one large window on north side, carpet in small figure-red, with just a little green, black and cream. Wall up to plate rail in faded dull red cartridge paper; above figured in dull colors, very dark with a bit of dull red. The furniture in dark oak and you can imagine the effect; all the dull reds and oaks with golden oak woodwork in a north room and opening out of a green sitting room. As we don't expect to live here long, would like to fix it if I could with paper and paint and possibly making the carpet into a rug. What paper would you suggest for the sitting room with the green carpet and green and golden brown portieres between hall and sitting room? Also what kind of paper for hall, which is about 5x12?

Answer: Your case is trying, but much can be done at slight expense. You can get in the plain, cartridge papers a soft, mode shade, a shade neither tan or brown, but harmonizing with the brown in sitting room furnishings. It will be a fresh and charming contrast to the green carpet, etc., The ceiling can be the same as the side wall, as the shade is light colored. You can use the same thing in the long, narrow hall.

The dining room can be made very pretty if you don't mind painting the woodwork cream color. It will take 3 coats of paint probably. Put a cream satin stripe paper up to the plate rail and above it something gay in red leaves, birds and things, on a cream ground. Don't be afraid of the cream; your red carpet and dark furniture will offset it, and you can use red and white madras at the windows. Your ugly duckling will be a swan.

Mrs. L. J. H., Mooreland.

Q. I am building a bungalow on a plantation, in a fine 10 acre grove of trees. The living room is 30 x 24 feet, red brick mantel and fireplace, northwestern exposure, well lighted by 9 windows, four doors; ceiling 10 feet, wainscoting 4 feet. The floor is of oak, neither well made or finely sawed (done in local saw-mills, with no machinery for handling hard wood). The other wood work, including window seats built around fireplace, is of fine quality cypress. The windows are diamond paneled, opening out, casement style. The front door, side lights and transom are the same.

I don't like the light oak finish nor natural wood; prefer the rich brown. Would you suggest color for floor and other wood work? The wall is to be papered. I would like a buff. What do you think? and please advise for curtains, how to hang; color for rug.

Now one more question. The windows; how must I paint or stain the cross sections in the diamond paneled windows, brown like exterior of house or a creamy white?

Then the living room ceiling is to have pieces 4 x 6 put on to form the exposed...

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Answers to Questions—Continued

Leams; it is now ceiled with good dressed cypress. Could I have this papered in light tone like side wall, then beams finished like woodwork? I am afraid if we stain the whole ceiling, having no facilities for lighting other than kerosene, we will have a dark room and I saw in one of Keith's, a plastered interior, light buff side wall and ceiling and the brown beams crossing it. I have been helped so much by this department, I hope you will not despair over these many pages, but will tell me candidly your opinion.

Answer: Candidly then, we should not like a buff wall with the red brick fireplace and nine southwest windows. Why not choose a soft grey, which harmonizes admirably with brown woodwork and floors. Of course it must not be dark, and then the red brick would be just right. You can have a decorator's canvas stretched over your ceiling and then tinted grey like plaster.

The oak floors can probably be smoothed down considerably stained brown, shellacked and waxed. The casement sash would be pleasing painted cream. Casement draperies hang short and straight from a small rod placed upon the sash itself and not above it. Do not think you would like a plain buff wall in the bedroom. In No. 3, you could carry the browns and greys of the living room out in walls and woodwork, but warming and brightening with furnishings of small gay flowered chintz, red and yellow. Very pretty in an east room. In No. 2 use rose color.

W. C. Y., Trenton N. J.

Asks suggestions for brick, city house.

Answer: The rooms being small and opening widely together north and west, it is advised to treat them in accordant tones of golden browns in reception hall and living room, with a paper in delicate shades of

Answers to Questions—Continued

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Economy of Good Manners.

OW few people realize the market value of a pleasant manner in their dealings with servants and tradespeople. Not, of course, that one would wish to apply a commercial standard to the amenities of life. But considering the attitude of those with whom we have dealings as a sort of by-product, like aniline color or coal tar, it is a fact that too many of us save our politeness for our intimates, and consider a grumpy and forbidding manner good enough for the rest of the world. Sometimes this sort of spiritual attitude is a development of the sort of over-conscientiousness derived from a line of ancestors, trained to dread any deviation from the exact letter of the truth. They, and we, feared lest untruth might lurk in the too pleasant mode of speech, in the too cordial manner, and it is hard escaping from life-long tradition, though we may admit the charm of the easy insincerities of the Latin races.

The moral difficulty once surmounted it is astonishing how much better one is served for the cheerful tone and the ready reciprocation of courtesy. "Such a pleasant lady, she is," says the washerwoman. "She's a lady, she is," asserts the grocer's boy, and both of them will strain a point to oblige her, while her, quite possibly more meritorious sister is left in the lurch. Such, alas, is human nature, and one saves much vanity and vexation of spirit by recognizing the fact.

Quite aside from the matter of expediency, we may well ponder the fact that the obligation to brotherly kindness is as urgent as that to sincerity, and that Saint Paul, in that list of precepts which has been called the Christian code of etiquette, enjoined courtesy.

Moving Day.

The economist knows a woman who has recently moved, achieving a very dignified and comfortable "flitting," if those adjectives can ever be applied to so trying an experience as changing one's residence. As she was one of those persons of large possessions, for whom the business is unusually hard, her method may help someone else.

In dismantling the old house every article was thoroughly cleaned. Books were packed in small boxes, mostly starch or soap boxes. All the smaller pictures were packed in bundles of six or eight, with an abundant packing of newspapers to protect them. The movers protected the larger pictures and mirrors sufficiently in packing them in the van. Bric-a-brac and the greater part of the china was carried over by hand, as the new house was nearby. A large clothes hamper was filled with ornaments, or dishes, packed with loosely wadded tissue paper, carried over by two strong boys, unpacked and returned with the paper for another load. The safe carriage of some fine clocks was secured by having them cleaned, the jewelers calling for them at the old house and returning them to the new one. The carpets and rugs were cleaned and returned to the new house, and laid at the same time.

When the actual moving came, the things were sent on two successive days, in the morning of one day, and at noon of the next. On the first day were sent all the non-essential articles, the parlor furniture, books and book cases, all the
Household Economics—Continued

smaller articles from all the rooms, cushions, draperies, pictures, trunks and superfluous kitchen utensils, and everything which was to be stored away. After the vans had left, everything was placed, as far as possible, china arranged in the closets and pictures hung, and clothing unpacked and hung up. All the odds and ends were also sent up to the attic.

When, at noon of the second day, the final load arrived, it was a matter of a very few hours to get the house into habitable condition, and perfectly easy to begin the ordinary routine the next morning. The house and all its contents being thoroughly clean, the ordinary work of the week could be suspended and the attention of everyone given to the work of settling, of which, after the first day, there was very little to do, except placing the books and hanging the curtains.

Economy or Insurance.

The habit of saving is not indigenous with native Americans. Most people are economical because they must be, not because they recognize the importance of putting by for a rainy day. The hoard of the French peasant is not often duplicated by the corresponding class here. The popularity of life insurance, as an investment, has a close bearing upon our national failing.

Be this as it may, no one defends it, and the evil admitted is half cured. The beginning of the new year is a good time for reform. A practical resolution is to make it a rule to lay aside something every week, if only five cents. In the course of time, a habit of carefulness will make its appearance, which later may lead to substantial results.

When Cheap Meat is Good Meat.

The truly accomplished housewife is she who is able to make palatable use of cheap cuts, to whom flank steak, chuck roast and the upper cut of the round are full of delightful possibilities. As to flank

Books for Home-Builders

Bungalows and Cottages - - - $ .25
Interiors Beautiful - - - 1.00
Practical House Decoration - - - 1.00
Typical American Homes - - - 1.50
(Costing $3,000 to $5,000)
Typical American Homes - - - 1.50
(Costing $5,000 and Up)

MAX L. KEITH, - - Minneapolis, Minn.
Household Economics—Continued

steak, much vaunted by writers on economics, the writer confesses to doubts. She has never been able to make it more than tolerable, except as a flavoring to other meat in a stew, or as the foundation of a soup. Its flavor is excellent, but it is hopelessly fibrous and, when browned, acquires a hard stringiness. Round steak, properly cut, and from an animal of large size, is tender and of excellent flavor. This applies only to the upper cut and to the section next the rump. There are possibly four really good round steaks in a hind quarter, and these should be cut at least an inch thick.

The chuck is another cheap cut which has possibilities, but not as a whole. At least two ribs and the second cut should be bought. This will weigh from nine to twelve pounds and, in New York, costs twelve cents a pound. The lower end of the ribs should be cut off and corded, to be used a week later. In the remaining piece, a strip of bony cartilage runs parallel with the ribs. This should be taken off and the meat on the upper side of it cut up for a stew. When the chine bones have been removed from the other piece there remains what butchers call the kernel of the chuck, a solid piece attached to the ribs, weighing four or five pounds, which makes an excellent roast, hardly to be distinguished from any other rib cut. The essential thing is the removal of the coarser meat above the cartilage.

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Last longest—look best—are not too costly.
There's no other kind so good—so pleasing.
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Will INSURE COMFORT in Your Home.

See that your doors are hung with

STANLEY'S Ball-Bearing Hinges

No creaking of doors
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ARTISTIC BOOKLET FREE

THE STANLEY WORKS
Dept. T, NEW BRITAIN, CONN.
Christmas.

“Lo, now is come our joyful feast!
Let every man be jolly.
Each room with ivy leaves is drest,
And every post with holly.
Without the door let sorrow lie,
And if for cold it hap to die,
We'll bury it in a Christmas pie,
And ever more be merry.”

—Old Song.

Table Decorations.

WELLERS in cities have no trouble in buying Christmas greens ready-made, but even they, if they are in search of something elaborate or novel, will find it pays to make up the greens themselves. For adornments attached to the walls, only one side of which is visible, a foundation of wire netting is a great assistance. This is especially the case with the long festoons, or swags, fastened just below the cornice of a room, with long ribbon streamers depending from the points of meeting, a simple but very effective style of decoration. Beware, however, of using scarlet ribbons, for streamers, in anything but a green or neutral tinted room.

For the decoration of the Christmas dinner table, nothing is more satisfactory than a mat of holly, from which rises a crystal vase holding a few fine blossoms. Poinsettia, the Christmas rose of the antipodes, is by far the most effective, but is not always attainable. White orchids, the next best, are also hard to find, but carnations or hyacinths are always to be had.

For a long table, a simple and beautiful decoration consists of a tall glass vase of holly, in the centre of the table, with a smaller one half way from either end with festoons of smilax and fern connecting the three.

Now for the Turkey.

A substitute for the ordinary roast turkey, which some people may like for the Christmas dinner, is a boiled turkey, with a celery stuffing. The celery stuffing is made with equal quantities of stewed celery, chopped fine, sausage meat and bread crumbs. It is seasoned with butter, pepper, salt and parsley, and the turkey filled with it is boiled, preferably in stock, very gently, for about two hours, if it be of moderate size. For the sauce, add the liquor from a pint of oysters to a pint of the pot liquor, and thicken it with butter and flour. Cook ten minutes and just before serving add the oysters, cooking them only until the edges curl.

English Plum Pudding Again.

It is considered essential to the character of the genuine English plum pudding that each member of the family
should stir the mixture. The spoon is even held in the tiny hand of the latest baby.

The English plum pudding has a very large number of eggs, indeed is practically a wedding cake, with the substitution of crumbs for part of the flour, and of suet for butter. English people criticise the American imitation as lacking sweetness. As a palliative of the exceeding richness of English plum pudding, it should be remembered that it is always served surrounded by burning brandy, whose fumes probably tone up the stomach for its severe labors. The correct sauce is a hard one, also containing brandy. A chop dish, encircled by a wreath of holly, lends itself well to the service of a plum pudding.

In making a quantity of pudding, just before Christmas, fill a number of baking powder tins with the mixture, steaming them by themselves. One of them, wrapped in paraffine paper, tied with scarlet ribbon and a sprig of holly, will be appreciated by someone who does not keep house.

Coming specially for the manufacture

Before Buying Christmas Silver

Send for our illustrated catalogue showing many patterns of unusual artistic merit.

"1847 ROGERS BROS."

stamped on spoons, knives, forks, etc., represents quality proven by life-long service—"Silver Plate that Wears."

Sold by all leading dealers. This is the brand of silver plate that has been illustrated in this magazine throughout the year.

of Christmas cakes and puddings, is old fashioned, sticky brown sugar. The only difficulty about using it is that it is so awfully good to eat that most of it is likely to go in that way. A lighter colored sugar, but still distinctly brown, is admirable for a sauce for simple puddings. 

**Christmas Candies.**

In the minds of the youngsters, Christmas and sweets are closely associated. No normal child would care for a hygienic Christmas, without candy. This being the case, it is distinctly worthwhile to make home-made candy, at this time, if at no other. If one is not up to boiling sugar to the precise degree required for cooked candies, there are a good many sorts which can be managed by merely stirring confectioner's sugar to a paste, with water and white of egg, using a variety of flavors. A quantity of this can be formed into a sheet, three-quarters of an inch thick, after it has been mixed with an equal quantity of chopped nuts, and each piece dipped into melted chocolate. (By the way, always use the unsweetened confectioner's chocolate, if possible.) Creamed dates and walnuts are easily managed by the tyro. Figs, dates and nut meats, finely chopped, mixed to a stiff paste with a little icing, or with a very little maple sugar, and made into little balls, are exceedingly good. They should be rolled in powdered sugar. Another delightful bon-bon is made from little balls of the mixture made for cocoanut macaroons, dipped in melted chocolate.

**How to Make Fudge.**

Two squares of unsweetened chocolate, scraped fine, or a quarter of a can of Baker's cocoa, two and a half cupfuls of granulated sugar, a small cupful of milk and a half tablespoonful of butter. Mix chocolate, sugar and milk, put it over a hot fire and add the butter. Stir constantly and note the exact moment at which it begins to boil. Boil exactly four minutes, stirring it all the time. Remove from the fire and continue beating until it is heavy enough to keep its shape, and perfectly smooth, adding a teaspoonful of vanilla, as you beat. Put it into a buttered pan, three-quarters of an inch deep, and mark it into squares. The only secret of success is boiling it exactly four minutes, hard, and beating it until it is cold.
Material and Labor Prices for 1908.

In this connection it might be well to mention a few facts that will prove of vital interest to readers who intend to build during the year 1908. We are in a position to feel the building pulse of the country at all times and we see at the present time the prospects of a decidedly more conservative scale of prices on material and labor throughout the country during the year 1908. This is being brought about, not by a falling off of trade, for it is increasing by enormous strides, but by the dominating power for sane and legitimate business at Washington. Corporate control is commencing to feel the limit of its power. It is commencing to feel the mighty hand of the judicial branch of the administration and there is every indication that prices will be lower during the spring and summer of 1908 than they have been for several years. Whether the following administration will be able to keep prices on a reasonable and even tenor is a mere matter of conjecture; therefore the most plausible time to build will be during 1908.

Realizing the enormous building prospects we have in obedience to the great demand upon us issued several books which are published purely for the benefit of our readers, as the small price asked for them does not begin to cover the entire cost of publication. On the inside covers of this magazine will be found more detail information in regard to our great subscription offers. If you are going to take advantage of the coming fall of prices the time to subscribe for this magazine is now, that you may have a splendid collection of homes and ideas and valuable information to guide you when the building season opens.

**Prices of Building Materials sent in by B. Roth, Dodge City, Kansas.**

- Carpentry Labor, per day... $3.00 to $3.75
- Finishing Lumber, per M... $3.75
- Flooring, per M... $4.00
- Plastering, per yd... $0.09

**This Colonial Fireplace**

- Designed by a Leading Architect
- Will Not Smoke

By our peculiar methods of construction you can build a roaring fire on the bleak, cheerless days in this beautiful brick fireplace, and enjoy the warmth and cheer that a fireplace should give forth—and without fear of annoyance from smoke, if you follow our instructions. It goes up the chimney—where it belongs.

**We Make and Sell Direct to the People**

Fireplaces for New or Old Houses

That combine the greatest utility with beauty of design and honesty of construction. The designs are from America's foremost architects; the plans from a practical fireplace builder; color schemes suggested to harmonize with any room, whether it be in cottage or castle.

- Our fireplaces are found in the homes of many men of national fame. Our designs have a dignity and artistic value peculiarly their own, are built of finest specially made brick, and are therefore not to be confused with the cheap wooden mantels you see advertised.

**FREE DESIGN BOOK**

Will be a valuable aid to you in choosing a suitable fireplace. Let us send it to you today. You should see it before making a purchase.

*Prices from $18.00 Upwards*

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**THE ARCHITECT**

Send One Dollar For my latest Book

A Beautiful Book

BEST HOUSE PLANS

It contains 190 House Plans

RENTAL COST

HOUSE $1,000. to $10,000.

Portfolio of churches sent FREE to any address.

This Handsome House Cost $2500.00; Complete Plans $15.

1028 K. Lumber Exchange, Minneapolis, Minn.

The only Stop Adjuster made from one piece of metal with solid ribs and heavy head that will not cup, turn or bend in tightening the screw. Manufactured only by The H. B. Ives Co., New Haven, Conn., U. S. A. (Fifty-page Catalogue Mailed Free.)

**Sedgwick Window Stop Adjuster.**

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Window Stop Adjuster.

**HEAVY BED**

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- DRAFTSMEN qualified; Arch't Arch., Mech't. B.

BUILDERS trained for leaders in business

- FOREMEN educated in any trade

- CORRESPONDENCE courses for home study
Announcement.

THE FIRST ANNUAL CEMENT SHOW will be held in Chicago at the Coliseum, December 17–21, 1907.

The Exposition will be held under the auspices of the Cement Products Exhibition Company, a company incorporated under the laws of the State of Illinois for the purpose of holding annual expositions of cement products. The enterprise is being promoted by Portland cement manufacturing interests of the middle West, and is being actively supported by the leading periodicals devoted to the industry as stockholders in the company, including such representative papers as Rock Products, Cement World, Cement Era, Construction News, American Contractor, Engineering-Contracting, Cement and Engineering News, The American Lumberman, etc.

The Exposition will be of great educational importance, and will accomplish a good work in advancing the interests of the industry. The scope of the Exposition may be judged from the outline of the various divisions of exhibits as follows:

Cement, concrete, mixers, block machines, brick machines, cement pipe machines, cement tile machines, cement post machines, cement coloring mixtures, reinforcing metal, cement publications, testing machinery, sheet piling, aggregates, sand, technical institutions, etc.

The management of the show has been placed in the hands of Mr. L. L. Fest, an experienced manager of great trade exhibitions of this nature. His connection with the affair is of itself an assurance of success.

Answers to Questions.

Q. In a dwelling house 33 x 35, can you advise me what slope a barrick roof should have in order to obtain the effect shown in the Spokane, Wash., house published in your issue of February, 1907, Keith’s Magazine?

Ans.—The house referred to has what is known as a "third pitch" roof. The height or rise of roof is obtained by dividing the least diameter of your house by three. Hence if your house is thirty three feet wide, the rise of the roof will be eleven feet, measuring from plate on which the roof rafters start to top of ridge.

Cement Sidewalks.

T. E. B., Independence.

What proportion of cement, sand and crushed rock should be used in a cement walk? How much of each should I get to make 100 sq. ft. of walk, what proportions should be used in a concrete foundation? How much of each material should I get to make a cu. yd. of wall?

Ans. In laying a grout concrete sidewalk, same should be prepared for and laid in the same manner as the best kind of a concrete cellar floor is laid. First it should be laid on sand. If it is not in a sandy location, then dig a trench about eleven or twelve inches deep, fill in six or seven inches of sand well puddled down with water from a hose and tamped, the final surface to be within five inches of the finished level desired for a sidewalk. Then put six inch planks or boards on edge at each side of the desired width of the sidewalk, holding same on edge by stakes driven into the ground, just outside of them. Then fill in a grout four inches thick composed of Portland cement one part, clean sharp sand three parts and clean crushed rock four or five parts in sizes that will pass thru a one and a half inch ring. This to be mixed dry, adding the water while hoeing and dumped at once into place and thoroly tamped down. After this is set prepare a finish coat to be one inch thick composed of Portland cement and clean sharp sand in equal parts. After grout is thoroly set wet same with a hose and then apply the finish coat. This should be troweled smooth to an even coat one inch thick and just before it is set you may mark off into squares if you desire. Thoroly protect this finish coat from the elements and small boys who delight to place their initials on it. 100 sq. ft. of walk will take the following quantities of material: 2 bbl. cement (8 cu. ft.), 4 bbl. sand (16 cu. ft.), 1½ perch of stone (19 cu. ft.). Use a combination of 1-2 and 4 for a concrete wall (1-3 and 5 will do if materials and workmanship are the very best). Material required for a cubic yard of 1-2-4 wall are as follows: 1 bbl. cement 4 cu. ft., 2 bbl. sand, 8 cu. ft., and 1 perch of stone, 16½ cu. ft.—total 28½ cu. ft.—amount required 27 cu. ft.—allowed for waste 1½ cu. ft.
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

Operating our own Gypsum mines—absolute purity of raw material, our Pioneer Experience and Nearly Half A Century's Steady Improvement in the Science and Practice of Plaster Making—all this has contributed to give modern home builders the finest, and most uniformly reliable Plastering Materials known to the Building World.

What A Perfect Wall Means

It contributes to Health.
It preserves the Decorations.
It means protection against Fire.
It means protection against Water.
It saves Weeks of Time in Building.
It means a stronger, more durable house.
It means greater Domestic Comfort.
It contributes toward Domestic Economy.

But a perfect wall is not possible with lime or other inferior plastering materials—make no mistake about that!
Your Architect knows—your Contractor knows—your Plasterer knows—your Material Dealer knows, the high merit and reputation of U. S. G. Hard Plasters. Insist on getting the right material.
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.

U. S. G. Plaster, on Sackett Plaster Board "Instead of Lath"—finished with Universal (the new finish without lime) makes an ideal interior wall.

United States Gypsum Company
Chicago
Cleveland
Minneapolis
HOUGH one of the most common things to be seen in this country, the real preservative properties of paint are but little understood, even by many who are engaged in employing it. To most people paint is paint, whereas there is a wide difference in varieties and numerous serious mistakes are made in employing the wrong kind. L. E. Andos, who has completed a series of exhaustive tests on all subjects connected with paints and the uses to which they are adapted, has recently published a statement which brings into prominence several facts that have largely, at least, escaped the notice and attention of paint users, tells the American Contractor.

CHESTNUT or oak staves may be used in the construction of a silo. We would prefer the chestnut, as we do not think there is so much danger of warping as with oak. Of course, oak staves are frequently used in a silo with satisfactory results, but chestnut if of first grade should last very well.

“We have a great variety of pleasing colors to select from today, but of the list of natural and artificial pigments comparatively few colors are really durable. It is not a satisfactory work to select a pleasing combination of tints, and then find after a few months that the colors have faded, leaving a decidedly blotched appearance. Permanence of colors as well as durability of the coat of paint are desirable. A color scheme, no matter how beautiful, if it quickly fades, must only serve to exasperate. The aniline lakes furnish the most brilliant and most delicate shades and colors, but they vanish when exposed to the sunlight almost as soon as the paint has dried. Few conscientious architects specify these for good work. They are used in some cheap paints intended to catch the eye, but in a very short time the light tints have darkened and the darker shades have faded or altered.

“The only durable, unfading dark pigments are the several lamp, ga- and bone blacks, and the only suitable white pigments are white lead and oxide of zinc. With these latter marble dust, whiting, silica and other adulterants are often mixed in considerable proportions, thus destroying the quality of the paint. The iron oxides form the most durable of red pigments, but beautiful aniline dyes are often mixed with them. The dyes fade quickly and the color scheme is lost. Of the yellow pigments the ochres are more durable than the chromes but the latter are brighter. The Prussian blues and ultramarines are not very permanent unless combined with oxide of zinc. The green shades are generally produced by combinations of Prussian blue and chrome yellow mixed with such inert pigments as barytes, and they hold their colors moderately well when mixed with sufficient oxide of zinc. The mineral browns ofumber and sienna are very durable.

“It is possible to secure a good color scheme with these durable pigments, but brilliancy of effect generally means quick fading. Our natural love for rich, delicate tints deceives us into accepting a color scheme which can have no permanency.

* * * * *

Concrete Posts.

ELLWOOD PARK, a pleasure resort near Chicago, contains 62 acres of land and is fenced with concrete posts. A thousand of these posts are nine feet long and the remainder seven feet. They are 4x4 inches in cross section at the top and 4x6 inches at the base. They are made of one part Portland cement and two parts stone screenings, ranging from dust to one-fourth inch pieces. Each post is reinforced with four one-fourth inch Johnson corrugated bars, one on each corner. Says Cement Age.

Two men were engaged in making the posts and could produce about forty a day. The working platform was large enough to hold eighty forms, or two days’ product. In casting a post, a layer of concrete would be placed in a form, then two reinforcement rods were placed, followed by a second layer of concrete, the other two rods and then the balance of the concrete. The latter was made wet and was tamped well in place. The forms were stripped twenty-four hours after the posts were cast, the latter being kept wet in the meanwhile. The posts were left on the planks on the platform an additional twenty-four hours, and were then removed from the platform while still on
the planks. They were stored at least a week on this platform and were then laid out in piles in single layers until used. For three weeks after they were made they were kept wet and for the first week of that time were covered. The two men in making an average of forty posts a day also mixed the concrete and moved and watered the posts. Forty forms were provided and after being used in making 1,500 posts, were still in good condition. Although, not over three per cent of the posts were broken after they had been made before they were set in place in the fence.

Cement Bee Hives.

At the last meeting of the Canadian Bee Keepers' Association several of its members were using Portland cement in the construction of bee hives, and bee hive stands, says Cement and Engineering News. These hives are made by first making a long cotton tube and filling it with cement mortar, which will then resemble a long sausage. This cement sausage is then coiled into the shape the bee hive is to take, one layer above the other. The cement filters through the cotton fabric, being sufficient to form a perfect bond between the different layers, which, after hardening, possesses great strength. Light rods are placed on the inside four corners, as guides to give form and shape to the hive. These hives are said to be cheaper than wood. The cement coil is about ¾ of an inch in diameter when full of cement.

Brick Filler.

In the specifications and directions for laying vitrified brick pavements, approved in general by the National Brick Manufacturers' Association and published and distributed by the National Paving Brick Manufacturers' Association the set prepared for the "best known construction" contains in part the following requirements regarding the filler for the brick with the accompanying remarks, in explanation and direction:

The filler shall be composed of one part each of clean sand and Portland cement. The sand should be dry. The mixture, not exceeding one-third bushel of the sand, together with a like amount of cement, shall be placed in the box and mixed dry, until the mass assumes an even and unbroken stands, says Cement and Engineering News. These hives are made by first making a long cotton tube and filling it with cement mortar, which will then resemble a long sausage. This cement sausage is then coiled into the shape the bee hive is to take, one layer above the other. The cement filters through the cotton fabric, being sufficient to form a perfect bond between the different layers, which, after hardening, possesses great strength. Light rods are placed on the inside four corners, as guides to give form and shape to the hive. These hives are said to be cheaper than wood. The cement coil is about ¾ of an inch in diameter when full of cement.

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shade. Then water shall be added, forming a liquid mixture of the consistency of thin cream.

From the time the water is applied until the last drop is removed and floated into the joints of the brick pavement, the same must be kept in constant motion.

Dry, sharp sand for this mixture is necessary without question or comment. The first application should be thin in order that it may flow to the depth of the joints of the bricks, thereby insuring a substantial bond, and should be kept in constant motion while being applied, otherwise the sand will settle and you will have water and cement instead of water, sand and cement. The water and cement wouldn't be objectionable, but the sand by itself is wholly so.

* * *

Varnish and Paint Removers.

The best paint and varnish removing compound seems yet to be invented, and there is a fortune for its lucky discoverer. It will come. Great advance has been made in this direction since the days of not so many years ago, when the charcoal burner was used, and before which was the lime-and-potash compound, both crude enough.

The blow torch too has its limitations. For one thing, people object to the danger of fire when it is used around a building. Carbolic acid removers are very objectionable on the score of smell and burning of the flesh when it comes in contact herewith. Fusel oil removers do good work, better indeed, than the carbolic acid compounds, but the smell is vile and injurious, and it is very costly. But there is one varnish remover, cheap, odorless nearly, and open to none of the objections that the others have, and that is glue. Simply glue. Make up a liquid glue, quite thin, and apply it hot to a varnished surface, and let it be where the temperature shall be not lower than say about 70 deg., Fahr., and let the object that has been coated with it stand for twelve to twenty-four hours, and the varnish may then be brushed off.

* * *

Mahogany.

Mahogany has always been a favorite for house fittings, either in the way of furniture, or for the woodwork of the room, especially the dining room and library. Even its imitation, stained cherry, is admired and liked. One of the popular beliefs is that
Splinters and Shavings—Continued

The supply of this magnificent wool is about exhausted. It is true that certain localities, whence formerly came our supply, are no longer able to produce any amount of consequence, yet the Central American and Mexican forests are practically intact yet, and apparently inexhaustable. And the grade the rarer products of San Domingo, is still obtainable in large quantities. Mexican mahogany, which nearly equals in

* * *

The Drying of Hardwood.

A new theory in the drying of hardwood lumber has been advanced by Z. Clark Thwing, general manager of the Grand Rapids Veneer Co., in the Furniture Journal. Mr. Thwing claims that the swelling or shrinking of wood from moisture is due to foreign substances in the sap and that, when these are once removed, lumber will not swell from moisture or shrink from its extraction by heat. These foreign substances in the sap must not be confused with pitch, turpentine, etc., for they are something more elemental than these and enter closely into relation chemically with the sap in the functions that it performs in the body of the tree itself. The gist of the new theory is that when sap has been evaporated by the ordinary drying process it leaves behind in the wood certain substances in a more or less solid state and that, when moisture comes, these elements, having been a part of the sap, take kindly to the liquid, and absorbing it, swell out. The wood itself does not expand; the swelling is confined entirely to these substances. This foreign matter varies greatly in its nature in different woods and is also found in greater or less quantities, thus causing in some lumber only a slight expansion and in others giving very serious trouble. There seems to be no relation between the quantity of sap contained in the wood and the quantity of these foreign substances found in the sap. The solving of the drying question hinges on the possibility of extracting these elements from the wood, and the man who advances the theory claims to have a process by which it can be done and that, after the wood is treated in this way, a piece of dry oak, for instance, can be taken and thoroughly soaked in a bucket of water all night without swelling perceptibly.

50% SAVED
OAK VENEERED DOORS IN STOCK ALL SIZES.

* * *

THE FOSTER-MUNGER CO.
AMERICAS GREATEST SASH & DOOR HOUSE
CHICAGO, U.S.A.
WRITE FOR VENEERED DOOR BOOK 1448 G

* * *

Cabot's Shingle Stains

For houses, barns, stables, sheds, fences, and all rough woodwork, especially shingles. They are softer and richer in color, easier and quicker to apply, wear better, look better, and are 50 percent cheaper than paint. Creosote, the chief ingredient, is the best wood preservative known.

Samples of Stained Wood, with Chart of Color Combinations, sent on application.

SAMUEL CABOT, Sole Mfr., Boston, Mass
Agents at all central points.
LUMBERMEN throughout the northwest are deeply interested in the findings just filed by a referee in an action in the supreme court of Nebraska, in which it is declared that the Nebraska Retail Lumber Dealers' Association is not an unlawful organization and that its operation had not been in violation of the law of that state.

The findings in this case are of particular interest in Minnesota and the northwest because of the recent effort in the legislature of this state to institute an investigation of the Northwestern Lumbermen's Association, which is organized on almost exactly the same lines as the Nebraska Association and has its headquarters in a state with similar anti-trust laws.

The action in the supreme court of Nebraska was begun on the part of the state more than a year ago when Morris Brown was attorney general, and its purpose was to restrain the Nebraska Retail Lumber Dealers' Association from operation on the ground that its members, 370 in number, had conspired to monopolize the retail lumber trade of the state for the purpose of restraining trade, regulating prices, pooling profits and of restraining internal trade among its members by dividing the territory of the state among them.

THE CONCLUSIONS OF LAW.

As conclusions of law, the court finds:

"The purpose of the Nebraska Lumber Dealers' Association as declared in its articles of association, are not unlawful.

"The declared purpose of said association being consistent with the provisions of the anti-trust laws of Nebraska, the defendants are not, from the mere fact that they are members of said association, chargeable with acts, in violation of such laws, done without their knowledge or consent by fellow members thereof.

"The facts as proved and found do not, show any agreement, combination or conspiracy in restraint of trade.

"The facts proved and found do not amount to an unlawful trust.

"The facts as proved and found do not show any agreement, combination or conspiracy to monopolize any part of the trade and commerce.

Beauty and Usefulness

The real artistic worth of any article is greatly enhanced by its usefulness. These two attributes ought to go hand in hand, the one reflecting the other.

Morgan Doors

are perfect examples of real artistic worth. They are beautiful from every standpoint, they are useful to the limit of usefulness—durability and strength.

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Write today for our handsome illustrated book, "The Door Beautiful," showing some of the details of the honest construction and beauty of design of the Morgan Doors.

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Splinters and Shavings—Continued

“The defendants, except as herein otherwise stated, were not at the date of the commencement of this action, guilty of monopolizing any part of the trade and commerce of the state of Nebraska.

“The unlawful combination between the defendants, the Barnett Lumber Company and the W. C. Bullard Lumber Company, mentioned in the accompanying findings of fact, is presumed to have continued until the date of the commencement of this action, and the state is entitled as against said defendants, to judgment as prayed in its petition.”

* * *

Concrete Blocks.

“The block is made as large as can conveniently be handled in laying. Thus its volume is equivalent to from 20 to 35 brick, greatly saving the masons’ time, reducing the proportion of mortar joints and facilitating the maintenance of true lines in the wall.

“The form of the concrete-block is its most decided advantage, affording an air space which prevents the passage of moisture, which makes a house cool in summer, which cuts off 25 percent of the winter’s fuel bill, which impedes the passage of sound, and which so promotes ventilation that maximum sanitation ensues.

“The strength of the well made concrete-block is so far in excess of any duty likely to be imposed upon it in residence construction that it seems unnecessary to dwell upon this quality. In most cities ordinances now provide that concrete-block wall, with usual percentage of air space, may replace solid brick walls of equal thickness, although some have been progressive enough to vary this regulation in favor of the concrete-block. As a matter of fact, in no ordinary residence will a 12-inch wall be found inadequate. Well made, properly cured and properly laid blocks may be relied upon to carry a minimum load of 2,500 pounds to the square inch. It will, therefore, be seen that, where joists are properly hung, the point of greatest danger will be in the floor span rather than in the walls. Of course good construction will not place a concrete-block in tension, as its compressive strength is about ten times its ten-

Wood Finishing Talk No. 2.

When you are building or re-finishing your house, why not finish the wood work with products which will produce a permanent, transparent and thoroughly satisfactory finish? This can be accomplished by using our wood finishing products, recognized for many years by all architects and painters as the best. It is just as easy and economical to produce a finish different from the ordinary kind.

If you are building, write for our samples, stating the kind of wood you are using and asking for our Modern Wood Finishing booklet, which gives interesting information on the subject.

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“Wheeler’s Filler is the cheapest in the end, and our reputation for good finish we believe is largely due to the use of Wheeler Filler.”

“For more than 20 years, I have specified Wheeler Filler in my work. Its use in my experience has overcome the most stubborn prejudice among contractors; and made them the most ardent advocates of Wheeler. It has never failed to satisfy.”

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sile strength. Hence a transverse strain, or eccentric loading, demands a distribution of the load by the introduction of reinforced-concrete members.

“The term fire-proof is greatly abused and is often applied to a material which is merely non-combustible. A fire-proof building must be not only non-combustible, it must be fire-resistant, it must be so constructed that its contents will be protected from excessive heat. It is in this respect that the concrete-block stands foremost among fire-proofing materials. Concrete being of itself a non-conductor, and its conductivity being decreased by dehydration of the outer quarter-inch at a temperature of 1,000 degrees Fahrenheit, its efficacy in a fierce conflagration is enhanced by the air space in the wall which effectually prevents the transmission of heat to the interior. In actual fires it has been noted that the hand could be comfortably held against the interior of a concrete-block wall while flames from an adjoining burning building were beating against the exterior.”

“In the curing of blocks great progress has been made, and the day is no more when blocks were allowed to lie exposed to sun and wind until they dried. When curing is by sprinkling, the common practice of the present day is to cover the blocks with hay, straw, burlap, or some other moisture-retaining material. The result is not only blocks of far greater strength and soundness than in the early days, but blocks of more uniform color, greater freedom from map or crazing cracks, and an almost entire absence of that white offlorescence which was formerly the cause of so much vexation. Many of the more progressive block makers are curing by steam. Of course, it has long been known that blocks placed in a cylinder under steam pressure cured with great rapidity, but today numerous plants are curing in sheds lined with tar paper, the blocks being stacked in these sheds and steam turned in for 24 hours with excellent results, both as to saving in time and as to color and hardness of the finished product.”

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If the readers of this magazine will write for a copy of "New Ideas for Home Decoration," written by John Taylor and illustrated by John Ednie of Glasgow, Scotland, they will receive a booklet, size 8x12, containing 10 designs in colors, showing several artistic wall treatments of burlap.

This booklet is issued by the H. B. Wiggin's Sons Co., of Bloomfield, N. J., who will mail the same upon receipt of 25 cents postage.

Princess Priscilla's Fortnight.

A new book from the author of Elizabeth and her German Garden, is ever hailed with delight. One has visions of being curled up in an easy chair beside the reading lamp—if it is winter—in the delightful society of this gay and charming writer, who still fancies herself unknown and declines to put her name on the title page of her popular books, though everyone knows what it is. "The Princess Priscilla's Fortnight," just from the press, is in her author's most charming vein of delicious humour, good natured satire and gentle though sometimes quite shrewd philosophy. There is no plot—there never is in her books. Plots are stupid, unwieldy things anyway. The whole movement of the story occupies but a fortnight; but in that time the
Princess Priscilla contrives to run away from the ceremonial life of a little German court, light down upon the placid English village of Symford chewing its cud with staid and decorous gravity, buy a couple of laborers' cottages because they were overgrown with roses, out of which cottages the unhappy tenants were tumbled at an hour's notice and an army of workmen required to paint, paper and put in several bathrooms in one day's time. As these and kindred performances soon exhausted the ready cash with which Priscilla had fled and there was nothing to pay a cook with, this wayward though charming young lady concludes to go back to her princess-ship and marry properly. How she turned topsy-turvy the innocent village where she essayed "the simple life," during the fortnight of her residence there, and left despairing lovers in her wake—you must read the book as I have, to find out. It will pay you to do it.

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This Journal contains monthly, 40 to 48 pages (size 9x12) and specializes the important subjects, New Methods and Materials in Modern Construction. Contains numerous illustrated articles and departments for the builder. You will find it of great value to you.

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We will mail for $1.00—three copies of any back issue in stock, and enter a 3 months trial subscription to begin with the current number.
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ON HOME BUILDING
OFFICES:—525 Lumber Exchange
MAX L. KEITH, Publisher, MINNEAPOLIS

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### ON HOME BUILDING

**OFFICES:** 525 Lumber Exchange

**MAX L. KEITH, Publisher, MINNEAPOLIS**

**Special Number**
Two and Four Family Houses.

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Your Water Supply Problem

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Kewanee Water Supply Company, Kewanee, Ill.
32 Broadway, New York
820 Marquette Bldg., Chicago
Contents for July

THE CHARM OF COTTAGE ARCHITECTURE IN THE SOUTHWEST

PART III. (PARTS NO. 1 AND 2 WERE PUBLISHED IN JAN. AND MARCH.)

RE-CONSTRUCTION OF A COUNTRY HOUSE

MODERN PLUMBING FOR THE HOME

(PAPER NO. 1-KITCHEN PLUMBING)

MODERN DESIGNS FOR THE HOME BUILDER

DEPARTMENTS

DECORATION AND FURNISHING

ANSWERS TO QUESTIONS

HOUSEHOLD ECONOMICS

TABLE CHAT

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HOME GROUNDS AND GARDENS

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"Style"

Little Journeys With The Architect

A Children's Pleasure Resort

The Water-Lily Garden

Modern Designs for the Home Builder

By Una Nixon Hopkins

By J. Taylor

By Carlos de Gouex

By E. Mev

By Ida D. Bennett
Full Plans of these Cottages WILL SOON appear in Journal of Modern Construction.

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"High Standard" Liquid Paint

Gives Best Results

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The Lowe Brothers Company, 450-456 E. Third Street, Dayton, O.
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OFFICES:—525 Lumber Exchange

MAX L. KEITH, Publisher, MINNEAPOLIS

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SOME OF THE GOOD THINGS
IN NEXT MONTHS
KEITH'S HOMEBUILDER
EACH MONTH

Is Keith's best month. Look on the pages of this magazine and you will readily admit that

KEITH'S HOMEBUILDER
has never presented to its readers a more beautiful, interesting, practical and instructive number. Keith's Magazine,

IS PROGRESING,
Watch it!

The opening article will be not only a Literary Treat, but a bright, refreshing description of one of the most interesting and most wonderfully constructed homes in California, written up by Henrietta P. Keith. It is truly a home, that is "out of the Beaten Track" the appropriate title under which the writer wields the pen. This house is probably the only one in America in which absolute harmony prevails, especially in the decorative scheme and the furniture (as shown by the many illustrations).

Planning the Home.

"Planning the Home" is the most interesting event in the family's history. It is an absorbing and delightful occupation into which all members of the family enter with unbridled enthusiasm. Yet few if any of them know of the discouraging pitfalls into which most people fall who try to plan their own home. Read Arthur C. Clausen's interesting series of articles on simple rules for house planning the first paper of which appears next month. It is well illustrated.

A New Plaster House.

"A New Plaster House," something out of the ordinary run of cement exteriors is treated in the illustrated article by O. W. Alford. The subject is a rustic pile of quaint southern style. Following this will be the usual instructive article in the

Little Journeys With the Architect.

Journeys With the Architect, series by Carlos de Gouex. This month is given a valuable discourse on concrete blocks in which is pointed out some rather harsh but pertinent facts. Next month the interesting theme will be Brick Houses, pro and con.

The Modern Home.

The Modern Home; The second paper on decoration in the instructive, illustrated series by J. Taylor. Mr. Taylor's first paper appears in this issue. The value of this series of articles needs no comment in these columns.

Decoration.

Decoration, by Miss Eleanor Allison Cummins. So popular have the departments devoted to Interior house decoration become, that we are going into elaborate detail on this inexhaustible subject next month.

Remember that we answer any and all questions in regard to building construction and house-decorations in our free service departments.

Table Chat - - - Household Economics.

Table Chat and Household Economics for next month, we would especially ask you to carefully read. The article on Household Economics is well worth your time and attention.
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For Sale By All News Dealers in the United States and Canada. Trade Supplies By American News Co., and its Branches.
We shall close this year—our best year—with a splendid Christmas number, and give the following as a few of the "Good Things."

LIKE every other high grade magazine it is our aim to make each issue of KEITH'S MAGAZINE far superior to all preceding issues. That each number is full of helpful, practical reading is evident from the many favorable letters being received from our readers. Here are a couple of specimens:


"I enclose money order for $1.50 to continue the subscription of the Worchester County Mechanics Assn.—Magazine grows better and better every year."

WM. A. SMITH.

Mrs. L J. Hakenyos of Moorehead, La., writes us Oct. 16—"I have found your magazine of such immeasurable benefit to me during this year of building, that I enclose $1.50 for a year's subscription for the Contractors who build my house."

AN OLD CONNECTICUT HOME.—By Edith Babney.

Being a bright, highly interesting article with many illustrations, about a very attractive old colonial home entirely furnished with original colonial furniture from the seventeenth century.

PLANNING THE HOME.
By Arthur C. Clausen, Architect.

This will be the second paper on that most vital subject treated in an interesting, valuable and authoritative manner. The first paper appears this month. Read it.

A SHINGLED HOUSE.
By Walter P. Crabtree, Architect.

An interesting article, by an interesting man on an interesting subject, being a well illustrated article on certain styles of the best and most modern house architecture.

HEATING AND PLUMBING.
By Charles S. Sedgwick, Architect.

A most valuable article for all prospective home builders. A carefully prepared treatise on the intricate problems of Heating and Plumbing.

THE CASEMENT WINDOW.
By Ora W. Alford.

Bright, interestingly written and authoritative—it is a well merited article on a subject which has received too little attention heretofore.

THE MODERN HOUSE.
By J. Taylor.

Our European contributor gives us an instructive article next month on decorative metal work illustrated by the author's beautiful original designs prepared especially for Keith's.

DESIGNS FOR THE HOME BUILDER.

Next month a collection of our best house designs will appear. Our old subscribers will appreciate the marked improvement this past year in our illustrations and in the character of the "Modern House Plans." This has been brought about by a broadening of our acquaintance among established architects which enables us to present a much greater variety of ideas in house designs. The architects contributing to this strong and important feature of Keith's will always be found ready to answer inquiries concerning their plans and we will promptly forward to them any letters sent in our care.
KEITH'S MAGAZINE
ON HOME BUILDING

OFFICES:—525 Lumber Exchange

MAX L. KEITH, Publisher, MINNEAPOLIS

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KEITH'S MAGAZINE

KEITH'S PROSPECTUS

TALK WITH THE EDITOR ABOUT SOME

DURING the many years past in which "Keith's Magazine" has upheld its popular and undisputed title as "The Leading Authority for Home Builders in America," its publisher has stopped at no effort that would increase its value to the reading public in general and to prospective home builder in particular. It has been the publisher's constant aim, ably aided by the editorial force, to make each year and each issue of Keith's Magazine the most practical, helpful, beautiful and valuable of its existence. During the last nine years no magazine has been instrumental in the building of more beautiful homes than Keith's. Thousands of substantial, well planned, artistic homes stand today as monumental milestones to the progress of Keith's Magazine from whose instructive pages thousands of home builders have obtained the ideas which in their homes took material form.

Of the twelve issues of 1907 we are justly proud and the marked increase in our circulation during the past year is a gratifying acknowledgment of our success. For the coming year of 1908 we have enlisted many of the best and most authoritative talent available and we can say with certainty, knowing what is in store for our readers, that the year 1908 will witness the greatest triumph in the history of Keith's Magazine; that our tenth year will be the most popular of all.

* * * * * *

Some of the Good Things for 1908.

Each of the following writers is an authority on the subjects treated. Many of the names are new to our readers, and from the pens of these new writers will come some of the most interesting articles of the year. Old friends, tried and true, have not been forgotten and in the list of prospective contributors our readers will welcome not a few who have in the past given us their valuable ideas. All articles will be elaborately illustrated.

* * * * * *

Designs for the Home Builder.

For many years the most important and valuable feature in Keith's Magazine has been the one devoted to the publication of high class homes, showing one view of the exterior and the floor plans of from six to ten designs each month. Giving the home builders with one year's subscription a beautiful collection of about a hundred designs. These houses represent the best work of celebrated architects in the country. Each house is described in detail, giving facts that are of interest and value to home builders. If you want a home to suit any sized lot, at any price and in any style of architecture, look in Keith's and you will find it. The usual high standard of this department will be maintained through the coming year.

* * * * * *

Planning the Home.

"Planning the Home" followed by "The Complete House" are two practical series of articles by Architect Arthur C. Clausen, author of "Problems Solved." The first series now running is a practical treatise on the proper arrangement of rooms from economical, structural and artistic standpoints. In the second series, "The Complete House," the writer will treat upon such details as Painting, Plumbing, Heating, the strength, quality, comparative beauty and value of building materials, etc. Mr. Clausen will also give us his usual straightforward authoritative opinions under the following titles:

Cement Houses.
Porticos.
Mixing Things.
Dormers.
Unique Porches.
Portals of the Rich.
Settings and Back Grounds.
An Architect's Log Cabin.
Adaptability to Location.

* * * * * *

Home Grounds and Gardens.

A home must necessarily depend to a considerable extent upon its environments for its outward attractiveness. A few well trained vines and appropriately planted grounds will do much toward enhancing the beauty of any home emphasizing its prominent features or hiding its defects. We are pleased to continue this year our department on Home Grounds and Gardens which will be conducted by the well known writer on botany and horticulture, Miss Ida D. Bennett. The following articles by Miss Bennett will be beautifully illustrated by appropriate photographs of gardens and flowers.

Feb. Care of House Plants during Winter.
Apr. Ornamental Hedge Plants.
May The Garden in the Temporary House.
June Hardy Perennials.
July The Summer Rose Garden.
Sept. Plants for the Terrace.
Oct. Fall Work in the Garden.
Nov. Winter Protection.