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Home Building vs. Speculative Building

OME building, which we class as private construction, takes precedent over big construction in the program laid out by the Department of Commerce. In making his recommendations for deferment of public construction, Secretary Hoover says, in part: "We need the full use of labor and material for long overdue private construction. We wish no cession in this prime necessity."

Public construction is in a class by itself. In so far as it can be deferred past the immediate pressure of private needs, it will tend to spread the period of building operations over a longer time and, as it has been so appropriately said, is a way to hold on to prosperity.

Speculative building, however, is not only being discouraged but conferences of the Building Industry all through the East, recommend its curtailment through the refusal of building credit for this class of building—BECAUSE IT IS POOR AND SHODDY CONSTRUCTION. The main criticism of the Building Industry to speculative building is because such buildings are put up purely for speculation—for the money they will bring back, rather than for the service which the building will render to its owners.

The line drawn between speculative building and private construction carries an additional note of interest to the home builder. Emphasis is laid upon stopping of speculative building in order to give precedence to private construction. Speculative building results in a wild race between builders to make quick profits, and this cannot help but lower the quality of the work. When buildings are erected merely to sell, materials are of inferior quality and workmanship of the poorest—just sufficient to "get by" and make a good appearance.

Usually when a house is built to catch the eye of a prospective buyer, money is spent for showy effect which should have gone into the more substantial items of nails and dimension timbers. The average purchaser, anxious to get a home for himself or to buy an apartment house which will bring in rentals as well as give his family a home, is not always informed so as to judge values in materials and construction and therefore when buying a house already built, the history of its building should be learned and given consideration. Was it honestly built? Was it built for a home or was it built for speculation? The speculative quality in the ready-to-sell house, usually is the answer to the question, why one can sometimes buy a house that was "built for sale" for less money (including the speculator's profit) than to build.

We urge every prospective home owner to build his own home.
KEITH'S MAGAZINE
ON HOME BUILDING

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Entered as second-class matter January 1, 1899, at the Post-Office at Minneapolis, Minn., under the Act of March 3, 1879.

Copyright, 1923, by M. L. Keith.
There is a decorative quality in the iron gate and fence.
The little house that says "Stay," when the open road says "Go," according to Josephine Preston Peabody, is the kind that we all want to build, if we are planning a little home.

Those of us who were "brought up" in the roomy abodes inherited from our colonial ancestors indeed may become reconciled to diminutive quarters if they are thus individualized into what is known as cosiness. The small cottage, or "little jewel of a house," is what justifies a tiny dwelling; for the charm of its carefully worked out details often makes it rank with the mansion for artistic charm.

As time goes on it is predicted that the very tiny house, known in Southern California as the "doll bungalow" will lose its popularity. It is possible that bungalows and cottages built in groups such as the "bungalow court" will be abandoned by those who can have a home of their own, for while these are vastly more livable than the towering apartment house, which they.

in a way, supplant, yet there is very little privacy obtainable in such close proximity to neighbors. But the small house, whether a six or eight room two story affair, or a three room bungalow will continue to grow in favor;—it has so many good points. If it is small and inexpensive enough, it gives an opportunity for the "apartment exiled," business people, the school teacher, even the newlyweds to have the privilege of a real home; not merely a place to eat, sleep and listen to the neighbors' phonographs. Costing less than a larger house makes it possible for anyone with the home creating instinct and the necessary few thousand

A quaint picket fence and a Colonial bungalow
dollars, or credit for monthly payments, to become not only "property owners" but a vital asset to the community.

In this connection it is worth reminding the modest builder who perhaps feels a trifle apologetic among more pretentious neighbors, that clever planning will enable him to design a little house that can be enlarged as circumstances permit. The quaint charm of many English dwellings is often attributed to the picturesque additions that have been made to them from time to time. Wings pushed out on one or several sides of the main building, perhaps at an angle, are but a suggestion of what can be done when more room is needed. The building of more rooms around a court, or a patio thus enclosed is worth borrowing from the Spanish type of building.

The little house may even eliminate that modern tyrant, the servant, for with electrical appliances daily becoming more practical, it is quite possible for the home maker to run the domestic machinery herself and yet have time left for other duties and pleasures.

The planning of the little house requires of course, even more study than a more spacious dwelling—for it must be so "much in little."

In the first place the general style of architecture must be considered. Adaptations of the American Colonial, the English cottage, Queen Anne,—so called with its picturesque pointed roofs and stucco bungalows in Spanish or Italian types are all feasible. But a final choice depends upon the climate and building site. Thus for example, a woodsy building lot that will frame the house with trees just naturally combines itself into subtle harmony if shingles, cobble stones or half timber construction is used. The house etched against a mountain background will be effective, built of light toned plaster contrasting with the setting. For the house that is the raison d'être of an old fashioned flower garden, what more appropriate dwelling could be devised than an American Colonial, for green blinds, a trellised arbor and perhaps a gate, will relieve the most modest structure. An odd shaped lot, too, can often be profitably utilized for the little house if the plan is also developed to make the most of the space. A hillside site is often a very picturesque setting for a snug little...
A little house that says "Stay" when the open road says "Go"

home, that instead of a possible "castle in Spain" is delightful built in Swiss chalet style.

A narrow house looks much smaller than one with the width of the house set to the street, and this must be taken into consideration in the planning of the house. The effect of size is often achieved merely by spreading the rooms out widthways, or by adding porches, pergolas or trellises. Simple planting that avoids cutting up the lawn, too, will increase the apparent size of a lot.

Care of course must be taken not to let decorations whether inside or out, "run away with the house." This perfection of detail already mentioned, is what cautions us to keep woodwork, walls and electric fixtures simple in line and coloring, for this means good proportions. But it does not deter us from making economical use of every nook and cranny for window seats, built-in bookcases, cupboards, shelves and closets. Careful planning for these conveniences is what makes a few rooms answer our immediate needs and give so much satisfaction and comfort.

MILTON

Evelyn M. Watson

"They also serve who only stand and wait."
Think not his universe was endless night:
The dark but crowded out one world from him—
Within were countless worlds in ceaseless light.
The darkness like the raven fed his soul;
The silence proved a well spring of delight.
Thus healing and revealing forces wrought—
And such as he yet give the world its sight.
HERE is very little that need be said in advocacy of sleeping porches. We all know that the pure, fresh air of the outdoors is healthful. Hence, since we are supposed to spend approximately a third of our time in bed, a place wherein we may receive and enjoy the inestimable benefits of a bounteous supply of outdoor air while sleeping is naturally very much to be desired.

There is, however, considerable that may be said on the subject of planning the outdoor sleeping place. For one thing, the general idea of what constitutes a truly satisfactory sleeping porch has, in late years, undergone a rather notable change. Formerly the sleeping porch was, as its name the more exactly signifies, usually quite an ordinary porch and, as such, generally received but scant attention. It was apt to be made little more than a sort of temporary or make-shift affair. Oftentimes no particular provisions were made, other than temporary curtains, for the regulation of undue breeziness, over-brightness of early morning light, or uncomfortable frigidity in winter, nor did it afford any considerable privacy aside from that which location accidentally gave it. But today it is generally given much more consideration and is quite differently treated, being generally made one of the most comfort-
A sleeping porch with "street-car windows"

The desirability of having the sleeping porch equipped with glazed and screened sash is readily recognized. It is then possible, of course, to regulate the admission of air according to weather conditions or to suit individual desires, and also to close up more or less, the porch or room against dust during the day. The windows may be of any kind which are easy to open, but since a maximum of openness will sometimes be appreciable, especially on extremely warm nights in summer, either the casement type or the so-called car-window kind which drops into slides or "pockets" in the wall underneath will prove especially practical. Sometimes even the arrangement in this respect is such as to enable the windows to be removed entirely during the summer months. Whereupon the feature becomes an out-and-out screened sleeping porch. The curtains or blinds naturally come into service for the regulation of light, for increasing privacy, and for keeping out weather.

The windows of rather an ordinary sleeping porch are shown where the sash and details are of the car-window type. The sill may be lifted and the sash windows dropped down into a pocket in the wall under the window. The porch is about nine by eleven feet in size. The windows are fitted with a type of rolling Venetian blinds which are readily adjusted to regulate the amount of sunshine or weather which is admitted.

In the first illustration is shown the interior of what is really a sleeping porch and sun room combined, and as either an especially charming one. It is about nine feet wide by nearly fourteen feet long, and, like the ones already mentioned, has windows

The sleeping porch is over a living porch.
in three outside walls. These windows are of the casement type, hinged to swing outward in pairs, and, besides their glass, roller-operated screens and ordinary blinds, are provided with particularly attractive curtains. These curtains are patterned in green, old rose and cream, with touches of blue and bright red; and, as will be noticed, material of the same kind is also used for the bed dressing and in the upholstering, producing an unusually attractive color scheme. The interior woodwork is in old ivory finish, and the greater part of the furniture, which includes a pair of day beds, has been selected to match.

The first exterior picture shown is that of a sleeping porch located over a side living porch. It was built as part of the house itself, and is about seven by thirteen feet in inside dimensions. It has windows, of the ordinary double-hung kind, in three walls, which are screened as well as glazed.

Another illustration shows a sleeping porch built on after the house had been completed. It is located, as will be seen, above a latticed-in service porch off the kitchen, and, comprising an uninterfered-with extension, has windows in each of its three exposed walls. The windows are equipped with removable sash, with the results that screens and roll canvas curtains constitute the only window protection during the summer. In inside dimensions, this sleeping porch is about six and a half feet wide by ten feet long.

The sleeping porch shown in the last illustration was added to an old house. The house is of the one story bungalow type, and the addition is extended outward in the rear. It likewise possesses three outside walls, with window openings in each. Here, however, no glass is used, the openings being merely equipped with screens and outside roll curtains of awning canvas. The porch is about eight feet square, and is accessible from a bed room.

The modern sleeping porch is, indeed, very much like an ordinary bed room, except for its greater number of windows and for the fact that it is customarily made somewhat smaller. That it be quite open, so as to admit plenty of the outdoor air, is, of course, especially essential. It is, therefore, usually planned with at least two, and sometimes three, outside walls, and these outside walls are generally filled very largely with windows. Not always are these window openings provided with glazed sash; screens and weather-proof curtains or blinds sometimes being regarded as affording sufficient protection. Unquestionably however, it is preferable that they be glazed in the usual way, as well as screened and curtained.
A screened porch added to the rear of the bungalow

The accompanying illustrations will be found worth study in this connection. Showing both exterior and interior views, they offer suggestions as to planning the sleeping porch in respect to location, window treatment, furnishing, and so forth; and also will doubtless help to bring to realization the fact that the sleeping porch may often be added as a very desirable addition to the old house or one already built, as well as incorporated into the plan of the one about to be built.

Sleeping porches like the ones here illustrated are especially practical, for they may be actually enjoyed throughout the year, regardless of the severity of the weather, and are also easy to keep free of dust and clean. If your house is not already provided with good porches, perhaps this is the solution of the summer problem which shall give you the maximum of comfort for the warm season.

BEAUTY

"The fact is that beauty endures, despite our frailties; and it is as inevitable that great art returns again and again as that April repeats her green magic year by year. The sordid, the vulgar, the stupid, and the commonplace have their little moment; but somewhere the eternal things go on and the stars are in the heavens, whether we notice them or not. They wait, like all wonderful things, for the extreme experience which forces us to lift our eyes to them. Nothing great ever perishes. Of that I am deeply convinced."

—Unknown.
Garden Shelters for the Small Home
Katherine Keene

In the great country house and town mansions there are formal gardens, pergolas, tea-houses, pools, fountains, and all manner of summer houses to give a measure of shelter out of doors during the warm season. But what is there for the small home on the tiny lot, in town, during all the summer weather? What have people done, and what can they do, at small expense, which shall permit the family to live a part of their leisure time, at least, out of doors during the open season? Can the small householder set his foot on the spongy earth, and read, or even sleep out of doors without being subject to all manner of annoyances?

The fitting up of a porch and using it as an out door room has been very popular; so popular indeed that the house has, in reality, claimed it for its own—and the "sun room" may indeed be the hottest and closest room in the house. It may have been very simply finished at the start, but the domination of "things" is very insidious, and soon the sun room becomes simply another room, differing only in the type of furnishings, but in no sense an out door room.

Where a porch is big enough it is easy to keep it open and airy, but the really big porch is no part of the small house. Where possible it gives an easy and almost perfect solution of the problem of out door living. But in many cases we must look farther for an out door shelter on the small lot.

If there is a shaded corner of the lot, seats and perhaps a hammock, possibly a rustic tea-table which will not be harmed...
by the weather, and some chairs, give the essentials for a comfortable hour out of doors. If there is no shaded corner, given a little time and the necessary preparations, and the shade can be provided. There are many quick growing vines, and trees, and shrubs which will provide a good shade in the course of one or at most a few seasons. Seats may be set in any convenient place, and may be as simple or as elaborate as desired. The simplest bench built by the boy through his manual training course gives a beginning. This may be set under a trellis or pergola, or may have trellised ends and back, which are very good looking after the vines are gone, or may remain a bower of slower growing vines which keep their growth from year to year. A trellis covered with wild clematis, for instance, carries its feathery balls of seed pods well into the winter.

Here is a photograph showing what was done in one instance, to make a summer retreat. The photograph was taken just as the vines were coming into leaf, before the foliage hides the framework from view. A little later in the season only a mass of greenery is to be seen. Much of the grassy “back yard” of a small lot was covered and enclosed. Trellised posts were built up which carry the beams and rafters of the pergola. A light trellis is carried across between the posts completely enclosing the space except for the openings made for the purpose of passage. An arched entrance way may be seen in the photo. French doors from the house open to it with two or three steps to the grassy carpet. The enclosure may be screened completely, overhead as well as at the sides, and make a perfectly safe place for little children to play, under the mother’s watchful eye. Easy access to the house permits indoor furniture to be carried out when needed. Awnings may be set to draw overhead, to give additional protection from the sun, or until the vines have completely covered the pergola rafters. Such awnings as are drawn over some of the California patios, paved terraces, or small courts are wonderfully
The rustic tea house may be home made attractive, as well as being a very practical protection, easy to install and operate.

The rustic tea-house has been associated with garden living from early times, and retains its popularity. It may be very simply constructed of rustic poles with the bark left on or the bark may be peeled and the poles oiled, giving a rich color as they weather. Such a tea-house is usually closely roofed as a protection against the summer shower, often with wide projecting eaves, swinging low enough to give additional protection. Vines may be trained to cover the entire structure, or if set in a shaded protected place it may be left open to catch every breeze which is stirring on a summer day.

In the rustic tea-house the chairs and table may be home made, and of the same rustic materials if any of the household has the initiative and the skill to make such pieces. It is of course possible to buy such furnishings. If subject to the weather, they should be built and finished to withstand the elements in a reasonable way.

The tea-house need not, of course, be rustic. In fact the whole range of construction is open to the ingenious builder, and the summer house may be made as attractive and as well fitted to its many uses as any of the indoor parts of the house.

Motor Inns
Delphia Phillips

We have the chain stores, and now we are to have the chain Motor Inns. But whether or not the chain of Inns become a reality, the first Motor Inn is an assured fact. It is situated at Los Angeles, and it is the plan to erect the others in the chain of these California motor conveniences.

The first Motor Inn unit is an arrangement of homey bungalows and garages, together with a service building, on a five-acre tract on Whittier Boulevard, and the plan is to add stores and repair departments, and such other conveniences as may seem desirable as time goes on. At present, a goodly number of bungalows are completed out of the thirty which are to be erected on these attractive grounds.

The keynote of the place is simplicity combined with comfort, with as much beauty as is possible without making the rates too high. Many a motorist has longed for a place to stop where his party might enjoy a good night's rest in a comfortable bed, and bathe off the dust of travel ere they start on their journey once more, and has been dismayed by the prices charged by the hotels along the way. To permit motorists to travel without the necessarily high charges of hotels and still give the traveling public clean and attractive quarters is the aim of the promoters of the Motor Inns.

To this end, service has been practical-
ly done away with, except for the helpers that clean up the rooms after the departing guests, for the latter wait on themselves. In the service building the office and rest room are in one wing and the dining room on the other side. There is a long room in which are ranged a number of tiny gas stoves. Just back of the stoves are the rows of sinks, the faucets, and above the latter, the small cupboards. Each guest or party is entitled to the use of a stove, sink, cupboard, and the receptacle under the gas stove in which pots and pans can be stowed away. At the end of this room is a very pleasant dining room, and the use of one of the tables is also the privilege of every guest. The service bungalow is really the community kitchen, dining room, rest room, and organization headquarters for the entire group of bungalows which comprise the Motor Inn.

There are four apartments in every bungalow, each with an outside door, and private bath and toilet. Each room has outside exposure. Each apartment can accommodate two people. They are prettily, but not expensively furnished, and the homey and comfortable appearance at once strikes the observer; for the Hotel Motor Inn, as it is sometimes called, is less like a hotel than like a family of friendly bungalows. The motoring party prepare their own food if they choose, eat it in the dining room, and go to their pleasant rooms for a night's rest. Or, if it is daytime, find an attractive rest room waiting them in the service bungalow, or pretty nooks about the grounds. The grounds are beautified by shrubs and flowers, and playgrounds for the children will be added later.

As the purpose of the Motor Inns is to give real accommodation to the motoring public with as little cost as possible, something has to be said about the price if any mention is to be complete, of this interesting and entirely unique venture: The initial price charged per day includes every convenience and privilege about the premises, including locked compartment for the car in one of the garages, the use of community kitchen, dining room, apartment, hot and cold water, and all the rest of it. And the charge is less than the usual price for half these privileges.

It is the avowed purpose of the promoters of the Motor Inns to run them on the same business basis as chain stores are run, and with the same economy. In northern California, another man has fancied the idea and is erecting a similar set of buildings, but is making them more expensive and pretentious.

It is the plan of the chain Motor Inns to keep their units on the same plane of simplicity and comfort that the first Motor Inn shows.
The House O' Dreams

We make the pattern for our lives by our thoughts. By seeing in the mind's eye, vividly, and in detail, the beautiful things that the soul craves we are providing the threads which are woven into the subconsciousness; and it is amazing how often the pattern which we have subconsciously woven appears in the things about us; and the things which we have resolutely put out of our minds because, perhaps, they seemed foolish, have failed to appear. Do not refuse to think and dream of the home that you want simply because you do not see how you can achieve it—that is simply pushing that little house of your dreams further and further into the limbo of Things-that-can-not-come-true. Think about it and plan for it. You say, "If I could only have a house with a stoop and seats beside the door like this picture, and the rooms opening beyond to a garden!" There is food for dreams in the beautiful home building magazines whose pages you turn with longing fingers on the newsstands, with their tantalizing and fascinating pictures.

Our heritage of beauty is here all around us. So, I say, do not fail to study the beautiful pages of such magazines; study them as you would a lesson, until you can shut your eyes and see vividly the house, and the garden that has especially caught your fancy. Read all the articles on rugs and furniture, pictures, and all the smallest details; and the house o' your dreams may come true, sooner, perhaps, than you expect.

Marguerite Harmsworth.
How Will You Build Your Home?

AN ATTRACTIVE STUCCO BUNGALOW IN WHICH THE WALLED TERRACE AND THE BROAD OUTSIDE CHIMNEY MAKE A FEATURE OF THE ENTRANCE.

E. W. Stillwell, Architect.
A STUCCO BUNGALOW WITH TILED ROOFS PROTECTING THE ENTRANCE TO THE PORCH AND TO THE PATIO. THE GABLE OVER THE LIVING ROOM IS TILED, WITH FLAT ROOF AND PARAPET WALLS FOR THE REST OF THE HOUSE.
A WIDE SPREADING BUNGALOW WHERE THE ROOMS OPEN WELL TOGETHER. IT HAS A WIDE PORCH AND IS COOL AND AIRY IN SUMMER AND COMFORTABLE ALL THE YEAR ROUND.
A CLOSELY PLANNED HOUSE, COLONIAL IN TYPE WITH A GAMBREL ROOF. THE HOUSE IS SET WELL ABOVE THE GROUND TO GET LIGHT TO THE BASEMENT. THERE ARE SEATS AT EITHER SIDE OF THE ENTRANCE, AND A BRICK STOOP.

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CEILING HEIGHT 8'-6"

SECOND FLOOR
CEILING HEIGHT 8'-0"
A TWO-STORY STUCCO HOUSE. THE LONG PORCH GIVES ENTRANCE TO THE WIDE HALL BETWEEN LIVING ROOM AND DINING ROOM, THE WHOLE SPACE OPENING WELL TOGETHER. THE SUN PORCH PROJECTS TO THE FRONT.
A SIX-ROOM BUNGALOW SPREAD OUT ON ONE FLOOR WITH WINDOWS OPENING IN TWO DIRECTIONS IN MOST OF THE ROOMS. UNUSUAL SHAPES IN ROCK AND CLINKER BRICK ARE USED FOR PORCH AND CHIMNEY. THE HOUSE IS ROOMY AND LIVABLE.
A HOME-LIKE HOUSE OF THE SOMewhat LARGER TYPE WITH A BEDROOM ON THE FIRST FLOOR AND FIVE ON THE SECOND FLOOR. THIS IS PLANNED FOR A COUNTRY HOME WITH A MEN'S ENTRANCE BESIDE THE REAR PORCH AND A LARGE ROOMY KITCHEN. THE SOLARIUM OPENS FROM THE LIVING ROOM WITH AN OPEN BALCONY OVER IT.
Decoration and Furnishing
Virginia Robie, Editor
The Architect and the Decorator

It needs only a superficial acquaintance with modern work in this country to see how much more architectural all interior furnishing is becoming. It is by this means that character in arrangement is obtained, and modern rooms are found in American houses which are as worthy of study as their European prototypes. Interior decoration is following with immense strides the architectural development in America. It has been of slower growth, owing to the lack of co-operation in the various interests involved and the indifference of clients. Only a half century ago the majority of city residences and suburban houses represented the skill of master carpenters, and the only country houses were the picturesque groups resulting from frequent additions to farm buildings. Nearly every building now is planned by a well-trained architect. Likewise house decoration is taking its original place as an important branch of the fine arts.

Not more than a generation ago interior decoration was produced by different trades working independently of each other, even if all were under the supervision of the architect. As soon as the structural work was finished, if the house was not actually given over by the architect to the owner, he enlisted the services of a painter to ornament the walls and ceilings of the principal rooms, or the owner's family selected the wall paper. The carpet or rug merchant covered the floors; and numberless pieces of ready-made furniture, upholstered with goods and comfortably stuffed, or highly polished pieces in latest designs were chosen. Chandeliers were selected from mechanical models. Upholsterers draped the windows and doors with heavy fabrics. Then, when the owner had arranged pictures on the walls and bric-à-brac in every available space, the house was "done" and often "done to death."

Now the children of that generation are
keeping merely the family heirlooms handed down from the eighteenth century. Country towns in both continents have been ransacked to find coveted examples of taste and skillful workmanship. Cabinets, tables, chairs and old prints have been eagerly bought at antique shops, not because it is a fad to possess old articles, but as a warning to manufacturers that the public taste had outgrown their wares. Admittedly the collection of old pieces has been responsible for much fraud, cheap imitation and feigned admiration. It has had, nevertheless, its beneficial results. The appreciation and reproduction of colonial architecture in suburban houses, and Georgian and French examples in more ambitious work have undoubtedly brought about a change in taste of interior decoration; but to the recognition of architectural traditions, whether of the eighteenth century or of earlier date, is due much of the excellence in decoration of modern houses.

The architectural character expressed by the interior decoration of a house, which is simply the recognition of precedent, does not prevent individual expression. On the other hand, individuality is encouraged by it. Neither does it produce stereotyped or common effects, nor does it mean the slavish imitations of foreign styles, nor methods of a remote age and civilization. The word “style” conveys the wrong impression. Properly used in the architectural sense, “style” means a consistent artistic expression. This may be produced by simple as well as elaborate and costly effects. A stucco house, built on a rugged coast, can have style based on a traditional character, with the material used in broad masses and the shadows furnishing all the detail required. The interior decoration and furnishing can form an organic entity that represents artistic ability quite as much as that shown in the interiors of palatial residences where the rooms are faithful reproductions of French styles.
Architecture and decoration are already advancing beyond the archeological stage and adhering to principles taught by history. There are strong indications of a desire to give a local or national expression to houses. The results are interesting and full of vigor and virility. No amount of applied ornament, however appropriate the motif, no originality of expression, however clever in execution, can produce good decoration when the architectural character is missing or inappropriately expressed.

Many of the mistakes seen in house furnishing may be traced to a misconception of what is necessary and vital. To some persons this is an accumulation of objects without due regard to either use or beauty. Failure to accomplish the best in fitting up a house can sometimes be traced to disproportionate, ill-regulated expenditures. An oriental rug is purchased at a high cost because “it will last forever,” and the rest of the room is set forth with cheap furniture.

Amidst much that is disheartening in the field of household art, there is an encouraging element in the increasing number of people endowed with natural taste, intelligence, and a progressive spirit. With these attributes even a small proportion of a moderate income may be so wisely dispensed that the entire house will develop in harmonious ways, with every problem nicely considered and the balance falling to practical quality or artistic effect, according to the relative importance of each.

Taking a rapid survey through the house with an eye to things needful, and the aim to present them in an inexpensive and pleasing way, the hall comes into first consideration. Color effect is here the most instant and insistent in giving a hospitable or an inhospitable impression. Red halls were overdone in hotels and apartments where the color was applied to walls, floors, and furniture, but in the more elastic field of a private house this color may be introduced occasionally in a more subtle treatment.

The hall color may be advantageously carried into an adjoining room when separation is made merely by an opening without doors. A slight variation, however, may give to the hall a two-fold stripe, and to the living-room a plain surface. In like manner, the floor covering of connecting rooms may be of the same material and color. Small rooms are particularly helped by these plans.

A reception-room that takes the place of a parlor is easier to furnish than the old-time parlor. In the reception-room the caller in out-door costume feels more...
at ease in quiet-toned surroundings than in white and gold furnishings that belong more fittingly in a drawing-room. In the reception-room any personal objects of family life will naturally be omitted, and due regard paid to furniture that is pleasing in line, pictures that are entertaining in quality, and colors that are tastefully blended. A clock and a mirror should not be omitted in this room, and photographs or prints on a table, a late magazine or an attractive book will be welcomed by waiting visitors.

The combination of uses to which a living-room is put makes it a center of attraction in the home. To go to William Morris for inspiration in its furnishing will give useful hints about restraint in decoration, books, comfortable chairs, tables of commodious size, vases for flowers, pictures, and the fireplace the chief object of all.

The actual requirements of the dining-room may be summed up in, first, wall hangings; second, floor coverings; third, curtains and door hangings; fourth, a table that may be extended; fifth, chairs; sixth, serving-table; seventh, sideboard; and eighth, china-closet. From such a list as this the home-maker buys the equipment for the room in which the meals are served.

To purchase economically and tastefully, and at the same time to infuse a dash of novelty into schemes of furnishing are goals for which to strive. Effects which would be undesirable in a town house are often decidedly pleasing in a summer home. The fact that a dwelling is occupied for a portion of the year only gives charm to certain decorative schemes which might pall if lived with for twelve months. Bizarre schemes of treatment are out of place, but a slight departure from conventionality is something to be fostered.
Mahogany or Ivory Finish

V. A. S.—We are building a colonial house with side entrance, and it is rather hard to decide about the woodwork in living room and dining room, whether to have it mahogany or ivory. Some of our friends think it should be mahogany, but we prefer ivory ourselves. We are intending to use ivory in sun room and gray in kitchen and breakfast nook. If ivory were used should the floors be light or dark oak. I suppose the French doors into sun room should be ivory, but what should the inside of front door between dining room and kitchen and mirror door be? Also the stairway? Should the steps be same as floor and what finish should the railing be? If we were to finish dining room and living room mahogany what should be finish of steps and French doors into sun room? Will have mahogany furniture in both. Fireplaces in sun room and living room are red brick and red tile hearth. Three ivory reed chairs and table for sun room are all we have at present, but are thinking of getting an ivory swing or day bed. Would you suggest color scheme for this, rugs, etc.? We are thinking of getting a mohair davenport and chair for living room along with the mahogany furniture. What color would you suggest and what drapes and paper also paper for dining room? Have Whittal rug in tan, blue and rose for dining room. I am thinking of getting plain taupe rug for living room. Would this look as well as gray? I have been reading questions and answers in your magazine, but do not seem to get all I need out of them, although they have been a big help.

Ans.—We should not pay much attention to the advice of outsiders. Consult your own preferences. You are to live in the house. Moreover, with so much mahogany furniture as you have in mind, and with the red brick fireplaces, we should prefer ivory woodwork. We do not like mahogany with red brick. You can compromise, with doors of mahogany, stair treads and rail. The front door should in any case be mahogany—the brown tone. The French doors however, are prettier if in the ivory finish. Gray will be pretty for the sun room, and walls painted deep ivory in a large, tile pattern; or you can get a heavy paper of that kind. Paint the ivory chairs you have a sage green, and get the new ones to match. Cushion them in a green and gray foliage cretonne.

With ivory woodwork the oak floors are prettier if slightly stained. We would have living room walls gray tapestry, and a rug of darker gray.

Either Mohair or velour are good for covering davenport, etc. With so much mahogany should like these two main pieces in plain gray, with pillows of rose, and one chair in deep rose. Then have your curtains of ivory white pongee or casement cloth, and no other curtains.

With your Whittal rug in rose, tan and blue in the dining room you cannot do better than a paper in soft grays on an ivory ground, and draperies in either plain blue or rose, at the windows.
E. R. H.—We are building a new house of native sandstone and think your suggestions would be very helpful. The enclosed sketch shows size of dining and living rooms and location of windows. The woodwork is to be brown mahogany and ivory in the living room and ivory and walnut in dining room. We have selected walnut furniture for dining room. I would like a davenport for living room of clipped mohair in figured and plain design.

The ceilings are low, only 8 ft. Shall I hang side drapes to floor? How shall I curtain window over built-in buffet. Shall I curtain French door to porch and dining room? Where should we place the davenport? Please suggest where side lights would improve the rooms. We have a long mirror over mantle which takes all the space there. We have not decided on color of wall paper.

Ans.—Your decision as to treatment of the woodwork, and the furniture to be used, appears very good. We like the idea of the clipped mohair for the davenport, and suggest placing it directly in front of the fireplace in winter, at least. The corner with bookshelves should have a reading chair and a tall reading lamp to stand beside it. Side lights each side of the arch into hall would seem desirable. But a center ceiling light will also be needed. We think a color scheme of old blue and taupe gray would be agreeable in this living room with its many south windows. A rug in ReGo Wilton, the nap thick and long, in taupe gray with a little black in it, would be a good choice. Side curtains to the floor might be used on account of the very low ceilings. Old blue pongee would be a pretty material. The French doors to the dining room could be veiled on the living room side, with very sheer thin silk or voile, the veiling well pushed together to the center. The French door to porch, the same. Use rose with your ivory and walnut in dining room, and short side curtains at buffet window. It is not necessary to curtain the whole house alike.
A Mountain Cottage

A. E. D.—I am enclosing floor plan and kodak picture of a mountain cottage we have recently purchased, and as a subscriber to Keith’s I would like a few suggestions as to exterior and interior treatment. The house will need repainting and we are hesitating between a gray, its present color, and a dark brown. We are also in doubt as to how to treat the living room. The French doors, five pairs, have been painted white, but the walls, which are paneled in plain white pine, have not been painted or stained. The grain in the wood is very pretty and we have thought perhaps on that account a stain might be preferable to paint and if so what color would look well with the white doors? We thought we would not change those. The ceiling is a buff beaver-board with beams of the plain pine. Also, what treatment would you suggest as to draperies, etc., for the French doors? Any suggestions as to exterior or interior decoration we shall appreciate, as we feel we have secured a very attractive mountain home and desire to make it as pretty and home-like as possible. We have eight very pretty chairs in the natural color reed which we secured with the house, as well as a reed library table and dining table, also a number of plain chairs painted white. Would you use grass rugs on the floor?

Ans.—We are pleased to make these suggestions for your interesting mountain home. We infer that it is desired to treat the house more carefully and artistically than is usual with the ordinary mountain cabin, where little is planned except to be fairly comfortable in a very rustic fashion. As to the exterior . . . we note that it is shingle construction and hope that the shingles have been stained and not painted. We would leave the present gray color unchanged and stain roof shingles and paint the trim a pleasant leaf green, with the window sash white. We should also keep the French doors white, staining walls and inside trim a soft walnut brown, also the ceiling beams and painting the spaces between the beams white like the French doors. We suppose the French doors will mostly stand open and instead of draperies, we suggest using on them shades of gay figured glazed chintz on a roller attached to each sash. Parrots, with much green foliage and a green grass rug, as you suggest, would be very charming with the brown and white woodwork. The reed furniture you speak of is excellent, only we would repaint parts of each piece in black enamel and upholster chairs in a striped denim, green, mauve, and gray stripes. We would use the big grass rugs only in living room, and some of the “log cabin” rag rugs for the bedrooms. You say nothing about the walls, but we should like a leaf green trellis, about 18 inches high of narrow wood strips, running around above the baseboard with white walls. We should paint the wood chairs green, instead of white, with black strips on legs and backs.

Curtains

G. T. G.—Kindly give me suggestions on color and design for curtains and drapery for first floor of our new home. We have blue living room set in green mixture tapestry with mahogany piano and floor lamp, a fumed-oak dining room set, with both rugs alike, a mixture blue, tan and a touch of green. Woodwork in two rooms natural finish birch.

Ans.—With the blue and green nature tones in the tapestry of your furniture, we suggest side draperies for the windows of blue pongee, in a shade of blue that will harmonize with the blue in the rugs and furniture. If you cannot find this, a blue and green striped linen would be good, on the outer sides only of each group of windows, with a valance across the top of each group, of plain blue velour or velvet. Let the valance be without fulness, and edged with narrow green fringe.

The side lights of the front door (and any glass in the door itself) can have filet or antique lace in a rich pattern, stretched over it plain, without fulness. The glass curtains of living and dining rooms, can be of sheer voile or grenadine or net, not figured.
When he was a boy (boy-like) he wrote this:

This was when they were shingling their new home, in February, 1867.

46 years later, when he was a man, he wrote this:


Gents: I send you by this mail a sample of shingles placed upon my old homestead by my father in 1867. The pencil writing on same was done by me at the time the workmen put them on. They have done service from that day to the 2nd day of April, 1912, when they were removed for new building.

I can swear to the above. I was then 11 years old.

Truly yours, A. F. MABERRY.

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A. F. Maberry

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Household Accounting
Mildred Weigley Wood

The main purpose of keeping household accounts is the establishment of a wise plan for future expenditures rather than merely making a record of every dollar spent.

Everyone starting the enterprise of homemaking faces the question as to whether accounts shall be kept or not. What are the reasons for this indecision regarding the value of keeping accounts? Simply this: the family has not clearly in mind the purpose of keeping accounts and has never realized that accounts are not an end in themselves, but rather a means to an end. Merely keeping a record of every dollar and every penny spent is not the main purpose of accounting in the home. It is, rather, that a wise plan for future expenditures, a budget, may be made. If this is kept in mind there will not be the feeling of uselessness that comes from setting down countless figures which are never glanced at again.

One housewife makes the comment that she would not object to keeping accounts if she could make them balance, but that she is always a few pennies off no matter how hard she tries. Strange as it may seem the answer to that is, do not try so hard. Far better is it to account for 98 cents of the dollar and leave the two cents unaccounted for than not to know how any of it was spent. It will prove the experience of many that, as time goes on, a system of keeping records is established, in such a way that practically all the money spent can be accounted for satisfactorily. The sooner this times comes the better, but in the meanwhile the important thing is to keep some account of expenditures. Each homemaker should have as her goal not just lists of figures, but the keeping of accounts accurately enough to give the family the figures as facts which are needed for study in order to plan for the expenditures of the next month or year, as the case may be.

What Are Household Accounts?
Since the keeping of accounts, as a management responsibility of the homemaker, is not yet fully understood, we find housewives who shy at keeping household accounts, thinking them some special system of bookkeeping quite too complicated for the average person not trained for this work. Household accounts are simply records of the income and of the expenditures for all items for which money is needed for the proper care of the family. This record may be ever so simple and yet be a system of accounts.

Just as it is true that a family must make its own budget, so is it true that a family must determine its own method of keeping accounts. For this reason it is difficult to find account books which are satisfactory in every detail to different families. There are good ones to be secured, but they are usually used with best success when the plan for keeping records is carefully considered in the light of the
family's expenditures and such changes made as will make the plan fit.

**How Detailed Should the Accounts Be?**

This is an individual matter. Here is a bit of advice, however, which comes from those experienced and successful in these matters of household accounting which is worth following. Start your record of items of expenditures with a few main divisions such as food, clothing, shelter and other large divisions. Then, if your time will not permit a detailed record, subdivide these large items at first only to the extent that you believe you can record them accurately. It is surprising as time goes on, how the tendency to subdivide further and further increases in order to more successfully plan the new budget. As experience with keeping accounts continues there will probably be a shifting of one small item from one large division to another, but this is inevitable with changing conditions of living and should not make one feel that the accounting system is poor.

**How to Start Keeping Records**

Whether the records of income and expenditure be kept in a book specially planned for the purpose or in a blank book lined off to suit the individual, there will undoubtedly appear three types of items. These will be:

**Income**  
**Savings**  
**Expenditures**

Some people argue that savings should be a division of expenditures, and it may be looked at in this way, but since from savings most families expect to secure part of their future income, it seems equally logical if not more so, to make it an item by itself and give it a place of importance near the income and preceding expenditures since savings need to be planned for first rather than to be included as what is left over after all expenditures are made, a practice all too common.

**Suggested Headings for Accounts**

To keep records satisfactorily it is necessary to record the date of purchase of all items and the cost. In the case of the income and savings the date should be listed and also the source of the money.

It must be remembered that income will include that money which comes as a salary or compensation for services in the form of fees and also any money which
comes from use of property or as interest on investments (savings in the past). It is true that in most instances interest on money will immediately be reinvested in savings, but this will show under the item of savings. Savings will include life insurance and investments, as well as cash in the savings bank.

Expenditures must be subdivided at least into large divisions for satisfactory recording. The divisions used in planning a budget are the logical ones to begin with. Where a budget has been made it is interesting to plan a space for the amount of the budget so that as expenditures are made each month it will be possible to compare the actual amount spent with that which was anticipated. Thus the division for food might be listed in some such way as this:

**FOOD**

<table>
<thead>
<tr>
<th>Date</th>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
</table>

If the food has been further divided in the budget the amount budgeted for each division may be shown.

For those who are anxious to study their expenditures carefully the larger divisions will need further subdivision. If no special headings have been determined it will prove interesting to try the following to see how they fit the lines of expenditures of the particular family and then make whatever changes seem necessary.

**FOOD**

- Fruits and vegetables
- Milk and cream, butter and cheese
- Meat and fish
- Other groceries
- Meals out

**SHELTER**

- Rent or taxes
- Insurance or repairs

**CLOTHING**

- Ready made:
  - Outer garments
  - Under garments
  - Shoes
  - Hats and gloves
- Miscellaneous:
  - Materials and findings
  - Tailor and dressmaker
  - Repair and cleaning

In recording expenditures for clothing it is desirable to place the initials of the person for whom the article was purchased beside the item, thus making it possible to determine at the end of a year the cost of clothing for each member.

**OPERATING EXPENSES**

- Household and cleaning supplies
- Light
- Gas or other fuel
- Telephone
- Repairs and replacement of equipment
- Insurance on possessions other than house
- Stamps and stationery
- Transportation—car fare, automobile, upkeep

**ADVANCEMENT**

- Health
- Education
- Church and benevolence
- Books, papers and magazines
- Recreation and amusement

No one will study the above list without quickly seeing that some of the items might need shifting from one division to another. For instance, the upkeep on an automobile might belong either under operating expenses or under advancement or under both, depending upon whether the machine is used for transporting members of the family to work or for amusement or for both.

The question is certain to arise in studying this list as to where one would record expenditures for new furnishings. This might be a separate heading or it might be listed under operating expenses. In the case of a family just starting a home it would be apt to be a special heading, but thereafter would be a matter of replacement.

It will be readily seen that in planning for the recording of all these expenditures one must consider the number of times items will have to be recorded in a month and allow space accordingly. Thus food will take a much larger space than shelter in all probability.

A plan for accounting once determined and tried out with the accepted purpose of making these accounts a basis for a wiser use of the next month's or year's income invariably means a sense of satisfaction on the part of all the members of the family participating because it is possible to know just what can be afforded without danger of precipitating the family into financial difficulties. "Thrift is not meanness, it is management." Careful accounting helps to good management.
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**Cleanliness**

It should be possible to keep the inside of the refrigerator as clean as the dishes from which the food is served. Not only the lining surface, but the drain and trap connections are very important. The drain should be easily removed for cleaning. Constant care is necessary to keep the refrigerator in immaculate condition.

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A water cooler may be installed in connection with the refrigerator, connected with the city water, piped from a spring, or simply a separate cold water tank, filled as used. The coils are usually under the ice itself, and the faucet in the front or side of the refrigerator. In this way the water as it is drawn from the faucet is as cold as though iced, and if connected directly, there is always a supply.
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Price, $1.25; postage, 4c.

Published by

M. L. KEITH
Minneapolis, Minn.

Win-Dor

Casement Window Operators

Who Cleans Your Windows?

No matter who does it, if it's hard to do, and risky in the doing, they won't be cleaned as often as they should be.

It is just one more reason for casement windows; there are at least 10 other good ones:

That is to say, if they are outswung and equipped with Win-Dor operators. All eleven reasons are given in our booklet called, "Things You Ought to Know About Casement Windows."

The Casement Hardware Co.
221 Pelouse Building
CHICAGO

SNOW WHITE

Hess Steel Medicine Cabinets and Lavatory Mirrors

SANITARY - BEAUTIFUL

Better than wood—never sag, shrink, warp or stain. Easily cleaned with soap and water. The enamel is guaranteed never to crack, blister, or peel.

Low in price, but fine enough for any bathroom.

Ask any dealer or write us for illustrated booklet and prices.

Hess Warming & Ventilating Co.
1217 Tacoma Bldg., Chicago

Maker of Hess Welded Steel Furnaces
Shortage of Skilled Builders

It is stated that there are 134,000 brick masons in the country today. Thirty years ago there were 159,000. With the tremendous increase in building and yet the bricklayers at work are fewer in numbers than years ago. It is reported that bricklayers are getting $12 per day in Brooklyn, and plasterers in Manhattan striking for even more. The strike of some 2,000 bricklayers is reported to be holding up construction in New York City, estimated to cost $125,000,000. The same report states that we could easily use 200,000 bricklayers in the work of the country.

Industrial Association School in San Francisco

A solution to this problem resulting from the lack of skilled workers of all kinds, and of builders in particular, is being tried out with notable success by the Industrial Association of San Francisco, in the schools which have been established for apprentices. During the year ending May 1, 1923, the Industrial Association trained a total of approximately 700 apprentices through its schools for plasterers, plumbers, bricklayers, painters and paperhangers, and iron and brass molders. Not only has the acute shortage which existed in these trades last year been relieved, but over 700 young men are now well on the way toward becoming skilled mechanics. Indeed, a few of them, those with longest experience on the job, are now earning full journeyman's pay, and many others are earning only a dollar or two less. As the wages of all apprentices are based strictly on merit, and each paid according to what he can actually produce, the good wage which these young men are receiving is convincing proof of their proficiency.

Plasterers' School

In operation since May 1st, 1922, 190 apprentices have graduated from the plasterers' school and many of them are now being engaged at good wages on the very best class of down-town construction, handling everything from scratch coating to ornamental plastering. Twenty-five are still in night classes for instruction in ornamental work.

Plumbers

The plumbers school has been in operation since May 15th, 1922, with 210 graduates from the day course. One hundred and twenty-two have taken and 32 are now taking the night course, which gives advanced instruction. The others will be required by their employers to attend the night classes. Apprentices all start at $2.50 per day. Wages are increased as rapidly as individuals pass required tests, which are given by a committee of the Master Plumbers' Association at frequent intervals.

Painters' School

The painters' school is operated in cooperation with Master Painters' Association, one full day a week. Instruction is given to apprentices already in the trade. The course is designed to train men for both painting and paperhanging and pro-
We would like to mail you a copy of our latest booklet, "The Overlooked Beauty Spots in Your Home." Simply drop a postal and ask for it.

Interior Decorators say: "start with the floor!"

Start with the floors. To give attention to your wall tones and the character and harmony of the appointments, to the exclusion of your floors, is to overlook the beauty spots that lend the final touch of refinement to every phase of interior design.

Many leading decorators now specify Perfection oak flooring because of its wonderful finishing qualities, perfect uniformity and gratifying durability.

No home now may be said to be really modern that lacks this everlasting wood in every room. You will find that broad expanses, lustrous and velvety, give perspective for a more effective setting. Your carefully selected pieces show to better advantage. Your walls, pictures and hangings indicate a finer taste. And above all, there is a homelike spirit pervading each room.

If you do not find Perfection Brand Oak Flooring on sale, write us and we will give you the name of a good lumber dealer near you.

ARKANSAS OAK FLOORING COMPANY
PINE BLUFF, ARK.

PERFECTION
BRAND OAK FLOORING
Beauty and Permanence

Of course your new home will be beautiful—but,

Will that beauty be permanent? Will its walls and ceilings crack or stain or sag? Will a chance fire destroy it—its keepsakes and its memories?

The use of Herringbone Rigid Metal Lath insures a lasting durability—a beauty enhanced by age.

Let us help you plan a home of which you will be lastingly proud. Send for your copy of our booklet, "Building for Permanence and Beauty."

THE GENERAL FIREPROOFING CO.
Youngstown, Ohio

Herringbone Rigid Metal Lath

Make Every Room An All-Weather Room

With this new type, trouble-proof casement window you can instantly adapt any room to any weather.

Whitney Windows

Are weather-tight and storm-proof when closed. They can be opened to allow a clear sweep of the breezes in warm weather. They never stick, rattle or slam. Write for full information.

Whitney Window Corporation
WARNER HARDWARE CO., Successors
17 South 6th St. Minneapolis, Minn.

vides for steady progress from simple, rough work, to the more complicated phases of fine interior work; the men are kept in the school as long as possible. About twenty-five have graduated, with similar number still in training.

Bricklayers

The bricklayers’ school has been in operation since January 1st, 1923. Thirty-five have graduated, all of whom before going on jobs were required to pass the following production tests:

1,200 bricks in 8 hours on a 12-inch wall.
800 bricks in 8 hours on main corners.
600 bricks in 8 hours on 17-inch piers.

These rates are maintained for a minimum of five hours, continuously; with all work of such character as would pass inspection for permanent installation. Knowledge of usual trade methods and terminology are also required of graduates.

Molders’ School

The molders’ school has been in operation since January 1, 1923. It is conducted in operating a commercial foundry. Men are placed on actual production work as soon as they have acquired the rudiments of the trade. Graduates start work at $4.00 per day. Fifteen have graduated to date, with an equal number in training.

Colored Stucco

The fact that stucco can be given practically any desired color adds widely to the scope of its use as an architectural material. The production of a pure white Portland cement was the first step, as that made possible the light and delicate tints. Not only can stucco be made almost any desired color, but it can also be tinted or painted with metallic paint. Mortar colors come in red, black, buff, brown chocolate and olive green, and are effective with brick work.

The coloring of roughcast stucco presents few difficulties, it seems, and adds much to its effectiveness. The color lends a rich warmth that ordinary gray stucco does not possess. In smooth finished stucco the color follows the trowel or float, giving a surface of somewhat irregular or mottled appearance. To many this irregularity and variation increases the interest of the finished wall.
INTERIORS BEAUTIFUL
SIXTH REVISED EDITION

IN PLANNING your new home, the study of interior treatment both as to architectural detail and decoration is of equal importance to obtaining a good design and a practical, well-planned house. This book illustrates the interiors of many successful homes and contains much valuable and authoritative advice on Interior Decoration. Printed on enamel coated paper which brings out the beautiful detail of the illustrations. Size 7½x11. 160 pages. Flexible embossed cover in colors.

CONTENTS:
- Interior Decoration, taking up Color
- Schemes, Treatment of Woodwork, Walls, Ceilings, etc.
- Entrances.
- Halls and Stairways.
- Living Rooms.
- Dining Rooms.
- Sleeping Rooms.
- Sun Rooms.
- Fireplaces.
- Breakfast Rooms.
- Outdoor Living Rooms.

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A Year's Subscription to Keith's Magazine and Interiors Beautiful $4.50

POSTAGE PAID

Collaborated and published by

M. L. KEITH, Minneapolis, Minn.
How Much Is Ten Cents

If you had one mere dime rattling around in your pocket you would, no doubt, consider yourself hard up. You couldn't go far on a railroad train with that fare nor purchase a very hearty meal. You couldn't buy much more than a plain handkerchief for 10 cents in the way of clothing.

But! Do you know how much that dime would do for you invested in electricity? Based on a supposed rate of 10 cents per kilowatt per hour, it would accomplish any one of these tasks:
- Operate a six-pound flatiron 30 minutes a day for four days.
- Do one hour's washing each day for five days.
- Run a vacuum cleaner one hour each day for ten days.
- Operate a sewing machine for 20 consecutive hours, provided the sewing machine motor does not exceed 50 watts in rating.
- Drive an electric fan four hours a day for nearly a week, provided the fan motor is not rated higher than 30 watts.
- Operate a heating pad five hours a day for six days, provided the rating of the pad does not exceed 35 watts.
- Light a 16 candle power lamp for about two hours a day for 30 days.

To Determine Cost of Electricity

The unit of measurement for electric current is the watt or kilowatt (one kilowatt is equal to 1,000 watts). Current is sold by the kilowatt hour; that is, the number of watts or kilowatts used per hour. Electrical appliances are usually marked showing the number of watts which they use per hour. This number, divided by 1,000 (which reduces it to fractions of the kilowatt), and multiplied by the rate per kilowatt, shown on your electric light bill, will give you the cost of operating the appliance for one hour.

For example, if we have a four-pound electric iron marked 400 watts, we divide the 400 by 1,000 and find that 400 watts equal four-tenths (4/10) of one kilowatt. Now take, for ease in figuring, a rate of 10 cents per kilowatt and multiply by the .4 by .10, which gives 4 cents, the cost of ironing for one hour.

The weekly cost of electric light in the average home is 45 cents. The average weekly cost of doing the ironing (five hours), the sewing (five hours), the cleaning (six hours), the family laundry, washing the dishes (for 21 meals), and making toast (for seven breakfasts) by electricity is only 36 cents.

The Electrical Installation

Be sure that basement and garage lights are controlled by 2-way switches. This will save many steps and probably some bad falls.

It is very convenient to have the entrance porch light at the front door controlled by a set of 2-way switches, one inside and one outside the door, so that the porch light can be turned on from outside as you come home. On the porch a special socket may be installed for an "all-night light" or a 7 1/2-watt standard lamp which can burn all night long, illuminating the house number and tending to keep burglars away.

Be sure to have a switch for controlling the lights of each room from a point near the door. A pull switch at the ceiling fixture may be all right for certain types of fixtures, but some day the owner may want to put in a different type of lighting. When there are two doors to a room it may often be desirable to have a switch by each.

In every bedroom install a duplex receptacle in the baseboard beside the bed, so that both reading lamp and a heating pad may be connected.

In the laundry install a special connec...
Every idle stream or waterfall that is put to work, and furnishes light and power to homes and factories many miles away, means a saving in coal and, what is more important, a saving in human energies.

How far can a waterfall fall?

In 1891 General Electric Company equipped an electric plant at Pomona, California, for transmitting electric power 28 miles—a record.

Today electric power from a waterfall is carried ten times as far.

Some day remote farm homes will have electricity and streams that now yield nothing will be yielding power and light.

GENERAL ELECTRIC
**Garages**—Home owners will find this collection of 32 up-to-date garage designs a most interesting and helpful collection. There are designs to meet every demand from the small car inexpensive house to the better type of double garage. *Price 50c postpaid.*

**KEITH CORPORATION, Minneapolis**

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SMALL, lucrative and exceptionally interesting mail-order business. An unusual opportunity for the right party. An asset of this business is my 1923 advertising contract with Keith's.

ADDRESS

ANN WENTWORTH

Care Keith's Magazine, Minneapolis, Minn.
How She and He
Designed and Built It

SHE and He are no less than Katharine McDowell and Husband Ned of
Bronxville, N. Y. Happily for you they both kept a diary. Each told in it
what each did, and exactly how it was done. Told about all the hundred and
one things which you want to know. Everything right down to closets, how
many, where, and such like. And how they themselves Mellotoned the walls,
Neptunited the floors and Linduro coated the wood work. All of it, is told in
their combined diary called The Diary of the House in the Woods.
Send 10 cents for it direct to our main office at Dayton, Ohio.

The LOWE BROTHERS Company
465 East Third Street, Dayton, Ohio
New York Boston Philadelphia Jersey City Chicago Atlanta
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Lowe Brothers
High Standard Paint
OAK FLOORS are beautiful, permanent and economical—suitable for all the rooms.

The 3 Rooms You care most about

THE living room is the center of home life, radiating hospitality and good cheer, and should above all be livable and comfortable.

OAK FLOORS have character, dignity and charm. There is something in the very "feel" of oak beneath the feet that suggests comfort and ease; it is not "dead" or cold. It is a natural product, not a man-made composition, and the beautiful grain and variety of figure that Nature grew in oak cannot be imitated. When finished to conform to the color scheme of the room, an oak floor becomes in a decorative as well as a practical sense, the correct and modern foundation for the living room.

In the dining room, an oak floor, by its richness and beauty, contributes to the sense of well-being and enjoyment.

The atmosphere of the bedroom should be restful, quiet, and conducive to sleep. Oak floors, finished to harmonize with the subdued tones selected for the furnishings, are delightful in their invitation to deep, restful sleep.

If you live in a home without oak floors, there is a thickness of oak, called ½ inch, made especially to lay over the old "worn floors, in a grade suitable for every room, and within the reach of every purse. A book-lot, which tells all about oak floors, with colored illustrations of finishes, will be mailed on request. Write today for your copy.

OAK FLOORING BUREAU, 1042 Ashland Block, Chicago

FOR EVERLASTING ECONOMY
"THREE HOMES
BUILT OF STUCCO"

Is the title of an article in Keith's Magazine for May. It was beautifully illustrated and attractively written. It referred to the surface texture of the house as inviting the companionship of greenery and blossoms; to the opportunity stucco as an exterior coating offers from the standpoint of beauty in color and texture finishes.

Stucco, the article goes on to say, when properly applied is unquestioned on the score of durability, and its practical advantages many. "It is not high in cost."

We quote the last paragraph in full: "The stucco of the house mellows with time. When it is good stucco, properly prepared, age improves its looks but does not bring decadence."

The article is in no sense an advertisement, and is not special pleading even remotely. Bishopric refers to it as a guide to those who think of building in these days of high building costs, and seeks opportunity to demonstrate the superiority of Bishopric Stucco Over Bishopric Base as building material for this day and time. Inquiries will have intelligent attention.

THE BISHOPRIC MFG. COMPANY, 646 Este Avenue, Cincinnati, Ohio
Factories: Cincinnati, Ohio and Ottawa, Canada

Architects Froot & Raymond designed this Colonial Home for House Beautiful Magazine using "CREO-DIPT" Stained Shingles on side walls and roof.

THE beautiful texture of "CREO-DIPT" Stained Shingles is brought out by our process of staining selected straight-grain cedars shingles with finest earth pigments ground in linseed oil and carried into the fibres of the wood with creosote. Color effect in over thirty shades of reds, grays, browns and greens.

For both roofs and side walls "CREO-DIPT" Stained Shingles afford wonderful economy—save painting and repair bills.

If you would have a house, large or small, that is architecturally correct, for suggestions send $1 for 50 large photographs of houses of all sizes by noted architects.

CREO-DIPT COMPANY, Inc.
General Offices, 1022 Oliver Street, North Tonawanda, N. Y.
Factories: North Tonawanda, N. Y., St. Paul, Minn. and Kansas City, Mo. Sales Offices: Principal Cities.
Leading Lumber Dealers Everywhere Carry Standard Colors in Stock
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AUGUST, 1923

KEITH'S

MAGAZINE ON

HOME BUILDING

DEVOTED TO

BUILDING—DECORATION—FURNISHING

BETTER HOMES

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Bishopric Stucco over Bishopric Base will make the walls of your home beautiful and durable.

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Over it Bishopric Stucco

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The windows of the modern dining room are equipped with Air-Way Multifold Window Hardware. Thus it may be thrown wide open to the gentle, cooling breeze, affording all the comforts of outdoor dining, while retaining the conveniences of the indoor dining room. A weather-tight window which slides and folds inside, leaving a wide, unobstructed opening. If desired, Air-Way windows may be partially opened for ventilating at any point. Easy to operate—no interference from screens and drapes. Ideal for sun rooms and sleeping porches, as well as bed rooms, living rooms and kitchens.

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- Geo. Palmer Telling, Pasadena, Calif.
- Yoho & Merritt, Seattle, Wash.

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- The American Face Brick Assn., 110 South Dearborn St., Chicago, Ill.
- Common Brick Industry, 1319 Scofield Bldg., Cleveland, Ohio.

## Building Paper and Insulation

## Cabinets

## Casement Hardware
- Casement Hardware Co., Chicago.
- Whitney Window Corp., Minneapolis.

## Cement
- Portland Cement Assn., Chicago, Ill.
- Atlas Portland Cement Co., 30 Broad St., N. Y.

## Coal Chutes
- Kewanee Mfg. Co., 414 N. Tremont St., Kewanee, Ill.

## Doors
- Curtis Service, Clinton, Ia.

## Door Hangers

## Fireplaces and Accessories
- Colonial Fireplace Co., 4624 W. 12th St., Chicago.
- Hornet Mantel Co., 1127 Market St., St. Louis, Mo.
- King Mantel & Furniture Co., Knoxville, Tenn.

## Floor Finish
- Lowe Bros., Dayton, Ohio.
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## Garden Accessories
- Garden Craft, Crystal Lake, Ill.

## Hardware
- Casement Hardware Co., Chicago, Ill.
- Bishopric Mfg. Co., 10 Jones St., Rochester, N. Y.
- Corbin, P. & F., New Britain, Conn.

## Heating Plants
- Farquhar Furnace Co., Wilmington, O.

## Heating Regulators

## Hollow Tile

## Insulation
- Union Fibre Co., Winona, Minn.

## Lighting Fitments
- “Riddle,” Toledo, Ohio.

## Lumber and Flooring
- Oak Flooring Bureau, 1014 Ashland Block, Chicago, Ill.
- Arkansas Oak Flooring Co., Pine Bluff, Ark.
- Birch Manufacturers, Oshkosh, Wis.
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Metal Building Goods.
Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.

Millwork.
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Paint.

Plumbing Goods.

Refrigerators.
Herrick Refrigerator Co., Waterloo, la.

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

Sash Balancers.
Caldwell Mfg. Co., 6 Jones St., Rochester, N. Y.

Screen Cloth.

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

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

Sheathing.

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

Stucco.

Stucco Base.

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

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

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

Waterproofing Compound
General Fireproofing Co., Youngstown, Ohio.

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

Window Hangers.
Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.
Whitney Window Corp., 13 South 6th St., Minneapolis, Minn.

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

Miscellaneous.
Ash Receivers.
Sharp Rotary Ash Receiver Co., Binghamton N. Y.

Ironing Devices.
American Ironing Machine Co., Chicago, Ill.

Medicine Cabinets.
Hess Warm. & V. Co., 1217 Tacoma Bldg., Chicago.

Weather Strips.
Chamberlin Metal Weather Strip Co., Detroit, Mich.
BOUT ninety per cent of the residence building that is being done at this time is the building of suburban homes. Are not people availing themselves much more of the advantages of suburban home life because of the automobile, which today is a possibility for every family? There are others besides Mr. Ford who are making this possible, and a few hundred dollars investment will place a new automobile in the home. This automobile may be a luxurious touring car, or it may be an inexpensive family car, but whatever the cost, the automobile is a great institution.

On holidays and Sundays we see them on every highway, with full family loads. But in this editorial pleasure driving is not the important consideration of the automobile; it is the economic service which it renders, and the important place in the family life which the automobile is taking. No wonder that this industry has had such a tremendous growth of late years. Sometimes it has been said that people will own an automobile before they will own a home, but we are coming to believe that the automobile is a real help to the building industry of homes; that it is becoming almost an essential requirement for the suburbanite, whether he be businessman or employed in the mill.

Mr. Babson says, "The automobile industry is largely responsible for the satisfactory business conditions of today, which show one per cent above normal as against seventeen per cent below normal a year ago; that it is the greatest factor with which the banker, the manufacturer and the merchant must reckon, not only now but for years to come."

We believe that the automobile has revolutionized things to the home owner. He no longer determines the selection of his building lot with reference to easy access to his place of business, to the school or to his church. Nor is he, because of the convenience of the automobile, restricted to the confines of a twenty-five foot city lot. He may now spread out and have his garden and his flowers and hedges, which add so much to the attractiveness of the home.

This all changes the social economics of communities. It increases the health of the family, and every one is better off. We may even say, therefore, that the automobile goes hand in hand with the home, and in reality that it is a godsend.
The focal beauty spot of the garden is a pool.
Their Four-Roomed Air-Castle
Lee McCrae

His little house embodies a long-planned air-castle. But for the previous eight years of their happy married life Mr. and Mrs. S. had merely dreamed; no money had been stowed away to help the dream to come true. It is the old story—but this one has an unusually happy ending. Let us have the last pages first,—woman-fashion.

The bungalow is just big enough for two; the occasional guest being provided for by one of the couches which proves to be a concealed bed, so popular in this west coast. This extra bed is pictured here for it permits the building of a four-roomed house by young people who would be terribly mortified if unable to make a visiting relative comfortable, and four rooms cost quite a little less than five or six.

During the day it appears as an attractive, exceedingly useful couch, the other half of the bed remaining within the finished niche which is itself a convenient shelf within the closet-dressing room. At a touch this piece of furniture is drawn forth on its soft, wide wheels, a whole bed, all ready for occupancy. Within the dressing room is space for coats and hats and the extra things a woman wishes to have about, but out of sight.

The living room is pleasantly large with added spaciousness and light afforded by the French doors between it and the dining room. Sunshine and cross ventilation are also provided for by the four windows in the bed room. The kitchen is "just right" according to this neat but not overly strong housewife, and by having the space below her sink and drainboard enclosed with doors and drawers, in addition to the "cooler" and built-in dish cupboard, she feels she has sufficient closet space here.
The "cooler" referred to has shelves made of coarse wire netting which allow air passage from the vent in the floor to the pipe in the ceiling above it leading to the roof. This device, now found in nearly every California home, saves many an ice bill.

Over her two laundry tubs on the small rear porch, Mrs. S. herself placed hinged lids, turning the tubs into receptacles for soiled clothes, and also making a large handy "table."

The exterior of the house is best explained by the picture. Plaster was used although slightly more expensive than weather-boarding. It was in the dream; besides, since no painting or repainting would be required it was an economy in the long run.

The roof, too, as called for in this design, is less expensive than those with high pitch and wide eaves, and this saving evened up the more costly finish, while the simple entrance porch is the more attractive because of its simplicity. The decorative lattices were made by Mr. S. after store hours, and the full-grown shrubbery was planted by their own hands one happy twilight.

But how was all this possible when no money had been saved? That is the story that should have come first, perhaps.

True to the home-nesting instincts of men and birds and animals, this congenial couple planned vaguely someday to have this cozy roof-tree; but those were the cheap living days of the nineteen-tens, the salary was all too easily spent, and apartment house walls had not yet grown oppressive. Thrift-times had been postponed; then war-conditions broke, and they found themselves barely existing, the air-castle soaring out of sight, the rented walls contracting, and the landlord's exactions increasing. The day he served his third rent-advance notice they sat down and took stock.

All they possessed was a bare lot in a pleasant suburb and a gleefully sketched four-roomed house-plan that they always meant to build there "someday." In desperation they put aside the plan and grimly resolved to buy a tent, pitch it on the lot, and get away from the narrowing walls and grasping landlord. It was their private declaration of independence.

Mentioning it to a fellow-employee in the store, Mr. S. was told of the home-financing plan of the city's leading bank. It would loan him a good percentage of the lot valuation plus that of any house he chose to build, allowing this principal

By day—a comfortable couch.
At night—a full sized bed to be paid off in monthly installments at 7 per cent. Of course, he was keen enough to figure that these payments if extended over the ten years allotted would accumulate a heavy interest and he would be paying much more for his little home than this first cost would seem. But he also figured that the monthly sum would also be less than the exorbitant flat rent, and they had the privilege of paying off larger installments as fast as they desired, the future payments being discounted at 7 per cent per year on all the money advanced. Thus there was no penalty for prompt reduction of the loan.

“Our lot is worth a thousand dollars,” he said as they figured feverishly that night. “This four-roomed house can be quite substantially built, even if it is not completely finished, for a moderate sum. We can do without the glass doors between the front rooms for a time; we can make a place for the extra bed but not install it until flush; and we will content ourselves with only the necessary furniture at first.”

“Yes, even doing without the dining room set—they cost frightfully now—using that dear little blue and white built-in breakfast nook even when we chance to have company,” she added gaily.

Better even than the financing of this small home was the supervision taken of the building by the firm financing it. With no experience in building, no time to oversee the work, and no knowledge of materials and construction laws, this merchant might have suffered at the hands of contractors and unscrupulous workmen, whereas the firm, making a business of building, watched every detail, hired the best, and insisted on honest materials. Theirs was the plan, the job was the company’s since they advanced the cash. Relieved of all worries, they turned their attention to the saving of money so that the loan might be speedily reduced, and with something so beautifully tangible to save for they felt a real joy in their sacrifices.

Today this pretty little house is a real refuge, a dream realized, and if Mr. and Mrs. S. could broadcast a word into your ears it would be, “It can be done for we did it!”

"MY GARDEN"

A garden is a lovesome thing, God wot!
Rose plot,
Fringed pool,
Ferned grot—
The veriest school
of peace; and yet the fool
Contends that God is not—
Not God! in gardens! when the eve is cool?
Nay, but I have a sign;
'Tis very sure God walks in mine.
—Thomas Edward Brown.
It is the personal touch which adds the element of charm, whatever may be the object in which it appears; but nowhere is this so much the case as in the planning and building of a house. When one notices a "studio" tucked away somewhere in the plan the mystery is explained. One understands immediately that the planning has been done under the supervision of an artist, and one expects beauty in the results. Any material is charming when rightly handled, but stucco, admirably used, has charm in its texture, and readily lends itself to effective background as a setting for the doorstep garden.
Swimming Pools at Home
Charles Alma Byers

A swimming pool is truly a delightful luxury, and a garden pool makes the center of a beauty spot. Where one possesses ample grounds, suitably situated, a pool is unquestionably a feature that is well worth installing. Its claims to recognition as a charming garden asset are many. It is indeed alluring, as to its use and to the aesthetic sense as well, for nothing adds more to home grounds in a decorative way than a pool of water.

It is not every one who can go to the beach or to a lake for the warm weather. Community buildings may contain a swimming pool; athletic clubs and “Y” buildings usually have pools; but to have a swimming pool at home is a joy.

The swimming pool that is placed in the patio of a house is the greatest possible luxury. It is built not unlike a swimming pool in an athletic club or Y. M. C. A. building. The photograph shows such a pool, as built in California, which is enclosed in the extension of the wings of the building, filling the greater part of the patio. The wall of the pool is high enough to serve as a parapet. The arcaded porch gives a cloister effect about it, with a grassy plot between the porches and the pool. There are few people, however, who can have a pool practically in the house, in this way.

The swimming pool is still in the luxury class. Will it develop into a necessity to the next generation as the automobile and the garage to house it has become a part of the modern home? Is the "old swimming hole" finding its modern counterpart?

The pool that is to be used, out of doors, for bathing and swimming, becomes a miniature lake in most cases and requires grounds of considerable size. As a general thing it is, of course, best suited to such use as a feature of the country house, or of the suburban-located home occupying fairly extensive grounds. Never-the-less, since it can be made of any size, and can also be secluded from the street or public high-
way by a screen of shrubs or trees, such a pool need not be restricted to either the country estate or the home surrounded by an unusually large garden area. Nor is it a feature that can only be afforded by the very wealthy, for its construction cost, as well as the cost of the setting can, like the size of the pool itself, be brought down to the point possible to a modest purse.

However, the decorative possibilities of the swimming pool should not, by any means, be disregarded, nor need their proper development interfere with the pool’s more practical uses. Water, however introduced, invariably contributes to a garden’s attractiveness. Its sheen alone is enhancing, and its mirroring of the flowers and foliage or things architectural about it, adds still greater charm to a landscape scheme. The private swimming pool naturally introduces the use of water in a very legitimate way, and it also constitutes a most engaging center feature for developing various attractive ideas both in planting and in architecture. It may, for instance, be provided with a screening environment of trees, shrubbery and flowers, either in formal or informal arrangement. Possibly it may be enclosed by something in the nature of a pergola, either formal or rustic. It also, affords charming possibilities in the way of the use of garden seats, either semi-secluded or exposed, paved or graveled paths or walks, and so forth.

As portraying something of the general desirability of the feature, the private swimming pools illustrated herewith may be studied with some interest. One pool here shown is located directly in the rear of the house, with a broad winding stairway descending to it at one end from
A roomy awning covered second-story balcony. The pool is but about eight feet wide by eighteen feet long, graduating in depth from approximately a foot at one end to five feet at the other. Despite its very limited dimensions, however, it furnishes a great deal of enjoyment besides constituting a delightful asset of the grounds, decoratively. It has a tile-finished basin, and a broad planking of wood is used about its edges, while the surrounding space is paved with red brick. Italian cypress and other trees and foliage are used to enhance its setting.

Another illustration shows a materially larger swimming pool that is formed in the shape of a heart. It is about thirty-two feet in maximum width by something like thirty-six feet in maximum length, and it graduates from approximately eighteen inches to seven feet in depth. It is walled and floored with cement-finished concrete, and is bordered on all sides by a well kept lawn. Located in the rear of the house, and, due to a sloping away of the site in front, on a somewhat higher elevation, this pool is, by the sparse planting, only partially screened; with a wide view of the surrounding country. It especially deserves notice that it is directly accessible from the second-floor rooms of the house by the simple means of a short board walk, and a few steps to a spring board.

The pool shown in the last illustration is also rather small. It is about ten feet wide by sixteen feet long and varies in depth from three to six feet. Its basin is of concrete, finished with cement, and the walk that enclosed it is paved with light gray tile. This pool has a particularly attractive garden setting, with an arrangement of foliage and garden architecture that virtually screens it in from every point. On one side is a small summer house, and on the other a couple of latticed-in and pergola-covered seats, while at the farther end, embowered in the foliage, will be seen an umbrella-protected seat and table. A spring board is included in the pool’s equipment.

Swimming pools, in their construction, should, of course, be provided with intake and outlet pipes for refreshing their water.
Supply—if not continuously, at least with a partial change of it each day. Incidentally, they are sometimes connected up with an irrigation system for the garden, and where this is done there is no waste water, as it is readily put to excellent service. Either by the regular outlet pipe or by other arrangement, there also should be a means of completely draining the pool now and then, so that it may be cleaned. Naturally, in most parts of the country, such features are usable during only a few months in the year. However, this period may be, and sometimes is very substantially lengthened by equipping them with hot-water pipes, to run horizontally along the sides of the basin—one perhaps near the bottom and another a few inches beneath the water level.

**Raise Your Own Perennials**

Adeline Thayer Thomson

One may “take time by the forelock,” so to speak, along gardening lines in no better way than by seeding perennials in midsummer—July or early August.

An advantage is to be realized by following this method not only because the seedlings will perfect growth enough to ensure strong, stocky, plants that may be depended on to contribute a valued share in the blossoming fest the following season, but one will find there is marked economy as well in growing perennials from seed rather than buying the plants outright whether by the dozen or at the hundred rate.

The perennials one pays no modest price for on the market, someone raises from seed. The querie follows: why not raise them yourself, thereby owning not only a far richer and more varied stock than you could buy, perhaps, but
have them at very small cost?

Perennials are as easily germinated and raised from seed as are annuals. Nine persons out of ten, however, buy their hardy plants from the nursery. The secret of the matter is this: The average perennial does not bring forth its blossoms until the year following seeding and most flower enthusiasts, impatient for results, are not willing to wait.

Now, seeding perennials in mid-summer overcomes this difficulty to a great extent. By this time the rush and planning for the season in hand is finished; the flowering scheme well under way; and the garden lover is already beginning to formulate new planting schemes for the following season. Thus, mid-summer with its possibilities for raising a stock of perennials, strong enough by fall to winter safely and to mature blossoms for the coming season’s flower display, makes an appeal not to be overlooked.

For my own hardy garden I have raised hundreds of perennials from seed, and the mid-summer planting I have found just as satisfactory as seeding perennials in the early spring. It possesses the advantage also—a point in its favor for the modest pocket-book—that it scatters the expense, so to speak; not crowding all the expenditure for the planting scheme into the early spring time.

A partially shaded location should be selected for the seed-bed, pulverizing and enriching the soil with rotted manure (cow manure is best) or a sparing amount of any good commercial fertilizer. Sow the perennials, of each kind, in rows from two to three inches apart, the seed planted closely and to the depth of twice its size, labeling each row plainly according to the individual variety planted.

From the time the seeds begin to germinate they should be watered after sundown each night, using the finest spray of the hose or a whisk broom to scatter the water from a pail. From this time on the young seedlings should be watched carefully and if the heat is intense they should be given protection from the sun. A cheese cloth frame raised from four to six inches from the ground is ideal for this purpose, but if this is not available, newspapers, held in place at the corners by sticks, will answer the purpose. When the seedlings have attained their second pair of leaves, stronger plants will be secured if they are transplanted in the rows, from three to four inches apart. This should be accomplished after sundown, after the seed-bed has been given a thorough wetting-down, or on a cloudy day, preferably just before or after a shower. The young plants in their new positions should now, too, be
given protection from the sun until thoroughly established. By the latter part of August or early September the seedlings will have matured into strong, stocky, little plants that may be transplanted either to the permanent quarters which they are to occupy the following season, or given a place in the vegetable garden where early crops have been harvested. This latter plan is more satisfactory, I think, as the plants are readily transplanted in the spring and it is far easier to give them winter protection in one central location.

Just a word as to the protection needed to guard the young plants against the ravages of winter: Nothing should be done until the ground freezes in the fall.

At this time a light covering of leaves or straw held in place by old branches or light boards is all that is necessary. Manure should not be used at this time, neither should the plants be weighted down with a deep covering of leaves or straw. If this is done the plants will rot off and die. A four inch mulch is sufficient.

All this may sound like going through a great deal of “red-tape” to accomplish results. It must be borne in mind, however, directions always appear far more complicated than their actual accomplishment. There is nothing hard about raising perennials from seed. The garden enthusiast will derive not only keen satisfaction in raising his own stock of perennials, but will enjoy every moment expended in attaining this result. The following list of desirable perennials easily raised from seed may prove of service when buying seeds to plant.

**List of Perennials Easily Raised From Seed**

Arabis, Albida, Agrostemma, Alyssum (Saxatile), Anemone (Japanese), Anthemis, Aquilegia, Aster, Campanula (Pyramidalis), Campanula (Carpatica), Centaurea (Grandiflora), Chrysanthemum Coreopsis (Lanceolata), Delphinium, Digitalis (Foxglove), Dianthus, Daisy (Shasta), Daisy (Ulignossum), Gaillardia, Gypsophila, Helleborns, Hemerocallis, Hibiscus, Hollyhock (Bennial), Iris (German), Iris (Japanese), Liatris, Lilies, Lychnis, Lobelia (Cardinal Flower), Mornada, Mysotis, Peony, Poppy (Oriental), Poppy (Iceland), Penstemon, Phlox, Pinks, Primrose, Pyrthrum, Rudbeckia, Stokesia, Sweet-Wil- liam, Monkshood, Hepatica, Dieletra, Iberis, Veronica, Valerian, Fraxinella, Mullein Pink, Chimney Bell Flower, Violet, Achillea, Stokesia, Platycodon, Adonis, Baltonia, Physostegia.
How Will You Build Your Home?

Built around a patio with a lily pool and stepping stones is this very livable house. With large airy living room and porch, breakfast room overlooking the pool, it has the service wing on one side of the house and sleeping quarters on the other side.

E. W. Stilwell, Architect
THE NEW ENGLAND COLONIAL TYPE OF HOUSE MAKES A POPULAR AND LASTING APPEAL TO THE TASTE OF AMERICAN HOME-BUILDERS THROUGH THE RESTFUL DIGNITY OF ITS SIMPLE LINES. AT THE SAME TIME IT IS ECONOMICAL AND PRACTICAL TO BUILD.
A STUCCO HOUSE, COMPACTLY PLANNED, WITH THE SPACE OF THE LIVING AND DINING ROOM UNBROKEN BY PARTITIONS OR COLUMNS. IT HAS PULLMAN EQUIPMENT IN THE KITCHEN. THE STAIR ARRANGEMENT IS CONVENIENT AND ECONOMICAL. ON THE SECOND FLOOR ARE TWO CHAMBERS, A SLEEPING PORCH AND BATH UNDER THE COTTAGE ROOF. BRICK IS USED IN COMBINATION WITH THE STUCCO.
"Miramichi" is inviting enough to prove the "happy retreat" its Indian name implies. Shown on a wooded knoll, it would grace equally well a prairie lawn. The unusual, its roof is more practical than most—water tight, snow-proof, insulated against heat and cold. Outswung casements make the living room a veritable veranda in summer; a stately fireplace radiates good cheer in winter. A gate-leg table serves for the dinner hour, the sliding top of the built-in cabinet in the kitchen is convenient for breakfast and luncheon. Other built-in conveniences are indicated thus:


Cost, complete, with light & heat should be less than $5,000.
"BIRCH LAWN," possessing a suggestion of English charm, is attractive, capacious and unusually complete. The cheery solarium, equipped with one of the inviting new bed-Davenports in wicker, easily becomes a sleeping room by night and is convenient to the stairs. Outswinging casements also make.

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THE END OF THE LIVING ROOM DELIGHTFULLY VERANDA-LIKE.
A=BUFFET. B=BOOKCASE. C=CUPBOARD. D=DELIVERY & ICING DOOR.
R=REFRIGERATOR; SUPPLY CASE OVER.
S=SINK. V=VACUUM CLEANER, ETC.
PROBABLE COST, COMPLETE WITH LIGHT & HEAT, SHOULD BE NOT OVER. $7,900.
A small home of the simplest type comprising the minimum requirements very satisfactorily within the compass of 24 by 30 feet. A good living room, a bedroom almost as large, Pullman alcove in the kitchen, and good closets. A door could be cut between the kitchen and bath if desired and bedroom reached without going through living room.
A STUCCO HOUSE OF A LARGER TYPE WITH LONG LIVING ROOM AND PORCH ON ONE SIDE OF THE WIDE HALL, LIVING ROOM AND DINING ROOM ON THE OTHER SIDE AND FOUR SLEEPING ROOMS AND BATH ON THE SECOND FLOOR. SHALLOW COAT CLOSETS ARE PLACED ON EITHER SIDE THE ENTRANCE.
Decoration and Furnishing

The Use of Brass and Copper to Liven Your Rooms

Eloise Vidal

The decorative value of metals has been recognized ever since man first awoke to the need of beauty in his life, crude though it was in the earlier stages of his development.

Metals such as brass, copper, silver and pewter play a very important part in the decorative scheme of our modern homes, and they merit an even wider use where a glint of color is needed in a room; pewter and silver for the wonderfully soft gray tones, and copper and brass for the flame of their more brilliant tones.

Brass and copper are probably the most easily obtainable and reasonably priced for decorative purposes, and certainly the most colorful of all. Do you know that sometimes a single piece of brass, for instance, can so alter an otherwise dull and lifeless color scheme as to make it actually sparkle? The writer has in mind one dreary dining room, gloomy because of dark woodwork, dark walls, further darkened by a deep porch which shut out any direct sunlight, that was made livable by day and truly interesting at night, by substituting a Turkish coffee set of hammered copper consisting of pot, sugar bowl, creamer and cracker jar on a tray of copper, in place of the cut glass jim-cracks, that having no color of their own and never catching a glint of sun, had aforetime made the sideboard dull and apathetic. The red of the copper warmed the room, and at night when the electric lights were on, the hammered metal uneven of texture, caught and threw out little glints of red-gold light. Later this interesting group became the central object around which a completely new color scheme was worked out for this room. Another room, a living room in this case, having exposed rafters, drab walls and mission-like furniture, was transformed by the use of copper and brass. Fortunately, there was a large fireplace, but in its yawning mouth had been placed andirons and on the hearth the usual fireplace appurtenances, all of

Hammered brass andirons and coal scuttle
black iron. These were replaced by polished brass irons and when the fire burned in the darkened room the owners marveled that they could ever have lived contentedly with so much drabness.

Many fireplace accessories are available which are made on interesting lines which add to the comfort and pleasure of the open fireplace while at the same time they are adding color to the room in a very logical way.

The brass and copper articles are illustrated and offered as suggestions to carry this note of color. These pieces are handmade, many of them being copied after interesting old pieces that figured in the secular or religious life of ancient peoples. The candelabra is linked with the ancient Hebrew rituals, the lions upon it being the emblem of strength and the protecting power of sacred things. The candelabrum which is shown is 16 inches in height and beautifully wrought. It is useful and decorative on the mantel, lowboy, or desk. The tea kettles and ewers are Russian reproductions. Before the war brass and copper utensils were used continuously by the middle class Russians, and no home would have been complete without the brass or copper tea kettle to accompany the very necessary samovar.

These photographs are used through the courtesy of the Art Colony Industries of New York City, craftsmen in brass and copper. For the most part the door knockers, candlesticks and fireplace fittings, which are generally reproduced in these metals, are of English origin, the originals having been brought here by the Pilgrims and other early settlers.

In selecting metal or even pottery pieces one must be careful not to overdo the matter. Just enough; no more, is the only safe way to advise, in selecting the number of pieces for any room. Picture to yourself the effect of the tall copper vase shown at the heading of this article, filled with the dark orange, lemon and sulphur-yellow of calendulas and zinnias, or the deep purple, lilac and maroon of dahlias, or the same vase empty on a quaint table of mahogany, walnut, or painted, together with some books in rich colored leather bindings.

Brass candlesticks single or in pairs and holding candles that blend with the metal and the room’s color scheme, are good on the mantel, desk, table or square piano. A single stick is suitable for the bedside table. A low dark polished sideboard is suitably furnished with a grace-
A coffee set of hammered brass and other pieces, a full bowl of brass or copper filled with real or artificial fruit, and a pair of candlesticks, all three of which should be of the same metal and finish and general type of design.

The house of Colonial design seems an especially fitting background for gleaming brass, even to the individual knockers on the bedroom doors. Brass and copper are the only metals that seem appropriate with certain furnishings and color schemes. If your room needs a ray of concentrated sunshine, buy brass or copper, set it where the light, real or artificial strikes it and make the dull room glad.

Color

- What is it that gives character to a room? which instantly changes a drab, lifeless room into one which has a note of life in it? Bring a bunch of vividly colored flowers into such a room, especially if set in a bowl which gives the tone contrast, or a piece or two of copper, and—if it cords with the rest of the room—you work a miracle. An unfinished, unfurnished room is bare, cold and lifeless, but the moment you put a note of color into it you get an effect—good, bad, or indifferent, according to what you use and the way you use it.

If this is true for one room it is true for every room. No room should be slighted. Every room needs its own touch of color and color scheme. And the color scheme usually starts with the floor.

The floor covering should contain the darkest color tones used in the room. Next comes draping and upholstering, then paper of walls and ceiling, the ceiling, of course, being very light if not white. If you start with some color in the rug as a motif you can then work out your color scheme in the order named and you will usually find the general effect very pleasing.

In the decorating of an unfinished, unfurnished room, it is best to select your rug first as it is often less trouble to find the other materials to go with it than it would be to try and fit a rug in after selecting the wall paper and hangings.

Make the selection of a rug the most important part of your work, choose it carefully and remember that the better it is, the less furniture you will require to "fill" the room. A beautiful rug will make a scanty room look well furnished. Colors found in a beautiful rug may easily be picked out and accented in the furnishings, and you will find you have a well worked out color scheme, when the room is complete.
RAG RUGS

Some of the rag rugs which are displayed in the shops are fascinating things, and the shops themselves, in which they are shown, are almost garden-like in the soft colors, ragged flowers and old fashioned posies, soft pinks, blues, grays and greens. It seems hardly possible that just rags can make possible such rugs as these.

There are some rugs in gorgeous colors and with hand-made flower borders. The borders are about a foot wide and the flowers look for all the world like soft, crushed hydrangeas in different lovely tones of pink. Imagine, if you can, this band of flowers on a lavender body, or on one of soft blue, or old rose, or pale gray!

As handwork is always expensive, these rugs cost more than if they were made by machine. Some of the latter are lovely, too, and so low priced that the temptation to buy is proportionately great. One may have to guard against the problem of having so many rag rugs one doesn't know what to do with them.

A usual size for these rugs is 3x6 feet. One of these is sometimes sufficient for a small room, if the floor is nicely finished. Or, if not, the addition of one or two small rugs to match will make up the deficiency. One style which was particularly attractive was deep blue, showing end borders formed of two white stripes; something similar to this came in old gold also, and green. The other designs were quite the usual rug, and very pretty, but those of a definite color make it possible to carry out a decided color scheme for the room.

WHAT IS GOOD FURNITURE

"The first principle of a piece of good furniture," says Marian Moore, "is its successful performance of the duty for which it is intended. If it is a chair, it must be able to support the weight of a person, so that it can really serve as a chair and not only as a decorative feature. If it is a table, it must be solid enough to hold the things one wishes to place upon it, whether it be a reading lamp or a frail little box of gorgeous coloring. Some pieces are intended for no other use than decorative purposes, and as such should really be decorative and not merely messy as to line and color.

"Good pieces never go out of style. Good pieces, whose line, design and excellent performance of duty have made them indispensable, have been in style for centuries and will remain in style through centuries to come as exemplified in the Windsor chair, the John Hancock desk, tip table and other Colonial furniture as well as adaptations of early English and French furniture.

"As the modes of living change, the ever-growing desire for comfort, beauty and convenience leads to improvements in furniture as in everything else. For example, overstuffed furniture has come into vogue with the increase of good wearing materials, both serviceable and beautiful and moderate in price; the davenport bed was invented when living quarters became less spacious; reed furniture came into vogue when sunrooms became almost as numerous as homes, and there are many other recent innovations which make our modern homes more beautiful and comfortable."
Sun Room

W. B. C.—I am a reader of your magazine and am writing to ask if you will give me some advice as to the furnishing of my sun-parlor in my new home. My house is Dutch Colonial style and is furnished throughout in antique furniture, most of it Colonial. I am having a regular parlor in place of a living room and expect my sun-parlor to act as a living room. My parlor is furnished largely in “Rosewood,” with dainty draperies and Persian rugs. This room opens into my sun-parlor with plaster arches. The sun-parlor is twenty-eight feet long, has a large open fireplace of stone and wrought iron light fixtures. Now what I want your advice about is this: I have a lovely antique living room set (Colonial mahogany) done in tapestry and I wondered if it would be at all appropriate to use antique furniture in a sun-parlor in place of wicker. Now, please be very frank in your advice, as I would rather go to the expense of buying wicker than to use antique if it is out of place for a sun parlor. I am going to use hooked rugs in this room. In case you advise the antique, please suggest what kind of draperies to make slip covers of striped fancy denim art ticking, or chintz, over the tapestry, and getting some pieces in reed or wicker. A tile floor would help much to give a sun room effect, also the use of lattice, now so much in vogue. Walls painted deep cream and lattice work in lettuce green with a floor of dark green large square tile and your slip covers to harmonize, would make a lovely sun-room living-room, and open delightfully from the dainty parlor.

A Home Dressing Table

J. F.—We are building a new home, English in design. Am a constant reader of your magazine and would like your help about decorating and furnishing a northwest bedroom. Two windows on north, one on west. Would like to use a home made box for dresser in this room as furnishings for other rooms have cost quite a sum. Could I use some sort of cretonne, also, on an old arm chair? Want a bedside table and lamp and I think I will purchase a four post mahogany bed. Thought of using lavender and yellow in this room but find that my next door neighbor has furnished her northwest bedroom in these colors.

Ans.—We have seen lately a bedroom done in Wisteria tones with ivory woodwork and walls, which was charming. I suggest this combination for your northwest room. Wisteria is not lavender, but a deeper, warmer, more reddish tone—yet not at all red. This room had a Wisteria rug, also bedspread; and the side draperies at win-
dow were striped cretonne in Wisteria coloring. The dresser had cover to match. The white curtains of organdy had across the bottom three little ruffles bound with Wisteria.

In regard to the dressing table, it is hard to make a satisfactory one from a box. Too much drapery. We would have the carpenter take off a piece at the back of a kitchen table, so as to make it narrower, a table with a drawer; and then paint it up yourself, three or four coats of deep ivory. Put some of your Wisteria stuff on top of the table with, if possible, a glass top over it. Get a plain mirror, cheap, at a secondhand store, and paint the frame ivory, using it the long way over the table.

The mahogany four poster will not be so pretty in this room as a low wooden bed enameled Wisteria color.

The little console table by the bed must be painted Wisteria anyway, and have a night lamp of polychrome with a shade of reddish violet.

To Change a Brick Fireplace

B. R.—I am much interested in your magazines on home building, and have found many useful suggestions in them. Can you advise me about the following:

I have a large pinkish red brick fireplace in a room finished in silver gray stained oak. The combination of color is not harmonious. Is there any way by which I can treat the bricks or change the color? They are long flat smooth bricks outlined by a narrow white line.

Also can you advise me about color for the outside of the house. The shingles are now natural color but weatherbeaten; the trim, oiled a light golden brown. The interior is rather dark and I thought white trim would lighten it up, however, I like the somewhat dark appearance of the outside and thought to stain the shingles brown and re-oil or paint the trim. The roof is shingled also—a dark inconspicuous green. Would the above make the house look too dark? It is situated among trees and is well shaded.

Ans.—We fear not much can be done with the objectionable brick. They can be painted—but you would not like that.
We think the best course, is to have oak shelf and sides made to match the other woodwork in the room. Then, over the present brickwork, lay a facing of six inch square tile, in either gray or dull green, or dark red—whichever goes best with the furnishings of the room.

In regard to the exterior of the house—we like your idea of re-oiling, not painting, the trim and staining the weathered shingle brown—but not too dark a brown. We would choose tobacco, or Havana brown. The exterior will then be very pretty with the green shingle of the roof. We are pleased that you find the magazine helpful.

**Selecting Furnishings**

G. V.—I have been reading your monthly magazine for a long time and would like your advice about the following:

1. We are contemplating building soon and are already selecting furniture, just as we find something we really like. Recently we found a lovely tapestry living room suite. I thought of buying the davenport, rocker and arm chair to match, but was advised by the furniture man to take instead, the davenport and arm chair of tapestry, with an odd rocker of velour in a harmonizing color. Have about decided on two odd rockers, one in mulberry and one in blue velour, as these both harmonize nicely with the tapestry on the other pieces. Would you advise two odd rockers, or one upholstered in the tapestry like the davenport and arm chair?

2. Ours is a corner lot, facing both north and east. We have thought of facing the house north, with the sun room on the east. Thought this would be best because this would give us the south breeze into the bedrooms. Which is considered the best side for a sun room?

3. Have already bought furniture for sun room. It is black wicker, with cretonne in yellow with blackbirds on it. Just the seats upholstered and it is such a striking combination, had thought of having the drapcs in the sun room of the same cretonne, as they can get it for me. My idea was to have just a width of the cretonne at each end of the room; that is, two at the end, one on each side, with no valance connecting them. The glass curtains, I thought of having in the cream net (coarse). Thought of having just a tiny binding of black on the edge of the curtains, or would this be better plain? The cretonne is very “cheery,” but not one that would grow tiresome.

4. Had thought of having the drapes in the living room of a soft blue of some material not too expensive.

5. Have seen a few houses recently with the painted woodwork in harmonizing colors in various rooms. Do you think this preferable to varnished or is it only a “fad” that would go out in a year or two? My idea of the kitchen was white walls, either tinted or painted in flat white, with woodwork painted a soft gray-green, and tiny checked green gingham curtains at the windows. Black and white linoleum (tile effect) on the floor.

Ans.—Your very interesting plans for treating the interior of your prospective home are so well thought out that we can add little to them. As to the facing of the sun room, it would not be a sun room if it faces north. Let it at least get the eastern sun. A room which gets sunshine all day would be on the south. Your black and yellow scheme is very good, indeed, only we should not use glass curtains at all. To be really stunning, you should paint the floor black and have yellow rugs, a black table and a yellow mat and lamp with yellow shade.

Do not have two upholstered rockers in living room. One arm chair to match the davenport is sufficient. Let the other chairs be different; for instance, one antique cane and walnut and one odd chair covered with black velour with a handsome design in colors embroidered on the back. Rockers are but little used. We hardly see how you can furnish in blue in a north room. Better make it rose and gold. We do not admire woodwork painted in different colors except sometimes a bedroom done in soft gray woodwork is very pleasing. Your plan for the kitchen is very fetching and practical.
Old home in La Grange, Ill., built over 30 years ago, re-modeled into a 2 family flat, and modernized by ½ inch oak flooring.

These are the times
— that try women's souls!

Summer winds are blowing dust and dirt in through the screened windows and doors, and most of it sooner or later drifts to the floor.

There must be circulation of air, and with it an additional burden in keeping the rooms clean.

Have you ever been dismayed at the dust mounting up through a strong ray of sunlight when you sweep a carpeted room? Imagine the dust you don't see that is stirred up every time you step across the room, sifting into furniture and hangings.

OAK FLOORS are clean. There is no place for dust to accumulate. Dirt brought into the house by tramping feet is easily and completely removed. A little attention at frequent intervals is all that is necessary to keep an oak floor bright and clean.

If you live in a home without oak floors, a special thickness called ½ inch is recommended, for laying over the old worn floors. The work can be done quickly and economically, one room at a time, if desired.

A booklet on the uses and advantages of beautiful modern oak floors will be mailed you on request. Write today.

OAK FLOORING BUREAU, 1042 Ashland Block, Chicago

Put your flooring problems up to our experts. We will gladly serve you.

Nature's Gift of Everlasting Beauty
OST economists recognize four income levels: that for existence, for living, for comfort, and for luxury. Before studying any series of budgets as a guide to making one’s own, it is necessary to know for what standard of living such budgets were planned. Right here is the great problem. Just as “What is one man’s meat is another man’s poison,” so in the expenditures for living what means luxury for one spells necessity for another.

Every business concern is interested in what a similar business has for its budget, and what is generally considered fair expenditures for certain items common to such business enterprises, as overhead charges, pay roll, and supplies. In the same way homemakers are interested in budgets for given families with given incomes even if these budgets do not actually apply in all details to their needs.

There was a time when all budgets were made out on the percentage basis and we were told that we ought to spend a certain per cent for food, a certain per cent for clothing and so on. While this was never entirely satisfactory it was much more reasonable at one time than it would be now because prices of many necessary articles remained much the same over a longer period of time.

It was never, however, a very good plan for it did not allow for the fact that as the income varies the percentage that should be spent for certain items must vary. Thus, a family on an income of $3,000 a year might spend very little above the minimum for food for four people or about $500.00. This would be around 17 per cent of the income but a family with an income of $1,400 would not be able to exist on 17 per cent for food which would amount to about $4.50 per week for four people. Every once in a while we are startled by the publication of budgets telling people that they ought to spend no more than a certain per cent for the various divisions of the budget and such statements always bring forth much protest. This is because they do not and cannot in small space show that the percentages indicated are based on certain incomes and certain sized families. It is because of these misconceptions given by many of the budgets formerly worked out, that the guiding budgets of today have more and more been made to show the actual amount of money that could be wisely spent for the various needs.

This classification of the income into that for existence, for living, for comfort or for luxury gives the basis for the budget.

The amounts which can be spent on the various items of the budget will obviously differ for all these levels. Thus, the existence income provides only enough of food, shelter and clothing to
One day he wrote in it. The next she did. Their observations about each other are frequently crisp and often amusing.

Send for this "Diary of the House in the Woods"

First, it tells all about the designing of The House. Then follow interestingly informative things about its actual building. After which comes the way they treated the walls and finished the wood work, not to mention the final decision about all the floors. Most of the actual doing, they did themselves. By "they" we mean Katharine McDowell and Husband Ned. We finally induced them to let us publish the diary. It's now ready in its charming Mellotone tinted cover and is full of color illustrations and helpful text. Unless we are way wrong, it's exactly the kind of a book you have long wanted. Send 10 cents for it direct to our Main Office at Dayton, Ohio.

The LOWE BROTHERS Company
465 East Third street, Dayton, Ohio

New York Boston Philadelphia Jersey City Chicago Atlanta
Memphis Kansas City Minneapolis Omaha Toronto

Lowe Brothers Paints and Varnishes
keep the family alive and protected from the weather. A living income, however, not only keeps the family alive but provides enough to enable them to work and "carry on." The terms comfort and luxury incomes explain themselves. Yet in all these types of incomes one can make no arbitrary division because wealth is a relative thing as has been said and good and poor management so enter into the wise and unwise use of an income that one family can live in comfort on the same income that gives merely a bare living to another.

All sound budgets which are made out for guides must start for their figures at the living level, that is, one must know what is the minimum that can be spent for food, shelter and clothing to maintain the family in decency. Thus, in the case of food one must know how much must be spent to keep the individuals in the family able to work and protected from disease. When these minimum amounts are determined it is then possible to make an apportionment of the remainder of the income.

In studying any series of budgets it must be constantly kept in mind that no two families have exactly the same standard for the food they eat, the clothing they wear or the house they live in. Nor do any two families have exactly the same food requirement. It is also true that costs vary in different places and at different times so that budgets for one year and for one place will not necessarily fit another year and another locality.

*The following budgets have been based upon conditions and prices existing in Minnesota in the early part of the year 1923. The family of four consists of a man and his wife and two children under fourteen years of age.

A careful study of the budgets given here will show that all expenditures do not increase proportionally as the income increases. For instance, in the item of Savings the actual amount of money saved on the larger incomes is proportionally greater than that saved on the smaller incomes. It will also be noticed that while the amount allowed for food increases as the income increases in order to allow of more variety and the greater amount of social life in the home which usually comes with larger income yet this amount of increase is not proportionally greater. It is easy to determine by glancing at the budgets in the operating expense column where budgets on the living level have changed into comfort and luxury budgets, for most of the increase in operating expenses in the larger incomes is due to items of service.

Since these budgets are based on a desired standard of American living even the lowest income, which is one requiring great care for successful living, provides for savings and advancement. The frequent requests which come for such guiding budgets as these indicate that although it is impossible for any family to abide by them exactly yet there is a recognition that prosperity and contentment come in part through making a careful plan for the use of the income, this plan to include systematic savings. Carlyle has said that there are but two ways of paying debt: increase of industry in raising income, increase of thrift in laying it out. The use of budgeting seems to be the modern means employed toward "laying out" with thrift.

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*For details of these items see article on Accounting in July.

*Prepared by the Division of Home Economics, University of Minnesota.
How to Beat the High Cost of Building

There never was any better time to build a home! Get started right; and your new house can be built just as you want it, for exactly what you plan to pay, and according to today's standards in modern construction. Use the free services of a nation-wide building organization; read the offer made here:

Good News for All Who Wish to Build a Home

If you have hesitated to tackle the building problem single-handed, here is your chance to secure expert advice and practical aid in every step of planning and erecting a home of your own. The National Homebuilders Society will make it pleasurable and profitable for you to build—now. The size and scope of this organization makes experimentation unnecessary—failure impossible. From selection of the lot to the completed house—including every item of scientifically tested equipment; plumbing, heating, lighting, decorating and even landscape gardening; everything is covered; nothing is overlooked. You can have your home—built it now—have it on time—keep the cost within the estimate—and have every little detail of convenience, comfort, and attractiveness exactly as intended. Your local contractor can handle the job—your local dealer supply the material. They will welcome the standard service of this organization, because it makes the work twice as easy for all concerned.

184 Page Book Explains All

Our new book—The Homebuilder—is a mine of information for homebuilders; makes plain every point of selecting, financing, and building any kind of home you desire. Ready now! Don't postpone building; don't compromise on a 'ready-made' or 'knock-down' house; a real home of artistic conception, proven practicability of arrangement, standard construction from foundation to roof is now easy to acquire—and without the waste that always occurs when untested specifications are used. Every National house has been built and finished, and labor and material checked to the dollar. There can be no 'extras!' The big new book shows plans of over a hundred of these homes and photographs of the actual houses as they stand completed.

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Get this wonderful book of facts about homebuilding and the countless ways this society aids you. Joining forces with us saves you time, worry, and money. There are no dues to pay. You do not send a cent to get the book.

Profusely Illustrated—184 pages—plans—pictures—diagrams—every detail of design, construction, decoration of modern homes suited to any pocketbook. NOT a catalog, but a building guide. Yours to examine without obligation; only $3 if you decide to keep it permanently. Plans, specifications at cost at any future time. Use coupon.

NATIONAL HOMEBUILDERS SOCIETY
(A corporation not for profit)
6 North Michigan Ave., Chicago

Please send me PREPAID The Homebuilder—your new 184-page illustrated building guide, with plans and actual photographs of modern houses, completely describing their construction and equipment. I will either return the book after a week's examination or send $3 in full payment of everything, with no further obligation of any kind.

Name

Address

P. O. and State
Concrete Stoves for Summer Camps

It would a picnic dinner taste as good, I wonder, if the coffee boiled quickly, without melting off the handle or the nose of the coffee pot, if the weenies were not scorched on one side at least and the roast corn was not burned to a crisp in places, and if the Martha’s among the picnickers are not completely worn out before the dinner is ready? Could a dinner outdoors taste as good, if cooked over a convenient outdoor concrete stove, such as are being built in some of the tourist camping parks?

The whole outdoor living of the country has been transformed by the automobile. With a simple camping outfit a family can start out in a machine and travel completely over the country, finding camping conveniences almost anywhere they may go.

Concrete stoves like those shown in the cuts are being built in different places, and are practically complete.

The stoves are made of concrete with a row of fire bricks around the grate. The top is covered with sheet iron. In the front are two small hinged sheet iron doors of which the top door is used for replenishing the fire, the lower one for cleaning out the ash pit.
Why a HESS!

The many reasons why heating contractors and property owners should install HESS Welded Steel FURNACES are summed up briefly in those two vital words—Heating Perfection!

But the problems of attaining the Heating Perfection now afforded so completely by HESS FURNACES were not first so simple of solution.

Heating Perfection

To assure HESS users the greatest degree of satisfaction—our foremost aim—necessitated the designing and invention of numerous exclusive features which have through twenty years proved pre-eminently successful in affording durability, economical operation, quick, easily-regulated heat, cleanliness, correct humidity, and other important factors. It has also meant the perfection of various styles of furnaces to meet the requirements of special conditions.

These HESS features will be discussed in detail in future advertisements. It will be worth your while to study them.

A valuable Book on Modern Furnace Heating, describing the HESS FURNACES, and information on our Free Plan Service, may be secured by writing

HESS WARMING & VENTILATING CO.
1217 C Tacoma Building
Chicago

Branches at New York City; Detroit, Mich.; Minneapolis, Minn.; Milwaukee, Wis.; Cincinnati, Ohio.


HESS Welded Steel FURNACE

Edwards SPANISH TILE Roofing

When an "Edwards" Metal roof is properly applied to a house, all of the charm of the Old Spanish Terra Cotta Roofing Tile is preserved, even to the color.

The house takes on a new lease of life—it seems a better place to live in. An Edwards Metal or Tile roof is a real commercial asset and will bring a better return in rent or sale.

Edwards Metal Roofings made to have the appearance of wood shingles—tile—slate, or any other roofing effect, and none of these fine artistic effects will cost any more than a plain commonplace roof.

All Edwards Metal Roofing is easy to lay—no big expense for skilled labor—storms and winds will not wrench it loose or make it a rattle-trap. It is lightning-proof and fire-proof—Reduces Insurance Rates.

When an Edwards Roof is laid, it is there to stay. Send for our literature—it explains.

THE EDWARDS MANUFACTURING CO.
The World's Largest Makers of Metal Ceilings, Metal Shingling, Metal Roofing, Siding, Rolling Doors, Metal Lockers, etc.


Cabot's Old Virginia White

Cabot's Creosote Stains

The white house has "come back" and with a moss-green, or tile-red roof it is strikingly attractive and yet as refined and restful as it was a hundred years ago. Old Virginia White gives the beautiful white stain effect with no "painty" look, and Cabot's Creosote Stains beautify and thoroughly preserve the roof shingles.

You can get Cabot's goods all over the country. Send for samples and name of nearest agent.

SAMUEL CABOT, Inc. Mfg. Chemists
141 Milk Street, Boston, Mass.
24 W. Kinzie St., Chicago 525 Market St., San Francisco
A third small sheet iron door permits cleaning out the compartment below the chimney.

On account of the small space between the grate and the top of the stove only a small fire is needed to furnish ample heat for cooking purposes. The smoke, in finding exit, must pass over a concrete baffle and then take a downward course before passing into the chimney flue. This feature tends to prevent chimney from emitting sparks.

Building the camp fire is not only a troublesome thing to the camper, but the fire menace of the camp fire is one of the dangers in Uncle Sam's great camping grounds among the great forests. No one knows how many forest fires with the resulting loss and destruction have started in carelessness of the camper, or from fires started under unfortunate conditions.

Don't Forget the Kitchen Clock
When you are furnishing your kitchen, don't forget the shelf for a clock. A clock is almost next to the stove in kitchen importance. If it has not a stationary place, one is forced to look around for it—perhaps losing a valuable moment in doing so. And from the standpoint of appearances, a clock just set anywhere is never as good looking as a clock that is rightly placed. So, when you are furnishing your kitchen, don't forget the clock shelf.

Putty for Glazed Sash
Did putty drop out of glazed sash? Mix ordinary putty with pure white lead at the rate of five parts putty to one part of lead. This is especially suitable to greenhouses and hotbed glazing, but can be used elsewhere.

Electric Lighting
Houses having more than one floor should have 3-way switches in all halls and stairways. This also applies to the garage and front porch.
Install lights in all important closets, these lights to be controlled by automatic door switches.
In the kitchen there should be lights over the range and sink in addition to the ceiling fixture.
Cornice lights on the house will save an occasional heart throb. Controlled from central switches they afford excellent protection from burglars.
In the bathroom a bracket light should be placed on each side of the mirror.

For Unruly Brooms
If the straws of your kitchen broom have a habit of spreading out and curling away from the center, try putting a wide rubber band around them about half way between the ends and where they are fastened onto the handle. Much may be done in straightening a broom by washing it and forcing it to dry so that the broom corn is straight.

As to Hardware
Here is a bit of advice that is often given. In the matter of hardware, see to it that solid metal, bronze, or brass, is used just as far as possible, rather than plated metal. This applies to the exposed portions as well as to the wearing parts.
The two big sources of fuel waste are overheating and underheating, which are bound to result when drafts and dampers are regulated by hand. Automatic heat control eliminates this waste. The Minneapolis Heat Regulator maintains a steady fire and an even, healthful temperature. It automatically closes drafts and dampers when desired temperature is reached, opens them automatically when the temperature falls below the point indicated on the thermostat. Prevents fire from dying too low or burning too fast. Records over a period of 38 years show a saving of \( \frac{3}{4} \) to \( \frac{1}{3} \) in fuel.

Quickly installed in any home, on any heating plant. Write for booklet.

**MINNEAPOLIS HEAT REGULATOR COMPANY**
27th Avenue So., Minneapolis, Minn.

*The Minneapolis Heat Regulator*
"The Heart of the Heating Plant"

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**Whitney Casement Windows**

— permit perfect control of ventilation;
— don’t stick, rattle or slam;
— are storm-proof when closed;
— don’t interfere with screens;
— make your home more attractive;
— insure lasting satisfaction.

*Your Home Deserves Them*

Write for full information

**Whitney Window Corporation**

WARNER HARDWARE CO., SUCCESSORS
17 South 6th St., Minneapolis, Minn.
Gardens for Apartment Dwellers

ARTH hunger is as recurrent as hay fever, says Louise Wallace Hackney. It is an actual ache. It begins with the first seed catalog advertisement and is cured only by the victim getting her fingers in the black soil or the coming of August to sear the garden and she tells of an imprisoned apartment dweller, who had been entirely happy in her small apartment until the time when seed catalogs appear.

When it got warm enough to have the windows open all day, she found it almost unendurable. She would gladly have traded all the conveniences of her modern apartment for a trowel and a package of seeds.

One day she passed a florist's and saw window boxes for sale. Instantly her hunger foresaw a way out. She bought a box and enough plants to fill it, daisies, live-for-ever, money-worth, sweet alyssum, the ones she used to have in her old fashioned garden. When she got them home she sang as she planted them. She consoled herself by making it look as much like a real garden as possible. The Chinese and Japanese had done wondrous things in miniature gardens, she knew.

She had just screwed the box in place and sat down to admire it, when the superintendent of the building called. The management could not allow window boxes. It spoiled the looks of the building. It was a beautiful box, and so forth and so forth, but . . . She argued, pleaded, even stormed, but to no avail.

When her husband came home that night she was divided between tears and a declaration of independence that might involve a lawsuit. They talked far into the night. The next morning she called on her next door neighbor, and the one next to her, and the one beyond; all on that floor in the front of the house. One or two were indifferent, but the majority were enthusiastic. Window boxes were lovely. They just hadn't thought of them. Ten tenants who wanted window boxes were a force to be reckoned with.

Within a week the whole front of the place bloomed. Then one day a hesitating dweller across the street came to inquire the best way to start a window garden. Her idea spread like wind blown seeds. The air began to carry soft perfumes, the smell of earth and growing things. Somebody offered a five dollar prize for the box garden that held its beauty longest, the decision to be by popular vote.

Window gardening is an almost undeveloped art; yet one that offers artistic horticultural and even architectural problems quite as interesting as any Japan has solved. Window box gardening is a comparatively new field to the household, but its possibilities are fascinating, and almost without limit.

Pictures with Flowers for Colors

People, and especially home makers, are coming to realize that pictures may be made, shall we say painted? with flowers for pigments quite as successfully as with other kinds of colors. One may take a brush and pigments and paint the garden plan, taking any favorite group of flowers as the key, and then match the color scheme to garden flowers from any of the garden annuals.

Here are some color schemes that have been suggested:

- The orange African marigolds planted with the blue ageratum make a picture to remember. The ageratum also is excellent with the velvety orange, maroon and mahogany shades of the French marigolds.
A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

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

Revised Edition
Price, $1.25; postage, 4c.

Published by
M. L. KEITH
Minneapolis, Minn.
As a general rule, in planning for color effect one may start at one end with the true blues, then use pink and rose shades, then yellows shading into orange, then the scarlets and deeper shades, then a little more orange and the lavenders and purples with relief plantings of some white annual; finally not too great a mass of white should be used. Plant it rather sparingly throughout the border as it attracts attention from other coloring when used too freely and at a distance gives a spotty effect.

Beautiful color plantings may be worked out in the various kinds of annuals.

An aster planting may begin with the deep purples, following with the deep lavenders, flesh colors, then the darker rose colors and deepest toned reds.

Snapdragons may be planted in various unusual shades of yellow and buff, fawn, orange and scarlet to deep crimsons.

In all color schemes a sizable group of a single color gives by far a finer effect than can be secured from mixed plantings.

Zinnias in masses of brilliant scarlet, the wonderful burnt oranges, the delicate new pink shades, and creams and yellows make particularly gorgeous plantings.

THREE NEW PLAN BOOKS
Just off the press. Ask about them.

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Wild Flower Clubs
Wild flower clubs are being organized in many parts of the country, with the object of preserving, as far as possible, our wild flowers in their natural haunts. Thoughtless picking of the frail wild spring blossoms is endangering their continuation, and what would the coming spring be if there were no wild flowers? On through the year these depredations continue, chiefly through thoughtlessness. The scout movement throughout the country is doing much for the growing generation. The wild flower clubs may be able to do something for the grown-ups. Not only do they make for the care and preservation of our flowers, but also they encourage hiking parties and getting into the great outdoors.

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Building With Concrete Units

A portable garage made of concrete units has been mentioned in some of the concrete building notes. A concrete garage which can be delivered on an ordinary truck, and that can be erected and made ready for use in a day’s time is the achievement which is claimed.

The entire garage, with the exception of the concrete floor, which is cast on the ground, is constructed of pre-cast units, including slabs, pilasters, sills, plates, collar beams, rafters and other necessary pieces. A light weight aggregate is used in the manufacture of these units in order to keep the weight down so that two men can easily lift and handle the largest pieces.

In building the garage the concrete floor is first laid in the usual way. After this has hardened a pilaster 8 feet high is erected at the corner and a section of concrete sill placed. Then one of the slabs, which is 33 inches wide, 8 feet long and 1 inch thick, is put into place. The pilasters and sills are slotted so that the edges of the slabs will fit snugly into them. Next, an intermediate pilaster, slotted on two sides, is erected; another section of sill is laid and the second slab placed. This operation is kept up until the building wall is completed. Pre-cast plates similar to the sills are then fitted on the top of the wall. To prevent spreading, opposite sides of the wall are tied together with pre-cast collar beams. These beams are bolted at the ends to the pilasters by means of bolts embedded in the pilasters at the time of manufacture. The roof, which is of slab construction, is supported by pre-cast concrete rafters three feet apart. The lower ends of the rafters rest on the pilasters and are bolted to them with the same bolt that passes through the collar beams.

Doors consist of concrete slabs cast in special steel frames which are provided with hinges so that the various sections will fold together. Bolts for the attachment of hinges are embedded in the concrete corner piers at the time of their manufacture.

Window sashes are also made of concrete and are glazed with wire glass panes. Special short length wall slabs are used above and below the windows. These are slotted on the ends next to the window so as to get a good tight joint. The sides of the sash fit into the slots in the pilasters.

No mortar is used anywhere in the construction of the garage, and, if at any time it is decided to move the building, it can be taken apart readily and the units transported to the new site and the garage rebuilt.

To Brush or Spray Paint

A comparative test of interior painting for cement plaster was carried out recently for the Society for Testing Materials, where three identical wall spaces of soiled and unpainted cement plaster in a large
Architects Patterson King Corp., New York City, used on this Trumbull House, Great Neck, L. I. the long 24-inch "CREO-DIPT" Stained Shingles finished in "Dixie White" on side walls and Moss Green "CREO-DIPT" Stained Shingles on roof.

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hall were marked off. Two expert brush men coated one surface in 17 1/4 minutes. One man with a spray gun coated the second surface in 12 1/2 minutes, and the third space was covered by one man with a spray gun in 12 minutes. Both of the latter areas showed considerable better hiding than the brushed space. It is noted that the brush men worked at extreme speed.

The paint used in this test was very heavy flat wall finish in white. This test developed that it is possible on this class of work to get much better hiding with the spray than by brushing, for there is less rubbing up of the dust and dirt into the wet paint; moreover, more paint per coat can be applied with the spray than by hand brushing. The cost of painting the wall section, 205 feet in area, at a rate of $1.35 per hour was 77.6 cents with the brush and 27 cents with the best spray.

Charging Pullman Batteries

During the Shriners' Convention in Washington, one of the problems was the charging, every day, of nearly four hundred Pullman cars in the several yards which were used as hotels. In order to keep the storage batteries charged to furnish light, and power for electric fans, 130 farm electric lighting plants, with a capacity of 1 1/2 k. w. were installed between the tracks, on skids, each machine charging three cars at once.

These little plants are in common use throughout the country for lighting farms, country houses, stores, etc., but this is the first time they have been used on such a large scale on a single job. These were chosen because the Ford wearing parts which are used on the engine may be easily repaired or replaced at any garage.

A Few Don'ts for Home Builders

Don't assume that the lowest bidder is the most satisfactory.

Don't take anyone's word about "lump-sum" prices—investigate before you build.

Don't change your mind after the house is half built. Changes cost money.

Don't expect, if your house is not properly braced, framed and nailed, that your house won't settle, the ceilings crack and the doors sag.

Don't forget that four nails are more than twice as good as two, and are better insurance against sagging doors, cracked ceilings, warping woodwork.

Don't forget that your local dealers, contractors and supply men are equipped to give you very great help and a lot of valuable information.

Don't make the mistake of building from sketchy plans, or no plans at all. Nothing is more expensive than rule-of-thumb planning, or hit and miss building. Railroads cannot operate trains without time tables. There is no quicker way to wreck your purse than building without an accurate buying and building schedule. This means carefully prepared plans, that are complete in every respect.

—The Small House.

The Question

Here is the question most often asked by the one-about-to-build: "With the present high prices of building, would you advise us to build our home now?" and the answer seems to be, "If not now, when?" That prices may go down in a few years is, of course, possible, but it is not likely to be within the next five or even ten years. The law of supply and demand always governs, in the long run. America is now five years behind the normal supply of houses. With the demand greater than the supply, we can not expect much drop in building costs, nor in the high rent which the tenant must pay, with nothing at the end. Your little family will be grown-up perhaps by the time that building costs are really "low" again.

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GARDEN BOOKS

ARDEEN books, always attractive, make a particular appeal at this season of the year. Two books have lately come to us which are full of practical suggestions by a well known authority on gardening in its different phases:

The Making of a Flower Garden, by Ida D. Bennett, published by Frederick A. Stokes Company, covers the general scope of making flowers grow, and where and how they should be planted. Beginning with the location and the plans, soil, table of annuals, bulbs, the rose garden, window and porch boxes, vines, the water garden and the old fashioned garden, the value of color schemes in the garden, and many other points are all discussed under chapter headings. The home owner who wishes a garden will find much of interest in these pages.

The Busy Woman's Garden Book, by Ida D. Bennett, published by Small, Maynard and Company, Illustrated, Price $2. The title of this book explains its purpose. “It covers all necessary details except that of the personal equation.” “Your garden will give back to you just what you put into it—no more, and the more you give it the less will it require of you; neglect it ever so little and it will prove a hard taskmaster.”

“There are always critical times in the life of the garden; the gardener must recognize these and be prepared to give just the assistance the condition requires at just the time it is required.” “Weeds come in relays a week or ten days apart, come not at all if the soil is kept properly stirred.” Healthy, vigorous plants are not especially susceptible to insect attacks, with some exceptions, but the careless, slovenly gardener is a real and pestilential danger.”

Chapter headings cover: Planning the Garden, Hotbeds and Planting, Garden Tools, Soil Fertility, Early Vegetables, Herbs, Plant Enemies, Winter Storage, The Annual and Hardy Garden, Canning the Surplus, Planting Fall Bulbs, etc.

Cram's Quick Reference Atlas of the World, Published by The George F. Cram Company, is a valuable little book, convenient in size, yet containing 265 pages of engraved colored maps, and over 52,000 alphabetical index entries of cities, towns and places of the world, with population, from the last census, and with a quick reference key to locations on maps, also late geographical statistics.

The selections of cities and towns to be placed on the maps has been made, first, by reason of size; second, commercial importance; third, historic interest; fourth, attractiveness to tourists; fifth, prominence in literature. It is seldom that one finds so much information in such small bulk.

House and Home, A Manual and Text-Book of Practical House Planning, by Greta Gray, A.M., M.I.T., published by J. B. Lippincott Company, is the latest in the series of “Home Manuals,” published by that company. “Shelter, like food and clothing, is one of our fundamental needs. There are problems, sanitary, economic, social, and architectural, involved in a consideration of shelter. This volume deals with these four phases in an elementary and non-technical way.

“Many of the problems of sanitation of the house are housekeeping problems, many in cities are municipal, others are the householder’s problem. In the country the householder has more sanitary problems than has the city dweller. It is the sanitary problems of the householder of which this text treats. Social problems, such as education and the social status of the family are involved in the location of the house, and therefore receive brief mention. The less one can spend on a house the more essential it is to plan carefully to get all that can be had for the money available.” The book is intended not only to assist those about to buy or build a home, but also to guide people in the selection of rented places and to create the demand for dwellings that shall be beautiful, comfortable, and safe.
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SEPTEMBER, 1923

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The Shortage of Builders

The great need of the country is for more builders; men who love the feeling of the tool in their hands, and sense the possibilities in a piece of wood, a pile of lumber, or the brick and mortar, which only an experienced hand can lay. The good carpenter, who learned his trade in the "old country," and who can turn his hand to any kind of fine workmanship, is not given due recognition in his wage scale in comparison to the young fellow who just happened into the trade.

Even against such odds, $12 to $15 and more per day as the bricklayer's pay is bound to bring ambitious young fellows into the work, provided conditions are not set against them. Industrial training schools are being established in many parts of the country and boys are doing well with the training. It has been stated that the unions are not keeping apprentices out of the organizations. The best of schools can only prepare the boy for any work; experience and the helpful supervision of older workmen are necessary. There is a present real shortage of bricklayers estimated at about 20,000. While the scale of wage is $1.50 per hour, there is such a demand that a premium is offered and later demanded.

One of the most serious handicaps in all of the building trades is a matter which comes home to the householder and home builder, and that is, the unnecessary seasonal demand. As a matter of fact, the season makes a difference only in the mind of the householder. Why should all the papering and painting in the country be done only in three or four certain months of the year? Why should the house be "unsettled" only in the spring and fall? Only because the housekeeper permits herself to keep up the old bugbear of a spring house-cleaning. Certain kinds of construction are more or less dependent on the season, but the building season could readily be spread over a longer period.

Construction work more than anything else has given us the business revival of the past year, and it is upon construction work mainly that we must depend for the maintenance of industrial activity and good times. If we want our own boys to go into the good wholesome building trades, we must make the building industry in all its parts, a steady, all-the-year-round business. Steady work all the year, with inside work like redecorating for the cold season, would also do much to lower costs, because it would tend to equalize supply and demand.

We all want a good building season next year, and you can help by having your inside work done this winter. Arrange for it long enough ahead so that the workmen can use it for indoor work with their other jobs. Nothing makes for better working conditions than knowing there is work ahead—then, in time, we shall have more builders.
KEITH'S MAGAZINE
ON HOME BUILDING

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COPYRIGHT, 1923, BY M. L. KEITH.
A Colonial Entrance
The Magic of Spain
On Wall, Window and Balcony
Esther Matson

Magic of Spain—only three little words but how potent! Today this influence is felt not only in fancy but in brick and mortar, or more literally speaking in this case, tile and stucco facts. We have already noted in a former story how, especially on our Pacific Coast, the spell of Spain has affected some of our building, especially in the matter of doorways and wrought iron grill work, alike on large houses and on small. Equally marked is the effect of this influence on the walls, the windows and the balconies of the newer building.

That a severely plain wall surface may count aesthetically—may indeed make the best of foils for the most elaborate detail—this idea has come recently to us, Americans, in the nature of a discovery. In the architecture of Spain, on the contrary, there seems long to have been a feeling for the importance of that fundamental principle in art known as Contrast. Both from the exterior and from the interior viewpoint much was made of contrast—contrast between lights and darks, and contrast between plain spaces and spaces intricately patterned.

More obvious to us here was the picturesque value of windows and balconies, hinting of Moorish days and ways. These influenced us sooner, though even about them we were a little timid. The photograph of a house that once stood on the famous Orange Grove Avenue in Pasadena, California, makes an interesting study of the earlier contributions of Spain.
to our architecture through the Moorish notes which occasionally reached us before we began to appreciate the possibilities of Spanish building, which has come to us through Mexico and our own Western coast. The triple window with its twisted columns and the pattern made by the contrasting lights and darks in the three horseshoe arches above suggest the mysterious race of Saracens who left their vivid impress on such far-away lands as Castile and Aragon, Valencia and Andalusia.

Sonorous names are these, that bring to our minds pictures of ancient days when the art of working in wood was held in peculiar esteem! Times when in those lands the windows looked on gardens enclosed within the walls; and these windows were filled in with gratings of marvelously wrought wood called “Celosia.” Through these celosia the women of the household could peer out, able to see but not to be seen. For the Spanish Señora or Señorita of that time would as soon have thought of venturing in the street with her face uncovered as an American woman of today would think of stepping out without shoes on her feet. Thus there is a special glamor about the grille—a veil, as it were, of romance.

The ancient wooden grilles were very perishable. Scarcely an original one exists today outside of the museums. But later these screenings for the windows were made of iron and many of

Spanish influences in tile and stucco
these are still to be seen on "real Spanish castles" and on town and country houses in Spain. These our architects today are finding brimful of inspiration.

Often in the town houses no windows at all were to be found on the street side, or there may be just one window, or possibly a loophole, corbelled out and well grated. But toward the courtyard or Patio the windows are many and supplied with delightful balconies where one may sit and look down on the secluded garden below. The wrought iron railings of these balconies either match or harmonize with the window-grilles and the designs, sometimes simple, again so elaborate as to suggest nothing less than lacework, are a bewitchment.

Indeed the story of wrought iron, whether read in Spain, in Italy, in England, or in our own Colonial America, is a fascinating one. In Spain it is like an old-fashioned three-volume novel—set in the three centuries, the 16th, the 17th and the 18th. Whether used for window-grilles, or balcony, or for minor accessories such as torch holders and bell-pulls, the iron lent a lightsomeness and gaiety to whatever it adorned. As a matter of fact, in Italy and in the south of France, as well as on the Spanish Peninsula, it served "to express the gay and sunny temperament of the south of Europe," as Mr. J. A. Downing long ago pointed out, in connection with the grouping of the windows and the extreme openness of the arcades.

Today there is a vogue, in the East as well as in the Western parts of our country, for doing things "in the manner of Old Spain." Sometimes the result is excellent. Sometimes it smacks of the exotic and inappropriate. On the West Coast there seems to be a certain justification for adopting or at least adapting the style.—not merely because that coast was colonized by men from Spain, but also because the climate has about it a
certain blandness and at the same time brilliance of coloring that should presumably react upon the dispositions of those living there, as in southern Europe, to an end of inducing more “gay and sunny temperaments.”

Washington Irving summed up the creed of the Andalusian as “Enjoy the moment ere it pass.” For many of us that art is yet to learn; and where better turn for lessons than the doughty old Spanish cavaliers,—at least to that mystic land whose buildings have long stood out to us as synonyms for “air castles.”

To repeat that the sunshine on our Pacific Coast tends to gild the moments is to be guilty of a truism. Happily, those who go there to sojourn for a longer or a shorter time are at last beginning to show an appreciation of this fact in their house building. When they set about to put their particular air castles to the test of materialization they are coming more and more to pay attention to the way their walls catch the sunlight,—to the value of windows and balconies,—and even to the worth of out-of-door rooms.—but these are a story in themselves.

Now, it is to be hoped that we will not let the desire to make these features decorative lead us astray, in so far that we introduce them merely for the decoration’s sake. Rather, the great aim is to use them where they are “expressive” of the needs and tastes of the individual. If at the same time they can provoke reminiscences of Spain, surely this is to possess one further good quality—a quality that casts over them the magic glamor of romance.

Shutters for the Colonial House

HALL the house have shutters, or shall they be omitted? — that is often the question which has to be settled, and it is sometimes a question which makes a great difference in the appearance of the finished house.

There was a time when they were put on a house for the use they served, when shutters were closed night and morning, for protection from cold during the night and for keeping excessive sunshine from the rooms on the sunny side of the house. The slats could be turned to admit air while keeping out sunshine and heat, and at the same time give a seclusion to the room from the outside. The almost universal use of Holland
A Colonial house on Cedar Street, Salem—with shutters

shades on the inside of the windows has, in a way, taken the old usefulness from the shutters. Whether they serve the purpose as satisfactorily might be subject to question. Be that as it may, the modern question of shutters is usually one of appearance. One may even see a house where shutters are put on some windows and not on others in the same house. Where windows are grouped, as is so often the modern custom, there is not a place for the shutters to open. By the old way, they had special hardware for holding the shutters together and let them stand at right angles to the wall. They were too necessary to the comfort of the inmates of the house to permit them to be omitted.

Photographs of the same house with and without the shutters throws some light on this subject. In a group of Salem houses, photographed by Frank Cousins, we found a house on Cedar Street with shutters, and another photograph of the same house taken at a slightly different angle when the shutters had been removed, but with the hardware for holding the shutters still in place. These two photographs standing together make an interesting commentary as to the value of the shutters in the appearance of the house, and of the effect of simply omitting the shutters which were a part of the original design of the house. The proportions and the spacing of the windows were designed with the shutters as a part of the windows. Without them, an entirely different effect is obtained. The original design would have been somewhat different, in all probability, had shutters not been intended to be used on each window. On the other hand, a house which has not proved eminently satisfactory in appearance can sometimes be redeemed by the addition of shutters at the windows.
A Roadside Garage

A GARAGE that feels at home in the landscape, such as the one here shown, is one of the pleasantnesses you meet when motoring or walking along San Rafael Heights in Pasadena. It holds two cars and the garage itself is not particularly unusual, but the thing that makes it especially noteworthy is the happy way in which it is adapted not merely to its ostensible purpose or function, but also to its site. It is just endearingly tucked into the edge of the hill which the house crowns and is given a flat roof in order to keep it absolutely unobtrusive. This photo is shown through the courtesy of the owner, Mrs. Joseph Barnes.

- The two sliding doors have well proportioned glass panes above and wood paneling below, and a bewitching flight of steps directly at the right leads up, via a flower-garden, to the house. Trailing periwinkle and various blossoming shrubs fill the nooks and corners of the cement work and help to make the structure comely as well as utilitarian—a garage, in short, that you are sure must feel "at home in the landscape."
Reclaiming Our Good Old Furniture
Bertha Streeter

Randmother's attic was a wonderful place even when we were children. But when she gave us the old pieces of furniture there, we had arrived at the age of appreciation for such things; there was an inspiration in those reminders of the past that no money could ever buy for us.

The furniture had been neglected for years, so it was sadly in need of refinishing—which we thought we could do ourselves by taking our time to it. The broken legs of two heavy pieces, however, was something none of us felt fitted to cope with adequately, so we called in a carpenter for that job. He also did a bit of gluing.

Then we prepared the pieces for refinishing. Every article was first washed thoroughly with warm water and a very little pure white soap to remove every bit of grease. Only a small surface was taken at a time and as it was washed it was thoroughly dried. We had been warned that great care must be taken not to get the water into joints where glue had been used. A soft cloth was wrapped around a pointed stick to reach into all the corners and crevices in the carving; with corners cared for, the rest was easy.
After an article was as clean as we could make it and perfectly dry, we sandpapered it carefully with number 00 sandpaper to a good, smooth surface, working only with the grain of the wood so there would be no cross scratches. Then we dusted it very carefully with a soft old cloth.

As all our heirlooms had that deep, rich, mellow color that comes from age, all they needed now was revarnishing. A thin coat of coach-rubbing varnish was very carefully applied, care being taken to wipe off with the brush every drop that showed a tendency to run and spoil the smooth, even finish we were working for. This varnishing must be done in a warm room with windows closed and where no dust can reach the furniture before it is perfectly dry. Also, the furniture itself must be warm. It takes two days at the very least for this coat to dry properly, and we gave it three days to be sure. You can't hurry this part of the work if you want it to look right in the end. Each coat of varnish must be absolutely dry before you apply the next or all the varnish will have to come off and the work be done all over again before you will have a presentable finish. Anything but a good job in this line is not worth the time, money or energy it costs.

The furniture was now sandpapered again, this time very lightly, just until all the gloss had disappeared. Then the second coat of varnish was applied as carefully as possible and five days allowed for its drying. If we had been looking for a glossy finish we would have stopped here, but we wanted the dull, "rubbed" finish that would harmonize better with our other furniture. So we bought at a paint store some powdered pumice stone and cold water; rub the surface lightly with this until every bit of gloss has disappeared and the surface is smooth. Have ready a paste made from rottenstone—from the paint store—and cold water, and rub the surface with this until it seems even smoother than before. Wash this all off with a sponge dipped in cold water and dry with a piece of perfectly clean chamois skin. Now polish with a piece of cheesecloth and a good furniture polish, rubbing and rubbing until a high finish is obtained.

This finish is difficult for an amateur to accomplish, however, because inexperienced workers are apt to rub through the varnish with the pumice stone and rottenstone pastes. If you can avoid that, however, and will use plenty of "elbow
Heirlooms with that deep, rich, mellow color that comes from age

grease,” you stand a good chance of turning out a very satisfactory piece of work.

The finish our ancestors most admired is very appropriate for a number of old pieces to be used in one room and is comparatively easy to secure. After the old varnish has all been removed, apply a coat of thin shellac instead of varnish. When the shellac is thoroughly dry, sandpaper the furniture with number 00 sandpaper, very lightly and carefully. If the grain of the wood does not appear to be well filled with the shellac, apply a second coat very evenly. Sandpaper this second coat, then apply prepared wax such as you can get at any paint store. Rub the wax on with a soft cloth and keep on rubbing until you have an even surface. When the wax is dry, finish polishing with a dry cheesecloth. This is called a “wax” finish and may be kept looking fresh by an occasional application of the wax and such polishing as “ole massa’s”
furniture used to get at the hands of devoted Topsys.

This method of finishing must be done very quickly as the shellac dries very rapidly. If it is too thick to flow freely, add a little wood alcohol, a few drops at a time, trying it with the brush until it flows freely.

As to the varnish used in the other methods of refinishing: get the very best you can buy; it will probably cost you nowadays from three dollars a gallon up. Ask for the best interior finishing varnish or good coach-rubbing varnish. Pour it out, only a little at a time, into a clean tin cup, and never pour back into the can any you have left over.

It is better to put on three coats of thin varnish than two of heavy. If the varnish flows on and spreads quickly like an oil, it is just right. But if the brush draws or sticks the least bit, the varnish needs thinning. To do this, add turpen-
tine, a few drops at a time, until you get the thin, oily flow. It does no harm to get it too thin; the varnish will dry quicker, and you'll probably need one more coat of it than you would if you had not thinned it a little too much, that is all.

Use a good, flat, two-inch bristle brush with plenty of bristles, chiseled. Use a full brush each time and flow on the varnish, not rubbing it out thin over the surface. Begin work at a corner of a piece of furniture. Carefully fill in and cover the corners at each end of the strip you are working on, then, with long strokes, sweep across. Begin at the top of furniture and work down, remembering that varnish runs and once it is set you can't do anything with it. If you detect a drop or a running streak, quickly and carefully brush it across after wiping the brush on the edge of the can so it will hold as little varnish as possible. Rub the brush in oil when you are done or wash it out in turpentine, remembering that keeping the brush in perfect condition is quite as important as having varnish of the proper consistency.

Fillers and stains are used when, on reaching the natural wood by means of a varnish remover, the color is not as pleasing as it might be. The filler is put on and allowed to dry, then the stain is applied; there are several good brands that may be bought at any paint shop. Only one coat at a time should be put on because the softer and brighter the color, the more desirable the finish will be. You'll have to use your own judgment as to the tone because open-grained woods take up more stain than the close-grained, and stains differ in consistency. When you want several pieces to match it is wise to get them ready for the first coat of varnish all together so you can start with the same tone on all of them, and not be compelled to guess at it as you would if each were finished separately.

Oil stains are best for refinishing old furniture. For walnut, dark oak and any other wood that has been "antiqued" with dark stain, use burnt umber, Van dyke brown, and drop black mixed together. Burnt sienna is especially good for mahogany or cherry. Raw sienna in oil does best for light-colored oak and ash. Any of these are to be worked well into the wood and, after a few minutes, wiped off with a clean woolen rag. When the furniture is thoroughly dry and warm it is ready for the varnish or shellac, according to the finish desired on the completed article.

Many a piece of old furniture would be really good if it had removed from it some monstrosity of ornate carving. So exercise your imagination a little before you consign to the attic as utterly impossible some bit of furniture that brings back fond memories. And remember, too, that a bed, for instance, need not always remain a bed; it may be remodelled into something else that may better fit your needs. Perhaps it may even go to your daughter as a hope chest for her wedding finery and all the other things a girl holds dear.

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Color Balance

"With a proper color balance in one's living room, bed chambers and dining room, greater contentment must result, and with contentment there comes increased energy and an enlarged capacity for enjoyment."
How Will You Build Your Home?

WILL IT BE A BUNGALOW? ROOMS ALL ON ONE FLOOR AND OPENING WELL TOGETHER, IN ADDITION TO CONVENIENT ARRANGEMENT, MAKE QUITE AN APPEAL TO THE HOUSEWIFE.
THE DOUBLE BUNGALOW PRESENTS POSSIBILITIES WHICH APPEAL TO THOSE WHO WANT SMALL SPACE AND YET A COMPLETE HOME. TWO ARRANGEMENTS ARE SHOWN IN THIS DOUBLE PLAN, EITHER OR BOTH OF WHICH MAY BE USED. THE SEPARATE DINING ALCOVE IS GOOD. THE BATHROOM IS LIGHTED THROUGH THE ENTRY. SPECIAL VENTILATION IS PROVIDED.
TWO PLANS ARE GIVEN FOR THE FLAT ROOFED BUNGALOW, ONE OF WHICH IS SOMEWHAT LARGER IN SIZE WITH A LITTLE DIFFERENT ARRANGEMENT, SHOWING WHAT SOME FIVE FEET ADDED TO THE LENGTH CAN EFFECT IN ROOM SIZES.
A HOUSE WHICH CAN BE BUILT ON A 42-FOOT LOT HAS A DINING ALCOVE BAY, WITH WINDOWS ON THREE SIDES. IT PROVIDES FOR THREE BEDROOMS AND ALL THE USUAL LIVING CONVENIENCES. THE PLAN IS REVERSED.
AN UNUSUAL BUNGALOW WITH AN ENCLOSED GARDEN WHICH PROVIDES A CONSIDERABLE AMOUNT OF ROOM, HAS BOTH CHARM AND INDIVIDUALITY, AND A VERY LIVABLE ARRANGEMENT.
A FULL TWO STORY COLONIAL HOUSE WITH CENTRAL HALL AND LONG LIVING ROOM FILLING ONE SIDE OF THE HOUSE IS ALWAYS POPULAR WITH THOSE WHO CLING TO THE TRADITIONAL TYPE AMERICAN HOME. A DIGNIFIED EXTERIOR AND CONVENIENT AND ROOMY INTERIOR ARRANGEMENT PROMISES A SATISFACTORY HOME.
BUILT OF BRICK. THIS HOME IS REALLY VERY SATISFACTORY. THOUGH THE PHOTOGRAPH WAS TAKEN BEFORE THE PLANTING WAS STARTED AND DOES NOT DO JUSTICE TO THE HOUSE. THE HOUSE IS REALLY BETTER JUDGED BY THE PLAN THAN BY THE EXTERIOR. IT IS VERY COMPLETE AND THE ARRANGE-MENT IS GOOD, THE ROOMS OPENING WELL TOGETHER.
The peacock has always held an undisputed place in the decorative arts, but lesser birds come and go, appearing and disappearing without apparent rhyme or reason. Just now birds of many a feather flock together—
on wall paper, chintz, painted furniture, lacquered trays, and china doorknobs. Grave, gay, serious, and frivolous, they add life and charm to countless things. Parrots of all kinds, their lesser brothers, paroquets, and their picturesque cousins,
cockatoos, vie in importance with pheasants and birds of paradise.

It needs a frivolous age like our own to take a parrot seriously, particularly when stuffed and hung in a wicker cage originally intended for a thrush. The popularity of this green bird almost equals that of the peacock, and has completely routed the plump robins and sleek blue birds of the William Morris school.

Color schemes have changed. The interest in Chinese designs has brought into play the most brilliant combinations, made possible by the liberal use of black or gold, sometimes both. Gone are the subdued harmonies beloved by Morris; and gone likewise the intricate patterns of many printings, such as the "Strawberry Thief" and "The Macaw," and other once popular wall paper themes, in which birds had a prominent and picturesque part.

There is a directness about the new designs which almost takes our breath away. For this reason they must be used with discriminative and decorative tact.

The wall papers with their brilliant birds and flower-laden boughs, so fascinating when seen in the shops, are fitted only for the most carefully planned schemes of furnishings and seldom for the very small house unless used merely for summer occupancy.

Birds went out during the mid-victorian period, except for an occasional crewel stork against a crewel mountain, a passing phase of the "greenery-yellery Grosvenor gallery" style of needlework. Storks and cranes and other long-legged fowl were in high favor with Eastlake and his followers. Carved in wood they sometimes upheld those ponderous cabinet mantels which moved Morris to tears and seem so absurd to our generation.

The pseudo-Japanese birds of the Eastlake period took flight with the coming of the well-fed English songsters introduced by the Master of Hammer-smith. Perched on leafy boughs, the latter seemed to feast perpetually on cherries and pomegranates. And, as everything in life is comparative, the new color schemes by contrast with the old seemed clean and bright. They were certainly more cheerful.

Eastlake has his place in the decorative scheme of things entire, but we do not take him seriously today.
Eighteenth Century mirror, with gilded eagle

Our "Centennial" did not help us very much but the Exposition of 1893 did. Between the two came the cozy-corner craze, truly the twilight of our artistic development, if not the dark ages. About this time most of the birds took wing, returning in vast numbers with the Colonial revival. First came prim little birds in orderly rows, such as Jane Elizabeth, aged seven, and Abigail Ann, aged nine, worked on their samplers; birds unknown to the Audubon Society, but instantly recognized by non members. Other colonial motifs, such as baskets of fruit and urns of flowers, appropriately appeared with the birds and have never been widely separated.

Few will dispute the serene and high place of Japanese craftsmen when birds, as birds, are under consideration. In metal, wood, and ivory, on paper, lacquer, silk, and cotton crepe, we may follow the lure of the crane, the stork, the Mandarin duck, and the phoenix. Whether it be the work of one of the old "bird masters" or some humble modern rendering, the action and decorative force are instantly felt.

Chinese birds are fascinating in an entirely different way, usually more brilliant in color but less spirited in action. Persian birds are of another type, colorful like those of Chinese decoration, but quite unlike in drawing.

To follow the call of the bird would mean a long backward journey through the centuries, dipping into ancient history and skirting the golden shores of mythology. More than the decorative significance would have to be taken into consideration. History, philosophy, and religion are all symbolized, and each opens an extensive field of investigation. If Christian symbols were under consideration, the dove would claim first consideration and the sacred pelican second. The latter is depicted in a striking manner by Sargent in the second portion of his mural decoration in the Boston Public Library.

In Japanese mythology, all the birds have an important place. The cuckoo depicted against the moon signifies caution; the swallow in the willow tree, grace and sweetness; the crane with the pine tree, endurance; the crane with the bamboo tree, longevity; and the cock with the moon, vigilance. In Japanese art, the phoenix holds place of honor, ranking in importance with the five-clawed dragon of China. Like the Chinese monster, his presence has royal significance. Since he comes to earth only at the birth of an
emperor, it is necessary to preserve his likeness in countless ways. With the head of the pheasant, the features of the dragon, and the beauty of the peacock, this sacred bird is found in every form of ornament. His five colors signify the five virtues of obedience, uprightness, fidelity, watchfulness, and benevolence.

A record of the phoenix as set forth on porcelain and pottery would fill a volume, while a goodly book could be devoted to his representation in bronze. Most interesting of all would be a portrayal of his birdship as shown in old temple carvings. Beautiful examples may be seen in many private collections, and occasionally in the shops one may find temple rammus, or ventilation panels, in which the long resplendent tail of the phoenix is made the motif of a unique grille.

Birds as found on old china open up an interesting field, but the trouble here would be to know where to start and when to stop. The English potteries of the eighteenth century alone would yield a rich harvest. The beautiful exotic birds of Bow, of Worcester, of Chelsea, and of Derby would fill many cabinets, while the birds found on Staffordshire would be past counting.

Tiles would claim attention before the bird quest was over, and the pilgrimage would lead to the remote corners of the earth. And in the search it is quite possible that the stuffed parrot in the wicker cage might be completely forgotten.

*Dining room decorated by Carl W. Boynton*

Birds part of the table garniture
Giving Up the Big House

O. E. K. As ill health is making it necessary that we give up our spacious two-story house for a bungalow, I'm asking that you will help me decide some puzzling questions.

We do not like to take our guests into our every day living room, so think we would like a room for such use. Could we combine living room and library and music room in one and have another more formal room? If so, how shall we furnish it, and which must it be, reception room or sun parlor, or what sort of room? Should any musical instruments be in this room? If one "lives" in the living room it is not always in "apple pie" order.

Can you suggest a good style of furniture, rugs and draperies for such a room which will be used mostly for guests and callers if the family "lives" in the library? The house is to face south.

We want the sun porch arranged to be heated so flowers can be kept there.

Ans. It is not usual to find a drawing room in a bungalow type of house. Such a room is supposed to belong to a large and formal house where the style of living is in keeping. In a bungalow it is usual to find a living room, perhaps a den or study or library, variously called; a dining room, a sun room and a breakfast nook. Guests, unless very formal ones, are taken into the living room, which can easily be in order if the den or library or the sun room is used for the freer family life. The sun room is never used as a reception room. The familiar friends are at home there. It may open from either the living or the dining room, but in any case it is an informal room. It is usually furnished in wicker with gay cretonne or printed linen or striped cotton.

Certainly you can combine the library and the living room, in fact it is nearly always done. The piano or other instruments also find a place there. It is rare to find a separate music room in a bungalow type of house, though sometimes a bungalow is only a large establishment on one floor.

We should open the living room through the French doors to a sun parlor on the side. We would finish the woodwork in ivory and use black walnut for the main pieces of furniture in living room, upholstering davenport and one big cozy chair in a small figured blue wool mohair. Walls of two-toned soft grays, small tapestry design; rug of gray taupe with dark blue lines crossing diagonally; writing desk and library table of walnut but one or two odd chairs; floor lamps, table and desk lamps, preferably candle style of fixture; curtains of large meshed filet net drawn plain over the glass and side draperies of a blue glace silk fabric, sun-proof but having much lustre. The tone of blue used should harmonize with a scheme of jade green in the treatment of sun room. Paint the plastered walls of this room a deep ivory and run a one-foot trellis around the base of green wood strips. Have green wicker furniture upholstered in a striped cotton of blue and green. Paint the floor a dark water green and use a runner down the length of the room of blue and green mixed.
The first bedroom will be furnished in mahogany and the second in mahogany and curly maple combined.

There is to be a fourth bedroom in the attic.

What color would you suggest for the woodwork and walls of the kitchen which faces east?

**Ans.**—We should tint the living room walls Quaker gray, and use blue side draperies with the net curtains. Do not get small rugs, but another six by eight size as nearly like the one you have as possible, and lay them crosswise of the room. Upholster the davenport in darker gray Mohair, colonial pattern, and use on it pillows of rich blue velour. Cover the ottoman in the blue velour. Upholster the fireside chair in a rich cretonne, with much blue and green.

Tint the dining room walls deep ivory, and use rose curtains. Antique mahogany will be lovely in this room.

Tint the first bedroom walls pale gray, and use wisteria rug and furnishings. A delightful rug carpeting comes in a mot-
tled wisteria. Have the bedspread also, of wisteria linen, put together with insertion strip of heavy lace.

Paper the second bedroom walls in a chintzy paper, all little sprigs of bachelor buttons and with rag rugs, and ruffled muslin curtains.

Paint the kitchen walls deep cream and the woodwork pale gray, with blue and yellow gingham curtains.

Suggestion

E. M. L. I am now building a five room frame bungalow and would like suggestions on color schemes and furnishings. The exterior is to be painted dark buff trimmed in lead blue, windows trimmed in colonial ivory; all floors are hardwood; all casement windows and French doors are small paned. Living room and dining room are in one room, 11x24 feet; four windows north, one west and one east. The dining room is on the east side with built-in china closet. What colors would you suggest for woodwork and floors, walls and draperies?

I am buying all new furniture, not too elaborate—want it to be cheerful and homey. Draperies must be inexpensive but not common looking. I think strictly period and overstuffed furniture out of place in such a small house.

Ans. We should use the white trim on all the exterior instead of the window sash only; the lead blue is not a good combination. As to finish of interior woodwork, you can use either a silver gray stain or gray paint in living and dining room, and perhaps in back bedroom if you do not want ivory. In the kitchen, bath, and guest room, we would have white enamel. If the gray stain is used in living room we advise a little gray stain on the hardwood floor. But for your room, facing north, east and west, we think a general scheme of ivory woodwork, with soft cream tan walls, rugs in soft brown and cream, with rose for draperies, etc., would be preferable.

Reed furniture would be very good in this house—davenport, desk and chairs. You could have a walnut library table.

You could upholster the seat of davenport in mulberry mohair, with lighter shade for draperies, and use cretonne with crimson flowers on a black ground for the fireplace chair. As you have blue and white linoleum for the kitchen, we would have straw yellow walls, white woodwork, and blue and white curtains at the windows. We do not think the breakfast nook in lavender and green would open well from this. Why not make the breakfast nook green and yellow, with a set of the pretty painted wood furniture painted yellow with green and blue lines for decorations? Charming dishes are to be had in the Bohemian or Hungarian ware, with decorations in green and yellow, with touches of other color.

Wall Paper

J. C. Please advise me in the selection of wall paper for the two bedrooms, also correct shades in draperies and the proper treatment of floors.

Room No. 1 has but one window and gets but little sunlight. Woodwork is white enamel; furniture, ivory, Adam period design. We wish a panel effect in this room. I have decided on a gray symphony as a background and a rose and blue floral design for the panels, but am afraid this effect will appear too cold.

Room No. 2 has southern exposure, two windows, and gets plenty of sunlight. Furniture is oak and old fashioned but not freakish; woodwork is white enamel.

Ans. We think a gray wall would be altogether wrong in your room, and white woodwork is wrong with ivory furniture. The woodwork should have a coat of deep cream. The walls should have a ground of ivory, and the floral panels should be a well covered design of rose, not too much blue, on an ivory ground. The curtains should be rose color.

The room with oak furniture should have warm gray woodwork and walls soft putty color. The curtains, etc., should be of old fashioned chintz with a great deal of blue; the rug should be blue, and the easy chair covered with the chintz of curtains.
One day he wrote in it. The next she did. Their observations about each other are frequently crisp and often amusing.

Send for this "Diary of the House in the Woods"

First, it tells all about the designing of The House. Then follow interestingly informative things about its actual building. After which comes the way they treated the walls and finished the wood work, not to mention the final decision about all the floors. Most of the actual doing, they did themselves. By "they" we mean Katharine McDowell and Husband Ned. We finally induced them to let us publish the diary. It's now ready in its charming Mellowtone tinted cover and is full of color illustrations and helpful text. Unless we are way wrong, it's exactly the kind of a book you have long wanted. Send 10 cents for it direct to our Main Office at Dayton, Ohio.

The LOWE BROTHERS Company
465 East Third St., Dayton, Ohio
New York Boston Philadelphia Jersey City Chicago Atlanta
Memphis Kansas City Minneapolis Omaha Toronto

Lowe Brothers
Paints and Varnishes
The Homemaker, the Manager of the Food for the Family. While it may be true that there are other responsibilities equally important with the management of the food problem, homemakers the world over know that since food is one of the fundamental requirements of every person it is constantly uppermost in thought and plans. Whether she be skilled in the preparation of food herself, or whether she delegates that part of the work to others, she cannot escape the managerial responsibility for planning for the food for her family.

This managerial responsibility is not one which looms up at intervals and between times allows the homemaker to rest. It is ever present, ever pressing, and its good or bad execution so intimately connected with the family health, financial welfare and happiness that it behooves the homemaker to give it careful study.

Managing the food problem in a family has three definite lines of interest. These are: Planning of Meals, Cost of Food, and The Marketing Problem, which will be discussed in succeeding months.

While these three interests are inter-related, there are outstanding points connected with each which, if considered by the homemaker, will assist in making the management of the food for the family a successful enterprise.

Planning of Meals

How many homemakers each day have as one of their waking thoughts: "What shall we eat today?" It is almost a universal cry and the readiness with which women peruse magazines, go to lectures and talks and join groups which are concerned with this problem testifies to the feeling of need which they have for help in making this problem a simpler one if possible.

Planning meals well means that the nutrition requirements of the family are met, the tastes are satisfied, and that all this is accomplished within the amount of money which can be afforded for food.

Meeting the Nutrition Needs of the Family

There are a few simple facts which, in the possession of the homemaker, may make her feel quite satisfied that she is not going far astray in providing the food for her family. She knows that all the members of her family must have the right food—
1. To supply the energy which makes possible the work of the day and which keeps the body at the right temperature.

2. To give material for building the body and replacing those parts that are being continually worn out.

3. To regulate all the processes of the body such as digestion, the heart beat, and others, so that the body may be kept in good running order.

4. To furnish all of the substances which are essential for growth and health.

This may seem at first like a large order to place before anyone, but it is interesting to see that the requirements are very easily met if the homemaker will just classify foods in the way she purchases them and make sure that she provides food from each group each day.

Group I. Milk.
Group II. Fruits and vegetables. (This includes potatoes.)
Group III. Cereals. (Includes breads and other baked products.)
Group IV. Meat, fish, poultry, eggs, cheese.
Group V. Butter, cream and other fats.
Group VI. Sugar and other sweet foods.

It is not difficult for the one who is planning the meals to keep these groups in mind and be sure that each enters into the day’s meals.

Milk is placed at the beginning because every family, and especially the growing members of it, should have a good supply of milk each day.

Those who are making a careful study of nutrition needs advocate not less than one fresh vegetable and one fresh fruit a day, beside any cooked ones that are served, and certainly this is a desirable aim and not difficult of attainment if planned for.

Group III almost always appears in the family meals, but it is well to remember that it is desirable to have some of the whole cereals as well as the white flour products appear each day. Some of the breakfast foods and the coarser grained breads will supply these.

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YOUR HOME DESERVES THEM

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WARNER HARDWARE CO., SUCCESSORS

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If one of the foods from Group IV appears each day, this, together with the milk used, will take care of what is called the "protein requirement."

We hear much said about the importance of vitamins, but selection of foods from each of these groups with effort to provide either fresh vegetables or fruit, or both, is pretty certain to care for this need.

But someone says, this tells me nothing about how much food is needed. Fortunately, if the homemaker has a family which is in general good health she will be able to test the amount of food by the way in which her family keeps the proper weight and makes the proper growth. If any are under weight it is a sign either of too little food, or the wrong variety, or some physical difficulty which is hindering the proper use of the food. If any are over weight it is probable that too much food is being eaten. This question of weight, together with the satisfaction which the members of the family show, while not proving absolutely that the food is right, are certainly excellent guides if in other ways the family seems in good health.

Is a "Balanced Meal" Necessary?

Many homemakers are disturbed by the frequent discussion of "balanced meals." This is unfortunate, for it is quite unnecessary to try to meet all the requirements in the right proportions in one meal. If we talked about the "balanced day's meals" we should come nearer describing what the homemaker should aim at. Making sure that there is plenty of variety in the diet is one of the best ways to assure oneself that one is approaching well balanced food for the day.

Conservation of Time and Worry

There are many suggestions offered as to ways and means of lessening the amount of thought that must be given daily to planning meals. The efficiency of these depends in part upon the habits of the family. Thus, it is unquestionably time saving in the end if meals can be planned in the main for several days ahead, but if the family is irregular at meals this plan loses some of its worth because the amount of food left over cannot be anticipated.

Another device for saving time and worry is that of keeping a record of satisfactory food combinations and meals. The homemaker who builds up a list of these which have proved acceptable will many times find herself saved much thought by referring to them. A card file is a good method to employ for this because it allows of expansion. It may be that the collection will be slow, but in the end this is a helpful device that relates itself to the particular family concerned.

Lists which help one to provide variety are also useful. "Not having the same old thing" is the hue and cry of many homemakers. It is so difficult to keep in mind all of the different desserts which have proved satisfactory to one's family, the different ways of serving vegetables, and so on. Keeping lists of these to which new ideas can be added from time to time is bound to be helpful in securing variety with the least effort. A glance at the list will remind one that it is a long time since a certain dessert, or vegetable, or meat dish has been served. The following headings make a good start for the gathering of these lists:

<table>
<thead>
<tr>
<th>Soups</th>
<th>Breads</th>
<th>Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats</td>
<td>Desserts</td>
<td>Potatoes</td>
</tr>
<tr>
<td>Fish</td>
<td>Beverages</td>
<td>Salads</td>
</tr>
<tr>
<td>Cheese and Egg Dishes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandwiches</td>
<td>Relishes</td>
<td>Miscellaneous</td>
</tr>
</tbody>
</table>

Successful management of the food for the family is one of the most interesting, if it is one of the most time consuming and arduous occupations. There is a real satisfaction in feeling that the nutritive needs are being met and that the family enjoys the meals that are planned. The homemaker who starts in with the idea of lessening the thought and time involved will work out many devices in addition to those listed here which will be of help.
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THE GENERAL FIREPROOFING CO.
Youngstown, Ohio

Herringbone Rigid Metal Lath
Care of the Hands

As the home woman is becoming also a business woman and many old time traditions are dropping away, will the bugbear of dish washing disappear? It is even being claimed that, when properly done, dishwashing may tend to beautify, rather than spoil, the beauty of the hands.

Never use strong soap, nor cleansing chemicals in the water. Do not put the hands into water that is too hot, and do not keep them in the water long at a time. There are many appliances which the house keeper may train herself to use which keep the hands out of the water most of the time, and at the same time leave the dishes clean and polished. Some house keepers even claim to wash dishes without getting the hands wet.

The task of washing dishes rests under a terrible handicap in the psychology of the school girl period, which the matron has not cast off. Even the patented dishwasher has not received the immediate vogue which one might have expected, probably because, by the time the dishes are ready to be put into the dish washer, the most unpleasant part of the task has been done, that is, the preparation of the dishes for washing, and the hands have not been in the water at all.

The soap used in the kitchen should be as carefully chosen as the toilet soap, and should be mild and soft. A lemon for stains, and a good hand lotion of some kind should always be conveniently near. Rubbing a good cold cream into the hands before putting them into water is a protection to the skin.

Wringing the Mop

A new floor mop which "wrings itself" by a sliding hand grip which turns on the handle with a spring, wringing the mop dry without getting the hands wet, is a boon to the housewife who has floors which must be washed. Even if one might be able to wash dishes without spoiling the hands, wringing the mop in washing a dirty floor is a greater trial.

The mop itself is made of rough heavy cotton cord, the strands of yarn cross stitched together, so that they do not separate, nor get tangled. These are looped over the end of the handle that there is no danger of scratching the floor. There is a coil brass spring on the handle on which the hand grip at the top of the mop is turned so that it is twisted very tightly in wringing the mop, permitting it to be wrung very dry without the wet mop being touched with the hand. When released from wringing the cords spread into a convenient mop.

Planning the Appetizing Meal

Even though all the nutrition needs of the family are met there still remains some thinking to be done in order that the food served shall give the greatest satisfaction. There is no reason why meals may not be simple, inexpensive, yet appetizing, if a few principles are observed.
Why a HESS!

Square Shape
Greatest Heat Radiation
"Every Inch a Furnace"

The square shape of the HESS Welded Steel FURNACE provides the greatest heat radiating surface for a given diameter. Built on the same rectangular principles as locomotive and power plant fire boxes, with a grate under the entire fire, it maintains the fire at an even depth and assures perfect combustion and most efficient, economical use of fuel. The square shape gives a longer life to the furnace. Hess, evenly distributed over the large flat surfaces prevents overheating and burning-out of the furnace. And the protective surface coatings of the metal are not cracked or chipped by bending. The square shape is most economical in the use of material and labor, and permits the incorporation of square ash pit, smoke settling chamber and other essential, economical features.

Write for our illustrated booklet "Modern Furnace Heating" describing the furnace fully.

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The house takes on a new lease of life—it seems a better place to live in. An Edwards Metal or Tile roof is a real commercial asset and will bring a better return in rent or sale.

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All Edwards Metal Roofing is easy to lay—no big expense for skilled labor—storms and winds will not wrench it loose or make it a rattle-trap. It is lightning-proof and fire-proof—Reduces Insurance Rates.

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Win-Dor Casement Window Operators

Why Have "Just Ordinary Windows?"
The Dutch are to blame for them. The English found the cure for them. A cure they have used for centuries. Because of it, much of the charm of English houses is responsible.

So why have the ordinary slide-up-and-down windows (that are only half a window when it comes to ventilation) when you can for the same cost have casement windows, that you fit wide open?

Casements operated from inside the screen with Win-Dor operators.

Send for booklet called "Things You Ought to Know About Casement Windows."

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CHICAGO
The good results of meals do not rest entirely in the taste of food. Appearance as well as quality is important. In appearance, for instance, too large servings often give a feeling of distaste, while smaller servings may have the opposite effect—that of causing the desire for more. Color is an important item in planning meals. Experience helps much in avoiding a meal which is all one color, or one which has colors which clash. Thus, a dinner plate of fish which is white, and mashed potato, needs a vegetable with color to break the monotony—or, if this is not desirable, a bit of jelly, parsley or pickle may save the day. On the other hand, a tomato salad served with the dinner in which buttered beets is the vegetable is likely to give an unappetizing color scheme.

The shape or form of food is not a negligible item. As a rule it is desirable to plan for a variation in shape and form. Thus, stuffed baked potato and creamed peas in timbale cases might taste perfectly well, but seem unappetizing because they look so much alike.

The right arrangement of food on the platter, the vegetable dish and the dinner plate has much to do with its appetizing quality. Gravy placed over the wrong article of food, chops piled helter-skelter on the platter, these and many other points in arrangement may render uninviting an otherwise acceptable meal.

The appetizing quality of food as well as its appearance must be considered in planning meals. Granted that all the food is skilfully cooked, there still remains the problem of planning for combinations which consider odor and flavor, that of planning to serve food at the right temperature—cold things cold, and hot things hot—and selecting foods which will combine well in texture and consistency. For instance, keeping a good combination of flavors requires that there shall not be too many highly flavored foods at one meal, nor, on the other hand, too many bland ones. In the same way it is important to plan meals in which the same texture and consistency of food does not predominate. Thus, creamed potatoes and a creamed vegetable will not be as satisfactory from the point of view of texture as creamed potatoes and a buttered vegetable, or mashed potatoes and a creamed vegetable.

In addition to these points which have to do with the individual meal, it is important in planning the day’s meals and the week’s not to duplicate foods too often except those of bland flavor such as potatoes and bread. Such foods can be served to many people daily, or even at each meal, without seeming to become tiresome.

Mildred Veigley Wood.

The Modern Kitchen

Don’t, don’t and again don’t—let your kitchen be too large. In other, olden days when servants were many (and let us hope more highly efficient) then the big kitchen was another story altogether. Today the ideal kitchen is the very smallest possible space into which the necessary cupboards, sink, drain-board, et cetera can be mathematically fitted. There are people who prefer a “kitchenette,” while still others prophesy that this particular part of the house-of-the-future is doomed to evaporate altogether into the limbo of forgotten things!

Copper Brown

A good copper brown is made by taking red lead and tinting it to the proper shade with black. Copper brown may also be made by adding a little burnt sienna to a paint consisting principally of burnt umber.

Fruit Stains

To remove fruit stains from linen, moisten with camphor. If this is done before the stain has been put in water, it will disappear.
A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

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

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Efficiency in Planning the House

An the modern small home be built which shall at the same time be better built, better in design, and yet cost less money? That is the problem which architects and builders of long standing and wide experience have been working upon for a long time and especially for the period following the war. With our high rents and lack of housing it is one of the great questions of the day, and everything which points to a solution is met with great interest.

For the colder parts of the country the efficiency of the heating plant, both in its installation and its operation, is a matter of first importance. No saving in first cost which even slightly increases the cost of fuel, year after year, is a real saving. The compactly planned small house of regular outline, without unnecessary projections, with centrally located heating plant efficiently installed, and with the whole house well insulated, has been carefully worked out which is eminently adapted to the colder parts of the country. The usual house with full basement and attic is really a three-story house. Where much of the basement is empty space and the attic unused, it is of course a very expensive house whatever the size. More than that, an unused basement which serves as storage place for rubbish is a fire hazard. The efficiently planned house uses all of the basement, an amusement or play room, or a den for the man of the house, with good area windows, sometimes even displaces the laundry, which many housekeepers prefer on the rear porch or beside the kitchen. With the space under the roof utilized for sleeping rooms, there is not very much which can be cut out so far as the planning is concerned.

In many parts of the country where it is not so necessary to conserve heat, the house is much more livable through long sunny days if it is spread out over larger surfaces, as gas or electricity easily gives comfort on cool days, and a full basement is not only unnecessary but an extravagance.

Special Methods—Ernest Flagg

Some of the most prominent architects of the country have been working over these problems, and their solutions are being presented from time to time. Among these the most notable is the contribution of the New York architect, Ernest Flagg, who has always been a pioneer in new construction. To his genius was due the first great tower building, the Singer building, New York City, of which he was the architect. For years it was the highest commercial structure in the world, towering more than 600 feet above the street. Even while he was designing such great buildings as the Singer building, the Corcoran Art Gallery of Washington or the Naval Academy of Annapolis, he was experimenting with small private houses. He was working out ways and means to strip them of shams, to make them cheaper and at the same time to make them more substantial, and better looking. Since, or during the war, he has put up more than 500 attrac-
HERE'S MY OPINION OF

**Tide Water Cypress**

"The Wood Eternal"

The following are excerpts from the U.S. Govt. Report on Cypress—Bulletin 95, Dept. of Agriculture, Forest Service. (You know the conservatizm of Government Reports.)

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"When made into porch columns it retains its shape, holds paint, and has sufficient strength to sustain necessary loads."

"Cypress is put to almost every use as an interior trim for houses. It may be finished in natural color or stained. The wood contains little resin and thus affords a good basis for paint, which it holds well."

"It is a popular wood for kitchens, where it is subjected to dampness and heat. It shrinks, swells or warps but little, and is used for drainage boards, sinks, kitchen and pantry tables, cupboards and kitchen cabinets."

"The farmer puts this wood to many uses, in all of which it gives good service," etc.

Cypress is in truth "the wood eternal." If you are putting up a PALACE, a PAS-TURE-FENCE or doing a "LITTLE JOB OF BACK-STEPS"—remember—"WITH CY-PRES YOU BUILD BUT ONCE."

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Building Material Cont.

tive houses at a substantial saving of cost, and with better construction. So much interest has this created that Collier's published a special interview with Mr. Flagg, giving many details of construction, to whose courtesy we are indebted.

Mushroom Stone Walls

One of the most important innovations initiated by Mr. Flagg is in the building of stone walls, in the parts of the country where stone may be picked up in the field. A rubble wall is built, which Mr. Flagg calls "mosaic rubble," because the stone is set dry, like mosaic work. The flat side of the stone is laid flush with the outer face of the forms, which are built as for pouring a concrete wall, two feet high at a time. Concrete is shoveled in back of the stone filling the form. No mortar is placed between the stones. They are laid dry. Mortar is squeezed into the joints afterward when the forms have been removed. The forms consist of three 8-inch planks, which, when removed, are reset above, and two feet more of wall is built.

No Basement

The houses are built without basement. The surface of the ground is covered with waterproofed concrete with a dead air space between that and the floor. Furnace and coal bins are built above ground, which is labor saving in the care of the heating plant and adds a picturesque element to the house by increasing the mass. The laundry is usually better to be on the same level as the kitchen, in any case.

Why Do Houses Have Attics?

Attics are very expensive as storage space. They are usually considered a necessity because of the insulation which they give between the living parts of the house, with a circulation of air. By this new program of building little "ridge dormers" are set on the roof ridge, giving the circulation at the peak of the roof, so that rooms fill the space under the roof and are comfortable. These ridge dormers have windows and screens operated with cords from below.

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Building Materials Cont.

Hood rests on the tile and brick of the firebox and extends well to the roof. This is said to be an evolution of the Franklin stove and also of the little porcelain stoves used in the old countries. The metal of the hood itself is a great hot box which really heats the room as a fireplace of the usual type will not do. At the same time it is a stunning affair and the chief decorating motif of the room.

**Screens**

Copper screens are tacked permanently to the windows, which we are told used in this way are cheaper than ordinary wire screens on frames, and should last as long as the house.

**Zoning Smaller Cities and Towns**

Many of the towns and villages of the country are adopting zoning systems, according to the Department of Commerce. Reports showed 109 cities, towns and villages of the country were zoned January 1, 1923, as compared with 55 the year before. Of those zoned in 1922 there were 14 towns with populations of 5,000 to 10,000, while 12 had 5,000 inhabitants or less. The State of New Jersey ranks highest in the number of places zoned, New York second, and California third.

**Standard Size of Brick**

The Common Brick Manufacturers’ Association have issued the statement that through the good offices of Herbert L. Hoover and the Simplified Practice Division of the Department of Commerce, the brick industry has at one stroke been enabled to sweep away an infinite variety of odd sizes of brick and establish one standard size for the seven billion building brick produced every year in the United States. This size is approximately 8"x3⅜"x2⅜". The only exception now to be allowed is in the case of smooth faced brick for special exterior use, in which a very slight variation in one dimension only is permissible.

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The Georgian Period, by William Rotch Ware, for thirty years editor of the American Architect, has lately been republished in the 1923 edition, by the L. P. C. Book Company, Inc., in six portfolios, 10 by 14 inches, the first volume of text drawings and photos, with articles and theses, giving much interesting local data, and five portfolios of full page plates,—measured drawings and photos. This monumental work has been the standard authority on American architecture since 1898, when the original drawings and photographs were compiled.

In the last decade of the nineteenth century architects and home builders were realizing that we had an American architecture; the fine examples of early American building were being studied, sketches were made and photographs taken to carry away a better idea of these fine old buildings so that they might be copied in modern work. Summer school classes from the students of architecture at the Massachusetts Institute of Technology, through successive years, made measured drawings of these fine old buildings in Salem, Portsmouth, Ipswich, Marblehead, and all through New England, carrying the work wherever fine old types could be found.—New York, Pennsylvania, Maryland, Virginia, the Carolinas. As the work progressed portfolios were issued from time to time. Advantage has been taken of the opportunity offered by republication to rearrange and classify the entire work. A copious index and lists of plates arranged alphabetically and chronologically have been included which add materially to the availability of the valuable material. It is a book which should be in every public library in the country so as to be available to every one who wishes to build a Colonial home. The older or the new edition is probably in the library or the drafting room of the architects who do successful Colonial building. The plates are not only valuable to the architect but are fascinating to those who love beautiful building and especially beautiful homes.

How to Build Better Homes, an attractive booklet, has been issued by the Irvine Brass and Copper Company, which gives much both in the way of suggestion and of information which is of interest to home-builders. Permanence of materials is a matter especially under consideration, and the fact that the durable material, even at a higher cost, is cheaper because you pay for it only once. Photographs show what happens when rusting of materials occur. There are also charts and diagrams explaining terms commonly used in residence construction, and how placed in the house.

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MARY EDGINGTON WIDNEY

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<td><strong>Shingles Stain.</strong></td>
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OME builders are beginning to recognize that beauty in the small home means good proportion, good design, and a certain simplicity that is the direct outgrowth of a well-worked-out plan. Making a thing beautiful is not necessarily adding ornament, but rather, it is a simplifying process. The trained architect is not an inefficient, impractical man. He has long been misunderstood in this respect. He has sometimes misunderstood himself. In reality, his business is that of efficiency manager to the home builder, or to the building trade; to furnish what is needed in the most compact compass, or economical way, and doing it so that its very efficiency makes for beauty. As a rule, the simplest things are the most beautiful. It is much more difficult to get beauty into an extravagant thing than to give that quality to a simple thing. Beauty, therefore, in the small home, which means good design and good proportion, is not to be had at merely a money cost, nor is the quality increased with the larger price. Many homes have been spoiled by too much money ill-spent. The truth of this is forced upon the attention of any discriminating person who may drive through a newly built-up section of pretentious houses.

Of course anyone can lay out a diagram for a house plan, but the inexperienced home-planner usually finds that when he—or shall we say she—has located the fireplace, that there is no room for the chimney on the second floor; or probably it cannot be used for the kitchen flue, or even for the furnace. The stairs on the two floors may refuse to come together. The plumbing pipes are equally unruly. Sufficient "head room" has not been allowed for the stairs. And this is only the plan. When it comes to the exteriors—all of them, in elevation, and the selection of materials, both as to utility and beauty, even where strength may not be questioned or treated economically, a real problem is encountered. How is one to exercise good judgment and taste in the proportioning of these parts and the interplay of one material with another, when so many things must be accomplished at once? The profession of the architect gives him the trained hand which picks out the essential elements first, then as the design develops, the others naturally fall into place. A competent architect does not produce effects through wastefulness. It is seldom, if ever, necessary to go beyond the economic requirements of a building for him to make it beautiful.

Again we would emphasize this truth that the services of the architect are just as essential to the owner of a small home as to the man of wealth.
KEITH'S MAGAZINE
ON HOME BUILDING

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A home of charm and distinction

Druckenmiller, Stackhouse & Williams, Architects
This Out-of-Doors Generation
Betsey Buell Valentine

Just as fashions change in clothes, styles change in house furnishings, even the type of architecture which is in popular favor changes, so do many of our ideas change from generation to generation. The pioneers and early settlers had more interest in the interior of their houses, generally speaking, perhaps because houses were first built for protection. The feminine members of the family kept inside as much as possible, or went out swathed in veils. Being much out of doors would, of course, ruin the complexion, as they supposed. Today all of this is different. We have changed from an indoor to an outdoor generation.

When Jane and Tom are married nowadays they are not inclined to shut themselves in four walls, nor to plan their living within them. They are hunting for new and practicable ways for living as much of their life as possible out of doors. They want their friends to realize this as they reach the door-step, if not before. One such couple made a series of tours to pick up suggestions as to ways of living and of entertaining their friends out of doors. They motored up and down the Hudson and carried a kodak on a California trip, gathering suggestions and snap shots which might be fitted into their own special needs.

Jane adored flowers, and was also old-fashioned enough to like some means of dividing their property from the street. An
An outdoor fireplace of boulders

entire fence is not always attractive, and is expensive besides, so she compromised with a low hedge and an adorable little gateway taken from a suggestion found in the foot-hills above Pasadena. With a quick-growing rose bush, such as the Dorothy Perkins, Jane knew that the gateway would be lovely from the start, as well as a useful trellis for the flowers which she would train over it.

Jane had the idea that much of the work of the house could be done out of doors—if only she had a good place which was shaded from the sun and secluded from the outside, where she could prepare her vegetables, or clean her silver. The sewing machine could be connected to an outside wall plate which was placed for her electric appliances. Even the smaller rugs could be vacuumed outside, and her laundry was on the porch beside the kitchen. So she wanted a partially enclosed service yard, and she found an excellent suggestion from New Rochelle, as they were motoring into New York. Jane was rather inclined to favor attractive gates, as you may see from the photographs, and she liked the little trellised screen for the porch. The side entrance of this same house, with its iron railing on the brick steps, and the little doorstep garden pleased her very much.

Tom, manlike, was more inclined to think
of eats, and the possibilities of winter picnics. They were to build in a very rocky section of the country, and found that it was advisable to make it a winter as well as a summer home, staying right there all the year 'round, with possibly only the usual two weeks vacation from business. Tom put the rocks and the general situation together to see what advantage they could make of all the rocks which were available. Among the pictures which they had gathered was one of a wonderful outside fireplace, built of boulders, somewhere in California, and they decided to take this tip and build a big fireplace out of doors, where they could have outdoor "bakes" and "roasts" in season, and all kinds of good times right in their own dooryard. They wanted an outdoor well, too, like the photograph, even if they did not have an "old oaken bucket," which seems to have fallen into disrepute as not being "sanitary." But they left that suggestion for a possible later development, being fairly satisfied for the present with city water in the house.

One of the hardest problems to solve was what to do with a marshy, rocky corner of the yard, which would make it attractive without too much expense. Many days passed while they were considering this corner. None of their pictures seemed to throw any light on the situation and so they de-
cided to leave the matter for a time. It was not long, however, before a friend who knew the type of land they had to deal with sent them a photo of a rock pool with a foot bridge which gave them a suggestion that seemed to exactly fill the bill. Tom was able to procure some old poles, which were easily cut into the desired lengths. There was not much difficulty in making a rustic little bridge. They had the stones which were taken out of the excavations, and picked up in different places, piled in such a way as to make a dam for the water, which left a small pool where water growths could be planted, possibly even water lilies. Tom did practically all the work himself, so the expense was small, and the possibilities which might be developed were many.

Another question which had come up early in the discussion was what they should do about porches, verandas, or whatever one chooses to call them, which seem to be disappearing from the newer houses in some parts of the country. Of course Tom and Jane had a sun parlor. But the climate was not damp, and they often liked to be outdoors, when they were not sitting by the outdoors fireplace. While they were considering this Tom had met a New York architect who showed him a picture of some of his own work, where trees had been used to take the place of a roof. Instead of building an open porch they decided to plant quick-growing trees which should give them the shade in summer and yet allow the sunshine to creep into the house during the winter months. They planned for their seats and table, and placed the young trees accordingly.

When the new home was completed, the "housewarming" a thing of the past, and they had entertained their friends with both summer and winter picnics, they found that their home was considered quite unique and unusual. They had done their own landscape gardening—with the help of their pictures—and they had solved the indoor problems in the same spirit. They had to a large extent satisfied their desire to become out-of-door people in ways that would have astonished their great-grandparents of the indoor generation.
Our homes are places to live in, places away from other people where we as individuals can rest and grow and recuperate. These homes must be simple in character if they are to seem pleasant after the complex activities of the day’s work—everything in our rooms must be beautiful. We do all we can to make our rooms comfortable to our bodies. But these things must be comfortable to the eye. If the colors are inharmonious, if the lines of the room are distressing, if the room is poorly balanced, our eyes will register these things to our minds, and we will find our homes are restless, unhappy places. You cannot have harmony in your souls if you do not have it around you.

Before we take up this study of the dining room, I would like to say a few words about interior decoration in general. So many women who come into my studio start their conversation with the same sentence: “Oh, if I only had money I know I could make a lovely home. But to make an artistic room one must have a full pocketbook.” That is entirely false. Lack of money has never made a house common or ordinary; rather it has been too much money that has spoiled our homes. Our pocketbooks have been full enough to allow us to purchase things too quickly without time for thoughtful study of the purchase. Just furniture, no matter how beautiful, will not make your rooms attractive. Much more important than the actual pieces of furniture is your method of using them.

You may ask, “Isn’t the furnishing of my house a matter of the taste of my family?” To some extent this is true, but the furnishing of the home goes much deeper than that. Every interior that is satisfactory, and hence beautiful, is built up on principles and fundamental laws. Where do we get these laws? We use the same laws of order that govern the universe. Every blade of grass, every tiny flower, every towering tree, roots and sprouts and flowers according to law and order. When we build and plan our houses, we must fit them into this same scheme of order. If we do not do this, our homes are out of harmony with nature and so with us. Then everything goes wrong.

We all know that the environment of our family is of vital importance. The child’s first impressions are gained in the home. Are you giving your child the impression of honesty or of sham? Have you a sham fireplace, with artificial logs? Have you bouquets of sham flowers and sham fruits? Above all, is your house common? If you have a common house with furnishings like the rest of the houses in the block, can you expect your boy to love and cherish his house above all others? Why should he? It is just like that of everybody else.

You and your family are not like any family that has gone before you. Your children lead an entirely different life than the children of the past periods of art. So do not expect them to feel interested in their home if it is filled with furniture of past ages. You cannot surround a twentieth century boy with sixteenth century furniture and expect him to like it.

I receive in my work as consulting decorator many, many questions. Women come to me with questions regarding the plan for their furniture. They send me details of windows, doors and walls. They tell me what furniture they have that they would like to use in the new home, and then fail to give me any details of the family itself.

Note: This discussion of the dining room was broadcast over WLAG.
How can a mother expect to build an environment around her family if she forgets to consider the family first? It can't be done.

When you approach the matter of furnishing your dining room, ask yourself first, "What sort of room will be suitable for my family? What kind of husband and children have I? What are their habits and hobbies and what do they hope to be?" Too, can you afford to use your dining room for dining purposes only, or shall you use it other than meal time? If you need to use the room for sewing in the daytime and for the children's study in the evening, you may achieve a very charming room if you furnish it according to its use. I have seen delightful dining rooms that contained a small sewing stand and an open shelved bookcase. It was not so much what they used as how they used it.

There is a right and a wrong way to furnish a room, and happily the amount of money spent has nothing to do with the artistic results. Don't be one of the foolish wives that say, "Well, I know what I want in my house, and for me that's the right thing to have. No one is going to show me what to put in my house." If you do not know the laws of color, line and form that govern the growth of all nature about you, you cannot put your house in harmony with them. I cannot give you in this paper many of these fundamental laws and tell you how they affect the furnishing of your dining room, but I would like to give you a color chart to work with. If you have a paper and pencil handy make a color chart with me. Lay out first a six sided star form, or draw a circle and divide it into six parts. Beginning at the top and continuing around the star, name the various sections. Let the upper point represent red, the point to the left and lower is purple, the next blue, then green. The fifth point is yellow, the sixth is orange. There you have a complete color circle. On the left side of the star are the cool colors, blue, green and violet. On the right side of the star are the warm colors, red, yellow and orange. Certain nerves carry certain colors to the eye, and if you have a room with one color predominating, such as a blue dining room, the nerves carrying those colors are overworked and soon become overtired nerves. The quickest way to relieve this strain is to put into the room some of the complementary color. You will find this color opposite the color on the chart. If your room is blue, you have left out of your room the colors red and yellow, so you introduce a bit of orange, which is a combination of red and yellow. If you have a great deal of pink in your room, put in a bit of light green, for green is a combination of blue and yellow. You will find the complement of a color exactly opposite it on the star. If you have a blue dining room, put in an orange bowl, some soft orange linen on the table, and see if the room does not feel better to the eyes. You would not think of composing a piece of music in which you used a monotonous repetition of one note played over and over again. Do not compose a room in which a color note has been used monotonously over and over.
A dining room must be very cheerful in appearance. It is the room wherein we start the day. It is the room to which we return at the close of a busy day. A cheerful dining room will start the day right, its cheerfulness will chase away the gloom, and, truly, the cheerful atmosphere will aid digestion.

I hope none of my readers have in their dining rooms pictures of dead animals, ducks with lolling heads hung by the neck from some stout cord, or a gasping fish trying to escape from some fisherman's basket. Do you think these pictures are pleasant company while you are eating? Do you have a long sideboard filled with a goodly display of silver and glass, and yards of plate rails filled with the choicest plates—collecting dust? If you have, put the china away and clear the top of the sideboard. You would not think of building a set of rods on which you might hang your choice pieces of linen, and surely it is just as foolish to display your dishes.

But let us consider refurnishing and redecorating the dining room, even the walls and floor. We will take the floor first as the entire room is built upon the floor. Keep the floor dark in color. Then it will form a substantial base on which to place the furniture. If the floor is light in color the furniture seems to float on its surface. Let all the rugs and floor coverings be dark and warm in color. Everyone abhors cold feet and if you have cold colors on the floor you will instinctively feel that the floor is cold.

Let the walls of your room be much lighter in tone, and be sure to use a neutral color. The walls are the background of your room and if you use a color or pattern that attracts attention the walls will not remain a background. They will seem more important than the furniture. If you do not use a neutral or distance color, the walls will act as a cage around you.

If your room faces north, you must use a wall tone that has a touch of warm color in it, as the light that comes in the north windows is a cold blue light and actually changes the colors in the room, and makes them appear cooler.

Let your ceilings be very light in tone and cool in color. We want to keep a cool head. If warm colors are used on the ceiling, the room will seem suffocatingly hot.

If your dining room is small, it is a good plan to use a drop leaf table, as it is quickly made smaller when more space is needed. With this style of table I would suggest using the Windsor chairs. They do not need to be all the same style of Windsor. Perhaps father is twice as broad as mother; then surely he should have a larger chair than mother. Or perhaps the young man of the family has grown tall and husky with his athletic activities or his hours of farm work. Should he then use the same kind of a chair as his younger sister? The house will be home to them if it is a personal place, where individuals are considered not en masse but each for himself. Instead of a large sideboard that seems much too heavy for one side of a small dining room, use two smaller pieces of furniture at either side of the room. A small chest of drawers or a lowboy will serve very well as a place to keep your linens. On the other side of the room place a small cabinet. This cabinet will hold the large pieces of china and the silver. In two small drawers at the top you'll find room for the knives, forks and spoons. As these two pieces of furniture are wall pieces, to make them relate still further to the wall hang something on the wall above them. Above the chest of drawers hang a strip of gay cretonne. This is used in the manner of a piece of tapestry, but in a small dining room tapestry would appear too heavy and too dark in color. Over the silver cabinet hang a flower picture. In a small dining room this is sufficient furniture. Simplicity is the first requisite of a successful dining room, no matter what its size.

The window curtains in the room should be very simple and very cheerful in color.
or tone. If the pocketbook is limited, use the unbleached muslin for curtains. Use these as casement curtains and hang them on rings, so you may push them far back in the daytime and let in the glorious sunshine. Then in the evening they may be pulled together again. This eliminates the need of a window shade, and think how easily you may keep them clean. You paid good money to have windows put into your walls; do not pay out a great deal more for draping and redraping them. The simple curtains are always the best.

If you have a cottage home, do not use a glaring white china, and linen. Both are out of scale for a cottage, bungalow or country house. Use soft shades of linen, lovely warm grays finished with bands of fresh green, or a cloth of pale yellow linen with a band of lavender appliqué around the edge. For the china use the cream colored cottage ware, with an edge of blue or green, instead of the more common gold bands.

The lighting of the dining room is a rather difficult task. If you use the artificial electric candle fixture over the table, the table will not seem to have sufficient light, as the candles point away from the table toward the ceiling. I have found the most satisfactory light to be very inexpensive. Hang from the ceiling a heavy weight electric cord with socket and shade holder attached. For the shade use a plain undecorated parchment shade. If you wish to use some added color on the shade, paint a band of color around the top and bottom. Your shade is not a picture, and paintings of naturalistic birds and many colored flowers are out of place. See that the shade is hung low enough to shade the eyes of those seated at the table, and hung high enough that it will not obstruct the view across the table.

You will find that the dining room appears much more cheerful and refreshing if flowers and growing plants are used in the decoration. If you have a large low window or a bay window, you have a splendid place for an inside window box of flowers. Then you may have the cheer of fresh flowers all the year. The table setting never seems quite complete unless a flower appears there. In the winter a single geranium or a bowl of growing bulbs is interesting and attractive.

With the use of the color chart you may arrange some very distinctive and pleasing table decorations with simple materials. Remember that a color scheme is not complete unless you use a note of each of the three primary colors—red, blue and yellow. But if you have a spot of red and you wish to combine with that the two other colors, blue and yellow, you can use a bit of green, because blue and yellow when mixed together make green. You can make lovely color pictures on your table by correct combinations of color in the flowers, vase and linens.

In the spring when the purple iris blossom in the lowlands, gather a few for your table. Arrange them in a bowl of soft purple, and place them on a strip of yellow linen. This purple bowl may be used later in the season to hold a bunch of yellow nasturtiums. Can't you imagine the lovely picture made by a low bowl of yellow, filled with the purples and yellows of the velvety pansies? These little pictures of color are not hard to obtain if a little imagination is mixed with the study of the color chart. Place your flowers in a vase of complementary color, or let your vase and flowers be of the same color, and place them on a mat or strip of linen that is of a complementary color.

Try to change the little things in your dining room from time to time. This will keep the room from being monotonous and uninteresting. In the summer time change the strip of cretonne on the wall, using a piece with many cool colors in it. Keep your table linens cool and fresh in color. Then when winter comes, change back again to the warmer tones. In that way
you obtain variety, and variety is the spice of life.

But more important than these material things is the atmosphere of your rooms. Your home is your life and ideals written in walls and floors and ceiling. It must express you, and not the size of your pocketbook. You are a product of nature, and if you wish to live in harmony with the world about you you must tune in your surroundings to the laws of nature. Let your rooms embody pleasing proportions, beauty in line and form, harmony and simplicity. For without these things we cannot live harmonious, simple lives, that give us time for great thoughts and upward growth.

The Enclosed Porch
Wilbur Graham

The porch as developed in the modern American home is essentially the product of the colder temperate regions. The seats of ancient civilization were semi-tropical—the valleys of the Nile and the Euphrates, India, Greece, Italy. The civilizations of more northern Europe, from which we drew our early inspiration for building, craved protection in the building of their homes. Building houses for outdoor living during part of the year is essentially American. We have found it necessary to almost coin words to express these open spaces in our houses.

Porches, verandas, portico, piazza—what do the words themselves mean, and what do we intend them to mean when we use them? More often we speak of our porches, meaning great, open rooms with wide openings on two or three sides. We speak of verandas, which extend around three sides of a house sometimes, or of going out onto the
piazza. We use all of the terms quite loosely because closer meanings have not yet become fixed.

Porch is an old word. The great churches all through the Gothic period had porches—little covered ways into the churches, or entrances. Portico is perhaps an even older word. The ancient Greek buildings had porticos—covered colonnades often entirely around the more sacred parts of the temples; covered and colonnaded walks leading to or about the building. Early American houses, which we call Colonial, had porticos—small entrance porches, usually nearly square and generally with two disengaged columns. Sometimes these porticos were rounded or semi-circular, but they were simply entrances to the buildings. There are no indications that they were used in the early days as sitting places.

A veranda, according to the dictionary definition, is a balcony or open portico with a roof—that is, a covered colonnade.

A balcony we find is defined as a platform or gallery outside of windows, usually with the idea of elevation; also applied to elevated floors in large buildings. All of these words imply narrow space. Gallery is defined as a long passage, surrounded by railing.

Stoop, a term used more in the southern parts of the country, perhaps, is defined as a porch with a balustrade and seats on the sides, with or without a roof. In American building the stoop is more often hooded, with a projecting bit of roof, as an entrance in this country requires a protective covering.

Of all these words piazza is the only one which signifies space. It was not, however, originally part of a building, but an open square or space surrounded by buildings. In an Italian city the "Piazza," spelled like our word, is usually an open square of the city, used as we use a park, or as a gathering place for the townspeople. Our anglicized word is given as a walk under a roof supported by pillars, which brings us back again to porch or veranda as synonyms.

A terrace, on the other hand, is an open, uncovered space, originally a bank of earth, or any raised flat place. It may be on a roof, or an open balcony.

In our American houses open living
rooms or porches were first added, and later these were glazed, or enclosed in some way, and we have come to call them sun rooms, dining porches, sleeping porches, according to the uses to be made of them. There are as many ways of glazing the porches as there are of making the windows of the house. At first storm sash were set in the openings during the colder season and removed in summer. But the coming of cold days at any time of year, and the difficulty in protecting the furnishings of open porches from the sudden showers that are not infrequent in summer, and the storms early and late in the season, have all tended to encourage a permanent enclosure of the porches.

A very usual way of enclosing the porch is with casement sash. This permits of less woodwork between the windows than where a window box for weights is required, as with sliding double hung windows. Practically all woodwork may indeed be eliminated and the whole space opened. Casement sash permit the whole space of each window to be opened instead of a maximum of half the space as with sliding sash. An out-swinging casement may easily be made tight against the weather, and may be fastened when opened so as not to swing in the wind with danger of breakage.

The same type of window which is used in the rest of the house is often insisted upon for the porch. Swinging sash are sometimes made the same general type as the double hung windows of the house, with the glass cut as in the single windows. This keeps a uniformity between the porch windows and those of the living rooms, even though they are different in type. The enclosed porch really becomes an integral part of the house at any season of the year.

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**THE FOREST**

Evelyn M. Watson

Through bushy thickets, tangled with vines, I pass,
Into embracing shadows of softly-lighted
And earthy-scented woods; I come among
The lofty, heaven-reaching trees (as if
In prayer the arms were lifted high). And there
In living silences I understand
'A little of the forest of human thought,
And glory where I cannot comprehend.
In leafy dim I see a flash, a flame,
Of vivid colors, and hear a lilting song,
Magic and beautiful—Who cares
To understand the beauty that breaks
The prison bars of time and sets the spirit
To soar through Eternities of Being.
How Will You Build Your Home?

Two plans for the same exterior show what latitude may be taken in the planning of a house.

The living and dining space may be one room or two rooms, as the family decides.
A STUCCO HOUSE WITH A TOUCH OF COLOR IN THE BRICKWORK OF THE CHIMNEY AND THE BLINDS ON THE UPPER WINDOWS. THE EFFICIENTLY PLANNED HOUSE APPROXIMATES TO THE SQUARE FORM WITH THE MINIMUM OF PROJECTIONS, AND FULL UTILIZATION OF THE SPACE ENCLOSED WITHIN THE FOUR WALLS AND ROOF.
AN ECONOMICAL AND ATTRACTIVE 2-FAMILY DWELLING. IT IS FRAME CONSTRUCTION WITH WIDE CLAPBOARDS, OF A MODIFIED COLONIAL, IN TYPE. THE BATHROOMS AND CHIMNEYS ARE PLACED AND BUILT TOGETHER IN THE DOUBLE ARRANGEMENT TO A CONSIDERABLE ADVANTAGE IN COST. A MORE CENTRAL LOCATION FOR THE BATHROOMS BETWEEN THE BEDROOMS WOULD REQUIRE A GROUP OF HIGH WINDOWS AS IN THE HOUSE PHOTOGRAPHED.
A STUCCO HOUSE PLANNED ON MORE SPACIOUS LINES THAN THE MINIMUM SMALL REQUIREMENTS IS A SATISFACTORY HOME. QUITE MODERATE SIZED ROOMS AND PLENTY OF THEM ARE A LUXURY, AFTER THE EXTREME COMPACTNESS OF THE TINY APARTMENT WHERE EACH ROOM IS EXPECTED TO SERVE A DOUBLE PURPOSE AND TO BE IN CONSTANT SERVICE. NEW HOME OWNERS ARE FINDING GREAT SATISFACTION IN BEING AT HOME AGAIN.
A BUNGALOW HOME WITH GOOD ROOM ARRANGEMENT AND EXCELLENT COMMUNICATION BETWEEN THE ROOMS BUT WITHOUT WASTE SPACE USED FOR PASSAGeways. THE SUN ROOM GETS BREEZE AND SUNSHINE ON THREE SIDES.
A HOME WITH A LIBRARY OR "MAN'S ROOM" STANDING BESIDE THE ENTRANCE AND COMPLETELY SEPARATED FROM THE REST OF THE HOUSE. "MADAME" CAN NOT UNINTENTIONALLY APPROPRIATE A ROOM SO PLACED EXCEPT AS SHE USES IT FOR A CHANCE CALLER. FRENCH DOORS BETWEEN IT AND LIVING ROOM WOULD CONVERT IT INTO A FAMILY ROOM.
Decoration and Furnishing
Virginia Robie, Editor
Fall House Furnishings

The revival of pictorial wall paper makes possible many new effects

In all house furnishings, whether for city or country, the relation between walls, draperies and furniture should be carefully maintained. The problem of the town house is quite different from that of the country, but it is the same so far as this important point is concerned. No matter how simple the wall treatment, or how inexpensive the furnishings, certain principles cannot be disregarded. Equally important with simplicity are durability, color, utility and repose. Few rooms rise to such heights as to embrace all these points, but three at least—simplicity, utility and repose—ought to be within the grasp of every householder. So closely allied to simplicity and utility is durability that this important factor is often included in the others.

It is customary to think of proportion as belonging exclusively to the architecture of a house. Proportion is the very life of good decoration and furnishing. It may be expressed quite as much in a wallpaper pattern, and in the legs of a table, as in a fireplace or a ceiling. Even a candlestick on the mantel, or an electric light fixture on the wall, may express its presence or its absence. Mrs. Wharton has defined proportion as the good breeding of architecture. It might also be called the good breeding of house furnishing.

By proportion in furnishing is meant the balance of light and shade, the contrast of plain and ornamental surfaces, and the correct adjustment of the large and important things with the small and
unimportant. Proportion, simplicity and harmony are the A B C of the decorator's alphabet. The natural sequence is first the wall treatment, second the selection of floor coverings, and third the furniture. When the matter can be approached in this manner, the possibilities of success are greater than when the order is reversed.

Strength, simplicity and durability are kindred qualities never better expressed than in the well-made furniture of the day. The householder of the year 1923 has not only the assistance of the architect in helping him to begin right, but the aid of the furniture-maker in continuing the good work. Never was greater care expended in the selection and treatment of woods than today. The seasoning of both imported and domestic woods has been reduced to a science. Good design, skilled labor, and fine workmanship are represented in the best furniture. Therefore, when a selection is made for the town living room or dining room the buyer may feel assured that his fumed or weathered oak, or his new colonial mahogany, will not warp or fall apart, that it will be as good fifteen years from now as today, and that it typifies the best of modern work. We do not claim this for all furniture. Poor work still exists, but its proportion is far smaller. People are realizing that the furniture of their homes is an investment, and that whether the expenditure be large or small it is false economy to buy shoddy things. Supply and demand have regulated this matter, and the result is an awakening on the part of both the consumer and the maker that the best is economy in the end.

The furnishing of a city house, therefore, becomes an agreeable undertaking—not all plain sailing, as personal responsibility is never absent. No matter how well the architect, the wallpaper manufacturer, and the furniture maker have done their part, the choosing, massing and grouping belong to the occupants. No house is successful unless it expresses the personality of the people who live within,—their tastes, likes, dislikes and hobbies. It is in this grouping and arranging that many people succeed, and it is also true that in this very arranging many fail.

For several reasons it is easier to fur-

A simple Japanese screen
nish a country house than a city one. There is, in the first place, more space, and the very atmosphere of the country is itself an inspiration. With all outdoors for a background, it is not difficult to choose suitable color schemes, and the amateur decorator is further aided by innumerable attractive wallpapers and stuffs especially designed for country houses. The dust of the city does not have to be reckoned with and this, in itself, is enough to make beautiful the simplest cottage. Space, sunlight and freedom from dirt—what a trio! The city house, no matter how desirably it may be located, can seldom lay claim to all three, though space and sunlight are receiving more consideration than formerly. In the up-to-date city house, particularly if it be a detached dwelling, many of the principles which govern country house building are in evidence. But the average urban house is not of this type. It is in a block, and unless located on a corner, has but two exposures. The sunlight of the country it cannot have; therefore all the more necessary that it should receive a decorative treatment based on this fact.

As country interiors should suggest cool, summery things, so those of the city should express warmth, cheer, and coziness. To give these rooms such characteristics and not have them stuffy and overdone is no slight matter. Warm colors seem heavier than cool colors, and far more dense. It is of the greatest importance, therefore, that color schemes for rooms occupied in the winter should be carefully chosen. In a climate where there is a great deal of snow, wall coverings may be darker than where there is little or no snow. Where there is a great

Courtesy Porteous, Mitchell & Braun

Living room showing the dining room beyond
deal of smoke, soot and dirt, dark colors should never be used. The English realize this better than we do, for with us the tendency is to choose a color “that will not show the dirt,” regardless of the fact that it makes a room gloomy. In many London houses light tones are used exclusively, pale yellows, buffs, warm grays, even white, all of which are chosen for the dark days of the London winter. American housekeepers would doubtless protest at the added trouble involved by such color schemes, but there is a good deal of wisdom back of the choice.

A noted Irish lecturer visiting America, complained that next to steam heat, which he spoke of almost with tears, he suffered most from a lack of sunshine in the homes. As his lecture was confined exclusively to the large cities, his criticisms were based on town houses.

The dense greens and reds once favored are seldom seen today in city living rooms. The reaction against the poor-figured papers of that date resulted in a great demand for plain papers. In the selection of dark green for the living room and deep red for the dining room, green was chosen because it was believed to be restful, and the other because it was supposed to be cheerful. The reaction against dense green began in the schoolrooms. It was found that it was fatiguing for both teacher and pupils—that its effect was quite the opposite of restful. A softer green replaced it with results which more than justified the change. It is now difficult to find this dense green, for few wallpaper dealers carry it. They tell you that there is no longer a call for it, taking down from their shelves such a variety of livable greens and browns that choice is a pleasure.

Interesting old design—reproduced in modern mirror

In addition to the many attractive papers, are many other wall coverings the relative merits of which should be carefully weighed before purchasing. Among the many beautiful and durable wall fabrics are corduro-burlaps, Fab-ri-ko-na, Tapestrolea, Art ko-na, Sciotia Canvas, grass cloth and Canterbury cloth.

When a plain wall is desired calcimine and alabastine should not be overlooked. Many beautiful tones are possible in these mediums, and far better an inexpensive wall treatment if the color is satisfactory.
than the most costly textile if it is the least bit out of key.

Many of the new papers and wall fabrics are of charming grayish-browns and brownish-grays, harmonizing with the popular wood stains of the day. Others are based on autumnal color schemes and show a wide range of warm browns, luminous greens, and soft, rich tones which suggest ripe fruit—pomegranate and apricot shades, and soft tender purples. The variety is almost endless, and if combined with the right surroundings their possibilities are many. Also in the revival of pictorial wallpaper many charming designs are at our command.

Owing to the marked improvement in the treatment of woodwork, it is possible to use many colors in our houses which would not have been permissible a few years ago. Wood staining is so varied, and there are so many beautiful browns, grays and greens, that it is easy with a little care to obtain a fine harmony between walls, trim, and furniture. Beautiful shades of gray, just tinged with brown, combine with the many wall hangings.

Among shades in wood staining is "bog" oak, a soft green which would be charming in the city living room, particularly if the furniture were stained to harmonize. The variety in oak stains alone is considerable, including the well known "weathered," "Flemish," "Antwerp," "fumed," "Cathedral" and "tavern." These may be used on other woods than oak. Birch takes many stains with excellent results. Pine has beauties which are unknown to those who associate it only with the common "hard oil and varnish" finish. A satisfactory town living room is not difficult to attain, for in wall coverings, rugs, furniture and curtain materials, there were never better things than today.

Paint as a medium enjoys popularity. Much depends on the style of house under consideration whether paint or stain be chosen. With white paint, colonial furniture and a figured paper, one type of interior is secured. With stained woodwork, oak or walnut furniture, and a plain wall treatment, a different effect is obtained. Not only is the style of house to be taken into account, but household possessions, acquired by purchase or inheritance, must be reckoned with from the first hour of planning.

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Questions

L. P.—1. In a new house, how should the plaster be finished for decorating? 2. Is it advisable to wait a year for plaster to dry before the walls are decorated? 3. What is meant by “a neutral tone”?

Ans.—If you intend to “tint” or “wash” the walls, then what is called a sand finish is softer in effect than hard plaster. If the walls are to be painted with oil paint, then a hard plaster finish is best. 2. If the house has a good foundation, and is a well-built house, it should not “settle” nor the walls crack. Very few people wait a year before decorating. However, a house really is very pretty with the new, undecorated plaster. 3. “Neutral tones” are shades of gray, buff, tan or ecru, cream, etc.

A Large Commodious House

P. E. S.—I have been an interested reader of your magazine for some time, but more so since we planned to redecorate and remodel our home. Am enclosing a rough sketch of the floor plan of our bungalow, which faces the west. It is of maroon rough brick with white trimmings. A long porch extends the full width across the front. Though the house is new, we wish to make some changes and wish your good advice on several points.

The house consists of living-room, dining room, kitchen, small breakfast-room, two bedrooms, bathroom and small hall downstairs and a large room upstairs which hasn’t been completed. At present the woodwork in the living- and dining-rooms is oak and we wish to change this to ivory, with mahogany doors. In the living-room there are French doors to the dining-room, one outside door and one closet door opposite this. Should all of these doors be mahogany? The living-room is 26 ft. by 14 ft., and we have in mind one long 9 by 21 rich taupe chenille rug for this room. The davenport and two chairs are tapestry in black background with soft grays, blues and tans, but we intend to have these recovered in plain taupe mohair. Do you think this will make the room look too plain? I like plain rich things and it seems that you can get color by using bright colored vases, lamps, books and silk pillows. The spinet desk, console table and mirror, small davenport, table and one rocker are Italian walnut. The piano (given us or rather handed down) is of some dark wood, but matches well enough until we can get a small baby grand. The fireplace is red brick and we wished to rebuild it of a tan brick with part ivory wood and build in bookcases at the sides. What do you think of such a plan? Would you have the shelves open or with doors? This ivory woodwork would lighten the room, which at present is rather dark. What paper would you suggest for this room and should it be the same in the dining-room, since these rooms are so
Going to open into each other? I like a plain fawn-colored paper. Would gold silk shades on the wall lights look well with this color scheme? I thought of pongee with long silk fringe for the drapes for the living-room. If you agree with this idea, what sort of rich valance could I use?

The dining-room has just the north windows. The rug is a plain rich delft blue and the furniture—a long buffet, dining table and six chairs (blue hair cloth seats to match)—is Queen Anne brown mahogany. Would you use the same drapes as the living-room? Would blue silk shades for the wall lights in this room be too much blue?

I love my little kitchen for it has just recently been redecorated in all white enamel and yellow walls with dainty blue stencil.

One bedroom has an east and a south window, the other just two south windows. What color schemes would you suggest? We have Circassian walnut in one and ivory in the other. The woodwork in these rooms is white enamel, and floors are varnished pine.

What color scheme would you suggest for the little breakfast-room, which is really only a little Pullman—plenty of room for two. We have had it finished in ivory and blue, but rather fancy more dashing colors for such nooks.

The upstairs room we are soon to complete, but have no very good ideas of how to finish it. It is a lovely room, 26 ft. by about 9 ft. with three south and three north windows. Could you suggest anything different?

Ans.—Your floor plan shows a large, commodious house, worth spending some money on, and, of course, it will take some money to refinish all that woodwork and rebuild the fireplace. But it will be a beautiful home. With the lovely Italian furniture, we should refinish the two doors in a walnut stain rather than mahogany, and besides it is very hard to finish oak like mahogany. The French doors into dining-room should be ivory, same as the other woodwork. Also, the new fireplace mantel must be ivory. However, the glass sash of the French doors and of the bookcase doors (if you have

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them) may be stained walnut like the two other doors. In fact, the effect would be good, as just the two doors alone might seem patchy. We suggest gray brick rather than tan, and a tapestry paper for the wall in a conventional design, gray on an ivory ground. The one big taupe gray rug will be fine. As to the plain gray mohair furniture coverings, that will be good for the davenport, and for the two chairs we suggest using the same plain gray for the backs and sides (outsides), but large, bright flowers in rose, lavender and blue on the gray ground, for the inside, seats and backs and sides. This method of introducing color with a general plain color scheme is much used. We would not use pongee, which has rather a tan color tone, with these grays, for curtains, but either oyster white casement cloth or silk, finishing the edges with narrow silk fringe. If you have lambrequins, let them be plain, no fullness, the lower edge curved, preferably of brocade, rose and gold, with gold fringe on the lower edge. You can then use your gold shades on the light fixtures. On the plain taupe davenport, have a roll, and a couple end pillows of the figured furniture covering. The brown mahogany dining-room furniture will be lovely with ivory woodwork. The wall need not be the same as living-room. We should like a deep ivory grasscloth, with pale ivory-tinted ceiling. The blue rug and chairs are fine, but the windows should have curtains of gold silk or Sunfast. For the fine room on the second floor, we suggest painting the woodwork a French gray, with wall a shade lighter. Then have furniture painted a bluish green with decorative panels of gay flowers on a gray ground. Paint the floor a dark, rich water green, and use blue and green rugs on it. Have bedspread and window drapes of sage green poplin, with frills of pink silk set underneath the edges, and showing about 2 or 3 inches. Veil the windows with sheer voile, in a gray and white stripe. The blue and white breakfast room can be brightened up with blue, yellow and green furniture, and curtains of blue and yellow Japanese crepe.
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CHICAGO
Here is always a minimum cost for food for any family below which one cannot go without danger to health. Such a minimum food budget is not one that is satisfactory enough in variety to be adopted by any except those so pressed for money that its use is essential in order to live. As we come up the scale in variety and quality we find many families who “set a good table” as the saying goes, on the same money that for another family “sets a poor one.” This is usually a matter of good and poor management provided there is equal skill in cooking food.

While there are a great many factors which enter into the cost of food which are not under the control of the home-maker, there are also many which if she recognizes them, can help her materially in reducing costs without lowering the standard of the food she serves.

Know What Your Food Costs

It is very difficult to keep down the cost of food intelligently if one does not know actual costs. It is obvious that if accounts are kept at all the total food cost will be known but this is not sufficient to enable the home-maker to plan and buy intelligently. She must also be prepared to know costs of the different types of food she buys and to some extent have access to the cost of the individual items. To know these things necessitates arranging the accounts so that the details of food costs may be ascertained. The following method of dividing the food items has been found satisfactory by many:

<table>
<thead>
<tr>
<th></th>
<th>Milk, Cream</th>
<th>Butter, Eggs, Cheese</th>
<th>Meat, Fish, Vegetables</th>
<th>General Groceries</th>
<th>Meals Out</th>
</tr>
</thead>
</table>

Ice is sometimes included under food in determining cost or it may be kept under operating costs. Where ice cream is purchased it should be included under milk and cream.

If food is recorded under these headings it is possible to keep the cost of a good many separate items such as butter, milk, eggs, etc., without much space or trouble, but to keep track of the dry groceries, the different cuts of meat and other items usually requires either a large amount of space in the account books—more space than it is usually convenient to give—or some other device. A very satisfactory plan is to take a good sized piece of stiff paper that could be tacked up in the kitchen if desired and mark it off so that the cost of certain items throughout each month of the year may be recorded and watched. The items included on the card would be those which
are most likely to change prices or in which there is apt to be variation in prices from different stores. Each housekeeper's card will vary but the general plan will be something like this.

<table>
<thead>
<tr>
<th>Food</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar</td>
<td>8 lbs.—$1.00</td>
<td>10 lbs.—$1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flour</td>
<td>48 lbs.—$1.55</td>
<td>48 lbs.—$1.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lettuce</td>
<td>.25</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There are many items which are purchased only occasionally and so rarely vary in price that it would not be necessary to include them on this list. A sheet like this makes it possible to determine at a glance what one has been accustomed to paying and whether an advertised product is really listed at an advantage in price. It also gradually makes the homemaker familiar with the range of prices through the year and if the sheets for each year are kept comparisons can be made which tell one whether the change in the cost of food in the home is due to increase in prices or to a matter of management. By knowing the range of prices through the year the homemaker can plan meals much more economically because she will know when foods have their maximum season and hence their lowest cost.

Substituting One Food for Another

One food may be substituted for another as a means of keeping food costs low. Housekeepers often get into a rut in the use of certain foods and fail to avail themselves of the opportunity of keeping costs low by substituting some of the cheaper foods occasionally for more expensive ones, which plan at the same time gives a chance for variety.

The following points in the substitution of foods offer some suggestions which will affect the cost of food.

1—In purchasing fruits and vegetables their price per pound must be considered in relation to the amount of waste in estimating their actual cost.

2—Fruits and vegetables so far as nutrition is concerned are largely interchangeable, hence when fruits are high more vegetables may be served.

3—In localities where fruits are very scarce and very high the use of dried

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fruits is often a great economy. These can be prepared in ways to make them most appetizing. Dried fruit is not always cheaper, however, if the locality produces much fruit and it is purchased when in season.

4—“Putting down eggs” at the time when they are plentiful is an effective way of reducing the yearly cost of eggs and at the same time continuing to use them in the preparation of food where they help to maintain a good standard.

5—The increased use of cheese dishes to lower the meat cost is a satisfactory substitution if the meals are carefully planned.

6—Effort to prepare appetizingly the less expensive cuts of meat is an effective means of keeping down costs. This means, however, that the home-maker must make a study of the cuts of meat to be able to buy the cheaper cuts intelligently. The cuts which are common knowledge are usually the more expensive ones.

7—Unless the consideration of fuel and time is important the use of uncooked cereal regularly and the ready to serve one simply for variety will be cheaper than the predominating use of ready prepared cereals.

8—Considering the composition of food will help to reduce the amount of fat used.

For example, when making a cheese soufflé or any other cheese dish, a very small amount of fat or none may be used for cheese is one-third fat, and butterfat.

In the same way when cooking meat which contains fat it is most extravagant to add butter when serving unless food cost is no item. A small amount of the fat from the steak for instance will give the fat flavor desired. Yet it is surprising how many people butter a steak!

9—The use of the fat which comes from meat and is not consumed with it is one of the ways to see real saving, for where baking is done at home, practically all of the tried out fat can be successfully used.

10—The use of fresh fruit, which is enjoyed without extra sugar, is often an economy, for there are cheaper ways of securing food than through the increased use of sugar.

11—Syrups are rarely as cheap as sugar for seasoning unless they can be bought in large quantities and used before they deteriorate.

Lowering the cost of food or preventing its rising means everlasting vigilance on the part of the home-maker. It means skill in producing food which is not rich in expensive ingredients, yet good. It means keeping track of the cost of food with great care, it means securing as fast as possible a general knowledge of the composition of food in order to be able to substitute one food for another intelligently and it means also a knowledge of marketing points which is so large a subject as to require discussion of it alone.
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As for all other parts of the home, the same motive which influences the choice of furnishings and decorations should govern the selection of lighting equipment for the living room. The problem in selecting the equipment is to find luminaries which will harmonize with the architecture and furnishings, perhaps of period design, and at the same time provide pleasing and satisfactory lighting effects. It is impossible to overstate the value of the effects which may be obtained by illumination as a decorative medium. By the use of tinted lamps on different switches, one may, in a moment, literally transform the drapery and furnishing which permanently adorn the room. This mobility of light, effected as if by magic, may be controlled to cater to the moods of the occupants, whether it be for occasions serious or of a lighter vein. Illumination, therefore, by virtue of its ready application takes a pre-eminent position in the rank of decorative mediums.

Light as a Decoration
Supplementing general effect, one may use light merely for ornament—to provide a colorful spot on the mantel, to give life to a choice work of art, or to provide the long restful shadows suggestive of a peaceful eventide.

The cost for operating electric ornaments of this kind will amount to no more than the interest on the investment in a picture, vase, or bit of drapery, while the decorative possibilities are infinitely greater.

A new fixture of the semi-indirect type, which possesses merit for general lighting, is one utilizing several small semi-indirect reflectors instead of one large bowl. It is made in various period designs and has a grace that makes it distinctive in comparison to the many massive semi-indirect fixtures on the market. A unique method of support for the glassware in this fixture permits it to be removed as easily as a plate is lifted from a shelf. With the glass removed, the lamp also becomes very easily accessible. This unit is especially adapted to the changing of lamps to obtain various color tones for the creation of atmosphere in the room.

Portable Lamps
Light sources possessing the attribute of portability offer a distinct advantage over all permanently installed units. The variety and flexibility afforded by the use of portable lamps, while of distinct benefit in many other rooms in the home, are especially desirable in the living room.

Convenience outlets should be provided in such numbers that portables may be used in any desired portion of the room. The circuit for these outlets may be connected through a switch as a greater convenience in operating the various lamps.
together rather than separately. The three-way circuit, providing a switch at two entrances instead of only one, eliminates the necessity for crossing the room when it is desired to turn on or to turn off the lamps.

Electrical receptacles for movable mantel lamps may be made inconspicuous by setting them into the top of the shelf, providing the construction of the shelf permits such location.

Portable lamps permit of both local and general lighting to the extent that the ceiling fixture may sometimes be omitted. Anticipating the desires of a possible future tenant, a building plan contemplating this omission should, however, include the wiring and switch for this fixture, with the wires concealed.

There are types of portable lamps which are especially adapted for floor or table use where the ceiling fixture is omitted. They employ an inverted reflector to provide a strong upward light for general illumination such as is almost a necessity for entertaining. At cards, for instance, an ordinary portable lamp will, at its best, accommodate only one table of players, but for large groups more light may be obtained from one of these specially designed lamps.

One variety of this type has a translucent bowl using a 150-watt bowl enamelled lamp. Downward light for reading, sewing and the like, coming from the bowl, is quite free from glare, and there is also added a soft light reflected from the ceiling. Another variety of wide application has an opaque reflector pointing upward and additional lamps on a separate circuit which furnish ample downward illumination for reading, sewing, and similar occupations.

A good practical reading lamp should be part of the equipment of every living room. Slender standards of wood or metal supporting a shade of silk or parchment, or one of dense glass or even metal are readily available. It is desirable that the shade be adjustable so that the light can be effectively directed to the printed page, fancy work, or sewing. No matter how dense the shade or how effectively the lamp filament may be concealed from direct view, soft light can be obtained only by using a lamp with diffusing bulb or by employing some other means of diffusing the light: this eliminates dazzling reflections from glossy paper and similar material. Diffusing bulbs have the additional advantage in all portable lamps that they tend to “wash out” the annoying shadow cast by the fringe of the shade and they also soften the shadow from one’s pen or pencil when writing.

Table portables, like all other lighting equipment, should be selected only after seeing what lighting effects they produce,
with particular attention to form of shade and height of stand, which control the brightness and the spread of light. Greater height of stand is necessary to increase the lighted area beyond the table. Where the design of the portable has not had careful consideration a person reading beside the table is likely to be in shadow and in order to be able to read well, it may be necessary for him to assume an uncomfortable position with the book flat on the table so as to place it within the circle of light.

The sketch, although it may seem like a gross exaggeration, portrays a condition existing in many homes. It will be noted that with the book laid flat on the table, the distressing sheen or glare from the glossy pages is reflected directly into the eyes.

Ceiling Fixtures and Wall Brackets

For the living room types in ceiling fixtures are somewhat similar to those for the dining room, discussed in a previous article, although the former afford a wider scope for artistic design. Candle-fixtures, indirect units, semi-indirect bowls, and showers represent the most general types. The principles brought out concerning these fixtures for the dining room apply in the living room, except that concentrated light directly beneath the fixture is not necessary and, in fact, is not often desired.

Wall brackets, especially in the living room, are used largely for decoration. They are in fact adapted to this use alone and the attempt should rarely be made to utilize them for general illumination because, unless glaring, they give little light, and the number required would prohibit their use for this purpose. Opal glass, silk and parchment, and diffusing bulb lamps, rank among the best means of controlling the brightness of the unit, of shading the light source, and of producing comfortable lighting.

Crystal Fixtures

Crystal fixtures or chandeliers, with their numerous ornaments of sparkling glass are especially adapted to the large and more formal drawing room. Their chief characteristic is a sparkle and brilliancy that is particularly appropriate for an evening of entertainment and social functions.

Wherever the crystal fixture is used it should be supplemented by portable table lamps, floor lamps, and wall brackets, preferably with shades having warm color tones to supply the pleasing light that one enjoys during the quiet evenings when the brilliancy from the crystal fixture is not desired.

As a result of the effort to enhance the appearance of fixtures by day and to shade the lamps sufficiently to make them free from glare by night, many lighting units fail to supply adequate illumination. Fixtures are designed to combine decorative appearance with the same high efficiency in lighting that would be obtained from a purely utilitarian fixture under the cover of a shade of some kind.

Such units possess the advantage that the illumination is very little affected by the type of shade employed, and the greatest freedom in individual taste may therefore be exercised.
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GENERAL ELECTRIC
Resistant Materials

Fire Protection Around Stoves and Heating Apparatus

The necessity for protection around the usual heating apparatus in the house cannot be too strongly stressed, either in new buildings or in those already built, if we are to get away from unnecessary fire hazards in our houses, increased during the winter months. Certain precautions for safety may easily be taken in building the new house in the placing and construction of the heating plant in the basement and the range in the kitchen. For the house already built, in preparing for the winter season the householder should make a careful inspection of his heating plant and flues, and see that everything is in proper condition. The heating plant in the basement is usually set on a concrete floor but, especially in older houses, it is sometimes so set that a long smoke pipe is required to connect it with the chimney, and this may even extend through a partition—combustible or otherwise. Equal attention should be given to the kitchen range; whether wood or coal are used, or gas or kerosene is the fuel with which the cooking is done, the flues and vents should be looked over and put into good condition.

The Portland Cement Association has lately issued a Recommended Building Code, for cities with population from 25,000 to 150,000, in the interest of better and more fire safe construction. This code is confined to fundamental requirements, avoiding unnecessary details and using authoritative data as far as such have already been compiled and are available.

Many of the provisions of this code cover points which the householder should look over carefully in his own home at this season of the year. It recommends that a fireproof floor, projecting two feet on all sides, be provided for every coal, wood, or gas range which is more than 16 square feet in horizontal area—or which has a flame at the bottom. Smaller stoves and ranges, and those not having a flame at the bottom should be raised 6 inches if placed on a combustible floor, and such floor shall be protected with a stove board of sheet metal or asbestos. This applies also to heating apparatus placed in the room it is designed to heat.

The boiler or furnace should be placed not less than 24 inches from any non-fireproof wall, partition or ceiling that is unprotected, but if the wall or ceiling is covered with ¼ inch asbestos board or equivalent fire protection, the distance may be reduced to 12 inches. Ranges should be set not less than 6 inches from a combustible wall, and then only when so protected.

This ruling for the heating plant applies equally to the ceiling. The top of every boiler or furnace should be covered with asbestos, sand, or other heat-resisting material, otherwise the ceiling should be even higher.
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Smoke Pipes

It is only through faulty design that a smoke pipe should pass through a partition of any kind. Heating or cooking apparatus should be placed near the chimney. According to the recommended requirements a smoke pipe passing through a non-fireproof partition should be encased with incombustible material at least 4 inches thick, or with a double safety thimble with an inch air space between the two concentric rings of sheet metal with an outer covering of not less than ⅛ inch asbestos. A note states that the double thimble is of no value unless kept free from dirt, that the best protection is a casing of solid masonry with ⅛ inch space between masonry and pipe.

Steam Pipes

Steam pipes should not be placed within an inch of any woodwork. Passing through a partition or ceiling, steam pipes should be protected by a metal tube 1 inch larger in diameter than the pipe, and provided with a metal cap. A note states that a careful investigation has shown that steam pipes in contact with wood or similar material form a real fire hazard; that cases are on record where steam pipes have gradually caused the formation of charcoal and that eventually fire has resulted in some cases.

Hot Air Pipes

Where hot air pipes are placed in a narrow partition it is recommended that metal lath be used over the pipes. Such pipes contained in or passing through a combustible partition or floor should be placed inside another pipe arranged to maintain ¼ inch air space between the two pipes, or the pipe should be covered with ¼ inch corrugated asbestos. Register boxes should be of metal and should either be double or covered with ⅛ inch asbestos.

Chimney

No wood should be built into or shall be in contact with any chimney. A chimney should be built up from a foundation and should not in any case rest upon wood. A flue lining should not be less than ¾ inch thick and should extend from the lowest opening to the top of the chimney.

Defective Flues

Statistics tend to show that the great majority of fires are caused by defective flues. These defects usually take the form of cracked or dislodged bricks or the dislodgment of mortar from between the bricks. Careful, minute examination will usually reveal these defects. With a trowel and a small pail of mortar it becomes a small matter to reset the loose brick or to fill the crack. A mixture of one part cement to three parts screened sand is splendid for this purpose. In looking for defects one should examine particularly those parts where the chimney and the roof come together.

Chimneys should be cleaned of soot before time to begin fires. The clinging soot is apt to catch fire and may bring trouble, particularly on those windy days when the fires are first started and there is a strong upward draught. A chimney free of soot not only renders the hazard of fire much less but it enables stoves and furnaces to draw more evenly and thus furnish a more satisfactory degree of heat.

A New White Paint or Stain

To get a true flat white for exterior work, with a good covering capacity, at a not excessive cost has been one of the problems of the paint manufacturers. What is claimed to be an entirely new product, a double-white, has lately been placed on the market, with a new combination of pigments and fixatives; the result of long scientific research, exhaustive laboratory experiments and exposure tests, in order to obtain a solution of this problem. White lead and oil has always been the standard of comparison; the new product seems to show many points of advantage over this age-old standard. To get a whiter white, to get perfect filling and adhesive qualities, to make a free-flowing coat of maximum spreading power and ease of application, together with a good texture—these were the conditions of the problem set before the laboratories. It is claimed the hiding power of the new product is such that two coats are sufficient, having the covering capacity of three of older products, thereby making a saving in materials and labor of one coat. It is so much whiter that ordinary paint looks yellowish beside it. It has no gloss, does not look “painty,” shows no brush marks, and makes a waterproof coating. It flows on evenly and smoothly with a limpid character, filling the grain of the wood. The manufacturers claim for it great brilliancy, hiding power and wearing qualities.
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Value of Insulation

Professor F. B. Rowley, engineering professor in charge of the experimental station at the University of Minnesota, has been carrying on some research work which has great interest to the home builder, in the economic value which has been found in the insulation given to a house in its building. This experimental work has been done with the close cooperation of the manufacturers and builders to give the greatest practical value in the results, which have all been carefully tabulated for reference.

Differences in the types of insulating and construction material used in the erection of two otherwise identical homes may result in a coal bill for 8.82 tons a season for the house with the best practical walls, while the house with the poorest walls burns 14.7 tons, according to these experiments just concluded at the University of Minnesota.

After considerable experimenting testing boxes were constructed, one within the other, by means of which a panel of wall construction could be tested with a temperature of 20 degrees below zero on the outside and the usual house conditions, 70 degrees, inside. This was then corrected for a long period of time with an average difference of 32 degrees in temperature. The readings and measurements were recorded electrically in another room. All of the work was very carefully tested, and the results recorded in minute detail, giving much valuable information which can be systematically studied and used to get the best possible results in actual building.

According to Professor Rowley the heat loss in British thermal units per square foot per minute through the side of a house may vary from .4010 down to .1332, even granting that all the walls tested are sound, substantial walls, such as might be put into any new dwelling erected in 1923.

Wall panels were built in all of the usual methods of construction; frame construction with sheathing and siding outside and plaster inside, with stucco outside, with insulation placed in all the usual ways. Wall panels were also constructed with stucco exterior finish, without sheathing, plastered on the inside between the studs to make a heavy coat of stucco, and tested with and without insulation. In every case the insulation reduced the heat loss in the same type of construction, and sometimes tended to retrieve the heat loss on poor construction. The construction followed as closely as possible the standard practice.

From these tests it was shown that if one-half inch insulating material is placed between the studding of an average wall, that is, one constructed with plaster on the inside, and sheathing, tarpaper and drop siding on the outside, a saving of 26 per cent in heat loss is effected. This same insulated wall will effect a saving of over 50 per cent used in a wall constructed of metal lath and plaster for the inside surface and metal lath and stucco with back plaster for the outside surface. In general it appears that the best insulation is obtained by placing the insulating material between the studding, thereby breaking up the air space into two sections.

Make the House Tight and Warm

Some houses are cold and draughty, very hard to heat on a windy day, while others of the same approximate size and location are easily heated with much smaller coal bills. A tight house is a warm house, and in the light of a possible coal shortage, and certainty of high fuel costs for the coming winter the wise householder will begin to overlook his house to see if there may be any possible
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Air leakages which can be stopped before the coming of cold weather. In the first place it is generally easy to make the windows and doors quite tight against the weather. Storm windows or weather stripping will usually take care of that.

There are other leaks which are not always so easy to locate. Cold floors are always objectionable, and particularly so if there are small children in the house. Sometimes it will be found that there has been no beam filling between the floor joists at the outside wall, and a close examination shows very easily why the floors are cold. If there is a projecting bay it may not be insulated or even made very tight where it projects beyond the basement wall. A careful examination of the basement wall at or near the floor line and making it very tight will often save many tons of coal before the winter is over.

The attic also is often a source of heat loss, either as heat escapes into this cold space, or if the attic is used and heated. Lack of insulation in the construction of the roof itself may bring heat loss, especially since the heat always seeks to rise.

Insulation Borrowed from the Refrigerator

We are told that the use of modern insulating materials for homes was borrowed from the refrigeration industry, where cork and other materials of the kind have been used for years. In building a new house the matter of insulation should be given the greatest consideration. It is stated that the fuel saving in a well built and properly insulated house will pay for the entire cost of the insulation in a few seasons, and will continue to return dividends on the cost of the well built house, in addition to the constant comfort of an easily warmed house.

Furnace Efficiency

The matter of furnace control is a most important consideration for the domestic consumer, as well as in industrial operation, according to a pamphlet lately issued by the Smithsonian Institution. To run the domestic furnace most economically, the owner must keep the furnace itself in good working order, exercise effective draft control, and use the coal most suited to the individual furnace. The most common trouble is dirty flues; a one-eighth inch coating of soot will cut the absorptive power more than 25 per cent.
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“Face Brick Bungalow and Small House Plans” embrace 96 designs of Face Brick bungalows and small houses. These houses are unusual and distinctive in design, economical to build, and convenient in floor plan. “Face Brick Bungalow and Small House Plans” are issued in four booklets, showing 3 to 4-room houses, 5-room houses, 6-room houses, and 7 to 8-room houses. The entire set for one dollar; any one of the books, twenty-five cents. We can supply complete working drawings, specifications and masonry quantity estimates at nominal prices.

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The Burning Question

The elimination of fire hazards and the possible prevention of the incipient small blaze which may spread into a devastating fire has been discussed throughout the land during Fire Prevention Week. This campaign has commemorated the great Chicago fire. The people of the United States may not live on the side of an active volcano, nor in territory that is subject to earthquakes, but they are menaced by the fire fiend which is loosed on them through either their own or their neighbors' carelessness. The terrible figures have been blazoned abroad—15,000 killed during the year; 18,000 injured. Then, think of the terrific destruction of property, the records showing that every day of the year has seen the burning of 880 homes, 5 schools and a hospital. If this were an unavoidable evil it would be a different matter.

Let us visualize the cost in dollars and cents. Fire wastage in this country means $5 for every man, woman and child, and the average has run around this figure for years. On the other hand, in continental Europe, with its great density of population and congested areas, the per capita fire wastage is but 23 cents. Statistical reports on causes of fire show that carelessness is the cause of 20 per cent of this wastage, and much of it due to sheer carelessness. For example, the rubbish and refuse found in many basements and attics is often the beginning of great destruction; carelessness with matches and cigarettes has taken its toll time and again. But the fact that concerns the home builder more than any of the above statements is that a fair proportion of this destruction comes through careless or ignorant building, faulty construction and poor use of materials. This is the way a material is used which makes a fire hazard: a home that is constructed in a haphazard way is always a ready mark for complete destruction by fire. Poorly built chimneys and defective flues are another primary factor when considering fire causes. When building a new house it is so easy to take precautions against these defects, and in an old house, where good construction was not so greatly stressed, all the possible hazards should be examined every year before the fuel burning season is fully started. Failure to do so is part of the "carelessness" which comprises 80 per cent of the fires.

Fire stopping of the walls is another fire preventive measure which is easily noted and remedied if the householder will look into the matter. Walls or partitions which are open from the basement form a flue and give draught greater than many fireplaces have; such construction will readily convert an incipient blaze into a destructive fire.

The message of Fire Prevention Week to the householder sends him to look to his fire hazards, and by eliminating them add to his own safety and that of the entire neighborhood.
The lovely Hood River valley in Oregon is nationally famed as an orchard district. Yet it is more than a valley of commercial orchards—it is also a valley of beautiful homes; and there is a glorious appeal in the valley's fascinating mountain setting. A picturesque patchwork of orchards lie contrasted against interminable fir-thicketed knolls, ridges and canyons, the valley edged by heavy-forested and semi-barren mountain slopes, two immaculate snow peaks rising high on opposite extremities of horizon. And here, in this exquisite setting, stand many attractive homes of orchardists; one is enthusiastically minded to seek about, hoping perhaps to find standing snugly on some scenic promontory, one such home embodying all the attributes that the fancy may choose to dwell upon as fitting to this attractive region.

Accompanying photographs offer a glimpse of a Hood River valley home that, in the appeal of setting, rustic design, and the embodiment of utility and comfort, is happily realistic of fancy's desire. Built of native woods and stone, this home reveals a commendable adaptability of rough materials to an artistic use. It stands harmoniously among lofty pines, drooping firs and shady oaks that grace a spacious lawn sloping toward a wooded canyon, where deep below, a clear-blue, white-foamed river rushes over its rocky bed—a gigantic moat over which the eye never tires of looking out toward wide-spread valley points and mountains.
That it was intended not to exclude any of the boundless vista from the home’s interior, is surmised as one strolls about and notes the generous number and variety of windows.

The sloping site is advantageously utilized. Four stone pillars set upon a low, stone foundation wall, support the front of the house by spans of rough 12x12 timbers. This provides an open basement front, the front enclosing basement wall, of wood construction, being set back ten feet, thus making space for a concrete-floored, ground-level passageway, accessible to shelter cars. Two doors and a generous number of front windows supply access and light to the basement, which is concrete-floored and conveniently partitioned for its various uses, including a roomy hallway giving cheerful access to the basement stairs and to a washroom, containing a lavatory, toilet and shower bath.

The passageway, closed at one end by a continuation of concrete wall, opens to a driveway. A stone retaining wall flanking the passageway entrance, runs out a distance and back to ground level.

This wall supports a filled-in, sodded terrace built to the first-floor level, and it pleasingly subdues the height of this side of the house.

Above the passageway are two porches divided by a sunroom. There is access to only one porch from the outside and this is the main entrance porch. The porch steps are built into stone retaining walls that lead out from the end of the porch. Here an imposing feature of the exterior is the great chimney, built of field stones, centered to cut squarely the peak of half-pitch roof. The long rafters and snow-shedding lines of the steep roof, sloping down from the top of the massive stone chimney, quite characteristically suggests the chalet, so fitting to a mountain setting.

The front porch entrance is by a glass door opening into the sunroom, an intimate part of the large living room—to which the first floor is largely devoted—being set apart only by two wide-set posts, supporting a beam overhead, and flanked by low partitions. The great stone fireplace at one end of the large room, with its spreading elk head above the mantel, at once catches the eye. A closer scrutiny reveals a wide hearth of large slabs of stone, and, ingeniously fitted into the fireplace stone-work, several concrete panels in which arrowheads.
Ihe sod covered terrace at the side entrance and stone-axes have been embedded. A library and music room opens to the side of the main room at this end, an integral part of the main room yet given individuality by being placed apart through the use of low partitions flanking two posts, as in the sunroom. The open plan of room division provides a one-room effect, here desired to permit unobstructed sight of the outdoors through a window arrangement planned with this end in view.

Centered to look out over each of the porches are large plate-glass windows, flanked by casement windows, that magnify the perspective to an extraordinary clearness. Glass doors with sidelights provide entry to the porches and open the side vistas from the sunroom, while a hinged four-sash set of casement windows operating on a track to provide when desired a wide, airy opening, reveals a wide angled front view over canyon and valley. At the farther end of the living room from the fireplace, used for dining, French doors and sidelights open a view from the dining table out over the terrace. Six-light casement windows are the prevailing type, with a few exceptions, throughout the house; they add an old fashioned touch in keeping with the general rustic scheme of the entire home.

Directly across from the sunroom a simple balustrade shows the way to the hall doorway and a low landing, leading to the second floor stairway and to the back hallway which connects with the back porch, the basement stairs, and the kitchen.

The kitchen was planned for comfort and convenience. A built-out nook, glassed in by seven casement windows, provides a most cheerful, roomy space for the informal country meals; with two large windows over the sink, one surmises this kitchen to be an invitingly restful workroom. Accompanying plans show in detail the arrangement of fixtures and conveniences.

Turning now to the second floor by the well lighted stairway, we pass, on a landing midway, a casement window, and a glass door opening to the flat roof of the back porch—an accessibility quite convenient during cleaning time. There are eight bedrooms and a bath room. The appeal of sleeping close to the incomparable outdoors of the region, led to the sensible plan of individual sleeping porches; these are provided for four of the bedrooms. The second floor plan shows the arrangement. By a delightful suite arrangement, one room serves as a dressing room, and an adjoining room, separated by a glass door, is used as the sleeping porch, where four casement sash, operating on a track and hinged in two sets open and fold to each side in a large opening, providing a complete opening when desired or closed to any degree dur-
ing inclement weather. The eaves of the roof and sheltering eaves built out over the windows, shield the openings during stormy weather.

The plans show a well equipped bath room, with such added conveniences as a clothes chute, a spacious odd clothes closet adjoining, and a built-in steam cabinet. An excellent feature is a supplementary warming arrangement. The hot water boiler stands beside the range in the kitchen, intentionally planned to be at a point under the bath room. It is enclosed to the ceiling and opens into the bath room above by a hole in the floor fitted with a register, which may be closed. This arrangement warms the bath room during cool days when the heating system is not in operation.

The entire second floor is plastered and the woodwork finished in oil. The doors are of original design and of a simplicity that is most effective; wainscoting is used for panelling, and this idea is carried out in every door in the house. Where outside entrance doors are not glass doors, they are of this design, the upper part of the door proportionately fitted with six small glass lights.

A roomy attic space was converted into spare rooms and a den. Briefly, there are two comfortable bedrooms, a den and a small bath room. A hallway giving access to these rooms and to two ample store room spaces, is lighted by a small casement window. The den is a retreat quietly secluded. Wood was used in construction after a rustic plan.

The living room is finished in wood. The walls are paneled with lxl2's, oiled to preserve the natural wood color, the battens stained dark brown—a restful contrast. The heavy beams and spans of the ceiling are also stained brown, the ceiling between the beams paneled and battened to match the walls. A pleasing contrast is worked out in the ceilings of the sunroom and library where the beams are not exposed, the ceiling being paneled and battened in checkered pattern similar to the porch ceilings. Window seats are built-in here and there with an eye to utility; the plans show their respective positions. Built-in book shelves stand along two walls of the library, divided here by a window seat and there by a built-in desk.

The dining, library and reading tables are of rustic, homemade construction, of style and finish to match the woodwork. Two ornamental tables serving admirably for odd purposes, are made of thin cross-sections sawed from a huge pine tree cut on the place, showing rings of over 500 years' growth. A campfire proximity to the fireplace is offered by two blocks sawed from oak logs set on end as seats on each corner of the hearth. A convenient wood-lift operates into one of the fireplace window seats, part of the seat top hinged to open over the lift. Simple, harmoniously fashioned lighting fixtures add quaintly to the rustic scheme.

Here then is a country home, differing perhaps not greatly from other homes in the essential conveniences, yet its appeal is singular to a degree. It is not a country home in the sense that it stands on an
Built of native woods and stone it stands in entire harmony with its picturesque surroundings.

estate, but it is primarily an orchardist's home providing comfort and utility, courting a routine of orderliness by which is maintained its everlasting appeal. To perpetuate the simple art of the pioneer in the use of rough materials and the consequent distinctive, characteristic appeal in a beautiful setting, was a leading motive in the choice of materials and design. And, characteristic of the pioneer's adaptability, the fact that the owner planned and largely built the home himself, has brought into it an element of individuality and quaintness, wherein lies the dominating difference that makes this home distinctive.

Woods-Berries
Evelyn M. Watson

Garnet and topaz and lustrous sapphire,
This largess I find in the wood;
 Beauties they bring, arousing my fancy,
 For my spirit's famine—food!

Lovely to see and sweet to imagine,
 As gems for a princess to wear;
 I live, in one moment, a lifetime of yearning
 As I weave these jewels in my hair.
ITH the popularity of Colonial types of building comes a renewed interest in all the details which belong with that historical period, even though no attempt may be made to follow exactly the examples which remain to us of that early time.

The hinge of today is merely a butt on which to hang a door; there is little question as to its strength, nor as to its need as an additional reinforcement to the door itself. A simple door knob is all that now shows as the means of opening the door, and a tiny push button at the side of the door announces a caller. Accustomed as we are to all the complicated construction in the latch and the locking and bolting of a door, yet with all this mechanism concealed somewhere within the door itself, the several simple latches and bolts on the Colonial door seem very elaborate, even though the use of each may be obvious at a glance.

On many of the older houses, the development of means of announcing a visitor, from the big “knocker” through several kinds of operation for a door bell which rings somewhere inside the house, are all still to be seen on the door.

One of the earliest and most interesting of the ancient houses still standing and in good state of preservation is the old Wyck house in Germantown.
Wyck house at Germantown, Pennsylvania. Built of the native ledge stone and stuccoed over, it is credited with having been built before 1700, and used as a hospital during the Revolutionary war. An interesting note on the construction itself says that this stone, as it comes from the quarry, is quite soft and porous, and was doubtless stuccoed to give protection to the stone itself, as some of the houses of the early periods were stuccoed over only on the north walls, which evidently bore the brunt of the prevailing storms. The face of this building has been latticed over the stucco in trellises which carry vines up between the windows. Curious boxed openings have been left in the brick paving of the terrace for the vines which clamber over these trellises.

All sorts of curious details may be seen on the photographs of this old Dutch house of the early days. The door itself, as may be seen, is of that famous type known as a "Dutch door," divided horizontally, so that the upper part may be opened, while the lower part is left closed, keeping out possible intruders. On the solid wood doors which are standing open in the photo may be seen the heavy butts of the hinges, while the heads of the bolts indicate the location of heavy strap hinges across the full width of the door. The bolt heads show in the same way across both the upper and the lower part of the Dutch door. The solid paneled wood doors show the curious iron fasteners by means of which they are bolted when closed. The shutter fasteners on the windows were usually an essential piece of old time hardware, and were of many types, sometimes a simple catch such as that on the Wyck house, sometimes more elaborate in appearance, without perhaps being more effective in operation.

Notable among the hardware accessories of the typical Colonial house is the knocker on the door, an excellent example of which is seen on the upper panel of the Dutch door in the Wyck house. Whether it is now intended for use or ornament may seem a question to the present generation, as there is a bell knob at one side of the door, and an old-fashioned bell pull and wire which goes up and into the
The inside of the front door of the Morrill house in Salem, which is shown in the photograph with the little bull’s eye glass panels at the top of the door, presents an interesting collection of latches and bolts. The exterior of this same house was shown in an earlier copy of Keith’s, with and without the shutters at the windows. The shutter over the oval transom light may be seen from the inside, in this photo. The bolts which hold the knocker may be seen a little below the bull’s eye glass. The long latch is pivoted well back on the door and is on very simple lines.

The latch on the parlor door of the Pierce-Nichols house, shown in another photograph, is one of the most interesting latches found in the old Colonial houses in Salem. It has been photographed with a rule under the latch to show the size accurately. The fittings for this famous room in one of the best and most typical of the fine old Colonial houses of New England were brought over from Paris about the year 1800. One of the traditions of the house relates to the mirror over the beautifully carved mantel in this room which was brought from Paris to complete the remodeling of the “new part” of the house at the beginning of the nineteenth century.

While the name Colonial is commonly given to much of the work of the period, the work which was really done before the Revolution, when these states were colonies of Great Britain, was much simpler in form and often crude in construction and finish. This is especially true of the craft work in metals. Most of the old hinges and door latches, locks and bolts were made by the blacksmith, or possibly by the farmer himself—if he did his own smithing, as was not uncommon. Wood was used first for many of the old latches and bolts, some of which are still to be found today.

Iron was both cast and wrought by the Colonial craftsmen, the work of smith or the moulder. Hinges and bolts, locks and hasps were among the early pieces which were made, and always by hand, neces-
Latch

arsarily. Hinges were perhaps the first necessities on account of the strength required, and great ingenuity, and some imagination, together with much true craftsmanship, were displayed in the early work. Strap hinges developed from the crude straps of iron, which formed at the same time a reinforcement for the door, into many interesting types. The natural tendency was to flatten the ends of the strap and to give it some shape. The form of a spear head or of a leaf were among those most favored, often showing considerable imaginative quality in the work. The so-called "H" hinges are found on many old doors, more especially of cupboards, where the straps are vertical in the shape of the letter H, and a similar type where the horizontal reinforcing bar is added at the top and bottom of the door, giving the part of the hinge on the door itself the shape of the letter "L" at the bottom and inverted at the top.

The crude antique hinges and latch have no place in the modern home, however, as modern work serves our purpose much more adequately, and may be gotten in forms designed to be in keeping with the character of the fine old building. The ancient pieces are used, as a general thing, either for antiquarian reasons, or in a frank imitation, as they are too rare for modern use.

Beautiful craft work of the older time has been studied, however, by the designers, making the best of our modern hardware, who give us the advantages which they are able to find in the old work, together with modern methods and materials. We need to know some-thing of the old work, however, in order to make selections which are in keeping with the spirit of the Colonial type in the building of the house.

"The old craftsmen had a way of making the essentials of house fittings interesting, picturesque, often beautiful," says Mary Fanton Roberts. "It was the French craftsmen, the designers of furniture, the weavers of rugs, who made the French periods of decoration famous—not the pretty flippant ladies or the gallant little kings. In fact it is the craftsmen the world over, from Cellini to Duncan Phyfe, who have woven the years into epochs, not the politicians or the professional beauties."

"If you know and treasure iron work—whether an ancient grill of Valencia or a window latch from an old French palace—you will realize how definitely and finely both tell the story of their time. How representative, for instance, is the sturdy, simple Colonial plate of those strong young sincere days of our early Republic."
In our fore fathers', or rather our fore mothers', day, the kitchen was the center of family life. If help was plentiful, yet the mother was the manager and leader. Gradually the kitchen became a work shop, almost a laboratory. It was the domain of the help and the family entered it infrequently and tarried not at all. But with the universal scarcity of capable aid for the kitchen, the family again approaches within its walls as the family invariably follows mother, and the modern kitchen of 1923 is a combination of serviceableness, utility, comfort and attractiveness.

A kitchen in a comfortable home in a suburb of Detroit combines these characteristics. Its walls are painted a rich cream and the woodwork is a blue gray, but not cold. Its double drip sink is placed at a good height and above it is a window reaching to the ceiling. A kitchen should be ventilated at the ceiling when possible. At one side of the sink is a cold box. This opens inward with a neat door. It contains a number of shelves and the outside is covered with louvres and a fine mesh netting to keep out dust. Here is an ideal place to keep cream, salad dressings and similar things during the weather that is too cool to require the use of ice and yet not sufficiently cold to trust certain things to the ice box without ice. The ice box itself is in an outside room or pantry with doors opening to the kitchen and to the porch.

Cupboards line two walls of the kitchen, an ironing board that drops down from its particular cranny and the asbestos lined iron cupboard and plug close by. There are cupboards for table boards, bins, certain cupboards with narrow shelves about six inches wide between the deep shelves. These are for the numerous small things that every kitchen has in quantity. Many of the cupboards do not come down to the floor. They come within thirty inches, and below are the waste basket, the stool for the table, there are hooks placed on the under surface of the cupboard from which brushes and similar things may be hung. The housewife in this kitchen did not like cupboards close to the floor.
The broom closet and the clothes chute both open off the kitchen. There is also a milk cabinet on the side opening off the porch. The kitchen is equipped with all electric contrivances, including a range, and as the town in which it is located has no garbage collection an incinerator has been installed.

Off one side of the kitchen is a small alcove that is just sufficiently wide to accommodate a Pullman breakfast table and benches. A table hinged to the wall is shown, but the table may be built to slip out instead, so that it may all be easily arranged for cleaning and scrubbing. Above each bench is a shelf and on these the breakfast set is placed. There are one or two electric plugs placed conveniently near. At the end of the table is a window giving a view up a valley and across the country.

The linoleum floor covering, the various curtains and furniture and other equipment carry out the color scheme of cream and gray. Although it meets the scientific demands of the modern housekeeper, it has all the coziness and charm necessary to meet the demands of the most exacting of home keepers. It is a kitchen that is attractive to all the members of the family and frequently when alone the family begs to forsake the beautiful dining room and to have the evening dinner in the kitchen.

**Step-Saving Suggestions**

E. M. W.

**DD** to the kitchen equipment only those utensils that are obviously practical and useful. Do not clutter up the kitchen.

Things that are used there every day should be in the kitchen; other articles occasionally or frequently used should be placed in the pantry or otherwise put away.

Keep near at hand those utensils which are most used. Have narrow shelves near the sink and stove and put only one row of things on the shelves. Put a row of hooks under the shelves from which to hang utensils.

Have nothing on the floor which has to be reached by bending.

Give preference to utensils easy to handle and keep clean.

Have stove, sink, and work table placed at a convenient height for the housewife. This is most important.

Don't forget the stool to sit on, with convenient height, strong, light weight, movable. Though household experts may object to a rocking chair in the kitchen, many a housewife prefers a comfortable chair for a chance "guest" from her own household.

Have good light, daylight and artificial light both, at the stove, the table, and the sink, where most of the work is done. Add another light if necessary.

Have cheerful decorations in the kitchen; have kitchen utensils that are shapely and of good color, if possible. White enameled ware and blue enameled ware, or both are dainty, clean looking, easy to keep clean, and a delight to the eye.

Have a floor covering that is not only easy to keep clean and comfortable to stand upon, but pleasing to look at.

Have a shelf for books on household arts and economy.
How Will You Build Your Home?

AN UNASSUMING LITTLE BUNGALOW WITH ROOMS WELL ARRANGED AND LIVABLE IN SIZE. THE EXTERIOR IS DARK STAINED SHINGLES AND WOODWORK OF THE SAME TONES. THE GROUPING OF THE WINDOWS IS A NOTABLE FEATURE OF THE DESIGN.
A QUAINLY ATTRACTIVE COTTAGE WITH WIDE SIDING ALL IN WHITE WITH THE CHIMNEY AND THE AWNINGS TO GIVE THE TOUCH OF COLOR. THE FRONT STEPS AND WALK ARE OF BRICK, LAID IN PATTERN. THE ROOM ARRANGEMENT IS GOOD, THE ROOMS CONNECTING WELL BUT WITHOUT WASTE OF SPACE IN GETTING FROM ONE TO ANOTHER. THE PLANTING AND THE WHITE TRELLIS FENCE AT ONE SIDE ADD TO ITS ATTRACTIVENESS.
A STUCCO COTTAGE WITH A GOOD LIVING ROOM AND SUN ROOM PROJECTING TO THE FRONT TO GET EXPOSURE ON THREE SIDES. THE ROOMS ON THE LOWER FLOOR OPEN WELL TOGETHER. ON THE SECOND FLOOR IS A LARGE CHAMBER AND A LONG SLEEPING PORCH WITH GOOD CLOSETS, ALSO A SEWING ROOM. AN OPEN BALCONY IS REACHED FROM THE SLEEPING ROOM—OFTEN A GREAT CONVENIENCE.
A LIGHT COLORED STUCCO HOUSE WITH THE WOOD TRIMMINGS AND THE ROOF STAINED DARK GIVES EFFECTIVE CONTRASTS. THE WALLS OF THE ROOM ON THE LOWER FLOOR ARE ALMOST FILLED WITH WINDOWS, ASSURING A LIGHT AND AIRY INTERIOR. THE STEPS ARE OF BRICK WORK, AS IS THE PORCH WORK, WITH RATHER AN UNUSUAL ARRANGEMENT OF THE ENTRANCE STEPS. THE LARGE LIVING ROOM IS ATTRACTIVE WITH ITS MANY WINDOWS AND SUN ROOM AND DINING ROOM OPENING FROM IT.
POPULAR opinion on the subject of wallpaper is undergoing a reversal, and there are a number of new considerations to which the progressive housewife will give thought when she figures on redecorating.

We are familiar with the one-time choice suggestion to do all the walls alike, particularly if the rooms communicate. The purpose of this is to increase the apparent size of the room and avoid choppy, restless effects. But that is only one side of the story, and it is one that has made for monotony and passive neutrality where there should be active interest presented.

The other side of the story is that these communicating rooms may face north and south respectively, so that a better result would be had if one of them had a "warm" paper while the other had a "cool" color. Or one might be a living room in which a light, cheerful paper makes it a pleasant place for family activities to go forward, while the other is a formal dining room without pictures, in which the paper should have greater decorative significance. Or one room
may be equipped with heavy oak furniture which requires a wallpaper of coarse texture to support it, while that same wallpaper would be overbearing in a room where the furniture is more delicate. It will at once be seen that the special purposes, the exposure, and the equipment of rooms must be considered in the selection of wallpaper and it is rarely possible to find a house where one kind is suitable throughout.

In selecting wallpaper for communicating rooms, however, these differences do not imply a patchwork quilt effect. Strong contrasts and clashing colors must be avoided. In papering rooms that adjoin, one may use the same color in different textures. Or one may reverse the emphasis of color, having one room chiefly blue with accents of tan and dull red, while the other is chiefly dull red with accents of tan and blue. It is quite possible in these and various other ways to preserve the proper sense of interrelation and unity between rooms without identical wallpaper.

Walls as a feature of our environment do not always receive the appreciation to which they are entitled. Whether a room be masculine or feminine, formal or informal, gloomy or cheerful, its character is at once revealed in its walls. The color alone produces all sorts of effects upon us, wholesome or not, according to the choice we make. Red excites, yellow cheers and stimulates, blue exerts a quieting influence. Red is called an advancing color and makes a room look small. Blue is a receding color and increases the apparent size. Most of our rooms are small and need treatment to give them a sense of spaciousness. Light colored papers are best in these cases and permit of greater variety in the color and character of accessories. Whether we regard a wall merely as a background, or as decoration, too, it is always invariably both. Even if we do not hang pictures on it, and a decorative paper is chosen, all the furnishings and the occupants themselves are inevitably displayed against it so that it also acts as background. Therefore while the background should not be vague, neither must it be dominating. Its color should be subordinate to the occupants. Few faces can compete with bright orange, purples, greens and other futuristic fantasies that only emphasize their pallor and kill the color of one's clothes. Large areas should be in subdued tones. Bright reds, deep blues, orange purple or brilliant green may be effective in certain combinations when used in small areas for accent, contrast or variety. Otherwise they are unwholesome, offensive and aggressive.

In former years, each room was often identified with particular colors. Today, fortunately, we exercise greater initiative in the matter. We feel that contrasts and differences may be introduced so that everything is not standardized a propos of nothing; so that one may know he is in his own home and not in some institution with its dull gray or tan walls. Good color in every room would make sunshine on the darkest day, warmth on the coldest and cheer on the saddest. Demand is growing for yellow and this is well. Yellow imitates sunshine, and a yellow bedroom will start us off with a stimulus. In the dining room, especially if it be of western exposure, yellow will compensate for the absence of the morning sun. It is by no means a crude color. Delicate shades from primrose to the
golden tans inspire cheerful thoughts.

The color of wallpaper is considerably modified by its texture, that is, its roughness or smoothness, fineness or coarseness or its “feel.” There are available today in wide variety papers that reproduce in the most skillful way the surface finishes of a number of different materials. While they are frankly of paper, effects may be had of satin, moire, damask, linen, printed cotton, burlap, plaster, and leather which actually defy detection. This at once opens a vast realm from which to select the thing that your particular conditions require.

Rough, decided textures such as the rough plaster finishes, the embossed leathers or the coarse crepes, give a feeling of strength and power. Since the wall should always look strong enough to support the room, but not unduly strong for delicate furnishings, these decided textures are recommended for places where heavy furniture of formal oak types are found. A room of mahogany would be completely dominated by such treatment, however, and requires more delicate surface finish like damask with its two textures in combination. The elaborate and ornate room in the French style will be best set off by something even richer, like the silk or moire. The mission furniture of the bungalow requires coarse supporting texture. It is almost crude in its direct simplicity and any delicate satiny finish in the wallpaper would be a caricature. Its straight lines need sturdy background and this may be found in papers giving the effect of rough plaster, burlap, leather or tapestry.

There is also a revival in the use of pattern, which recently has been unpopular. We have been advised not to hang pictures upon a patterned paper. This should never have been an arbitrary statement for it depends upon the kind of pictures and the kind of paper. Many patterned papers are good backgrounds for pictures, permitting them to become a part of the decorative plan rather than standing out in isolation against a hard, unyielding, plain wall. Of course the pictorial papers like tapestries do not take pictures, as that would be “painting the lily.” Nor do brightly colored papers which interfere with the color of the pictures. Oil paintings require stronger color and texture in their background than more delicate watercolors and etchings.

Another prejudice has been exhibited against the use of wall pattern as preventing its use in curtains, rugs and upholstery. Here again, it depends upon the pattern, for while much insistent pattern is trying and restless, it is undoubtedly true that a judicious use of harmonious pattern creates a pleasant interrelation between the various furnishings and affords a more agreeable result than a harsh, flat, strongly contrasting wall. Patterns that are conventional rather than realistic will better stand constant association.

With some of the important general principles noted, I want to offer a few specific suggestions with relation to the rooms of the house.

Perfectly plain wallpapers should be avoided in bedrooms, even when a frieze or dado is used. They have a habit of becoming quickly soiled and of taking the dust and grime from any clothes which may at times be hung against them. If the bed is but a few inches away from the wall and you have to move constantly
between the bed and wall in limited space
when dressing the bed, this will be espe-
cially noticed.

When wallpaper has pattern treated in
tones of two colors, care should be taken
to repeat the same hues in other parts of
the room to effect a proper unity.

A word must be said about the drap-
eries which stand in such close relation
to wallpapers. The designs of many
papers are reproduced exactly in drap-
eries, and by using these, the possibilities
of inharmonious combinations are avoid-
ed. But what is gained by harmony is
lost by monotony of effect, and this treat-
ment is rarely so effective as something
with better contrast. If there is striking
pattern in the curtains or bedcovers, do
not have striking pattern in the wall-
paper; either the two-toned paper or a
simple stripe will be more restful. If, on
the other hand, the wall is smartly fig-
ured, then let the draperies be colored.

A bedroom facing north or east may
be warmed and brightened by primrose
yellow paper in two-toned quarter-inch
stripes and a border of blue, red, brown
and green. Suitable furniture should be
gray-green painted, or Colonial, mahog-
any or walnut. Draperies of cretonne,
tan with blue, red, brown and green pat-
tern, and one chair to match, and a gray-
green rug, would be very acceptable.

For the bedroom facing south or west,
gray wallpaper with a narrow floral stripe
in blue and rose, used with furniture of
mahogany or blue enamel with floral dec-
orations and wicker enameled in red-
brown is pleasing. Woodwork of gray,
rugs deep rose, or mats braided in rose,
cream and blue will attractively supple-
ment this scheme.

The oak furnished bedroom might have
putty color wallpaper with rough plaster
finish, rug of green-blue, curtains, madras,
of orange, black, tan and blue green.
A Five Room Cottage
C. W. B. I have a new five room cottage facing east, and am particularly interested in finishing the walls of the living room and dining room. My living room is 14 ft. x 25 ft., entrance being directly from porch in the middle of room, with small window in the north, and a tapestry brick mantel on the south; two bay windows, one on each side of entrance, on the east, and with French doors entering dining room. Woodwork of both the living room and dining room is finished in English brown, with oak floors. The dining room has two large and one high small window between them in the north side, and fireplace of tapestry brick on the south side.

The furnishings of the living room consists of a wicker suite, with velvet rug in which the tan or buff predominates, with some old rose. The dining room has complete set of Queen Anne walnut, and the rug is tan and blue, blue predominating.

Will you advise what color the walls and ceiling of each room should be, also as to what color draperies would be best suited? The window curtains are buff in color. Walls at present are the natural smooth plaster, finished, leaving them white.

Ans. Replying to your inquiry as to the color of walls, we advise soft grayish tan or ecru, not buff, for the walls of both living and dining room with deep cream ceilings. The wall must be a little grayish in tone, not tan or buff, but a soft ecru. This will blend with the English brown of the woodwork and the walnut of the dining room, also with the rugs, and the tapestry brick of the fireplace gives the right warmth of color.

You cannot do better than make rose predominate in the draperies and accessories of the living room and blue in the dining room.

“Bachelor Girl Quarters”
M. L. B.—For some time past it has been my pleasure to read, with much interest, your helpful suggestions to builders of new homes. I feel that I would like to appeal to you for assistance and suggestions as to the finishing and furnishing of frame bungalow I am now building. I enclose just a rough sketch showing the floor plan. The house is built on the foothills of the Rocky Mountains, commanding a wonderful view of our beautiful valley, to the East.

It had been my intention to finish the interior in ivory, with slight variation in the kitchen and bath. What color would you advise to finish walls in living room and dining room? Had thought strongly of finishing in the rich cream, practically the same as the woodwork. Do you think walls and woodwork the same would give the house the appearance of being too dead? If you think this combination is not right, what would you suggest for the different rooms?

Owing to the fact that the east rooms command such a beautiful panorama, have built no porch to the front or east. There will be a porch to the south. What curtains would you recommend for living
room, dining room and north bedroom? For the two front rooms, do not want anything that is going to shut out the light, or cut off the view. Am not very partial to heavy overdrapes. Want furnishings to be simple and plain, but at the same time appropriate and good looking and in keeping with the building.

For the living room, what size of rug, also what color or combination of colors would you suggest? Have to buy a new rug for this room, and want to get it with the idea of buying new furniture to harmonize with it. For the present will have to use tapestry davenport, and wicker furniture I now have. These are in the green and brown shades, but I do not want to carry them out in the new furniture. I want a change, and something with more life. It is my intention to buy walnut furniture for the living room, when the old is replaced, and this cannot be done all at once,—will have to buy a new piece or two, as I feel able to do so.

The north bedroom is to be furnished in ivory and rose. What would you suggest for rugs for this room? Do not just care for the large bedroom rugs now so popular; much prefer the smaller rugs that are so easily taken out.

Might add that this house is to be used as “bachelor girl quarters.”

Ans.—Your floor plan shows a delightfully planned interior. We are in sympathy with your wish not to shut out the inspiring view with many draperies. We also like your plan of ivory woodwork and walls. It will not give too neutral an effect if you put strength in the furnishings. Nothing is more effective than certain tones of taupe gray with ivory and you cannot do better than taupe gray for the living room rug, though it may have a narrow border, about six inches, in colors if you wish. We should prefer black. Then why not paint the wicker furniture you now have a dark gray and cushion it with gay cretonne. You could then add a walnut table, a desk, davenport, etc., as you feel able. Meantime, get some graymomie-cloth, which is inexpensive, and make a slip cover for the tapestry davenport and so get rid of the green and brown, for even temporary use.

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Do not use curtains over the glass of the windows at all, but hang half a breadth at the sides, of rose casement cloth, in the same shades as in the cretonne. The smaller details of the room can safely be left to you, but you have now the foundations of a room, charming yet serviceable.

We advise for living room, a rug 10x15, in one of the new Axminster makes.

New Shades

M. C. H.—Please tell me what kind of window shades are being used now. I must have shades for the entire house. Living room, dining room and sun parlor on first floor; three bedrooms and sleeping porch on second. Have three sets of French doors—between dining room and living room, from dining room to sun parlor, and living room to sun parlor; also, one set upstairs leading from my bedroom to sleeping porch. I would very much appreciate your advice as to what to use at all the windows and doors.

Ans.—The regulation opaque window shade is still the shade in general use. It comes in rather better quality, and some new colorings. The most popular of these is the "sand" color, a sort of grayish cast to the sand. The brass or metal rings, to pull the shade down by, are now however quite passe. Shades are finished at the lower edge by fringe to match.

The "sand" color goes well with ivory or pale ecru walls; if the walls are gray it is better to use ivory shades to match the woodwork. Sometimes glazed chintz shades are used on the windows of sun rooms or in quaint, cottage houses. Where the chintz is used, other curtains are usually dispensed with. They might be very pretty in your sun parlor and give an agreeable variety. They are hung like other shades, and may be gotten specially from the decorator or house furnisher.

The French doors between dining and living rooms do not need shades, but can be veiled with some very thin, sheer material, the same as that used for inner curtains, or a thin silk to match the predominaing color of the furnishings. The French doors leading to sun parlor from living room had best be equipped with shades if the light is very strong.
The Truly Economical Home

Every year more and more home-builders learn the secret of building an economical home. They are finding that the house which costs the least to maintain is the cheapest to own. This is one reason why so many Face Brick houses are being built today. Slow depreciation, a minimum of repairs and upkeep, painting only around doors and windows, low insurance rates, and smaller fuel bills—all contribute to the economy of the Face Brick house. The facts are discussed in "The Story of Brick." For your copy, address American Face Brick Association, 1724 Peoples Life Building, Chicago, Illinois.

Send for these booklets:

"The Story of Brick" is an attractive booklet with beautiful illustrations of modern homes, and discusses such matters as Comparative Costs, Basic Requirements in Building, the Extravagance of Cheapness, Financing the Building of a Home, and kindred subjects. A copy will be sent free to any prospective home-builder.

"Face Brick Bungalow and Small House Plans" embrace 96 designs of Face Brick bungalows and small houses. These houses are unusual and distinctive in design, economical to build, and convenient in floor plan. "Face Brick Bungalow and Small House Plans" are issued in four booklets, showing 3 to 4-room houses, 5-room houses, 6-room houses, and 7 to 8-room houses. The entire set for one dollar; any one of the books, twenty-five cents. We can supply complete working drawings, specifications and masonry quantity estimates at nominal prices.

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"The Home Fires" is a new book containing twenty attractive original fireplace designs, for which complete plans may be purchased for one dollar, and twenty-five pictures of fireplaces designed by well-known architects. Also an article on fireplace construction. Sent for twenty-five cents.
The Marketing Problem
Mildred Weigley Wood

When it is realized that often from 30 to 40 per cent of the income is spent for food, the homemaker can appreciate that intelligent, careful marketing is a means of conserving the income, while careless, thoughtless buying of food often makes what would otherwise be an adequate income, quite inadequate.

Efficient marketing depends upon keeping track of what there is on hand, knowledge of food prices, and food seasons, wise selection of stores, skillful planning of meals with reference to the use of food on hand, the keeping qualities, amounts to purchase, and, in addition to these points, alertness to follow the many specific suggestions for buying that come as a result of the experience of the successful housekeeper and others who have made a study of this question.

Keeping Track of Food Supplies on Hand

Someone has said that a good buyer plans for the present and for the future. In other words, it is not possible to do good buying and consider only the day's needs. The needs of tomorrow and next week and even next month must also be met.

Where the household food buying is going smoothly with the minimum of effort we usually find the homemaker is checking daily the perishable food, that is, the contents of the ice chest and the vegetable and fruit bin. About once a week she is checking her needs in the way of staples which are in constant use, such as sugar, flour, coffee and others. Less frequently than this, often only once a month, she looks over the supplies used only occasionally, such as spices, cocoa, chocolate, vinegar and others, and orders for the month or makes a list of supplies which should be replenished before the month is out. It is not always desirable to order these immediately, but if the list is made the housekeeper can then watch for special prices for the food materials on her list. As each item is secured it is crossed off the list.

An inventory of food supplies taken monthly or every two or three months is not only useful in keeping track of purchases to be made, but is also a means of finding out the exact cost of food for a given period of time because it shows the value of the food on hand. After the first inventory list is made the time which it takes to make an inventory is very slight.

<table>
<thead>
<tr>
<th>Food on Hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Article</td>
</tr>
<tr>
<td>Price</td>
</tr>
<tr>
<td>Amt.</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>1. Flour, cereals and bread</td>
</tr>
<tr>
<td>2. Milk and cream</td>
</tr>
<tr>
<td>3. Fats</td>
</tr>
<tr>
<td>4. Fruits and vegetables</td>
</tr>
</tbody>
</table>
The foregoing form is suggestive of one which may be used to serve the double purpose of showing the exact food cost and also indicating what food supplies are in need of replacement:

**The Market Order**

The written market order, that is, the list of supplies to be ordered, should become a matter of habit in order to avoid waste of time which occurs when memory fails and second orders have to be given and also because the written order is apt to be made out more definitely than that which is simply "in mind." The market order is best made with alternate suggestions for those supplies which may or may not be in market or where the price is likely to vary. An alternate, listed will frequently prevent the ordering of something much more expensive than the original article planned for because you "cannot think of anything else." The habit of making out a market order is easily acquired but it is also easily omitted and when omitted is almost bound to result in loss of time and money due to the necessity of ordering again and ordering without reference to cost.

**Knowledge of Food Prices**

A knowledge of what is a fair price to pay for different foods is almost essential to good buying. In a previous article suggestions were given regarding the keeping of a list with prices of some of the more commonly used food materials where variation in price is likely to occur so that "bargains" in these articles may be recognized. Another means of keeping track of food prices is to consult the "Fair Price Lists" or "Retail Prices of Food" as they appear in the daily papers. While these are not available in every newspaper, yet a large number do carry them and doubtless more would if they knew that their readers were interested. The prices in such lists must be recognized as only approximate, because the amount of service which a store gives and the quality of the goods affects the price to some degree. Even with these possible variations, such lists are of great help because they at least indicate rise and fall of prices due to seasons and other factors and hence enable the housekeeper to know what variation she ought to expect.
When to Market

The best selection of fresh food is usually secured when marketing is done in the early morning. Another time found profitable by some homemakers is Saturday evening, when the stores often reduce prices rather than carry the goods over Sunday. The time of marketing shows its best results when it is done in person.

Planning Meals for Efficient Buying

It is possible to observe all of the suggestions already given on marketing and yet not secure the maximum saving unless meals are planned with reference to (1) the form in which food can be purchased, that is, amounts, and whether in package or in bulk; (2) the cost of preparation in time and fuel; (3) the keeping quality of food, and (4) the food value of different food materials.

Form in Which Food Is Purchased

There is often saving to be effected when one knows that it is possible to buy certain food materials in different forms as, for instance, broken rice, which has the same food value as the unbroken but which because of its form is sold cheaper. For certain dishes this is fully as good as the more expensive form. Such articles as dried fruits can usually be purchased in small and large sizes with a variation in price in favor of the smaller size. Where the dried fruit is to be used for soufflés and other puddings or for ices or ice creams, it is unnecessary to pay for the larger fruit.

The question as to whether to purchase food in package or in bulk is one which the housekeeper who is trying to effect saving always has to meet. The main issue in this question is that of cleanliness. Bulk goods is invariably cheaper and if the store maintains conditions for keeping bulk goods clean, preventing the handling of it to any extent, it is frequently desirable to save at this point.

The form in which food can be purchased with reference to quantity offers as great an opportunity for study by the housekeeper who would spend her money wisely as any other point. Everyone knows that it is cheaper on the face of it to buy a dozen cans of a vegetable than to get one at a time; but this fact does not necessarily mean that this is the best way to buy such items in a particular family. For example, if having on hand a large supply of canned vegetables means a tendency on the part of the housekeeper to use these instead of a less expensive fresh vegetable which is in season, the purchase of a dozen cans in place of two or three may in the end be more expensive.

Cost of Preparation in Time and Fuel

In marketing, the amount of fuel that will be needed in preparation of food must also be considered. Meals can be planned so that when the main dish is to be cooked in the oven some of the rest of the meal is cooked there, also. Sometimes it may be worth while to pay a small amount more for a certain vegetable found in the market because the saving will be made up on the fuel.

Time required for preparation of food has to be considered in marketing. If the housekeeper has plenty of time to put on food preparation then purchases may be made with little regard to this point, but rare is the housekeeper who finds herself in this position.

Quantities to Purchase

There is much opportunity for saving through the purchasing of large quantities if only they can be kept from spoiling. In attempting to save by this method the purchaser has to recognize that she must provide for variety in the diet and that often large quantities necessitates too much repetition. This difficulty is frequently solved by more than one family making certain purchases together, as buying a crate of grape fruit.

Knowledge of Food Values

When all is said and done, really efficient marketing cannot be done except as the housekeeper plans her purchasing with regard to food values. This does not mean that she must know the detailed composition of every food material, but she should secure for herself enough information so that she can make satisfactory substitutions when she is face to face with the purchasing problem.
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Riveted and Welded Square Steel Radiator

Quick, Easily-Regulated Heat, and Plentv of it — Economically!

The HESS square steel radiator is very sensitive to heat, responding instantly to a small fire and radiating practically all of the heat produced; for sheet steel conducts heat immediately, without the loss of time and fuel required to heat bulky cast iron to its radiating point. The square shape provides a much greater area of radiating surface than is possible in round types of heaters, increasing in direct proportion the amount of heat circulated.

Great durability results from the uniform expansion and contraction of sheet steel distributed over a large area. HESS construction entirely overcomes the cracking of parts and opening of joints, common in sectional furnaces, and consequent broadcasting of gas and dirt. The welded seams, fused and sealed air-tight, and guaranteed against opening and leaking, make forever impossible the escape of dirt and gases into the rooms of the house.

"Modern Furnace Heating," a practical book on the subject of heating, and describing Hess Furnaces, will be sent on request.

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KEITH CORPORATION, Minneapolis

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112 Designs Cottages $1.00
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Before You Build get a copy of my 64-page up-to-date book of bungalows showing nearly 100 floor plans, together with exteriors of from 3 to 11 rooms in the various types such as Colonial, Swiss, Italian, Spanish, English, etc., selected from the thousands of beautiful bungalows of California. Price $2.00 postpaid anywhere. No stamps please.

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Pasadena, California

Sleep an hour longer on cold mornings

How can a man feel kindly towards his heating plant when it routs him out of bed to fix the fire before it's time to get up? Modernize your heating plant. Install a Minneapolis Heat Regulator. Then you can have your sleep out while the house is warming up in the morning. Punctually, at the time indicated on the thermostat, the drafts and dampers will automatically open. When you get up the house will be comfortable—a result of modern heating plant regulation. Besides giving you comfort, convenience and consistent, healthful heat, the "Minneapolis" saves from 18 to 30 per cent on your fuel bill, by preventing spasmodic over and underheating. It is a scientifically accurate instrument. Used with any type of heating system, warm air, hot water, steam, or vapor. And with any fuel—coal, gas, electricity or oil. It is now standard equipment on the leading makes of oil burners. Ask any heating contractor about the "Minneapolis" or write for free booklet, "The Convenience of Comfort."

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The "Minneapolis"
Heat Regulator
The Heart of the Heating Plant
What A Woman Can Do
May Belle Brooks

Those housekeepers who want their homes to have that sense of up-to-dateness which comes with new furnishings, but find no funds for replenishment in an overworked budget, are sometimes able to work wonders themselves by a clever manipulation of their old furniture that will give the semblance of the newer styles.

I recently saw an old square, extension dining table converted into one of the new, long refectory types for the library. Fortunately, the legs were of a rather bulbous design often seen in the latter style. Two leaves, fortunately, had been fitted so that the underpart of the table was complete when used with doilies, and these were inserted; and then the entire sides were sawed off a few inches to give the long narrow effect, and a table runner wide enough to conceal the leaves was thrown across the center. The old varnish was removed and replaced with a dark, waxed finish, and the edges carefully finished.

A very comfortable chaise-lounge substitute is possible by combining a low, armed chair with a box seat, both upholstered alike and of the same width, of course. When the two are pushed together the effect as well as the usefulness and comfort are similar to the more expensive article of the shops.

If you have two chiffoniers or chests of drawers alike in size and shape, a built-in dresser effect may be easily achieved along one wall of the bedroom by placing a kitchen table made the same height, between the two and hanging a mirror above that. This provides ample space for dressing table appointments and when all is painted the same color a very harmonious unit is the result.

A pleasing and economical arrangement was seen in a rather small room shared by two girls. Instead of two separate dressing tables, or one large one, a kitchen table was divided at the center by means of two mirrors fitted into one frame, back to back, and fastened upright to the table by large screws from underneath. This gave each girl her own mirror and dresser space, and, set in front of a window, a good light was always available to both. With a pair of benches to match, it proved a most unusual feature of the attractive room.

In a rented house containing no linen closet, a very good substitute for one was achieved by shoving an old tall chiffonier into a hall closet just big enough to receive it and allow the door to close. Here was drawer space for all the smaller linens while the top was further extended by means of a board laid across it, reaching to the wall at the end. On this the larger pieces were arranged.

An old-fashioned washstand having three drawers and a small side cupboard was made into a study and type-writing
Make Every Room An All-Weather Room

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SO INSIST ON TRADE-MARKED "TIDE-WATER"

CYPRESS

Lumber—Because it's "The Genuine Wood Eternal"
& LASTS & LASTS & LASTS & LASTS

Tell your lumber dealer about it—Look for this on every board—Accept no Cypress without this mark.

"HOMES OF DISTINCTION"

A beautiful book of 68 pages, showing homes in Spanish, Italian, English, Swiss and Modern style, in original colors, with floor plans and complete descriptions, costs, etc. Blue prints and specifications furnished for any design.

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HOW WOULD THIS MANTEL LOOK IN YOUR HOME?

Just think how much this handsome Colonial design mantel would enhance the beauty of any of your rooms. Why not plan to put in a HORNET MANTEL in your living room? It will make it cozy and warm in winter and attractive all year round.

You can get this mantel No. 2525 in dull mahogany color, or primed three coats white lead for white enamel.

SEND FOR OUR CATALOG TO-DAY—IT'S FREE

Hornet Mantel Company
1127 Market St. ST. LOUIS, MO.
table for the boy’s room by the simple expedient of hinging a drop leaf to one side of it.

Any woman the least bit clever with her fingers can make for her room as pretty a dressing table seat as that seen in an expensive home. I made one out of an old wash-bench by nailing a board upright to each side to provide arms, having them of exactly the same width as that of the main sides of the bench, so that there would be no edge protruding. Then a small board was nailed across the top of each arm to provide a base for padding. Old clothes and excelsior were used for padding both the seat and the arm rests. The whole thing was then neatly covered with cretonne and finished with an all-concealing flounce front and back.

In adapting old things to modern usage one must not forget the virtues of the paint brush.

The Delicate Function of Starch

While some housewives “never put anything away with starch in it,” there are others who do not see the necessity for handling a garment a second time, and who put things away in the fall just ready to put on. The art of starching is usually what makes the difference between a garment which has been “washed,” and one which looks “just like new.” Practically all new fabrics have a certain amount of dressing, so applied that it does not easily come out with ordinary wear. The function of starch is to replace this dressing, while keeping the fabric as pliable and soft as when new. Perhaps the housekeeper may not realize there are different kinds of starch, which may be used in laundry work, and that a choice may be made when a delicate fabric or a dainty frock is to be made fresh and ready for use again.

There are corn, wheat and rice starches, and there are blended starches. These blended starches are combinations of two or all of the others, with perhaps some borax and paraffin included. This is usually what the purchaser gets when she asks for “laundry starch.” The quality of starch which adapts it to use as a dressing is its viscosity; in other words, its stickiness or tenacity. Of the three starches, corn has the greatest viscosity. Wheat starch has less viscosity, but more pliability, and rice has the least viscosity. If you are unable to purchase rice starch, you can cook one-quarter cupful of rice in one quart of water, strain, and add another quart of water to it.

Borax, alum and paraffin, although not absolutely necessary, improve the starch. Gum arabic may be called a starch substitute. It is especially adapted for delicate work such as the dressing of organdy.

Bran may be used for washing cretonnes in place of soap. The rinsing should be done in bran water, which will contain just enough starch to give the cretonne its original appearance.
Creative art work and printing plates for direct mail advertising

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"The Finest Milled Flooring in the World"

IXL ROCK
MAPLE, BIRCH
AND BEECH
FLOORING

One important feature is the wedge shaped tongue and groove which enters easily, drives up snug and ensures a perfect face at all times without after smoothing, an advantage that is not obtained by any other manufacture.

Our method of air-seasoning and kiln-drying has stood the test for thirty years.

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Wisconsin Lumber & Lumber Co.
Hermanville, Mich.

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FIREPLACE Furnishings
That Gladden the Hearth
ANDIRONS

as shown 18 inches high.

FIRESET
27 inches high. Both finished to match in grey, sw dish and black. An artistic and substantial set, especially priced complete (six pieces) $9.95

COLONIAL FIREPLACE COMPANY
Manufacturers of complete Fireplaces, Dampers, Grotes, Andirons, Screens, Fretters, Hooks, Firesets, etc.

4612 Roosevelt Road
CHICAGO, ILLINOIS

Uncertain dependence on Jupiter, the well, and the cistern ceases when you install a Kewanee Water Supply System. Delivers a supply of pure, fresh water always under strong pressure. Get free bulletin describing 200 Kewanee Water Supply, Electric Light and Sewage Disposal Systems.

KEWANEE PRIVATE UTILITIES CO.
403 S. Franklin St., Kewanee, Ill.
The Ancient Art of Plastering

The use of stucco in some form is making renewed demands on the attention of the owner and the architect, on account of the wide variety of surface treatments that may be obtained, and the facility with which it may be applied either in new or in remodeled construction. Its use goes back as far as the work of the archaeologist has gone.

"Plastering is one of the earliest instances of man’s power of inductive reasoning, for when men built they plastered," says William Miller in "The Art of Plastering." In examining fragments of early Egyptian plastering brought back by Dr. Flinders Petrie, Miller found that the base was lime and that it was practically three-coat work, 3/4 inch thick, haired and finished as is done now. When used on partitions, it was laid on reeds which were laced together with cords to serve as lathing.

Ancient Greek work shows a lime stucco of most exquisite composition—thin, fine, and white. Some of it has been found at Mycenae, a city of Homeric date, according to a bulletin issued by the National Lime Association. "The lime stucco used by the Greeks and Romans," according to this bulletin, "had the finishing coats of a mixture of well slaked lime and marble dust, or in case of the Romans, sometimes powdered travertine stone or lave. This mixture was applied in several coats, each one being carefully rubbed, and before the final coat was set the decoration was worked out and the figures and carvings formed. In order to toughen the stucco and to prevent the last coat from setting too fast, there was usually some other material used in conjunction with the plaster, such as fig juice, rye flour, curdled milk, melted wax, or honey."

The abundance of modeled stucco revealed when the Golden House of Nero was unearthed, astonished the artists of the renaissance. 1505 is given as the date of this discovery and it led to the revival of "stucco durro," with the beautiful plastered ceilings and interiors of Italy.

The use of stucco on the exterior of buildings in England became popular at the time of Henry VII. The Plasterers Company, a guild, was incorporated in 1501, and the secrets of slaking and aging lime were jealously guarded and passed down from father to son. Great care was used in preparing and applying the mortar, and its durability is evidenced by the remarkable state of preservation of many old buildings after hundreds of years.

The California missions, built the latter part of the eighteenth or first of the nineteenth century, were built of adobe brick and then covered with stucco and given a relatively smooth-trowelled surfaces on which soft brown colors were applied with brushes.

Fine old stucco houses abound in many of the older sections of the country, east, west and south, and even up into Canada, which have stood for many years, and the stucco is today as good and sound as when put on. It must, of course like all such materials, be properly handled.
One day he wrote in it. The next she did. Their observations about each other are frequently crisp and often amusing.

Send for this "Diary of the House in the Woods"

FIRST, it tells all about the designing of The House. Then follow interestingly informative things about its actual building. After which comes the way they treated the walls and finished the wood work, not to mention the final decision about all the floors. Most of the actual doing, they did themselves. By "they" we mean Katharine McDowell and Husband Ned. We finally induced them to let us publish the diary. It's now ready in its charming Mellotone tinted cover and is full of color illustrations and helpful text. Unless we are way wrong, it's exactly the kind of a book you have long wanted. Send 10 cents for it direct to our Main Office at Dayton, Ohio.

The LOWE BROTHERS Company
465 EAST THIRD ST., DAYTON, OHIO

New York Boston Philadelphia Jersey City Chicago Atlanta
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Lowe Brothers
Paints and Varnishes
A curious note on the preparation of the mortar, in this booklet says: "Many plasterers of the old school used common dark molasses, one quart to each bushel of quicklime, or to every two sacks of hydrated lime, in the running box. This sugar solution is known to make lime more soluble and thus more active chemically. The practice is still in vogue today in some localities and the satisfactory results that are claimed from the improved working qualities are considered by many to be well worth the added cost."

**Overcoating**

The remodeling of existing buildings by means of a protective coat of stucco is known as overcoating. This has become a popular and satisfactory method of giving a pleasing appearance and has rejuvenated many types of structures. This method results in a saving, both in repairs and painting of woodwork.

The covering of the clapboard, siding, shingles, or other wood with counter lathing or metal furring often necessitates extending the old window and door frames or trims to correspond with the increased thickness of the wall. This may be done by the proper application of moldings to the frames or at times by rounding the plaster into the frames. Where the sheathing, clapboarding, and shingles have been removed, this extension of frames or trims is seldom necessary.

When weatherboarding, shingles, or other wood finishes are in poor condition they should be removed, and furring and lath should be placed over the sheathing. Waterproof building paper should first be applied over the sheathing if such paper has not been previously used, or if used and not in good condition.

If the studding and supporting framework is not stable and secure, the sheathing should be removed, and the studding, etc., should be properly braced and the furring and lathing applied either with or without new sheathing according to the judgment of the designer.

When weatherboarding and shingles remain, they should be gone over and securely nailed, and the furring and lathing should then be properly applied. In all cases, furring of sufficient depth should be used to enable the proper keying of plaster behind the lath.

**Storm Windows**

"Close up all the little leaks of the house and save on the coal bills," is the advice given householders on every hand with the approach of another season of high priced coal. Insulating materials and weather stripping are generally used on the newer construction, which save their cost in a few years through the saving in fuel, but storm windows must be depended upon for the older types of houses. Even in this age of efficiency it may "require the brains of the whole neighborhood" to put on the storm windows, according to the cartoonist, but even in such a case it is worth the effort.

**American Buildings Withstand Earthquake**

A statement issued by the Department of Commerce says that American steel concrete buildings in Tokio and Yokohama withstood the earthquake shock and are in good condition, according to a cable received from Kobe.

Officials of the department expressed gratification over the first practical demonstration of the effectiveness of the new so-called earthquake-proof factories and office buildings which have been constructed within the past three years. There are about six of these buildings in Tokyo.

**Strength of Brickwork**

Ordinary brickwork, laid in the ordinary way by an ordinary bricklayer, has as great strength as brickwork laid especially for testing in a laboratory, according to the conclusions reached in an exhaustive report by Rudolph P. Miller, former superintendent of buildings in the borough of Manhattan, New York. Old brick piers, taken out of a New York building, were found to sustain an average load of 1,555 pounds to the square inch.
The soft color tones in any of 30 shades of red, green, gray or brown, or in special "Dixie White" obtainable in "CREO-DIPT" Stained Shingles have none of the "painty" effects often noticeable in other materials.

Many prominent Architects use a careful selection of "CREO-DIPT" Stained Shingles in variegated colors on roofs and a solid tone of some harmonious color on side walls.

The long 24-inch "CREO-DIPT" Stained Shingles with a wide exposure effect on side walls add individuality and insure economy.

No bathroom is complete without a HESS WHITE STEEL MEDICINE CABINET or LAVATORY MIRROR

Coated inside and out with the best grade of SNOW WHITE baked enamel.

This mark guarantees it everlasting-ly against cracking, blistering or flaking. Your money back if you are not pleased.

Five sizes — three styles. If your dealer is not yet supplied, write us direct.

Hess Warming & Ventilating Co.
1217 Tacoma Bldg., Chicago
Makers of HESS WELDED STEEL FURNACES

The Beauty of your new home,
Make it permanent:

The booklet pictured above presents suggestions and information of indispensable value to the builder of the home of lasting beauty.

Write for your copy

THE GENERAL FIREPROOFING CO.
Youngstown, Ohio
EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

A Hardwood Floor For the Front Room

OW, then, my dear,” said Aunt “Jack” Peters the other day, to her nephew, Charlie, “you are a rising young lumber dealer, how much is an oak floor? Look me right in the eye.”

“Going to fix up the house?” said Charlie cautiously.

“What’s that got to do with it?” said Aunt Jack despairingly.

“But I ought to know,” Charlie began.

“How much?” interrupted Aunt Jack, in her hardest voice, “is a hardwood floor?”

“Which room is it, and how big is it? I ought to know that,” said her nephew.

“Well,” said Aunt Jack, in a resigned tone, “it’s my front room, if you must know, a 12 by 14 foot room, and I want a hardwood floor over the old one, I’m sick and tired of that old floor,—and I want to know how much is oak floor a thousand. Do you get me?”

“Yes, I get you,” replied Charlie, “but you’re not going at it right. It’ll cost you,” as he made a rapid calculation, “just $21 to buy enough oak flooring to cover that floor.”

“Did you say $21?” gasped Aunt Jack. “Why I thought it would be ten times as much. Old Joe Walcott told Bert it would be something like a hundred dollars, a thousand. Here, give me that pencil. How much floor does it take? Let me see. Twelve times fourteen; two 14’s is 28, and one 14 is 14. Eight; 4 and 2 is 6; 1’s a 1. A hundred and sixty-eight feet——”

“Add one-fourth for tongue and groove,” said Charlie.

“One-fourth. Four into 16, 4 times; 4 into 8, twice. Forty-two. A hundred and sixty-eight plus 42 is 210. Two hundred and ten feet in that room. You said $21. Two hundred and ten into $21.00 goes ten times. Ten cents a foot; and a thousand times 10 cents is $100. A hundred dollars a thousand! I must have thought there’d be thousands of feet in that little 12x14.”

“Now, Aunt Jack,” said Charlie, “if you asked your grocer the price of sugar and he told you $100 a ton, you’d think him crazy. You want oak flooring enough only to cover your floor. What do you care what it costs by the thousand. That’s only trade jargon.”

“You’re right, you’re right, Charlie, and I reckon we can handle it at $21. It does make a world of difference how you can look at the price, doesn’t it?”
"Home Sweet Home," a model house, replica of John Howard Payne's boyhood dwelling, recently opened for exhibition in Washington, D.C. and floored with OAK.

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In the Old Home

A special grade of \(\frac{3}{8}\)-inch flooring is made for laying over worn floors, using the old floor as a sub-floor. The cost is small, and the effect is wonderfully satisfactory. In fact it costs less than ordinary flooring, plus carpets, to start with. As far as modern homes are concerned it is practically indestructible if given proper care.

Hardwood flooring should never be laid where there has been new work, until the walls and plaster are thoroughly dry; in fact, it should be the last work to be done. It is most important that brick, stone work, concrete and fireproof filling be thoroughly dry before the flooring is laid. Building in winter, flooring should never be laid without first heating the rooms. Otherwise there is always dampness in cold atmosphere in new buildings which invariably leads to trouble, both in laying the floor and the subsequent use.

When \(\frac{3}{8}\)-inch flooring is laid during the summer months, which are usually warm and dry, with the first fall chill and dampness, the rooms should be heated at least once a week. This is particularly necessary with the thin flooring, due to its being subject to greater shrinkage on account of its light structure. Through prolonged wet cold spells, even in the summer, heat should be introduced in such rooms at least once a week.

The ideal method for securing the best results, in a new building, is to defer laying floors until even the interior finish and wall papering have been finished and become thoroughly dried.

Laying New Floors

The sub-floor in new work should be reasonably dry and laid diagonally. Ship-lap of 6-inch or 8-inch width is preferred. This should not be put down too tight and should be thoroughly dried and cleaned before the hardwood flooring is laid.

It is well to use damp-proof paper between the hardwood flooring and the sub-floor. Do not use ordinary building paper or rosin sized paper. The quantity required is small, and the very best quality of damp-proof stock should be used. Where sound-proof results are desired a heavy deadening felt is recommended.

It is very important to leave about \(\frac{1}{2}\)-inch space on all sides between the hardwood floors and the base board, to allow for expansion in event any dampness later gets into the flooring. This opening is covered by the quarter-round or base moulding.

Hardwood flooring should be laid at right angles to the sub-floor in old houses. After laying and nailing three or four pieces use a short piece of hardwood 2x4 placed against the tongue and drive it up. Care should be taken in driving up \(\frac{3}{8}\)-inch flooring not to break the tongue, which is fragile. Also do not drive up excessively tight.

Non-burning Wood

Wood that will not burn is, of course, a much to be desired thing. It is reported that not long ago there was tested on a considerable scale in England an Amer-
In planning your new home, the study of interior treatment both as to architectural detail and decoration is of equal importance to obtaining a good design and a practical, well-planned house. This book illustrates the interiors of many successful homes and contains much valuable and authoritative advice on Interior Decoration. Printed on enamel coated paper which brings out the beautiful detail of the illustrations. Size 7¼ x 11. 160 pages. Flexible embossed cover in colors.

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BOOK NOTES
The Building Labor Calculator, prepared and published by Gordon M. Tamblyn, Denver, Colorado, is a concise, complete and accessible compilation of quantities and materials required per unit of work, and the classified labor hours necessary to put it into place. It is convenient in arrangement yet small enough in size to go into a pocket.

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Through the Ages, "a monthly magazine devoted to the uses of marble—its universal adaptability, beauty, permanency and economy," is a new publication of which the initial number appeared in the spring of this year. It is a publication worthy of its subject, portraying beautiful marbles from those of ancient Greece to the details of the Pan-American building at Washington and buildings recently completed, together with modern methods of working and handling marbles. It is a beautiful publication carrying much interest.
The Overlooked BEAUTY SPOTS In Your Home

When you enter a home that is particularly charming in its decorations and furnishings, you realize that its secret lies in the wonderful background of elegance formed by its broad expanse of lustrous, velvety oak floors.

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As the Year Closes

The building of homes, in a more or less slender stream, goes steadily on—whatever the business conditions, because the home is one of the essentials of true living. As the year draws to a close, statistics show that the building of dwellings has led in the construction program over the last nine months. In a mid-west city the records show more than half of the total building to be housing accommodations. Homeowners are moving from the thickly populated districts of the cities into suburbs which in these days of motor car traffic are easily reached. We are told by an eminent financial authority that while there will probably be a decline in the building of apartments, as the need for them has been filled, he believes the great increase in home building of this last year will continue through 1924. We think his views are well founded.

In order to stabilize building costs it is becoming more and more necessary that the building program be spread over the entire year. We must get away from too much “seasonable” construction. We urge upon prospective home builders a planning of their homes during what we might call the real closed season for outdoor work, in order that they may be all prepared to take advantage of the earliest possible building operations. One of the reasons that building time is the scarcity of skilled labor. It is necessary to carry building operations as far as possible into early winter, and to start them as soon as possible at the close of winter.

There is always a brief period in mid-winter when actual building operations are at a standstill. It is during this period that all who have any thoughts of building anticipate the months when the hammer and trowel can swing. We quote Franklin D. Roosevelt, president of the American Construction Council, who says, “All who are interested in building projects in the near future should undertake them as early as possible because it enables them to take advantage of the slack employment period.” This means the mid-winter months.

We are very glad to tell our readers that Keith’s anticipates having a hand in the promoting of new ideas for the home builder, and to help in a very direct way to enable greater numbers of people to build to the greatest advantage. We shall carry out a number of noticeable changes in the magazine during the coming year, and invite a reading of page 273, which tells more in detail about our interesting program for the year ahead. May we anticipate with equal confidence the opportunity of carrying these messages to all of our subscribers who have been with us during this and other years.
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Usual window treatment in a concrete cottage
MOTHER found rooted deep within the center of her family a tiny seed. She named it “The Spirit of Home.” She studied it and found it a wonderful thing, filled with marvelous possibilities. As she studied she began to understand its meaning. Now when the light of understanding fell upon the seed, it awakened, rooted, and put forth little branches covered with leaves of beauty. As the mother watched and tended it, watering it with kindness and flooding it with light, a bud appeared. Then the bud became a flower, a beautiful flower filled with exquisite color and form. The family seeing it, loved it and called it “Home.”

Another mother seeing this, said to herself, “I, also, will give my family a lovely flower and they, too, shall call it Home. But my family shall have a much finer flower than my neighbors’. I will search until I find one much larger, more gorgeous than theirs.” She found a flower, somewhat dim in color, but of gorgeous, striking form, which had come out of the Feudal Ages. It had the breath of kings and queens upon its petals, so she knew it must be fine. She brought it in great triumph to her house and called in her neighbors that they might see what fine thing she was giving to her family. But the flower withered. It was an alien in strange surroundings. It had been taken from the house wherein it grew and without the warm light of love and understanding, it withered. One by one the petals fell, the leaves drooped and dried. The house wherein it died was still only a house, filled with the dust of a withered flower.

A third mother seeing her neighbors, scoffed at them, and said to herself, “What wasted energy! The flower of home will grow in any family. I have many things to do, I cannot stop to study and to understand that tiny seed. I must be busy feeding and clothing my family. They must be sent to schools. There they will receive the best in education. They will be able to go forth into the world and obtain great riches. Then they will be happy.” So she did not reason further but busied herself with many things. She built around herself and her family a cold laboratory of practicality. The tiny seed received no warmth of love or light of understanding. It, too, faded and the house wherein it died was still only a house, covering a tiny, frozen seed that might have been a flower.

Rooted deep in your family life is the tiny seed, “Spirit of Home.” It is a very tiny seed but hidden in its heart are wonderful possibilities. If you nourish it with love and tend it with reason it will blossom forth into a beautiful flower, Home. If you fail to let the light of understanding shine upon it, it will not grow, but will wither and decay.

—Ruth Gerth.
Inviting door steps to a sunny entrance. The brick of the steps are set on radial lines emphasizing the semicircular form of steps.

This home of charming simplicity has the vivid contrast of blinds and awnings. The great outstanding chimney promises warmth and cheer within the inviting entrance.

Awnings for Winter
Awnings which cut out the glare of the winter sunshine, yet without darkening the interior, at the same time adding a decorative treatment.

The surface of the stucco walls catches every shadow and transmits it into a constantly changing decoration.

Photos from Mary Wilson Hopkins
HERE were four fierce dragons in olden days, so reads legend, that lived in four corners of the universe. When the moon grew full each hurried from his retreat and together they devoured it, then turned and journeyed home only to find the moon had grown again and at once they started back on their journey. There are four dragons which arise whenever the moon of a new little home is hung in the sky by some ambitious person or family. There is the lean hungry one that is the limited contents of a purse. The second is sent by old father time and is the short building seasons which custom has established in many sections of our country. The third is an inexorable creature, the practical needs and demands of those who live within the proposed dwelling, and the other is the demand that the house be artistic, that it be good in design, and possess the elements of good taste.

The builders of a certain small home in one of Detroit's suburbs found that one or all of these dragons had destroyed innumerable plans of the home they hoped to have. At length four rules were determined upon to meet and overcome the four forces which previously had caused them to discard every plan. First, simplicity was decided upon, absolute simplicity in every detail. What extra decoration might add to the charm and beauty was to be left until a later date. Second, it was determined to use whatever material was in the local market and to obtain full value of the material's good points even if the material man was to be amazed and precedent be ignored. Third, the builders resolved to forget that phrase "the way it is usually done" and to work direct from material at hand to needs and demands. Fourth, it was decreed that all work was to be done permanently but in such a manner that in future years, if the
much looked for ship came in, additions and adornment might be added.

The house as erected was about twenty by thirty feet, rectangular in form. The lot on which it was placed was small, forty by ninety, facing the west. There were exceptional views to the northwest, north and northeast. There was no alley, street or service approach from the rear. Across the front was placed the living room opening with French doors, on the north end, upon a small entrance porch. A plan for the future glassing of the porch and thereby making it a sun parlor or vestibule was discussed. As all service would approach from the street, the delivery entrance or kitchen entrance was placed on the south side, which happened to be toward the town.

The placing of the septic tank was a matter which came up for serious consideration and discussion, as present conditions of the development required one for every house. We knew that a septic tank, when correctly built, is only obnoxious because of the space which it consumes unless it is placed very deep, that should be devoted to the garden. The side entrance needed a porch. Would it be possible to place the tank, carefully built of reinforced concrete, under the foundations of the porch? We decided to try it, with perhaps some misgivings, but it has proved an entirely satisfactory arrangement.

Opposite this kitchen entrance ran stairs to the basement, beneath the stairs running from first to second floor. From this small vestibule off the kitchen was a door opening to the kitchen and one opening into the living room. In this day of the tea wagon a direct approach from the kitchen to the living room and its hearth is most desirable. At the foot of the stairs leading to the second story was an entrance to the dining room. Such an arrangement practically obviates the need of a rear stairs.

Casement windows called forth the dragon of slim pocketbook. This was satisfactorily exorcised by having perfectly plain swinging windows built consisting of three panes of 16"x16" glass. These windows were hung to swing outward and the simplest hardware was selected, hooks and staples for fastenings and an inexpensive device for holding the windows open at desired angle. Again a plan looked into the future and some time more elaborate and better fittings will be substituted. At the present, the screens for summer use are hung swinging in, but on that day when the ship comes home under full sail, rolling screens will be sub-
stituted. But these simple casement windows delight the hearts of the owners who are averse to the usual double hung windows, and as they swing outward they are perfectly weather tight.

As the house was to be of frame construction, a visit to the lumber yards and a pricing of materials brought consternation. Even the suggestion to use ship-lap, rough side out and stained was useless, for the local market had a limited supply of shiplap. A pile of 8-inch boards, dressed, caught the eye and at once suggested a scheme. The difficulty in using such material for siding is in keeping the lumber dry. Boards used as siding warp convexly, the center curving in. Two simple precautions were followed. The carpenter ran a bit of furring strip or lath under the middle of each board and firmly nailed it to the sheathing and studs. After one or two experiments he determined the exact distance this should be placed from the board already nailed. This bedding strip in the center of the 8-inch board kept it from warping. Moreover a painter followed the carpenter and as soon as a wall had received the siding a coat of oil with a small amount of pigment was applied. The boards were thus kept dry and protected from dampness, while the tendency to warp was also checked by the strips. The broad thick siding gives a quaint character to the walls and casts delightful shadows, giving a texture to the wall.

It is not alone the area of a building that determines the cost but also the height. A foot in height means just so many more running feet of material. A small two-story house, 20x30, is apt to look stilted. To minimize this and to favor every means toward economy the ceilings were made low. Eight feet is sufficient ceiling height for practical purposes, but it may be a trifle low for artistic effect, especially in rooms the size of the living room in the house being de-
were no more difficult to keep clean than are the ordinary stained and varnished floors. To protect the base board from duster and floor mop, the base mould was painted the color of the floor instead of the light gray.

The trim itself was very simple. Dressed pieces two and a half inches wide were used for door and window casings, nor was it moulded, beveled or even rounded off. True, it offers a flat edge, which in certain places offers a ledge for dust, but so does any mould. A six-inch piece sufficed for the base board. It was amazing the difference in the price this narrow trim and mould offered when compared with the usual wider one. Anticipating the day when hardwood floors are laid and a backband added to the casings, the window stools were run past the casing to a distance permitting such a mould being placed outside the casing at a future time if desired.

Ordinary two panel doors were ordered for the inside of the house and when they were delivered, it was observed that although there was a decided variation yet the panels in every door were beautifully grained. Two were of elm, one of birch and two or more of pine. The beauty of such natural grain could not be painted without feeling there was a waste. The panels were stained with a gray blue harmonizing with both painted woodwork and floor and increased the beauty of the panel. The doors were decidedly out of the ordinary, but very attractive.

Although the house was heated by a small hot air furnace yet warmth for the soul at least was provided by a fireplace. This stack or chimney carried both the furnace flue and that for the fireplace. Field stone from nearby farms was secured and the face of the fireplace laid with these, broken rather small and cut so that the soft colors of the broken surface were given full value. Larger stones laid as are flagstones composed the hearth. However, to get pleasing proportions with shelf, breadth of chimney, height of room, etc., was puzzling until the portion of the hearth which holds the fire itself was raised the height of two brick. The draught of the fire was appreciably increased by raising the fire in this manner above the floor and the heat was thrown out into the room increasingly.

In a fireplace of this sort it is customary to run the masonry straight up to the ceiling following the same lines for the chimney breast, or else to decrease the chimney above the throat. In the former case there is a waste area or space where there are but two flues, and in either case, if the chimney only carries one flue, there is a waste space from the floor to the height of the chimney throat on one side of the fireplace opening. Here was a waste of space, and bookcase or cupboard was the answer. Below the mantel shelf an open cupboard was built to make a place for the tongs and fire shovel, the hearth broom and such equipment. Above the mantel shelf was built a bookcase opening to the face of the fireplace.

One practical need of the house plan itself was due to the fact that the family
was small and occasionally the mistress of the house was alone for a considerable time. The upstairs plan was so arranged that the stairs could be closed off from the other portions. The closets were off the hall and curtained. In this way though the bedrooms might be opened up at night and be found cold for dressing in the morning yet the clothes and closets and bathroom were left comfortably warm.

The plaster board, as is always the case, shows the joining, but the skillful selections of paper which has a small pattern or no distinct pattern obviates this objection and the second papering completely overcomes this difficulty.

At length came the porch and the problem of giving it the simplest possible construction. Two columns were built up of four boards each, with a simple base and a cap and neck band. Across these parallel to the house was placed a well-selected six by six timber and from the house, and resting upon this timber were two by six rafters. These ran about a foot beyond the timber. Roof boards were placed upon these, matched and beaded stuff, and then the composition shingles. The rafters were not framed in and the porch had an air of openness and lightness.

Cupboards, shelves, trellises, porch and window boxes, blinds, seats and bookcases are all part of the plan, but belong to the days to come. As each little ship comes in, from out its cargo one of these features will be unpacked. Some day the garden and picket fence, the gate and hedge and flagged walk will all contribute to the beauty of the little house. Meanwhile it is attractive, comfortable, practical, and in good taste; built in spite of the four old dragons that would devour all bright and happy things, even including a very small home.

Stencilling on Wood Unusual Effects
James S. McMillan

FIELD, which has not yet received the attention it deserves from the decorative artist, is stencilling on wood with stains or dyes. There are five different varieties of stains: oil, spirit, varnish, water stains and chemical stains. The first four are very suitable for stencil purposes. Chemical stains, on the other hand, are unsuitable because of their chemical reaction on the wood and stencil plate. Being transparent, stains allow the natural grain of the wood, or the texture of the material, to be seen distinctly. Herein lies their particular advantage. Very rich color effects can be obtained, which make the original nature of the material convey the impression of truth and beauty. New wood is best to begin with; old wood gives the stain a somewhat dull appearance; and dirty wood will not convey the color of the stain at all.

Before stencilling with stains, it is necessary to prepare the wood. A rubbing or two with fine sandpaper and a very light coat of weak size will answer this purpose. This allows the stain to penetrate the wood, yet keeps it from trespassing beyond the pattern. Being more liquid than either oil color or alabastine, these stains require more careful handling. To prevent too much stain going on the brush, it is advisable to prepare a pad made of layers of cheesecloth and pour a little of the stain on until the pad
is damp. It is then an easy matter to daub the brush on the pad and apply the stencil accordingly.

The natural tendency of the stain is to run along the grain of the wood. Unless this can be checked a clean pattern cannot be obtained. To prevent running, use the stain very sparingly. This is the only means of insuring good work.

Since the invention of aniline dyes these have been found very suitable for stencilling purposes, and many beautiful effects can be obtained by their use. The panels of doors, walls, cupboards and mantels can all be decorated in this manner with good effect. There is little or no difference between dyes and some of the stains just mentioned. In fact dye forms the coloring principle of many stains. Textile goods, such as cotton, silk, and woolen fabrics are often ornamented by this medium. They are used for borders, stripes, and powderings, or covering the whole fabric. The same remarks about dyes or stains apply also to inks: which are cheap forms of dyes and are applied chiefly for coarse stencil work, such as lettering on packing cases, wrappers and boxes.

There are two things that should be remembered in choosing colors for stencilling;—permanency and transparency; the former for the durability of the work, and the latter for effect. There is a marked difference in pigments from which one can choose. Nor should it be forgotten that the color of the material, whether stencilling on wood or on cloth, has, to a certain degree, a determining effect on the color to be applied. When stencilled decoration is to be applied to dark cloth this can be done most effectively by a bleaching method by which some of the color is taken from that of the material itself, instead of being added, as in the usual methods of applying the stencil design.

Stencilling is usually discussed as applied to oil colors, alabastine, distemper, stains and dyes; but more recently a new field for stencilling has been opened up through its application on cloth with acid. The method is very simple and produces equally as good work as either of the methods already mentioned. All that is required is a packet of tartaric acid, some liquid gum and a tin of chloride of lime. Mix enough of the gum and acid to form a thick milky liquid, and apply it to the cloth in the same manner as oil colors. When the acid has been properly applied and properly dried into the cloth, soak the cloth in a solution of chloride of lime and water, about two parts water to one part lime. This solution has the effect of taking away the color from those parts of the cloth where the acid has been applied, and produces a light shade of the natural color of the cloth. When this shade is quite distinct the cloth should be taken out, dried, then ironed. You have then an absolutely permanent design on your material.

Great care must be taken to have the solution of lime and water the proper consistency, otherwise the cloth will be spoiled. My experience shows that thin materials, such as linen goods, require a very weak solution, whereas thicker woolen goods require a stronger solution. In one example the material was a dark red cloth, and the design came out a light pink; in another case a dark brown cloth was used, and a nice creamy shade for the pattern was the result. Quite as satisfactory results could be had with other colored materials, given, of course, the necessary care in the formation of the bleaching solution.
A Charming Room  
Carol Weatherby

The low ceiling room has had its own peculiar vogue, and there are conditions where the low ceiling adds materially to the charm. These conditions of high and low ceiling in the various rooms have particular opportunity for development in the so-called "Duplex Apartments" or studio apartments, built in New York and some of the larger cities. For such apartments the unit of height is not less than fifteen feet in the clear for each story. Of this, the studio or the main room of the apartment is the full height, and is more or less of a monumental room in the architectural and decorative treatment given it. While the sleeping rooms and the little kitchen and dining room are each half the height, with stairs from the main floor, permitting many picturesque features. Each apartment is entirely self-contained, and may be as complete and as large as the tenant or the tenant-owner may desire. Such suites have been built as co-operatively owned apartments, where each owner plans his own apartment, and owns it, through the organization which builds and operates the entire structure.

These studio apartments may give...
much the effect of the rafter ceiled rooms which extend up to the roof, in the individual house, with the timber work and trusses exposed, such as the charming and quite unusual room shown in the photographs.

The low fireplace alcove, the little stairway, which must be needed to reach the upper rooms, the balcony across one end of the room at the halfway or mezzanine level, all give a sense of mystery which fascinates and carries one back to the wonder age of childhood, when something irresistibly interesting seemed to lurk beyond each door and in all the unexplored corners of the space beyond our ken. A closer examination shows that since the balcony extends over it, the fireplace alcove must of necessity be low ceiled; the beamed ceiling is charming, and probably also adds to the height in the alcove. But there is a source of interest in all the details of plan and arrangement.

In the furnishing of a room, even more than in the building of a house, if not hampered by sordid material considerations, one has all the world from which to choose. In such conditions the greatest difficulty is the exercise of sufficient self-restraint in the choice, and to keep all the elements in harmony. This is, perhaps, one of the reasons for the popularity of "period furnishings"; it limits by the historical period the types of things which may be assembled together, and at the same time gives a motif in bringing together certain types and furnishings.

The construction or general type of room itself,—if out of the ordinary and commonplace, may in a greater degree give a motif in the furnishing of the room, as it has in the interiors shown. It gives a setting for unique furnishings, such as have been gathered in the room; the carved beds, the high carved heads of which can only be seen near the margin
of the photo; the chest with linen fold carving in the panels of the door, and the mirror with the unusual carving in the upper panel.

With this freedom of choice in the selection of furnishings, fine old pieces of craftwork may be obtained, where there is a constant pleasure in letting the eye follow the beautifully modulated lines. The joy which the craftsman found in the work is returned to the sympathetic observer, with a constantly renewed interest. Moreover the traditions of the ancient craftsman are not dead in America today. Modern methods and modern thought are embodied in new pieces, with results which make possible homes that are satisfactory and beautiful in their furnishing. The habit is still with us to laud the past and condemn the present; but a discriminating taste can find excellent modern work.

Dining Room Furniture for the Living Room
Beatrice W. Hutton.

In the small house or apartment the living and dining rooms are often one and the same. The furniture for this combination room should be carefully planned both for comfort, and for convenience in eating. Especially should thought be given to the table. Gate legged tables have been used successfully, but when guests are to dine and more space needed the graceful table, with console ends, is more serviceable. This table makes an attractive living room piece and the console ends can be placed against the wall as lamp tables, or used as service tables when the additional length is not needed for the dining table.

Chairs for this table must not be too distinctly matching, as in the usual dining room set; but should be for ease and still manage to be in harmony with the lines of the table. The chair shown has an upholstered seat which may be covered in any material desired. Side chairs in the same design with rush seats and long rush benches would combine well with the cushioned chairs and break the monotony of too much pattern.
How Will You Build Your Home?

A LOW BUNGALOW WELL ARRANGED AND WITH ALL THE CONVENIENCES.
POSSESSING BUT FOUR ACTUAL ROOMS, "INGLE SIDE" IS DESIGNED TO GIVE FIVE ROOM SERVICE. WITHOUT DOUBT 'TIS AS INEXPENSIVE A BUNGALOW OF ITS CAPACITY AS IT IS POSSIBLE TO BUILD AND YET RETAIN ADEQUATE CONVENIENCE AND UNQUESTIONED CHARM. OUTSWINGING CASEMENTS, DOUBLE-GLAZED AGAINST SEVERE WEATHER, GIVE OUTDOOR DELIGHTS, WHEN DESIRED, TO DINING NOOK, LIVING ROOM AND FRONT BED ROOM AND ENHANCE THE OUTWARD BEAUTY OF THE COTTAGE. A FORTY FOOT LOT IS AMPLE FOR IT. ITS COST SHOULD NOT EXCEED $4,300. THE DINING NOOK, SKILFULLY HANDLED IN ITS RELATION TO THE KITCHEN, OFFERS SECLUSION AND CHARM.

A FULL QUOTA OF CONVENiences ARE INDICATED THUS:
A = FIREPLACE. B = MEDICINE CASE. C = CABINET. D = DELIVERY & ICING DOOR. E = REFRIGERATOR, CASE ABOVE. F = FOLDING IRONING BOARD. G = CABINET BELOW DRAINBOARD WITH CLOTHES TRAP TO LAUNDRY.
"Edgewood" is really a magic house, it offers so much for such a little cottage and all for so small a sum. It should not cost over $5,000 anywhere. Yet it is actually a six room house—a pretty wicker bed—Davenport converting the veranda into a bedroom by night. Outswing casements and its proximity to the stairs make it very fitting for its double purpose. Cross ventilation and insulation make for comfort throughout the house; a tall and unusually beautiful fireplace radiates good cheer when the air is chill.

How well equipped the wee home is can best be seen by a study of the plans. Open the door, here's the key:

AN UNUSUAL ROOF TREATMENT MAKES THIS BUNGALOW DISTINCTIVE. THE EXTENSION OF THE ROOF OVER IT MAKES THE WIDE PORCH AN INTEGRAL PART OF THE HOUSE. STONE WORK UP TO THE SILL COURSE OF THE WINDOWS WITH STUCCO ABOVE GIVES A PLEASING EFFECT, AND THE SENSE OF PERMANENCE.
A SMOOTH WHITE STUCCO SURFACE MAY GIVE WONDERFULLY ATTRACTIVE RESULTS IN THE PLAY IN LIGHT AND SHADOW WHICH IT CATCHES. IT ALSO GIVES OPPORTUNITY FOR Bits OF DECORATION AS IN THE BRICK PATTERN OF THE CHIMNEY TOP AND THE LIGHTING FIXTURE AT THE ENTRANCE. THE PLAN HAS BEEN REVERSED IN BUILDING THIS HOUSE AND A PORCH ADDED BEYOND THE DINING ROOM.
A newer bungalow built of stucco. The stucco surface is carried down unbroken to the necessary base course just above the ground level, giving a good wall height under the low eaves. Stucco piers on the corners and at the porch with well filled flower boxes between add to the attractiveness of the front entrance while the trellised side entrance is scarcely less effective.

FIRST FLOOR PLAN
HERE are as many ways to furnish a house as there are families in the world—and more—for it is a poor family that cannot boast at least two conflicting ideas on furnishing among its members. Perhaps it is this conflict at the outset, which accounts for the inharmonious, unhomelike aspects in many houses. The masculine and feminine ideas are at variance. A man’s theory may be summed up in five words, “Let us be comfortable.” A woman’s idea is, “Let us make the house attractive.” Between these two lies success. If we cannot achieve this mean at the start, let us take the man’s ideal as the basis of our efforts, and be comfortable first and artistic afterwards.

With all our discussion of beauty in the home, we pay little heed to one element, and that is restfulness. In these days of active life, it is requisite that the home present the antithesis of this; that in our rooms we be able to react from the stress of excitement. And where so rightly as in the homes which are our castles? We have thought little hitherto about it, but conditions are beginning to make such thought imperative. •

If we stop to reflect, we have to acknowledge that the sleeping room must be restful. The fact is self-evident. But scarce less important is the living room. Then there is the library, surely needing quiet, while even the dining room, which at first glance might appear an exception,
ought really to be cool and refreshing, in no way bizarre or blatant, if "good digestion is to wait on appetite."

As for the hall, that ought to be the keynote, we all know, of the house. After its declaration of cheery welcome,—declaration, mark you, not exclamation,—its chief expression should be one of rest and peace. Granting that we do want restfulness, we have to confess that it is getting more and more difficult to secure.

We pride ourselves on having won freedom from the tyranny of kings, but what about the "Tyranny of Things"? There is no gainsaying it, we are slaves of our belongings.

Harmony is of the greatest value in the making of a restful house. Whoever has studied music, even to the slightest extent, knows that harmony is farthest removed from monotony. Yet when it comes to house furnishing, especially to decorating, we are all more fearsome of monotone than keen about harmony.

It is significant that we use musical and color terms interchangeably. Perhaps in the near future investigations will be made far along this line of the relationship between color and sound. We are all aware that certain tones on a violin bring certain colors to the minds of those sensitive to such things. We know that the jar on our nerves, due to two certain colors in juxtaposition, is akin to that produced by two notes that make a so-called musical discord.

How true must it be that our rooms need a prevailing motif of color and a harmonious carrying-out of that, even as the musical composition has a motif and is carried out according to the rules of the particular major or minor scale.

"It is the spirit that must be trained first." We of the Western nations learn concentration slowly. Despite the fact that we live in an age of specialization, the majority of us possess unpoised minds. Rarely do Americans maintain
even an outward calm of manner for long at a time. It is a thing worth striving for, both inwardly and outwardly. Gradually, then, as we win toward the goal, it will be an easier matter for us to make our homes more truly well-bred; to let our rooms express restfulness.

The hall bears an important relation to the rest of the house. It has been likened to a preface of a book, indicating what may be expected beyond. Too often it is a straight and narrow path poorly lighted and unattractively furnished, and suggesting neither hospitality nor privacy. In the average house the hall is sometimes made to serve several purposes and poorly fulfills each. It is vestibule entrance, staircase-hall, and reception-hall and by this necessity a failure. It is too public for a sitting room, too large for a simple entrance, and too small for entertaining. It takes valuable space from the other rooms on the ground floor.

As for the relation of the hall to the living room there should be a more decided separation of the two than one usually finds today. A connecting opening seven or eight feet wide—possibly more—with columns at either side (a favorite modern arrangement) tends to destroy the proper privacy of the living room, and only a very stuffy little hall demands such an apparent enlargement at the expense of inner comfort.

Closely related to the present topic is that of upstairs corridors and passages. In the long, rambling house a broad outside corridor or gallery with nearly all the bedrooms at one side is a practical arrangement seldom attainable for reasons of economy of space which is usually a prime consideration even in large and expensive houses. In the latter a corridor of any considerable length should be five or six feet wide. In the smaller average house a short length of corridor may be reduced to a width a trifle over three feet. Where a wide outside corridor can be managed spaces under the windows or against the opposite walls may be particularly utilized for built-in wardrobes, linen cases, seats, etc. In planning the “circulation” of a house there is, as in every other feature, ample chance for nicely balancing the demand of enforced economy and the demands of beauty,
which require always a certain liberty of effect as opposed to that which seems at least to be mean and cramped. The hall should always be planned with a rather "generous economy."

It must be remembered, says Mrs. Wharton, that as the vestibule is the introduction to the hall, so the hall is the introduction to the living rooms of the house; and it follows that the hall must be as much more formal than the living rooms as the vestibule is more formal than the hall. It is necessary to emphasize this because the tendency of recent decoration has been to treat the hall, not as a hall, but as a living room. Whatever superficial attractions this treatment may possess, its inappropriateness will be seen when the purpose of the hall is considered. The hall is a means of access to all the rooms on each floor; on the ground floor it usually leads to the chief living rooms of the house as well as to the vestibule and street; in addition to this, in modern houses even of some importance it generally contains the principal stairs of the house, so that it is the center upon which every part of the house directly or indirectly opens. This publicity is increased by the fact that the hall must be crossed by the servant who opens the front door, and by anyone admitted to the house. It follows that the hall, in relation to the rooms of the house, is like a public square in relation to the private houses around it. For some reason this obvious fact has been ignored by many decorators, who have chosen to treat halls like rooms of the most informal character, with easy-chairs for lounging and reading, tables with lamps, books, and magazines, and all the appointments of a library.

Modern city houses demand attractive halls. They must be ample, well lighted and have a dignified character. Certainly no feature of the interior is capable of greater architectural possibilities. In some houses, however, the hall is simply a thoroughfare—a corridor for communication between rooms, or a hallway for access to the house. Many halls are utterly devoid of architectural features. It is true they contain a staircase, but this often leads precipitately from the front door into obscurity.

The hall gives the first as well as final impression of the interior. Its character at once reflects the taste of the owner.

The location, size, and arrangement of a hall are very important to the comfort of the family as well as to strangers or callers. Persons may enter the house comfortably, or may be ushered unexpectedly and suddenly into the private part of the house.

For this reason there is a general demand for separation between the public and private portions. This principle of separation and independence for guests as well as for family is as old as architecture itself. The importance of an imposing entrance is equally old. Egypt recognized this in the stately approaches to her temples. Rome realized it in her baths and palaces. In the smaller houses the atrium was the ancient hall. It was more ample than the living rooms, more public in character, and, although placed in the center of the composition, permitted separation from, as well as access to, the more intimate portions. Surely a modern house is not well planned unless such a result is attained, although it may be secured in the simple manner of a somewhat detached entrance.
Center Lighting Fixture

W. D. B.—I am very much interested in your answers to interior decorative questions and come to you for suggestions, too. I am enclosing a plan of the front part of our house. The woodwork is oak with oak floors. There is a bay window in both living room and dining room. The living room is papered with a sort of taupe gray. Fireplace is red brick with a mitred polychrome mirror over it, electric lights at the ends. The furniture we already have are a grand piano, Windsor chair and straight chair, gate-leg table, all mahogany. We have a day-bed upholstered in English chintz with a black background. Oriental rug about 8x14 with red as predominating color, although there are some very prominent blues. We are planning to repaper the ceilings, creamy white, on account of the dark walls, but we see no reason for removing the center light fixtures, unless they are ugly. With your several floor, table and desk lamps and the lights on each side of the mantel, you do not seem to need more than a bracket light on each side of the piano. However, if we could see the ceiling fixtures, we might favor taking them out. We suppose the rug you describe is Khiva, as those are the colors of that rug. We would make the blue in the rug and not the red the predominating tone of the furniture and hangings.

Cushion the window seat in a blue mohair and have blue wool damask draperies hanging straight on the outer sides only, of the bay window group. So many charming small tables are used now in furnishing, and we would place one there, with a small chair near it, perhaps just a bowl of flowers on the table. The gate-leg table should have a mat of blue mohair and a lamp, books, etc. But be careful to choose the soft, oriental blue of the rug. The spinet desk will be a pretty feature with desk pieces in blue and silver and a desk lamp with blue silk shade. The blue coloring will be best with the oak woodwork, also.

We do not think you can harmonize a cedar chest with walnut furniture. Why not stain the chest brown. We would suggest this bedroom as the most suitable place for the electric sewing machine. A pretty desk nook could be arranged in the hall or a radio table installed there.
With Cypress Trim

E. L. K.—I am enclosing a floor plan of our bungalow. The trim is cypress—natural color. What colors would you suggest for the walls?

The living room is furnished in overstuffed tapestry, verdure colors, mahogany piano and table—black and gold madras draperies—rug in shades of tan, brown, etc. I would like to get more of a touch of old blue or rose in this room. Would one or two small rugs in blue or rose be appropriate and perhaps a couple of pretty cushions; table and piano scarf of blue or rose?

The dining room is furnished in colonial polished oak furniture, with rug of tan, Chinese pattern, with blue, rose, etc., figures. Bay window forms one side of room. What kind and color of curtains also what color walls for this room? The kitchen is in white and light oak.

The back bedroom is furnished in white with bluebird cretonne curtains. What color walls do you suggest? Would you suggest any different color furniture in this room?

The front bedroom is at present furnished in white with dark rose sunfast draperies. Perhaps you could suggest something with which I could still use the rose sunfast draperies. Shades all through the house are white.

You, of course, understand I do not wish to buy any extra furniture—but if you suggest any different color in the bedrooms I could repaint the furniture I now have.

What we are anxious to do is to fix up our home attractively, for the time being, at little expense.

Ans.—We would advise the use of old gold, rather than blue or rose, in additions to your living room. With the cypress wood trim, the tan and brown rug, the black and gold rug, plain gold table mat, cushions and lamp shades, will best harmonize the mixed character of the furnishings. Let the wall color be soft creamy tan, or biscuit color.

For the dining room, we suggest wall paper in all-over, well blended tapestry, in dull shades of blue and green, with side curtains of plain blue. We would paint the back bedroom furniture sage.

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green, and have a rug or rugs in mixed blue and green.

We would change the furniture in the front bedroom to deep ivory with ivory walls, and woodwork painted ivory. Your deep rose draperies will then be excellent.

**The Sun Room**

J. G.—Will you kindly give me suggestions for treating windows in my sun room? It opens off from my living room and has thirteen windows, five to the front, east, and four to the north and south. It is finished in mahogany and is connected with the living room by French doors.

Shall I use roller shades and if so shall they match those of the house or be of cretonne? If I use shades shall I use drapes and of what material? If I use drapes shall I use a heading or rings?

I have not bought my furniture for this room but the rug in the living room has neutral tones of blue and taupe. Most of my furniture is mahogany and part is upholstered in tapestry.

Ans.—We advise roller shades on the windows of the sun room, a separate shade on each window. We wish you had given the color of the shades used on the rest of the house; but think those in the sun room should be the same, as this room is evidently finished like the living room. It is not usual to see mahogany woodwork in a sun room, and you must in a way live up to that in the furnishings. We hope the wall is cream or pale gray. We should not use draperies at the windows in so small a room. Instead, we advise a lambrequin over the top of each group of windows. We suggest as a general idea for furnishing this room wicker furniture painted robin's egg blue, with some black touches, then cushions of black satin, bound with the blue, and blue tassels at the corners, of some of them. Make the lambreins of the same, edged with blue fringe. Of course, a cream wall and cream shades, would be the choice with this treatment. There should be a rug combining the blue and black, and a black wrought iron reading lamp for one of the chairs, with blue decorations on the parchment shade.
Some of the Interesting Subjects
You'll See In Keith's Next Year

A summer home of unusual beauty—
Remodeling of an old church into a charming home—
The "Era of the Porch"—
Many attractive homes of the smaller types—
Special articles on Interior Decoration—
Articles on Roofing, Painting and Flooring—
Unusual features, such as the much discussed Garage Bungalow—
Practical discussions of Building Materials and their uses —
Helpful articles on Garden Walks—
The Heating Problem; Sanitation; Water Systems; Plumbing—
Accessories for the home, and many household conveniences—
The Stucco Wall—
Brick Houses; the Solid Wall; Tile and Brick Veneer—
An "Exchange Department" for Questions and Answers on Interior Decorating—

A Delightful Feature
—is the new department on Interior Decoration planned for the coming year. Keith designed homes will be augmented with sketches showing the arrangement of furniture and window hangings—and suggested color schemes.

How a New Bride Furnished Her Home
—will prove of help to every home lover. First she will tell you about the home she has to furnish, her own ideas how to make it the most comfortable and prettiest home anyone could want, down to the actual buying of furniture, rugs and drapes. If you're furnishing a home, or want to make your present home more livable, you'll want to read every one of these articles.

Keith's is going to be a bigger and better Magazine than ever this coming year. Every number will prove of help and interest to you in planning, decorating and furnishing your home.
Scheduling the Work
Mildred Weigley Wood

Old Father Time never works faster than when he is with the homemaker who has a family of any considerable size. The great question with the homemaker is whether she shall have "Time" following her or whether she will be the follower constantly trying to catch up with him.

The management of time is truly an age-old problem for the homemaker. Many have become so expert in making every minute count that they would put to shame many a business firm. There are some, however, who have scorned "scheduling" their work and for the most part these are the women who are in a perpetual state of "trying to catch up"—whose work "piles up" and who stoutly maintain they cannot get a minute to rest.

What Is Meant by Scheduling Work?
If it is not to be an eighteen hour occupation, there are two phases to accomplishing the routine of housework. One is the planning of time, or "scheduling" of work; the other is the executing of the various tasks or the "dispatching" of work.

Why Should There Be a Schedule?
Homemaking contains such a variety of tasks to be performed that a plan for getting them done is almost imperative or, in a large family, some will be left undone and these not always the least important, or some will have to be done in the hours which should be used for recreation or sleep.

Sometimes you hear people wonder how a certain woman manages to get through her work now that she has children when before she was always tardy. Whether she would admit it or not the reason probably lies in the very fact that she had children, who with their exact time demands forced her to some sort of a schedule whether she recognized it as that or not.

Those women who have worked with and without a schedule report invariably that this planning of the work means less worry, greater accomplishment and more recreation than when the plan was not used so that now the efficient homemaker is expected to consider "scheduling work" as one of her problems of management.

How to Make a Schedule
As in many other managerial problems of the homemaker, no two homes find that of scheduling work just the same. The model schedules which have been printed in books and papers can at best be only suggestive of what a schedule should be. Each homemaker will have to make hers to suit her own needs. Thus, if she lives in a community where her neighbors are in the habit of dropping in frequently and at odd times she will have to schedule her work differently from the woman who lives where calls are more formal.
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affairs and occur for the most part after three in the afternoon. Again, the ages of the children—whether there be a tiny baby with an early feeding hour for example—will very materially affect the plan of work. Indeed, an infinite number of variations in methods of living exist which definitely affect scheduling.

Every schedule or work plan has two objects: first, the order of the work; second, the length of time for this work. Of these two, probably the first is more important.

There are two types of tasks performed in every household. These are the daily ones, and those which are carried on weekly, or at some special time. To plan the order of work successfully really requires that the homemaker set down in black and white the pieces of work that must be done daily and those which must be carried out at intervals.

Unlike some businesses it is impossible to say that these tasks are to be performed in the order of their importance. There are certain times at which some of them must be carried on. The hours for meals and the time for feeding the baby would be definite times around which the rest of the work might organize itself. Moreover, the order of work is going to be determined by the hours which are most free from interruptions. How often do we see, in the unscheduled household, important free hours used up in doing trivial things which could be readily done in the minutes of a more interrupted hour. For instance, those tasks such as baking, which require almost continuous presence, would be planned for the hour when the baby is quite certain to be asleep, while such work as straightening a room or dusting could well be placed at a time of day when the chances for consecutive work are less certain.

The difficulty with most schedules for work is that they do not allow enough time for unusual tasks, especially those which come with children, and thus frequently fail to work. The more it is possible to schedule such work as cleaning the stove and polishing the silver the less likelihood is there that extra work will pile up as often happens when some task is allowed to go over time. A bread box may have been neglected and become musty, thereby necessitating extra labor and at a time which may be very inconvenient.

Every schedule should provide for a definite rest period. It should not be just time left over as is so often the case. There is no statement that should be made stronger than this.

To figure the approximate time to be allowed for each task is the second step in making a schedule. This usually requires several trial schedules, and judgment as to those hours when unexpected interruptions such as telephone, and settling some question with the children, are most likely to arise. Even though the schedule cannot be completely followed out, some of the important things will be accomplished. It is surprising, too, how scheduling leads to an increased effort to dispatch it more quickly—a problem that will be considered at another time.

A question put to a dozen homemakers whose work seemed to progress efficiently, concerning the points which they would emphasize in order to have the day's work go well, brought forth an almost unanimous response that starting the day early was one secret. The time when much of the important work must be scheduled is before two o'clock in the afternoon. The earlier the day can be begun, compatible with adequate rest, the less one is apt to be interrupted by telephone calls, delays due to busy telephone lines, callers and the countless other interruptions which only a housekeeper can really appreciate. This early start means that the first part of the schedule can be carried out as planned. The homemaker adopts as her slogan, "An hour in the morning is worth two in the afternoon."

Perhaps the best recommendation which scheduling has to give for itself to the homemaker who is considering its adoption is that once tried it is rarely dropped.
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The Tyranny of the Dishpan

If the men of the household were to “do the dishes” for a year do you suppose they would be using a dishpan, with their hands in the greasy water, at the end of the year? Not being dominated by the psychology of the dishwashing traditions, they would not find it so difficult to break the tyranny. Must the housewife all her life be trailed by the dishpan?

“Buy a dishwasher” was the counter attack of the Home Economics man, sales agent for household conveniences, to the insurance man who was pestering him to take out more insurance. Quick came the response, “I married one,” with a knowing look for the brilliant repartee. How many women, we wondered, find that their husbands have married dishwashers? At the same time it is the housewife herself who must find her own relief in this matter. While there are many patented dishwashers on the market nothing but human hands will pick up and put things away after a meal. Not bringing complete relief, she questions the usefulness of any help. It really seems that it is the mental antagonism combined with the physical reaction of fatigue after the preparation of the meal, which is to be combated quite as much as the task itself.

A dishwasher which is comparatively new in type is operated by the power of the water which washes the dishes, somewhat on the principle of the revolving spray head on the lawn hose. An opening below allows the water to run out after being sprayed over the dishes once. A “phantom view” of this machine is shown in the cut; it is shown as though made of glass so that the operation can be watched. It is a metal box with a cover, which stands on the drain board beside the sink, and has a rubber hose connection attaching to the faucet. Fittings for all the usual types of faucets are made for this connection. The one shown is connected to the hot and cold water faucets. The double spray head may be seen in the “phantom view,” which rotates, itself, while at the same time it is the

—

“Phantom view” of dishwasher
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time revolving around the cogged wheel. The spray has a considerable power, and is thrown back again from the top and sides, thoroughly cleansing the pieces. They may be left in the steam from the boiling water and thoroughly sterilized before removing the top. The machine is left open a few minutes for the dishes to dry.

Where there are more dishes than can be placed in one rack, several racks or wire baskets may be supplied; one with clean dishes lifted out to dry in the air while the second is being washed. There is an additional rack for the cooking utensils. Where there are only a few dishes used, they may be picked up after each meal and put into the dish washer as used, and the dishes be washed only once a day.

When it comes to the job of washing the dishes, after everything has been put away and the dishes gathered up and prepared for washing, then it is a matter in pure mathematics as to how much time shall be devoted to the task, and whether the housewife can better afford to give her time than the cost of the machine.

Can the dishes from each meal be washed in half an hour,—that is an hour and a half a day, 7 days in a week, 52 weeks a year. If one hired a maid to come in and do them, at 25 cents an hour, the work for a year would buy an expensive type of electric dish washer. Five months would pay for an excellent and very practical type of machine.

Health department reports give rather striking figures in the relatively small count of bacteria in machine washed dishes, over dishes washed by hand.

Making Starch

Good starch must be free from lumps. It should first be mixed with a little cold water and stirred until thoroughly dissolved—that is, the tiny globules are entirely separated. Pour boiling water directly into this, stirring vigorously while pouring, until the starchy solution changes from a thin, milky liquid to a clear substance of a heavier consistency. The temperature of the boiling water bursts the starch grains, producing a thickened mass. If not perfectly clear it should be cooked—that is, heat applied, but not boiled—until it clears. Boiling starch is apt to make it lumpy and uneven. In making a very small quantity of starch, it is usually necessary to apply heat under it, as not enough boiling water can be used to completely explode all the tiny granules of the starch without making it too thin. After the starch is properly made, water may be added to get just the consistency desired. For thin fabrics and for curtains it may be thinned until there is only a slight slippery feeling to the fingers when they are dipped in the starch and rubbed together. Starched garments or fabrics should be allowed to become "bone dry," and then dampened again before they are ironed, to get the best effects from the starch. Starched pieces should be ironed with an iron which is hot enough to quickly dry the piece, without danger of scorching.
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CHAS. S. SEDGWICK, 1135K Lumber Exchange, Minneapolis, Minn.
The Chimney—Its Decorative Value and Efficiency

The outside chimney is one of the decorative features of certain types of house, adding a touch of color, breaking the wall surface and giving a shadow where it is effective. Care should be taken, however, that while serving its decorative purpose the efficiency of the chimney itself is not diminished.

It is easy to see that, if the outside of the chimney is cold and the inside several degrees warmer, this condition may affect the hot gases seeking to escape through the flue. Those on the outside wall cool faster than on the inside, and drop back slightly, causing a small riot among the gases in the flue, and the passage out is stopped or slowed up, quite as really as with a material obstruction. In cold climates the outside chimney should be double walled, with an air space, up to the eaves, if the usefulness of the chimney is not to be impaired. Above the roof all walls are outside walls, and while heat may be lost there is not the interference with the draft.

The draft or drawing power of a flue, as any one knows who stops to think about it, is due to the tendency of hot gases to rise. Gases expand with heat, the tiny particles separate and become farther apart; hot gases are therefore lighter than cold gases. Since all gases are, comparatively speaking, perfectly fluid, the lighter, warmer, volumes rise and the cooler and heavier volumes fall, an interchange due to gravity. It can easily be seen, therefore, that a protected chimney that keeps the gases from losing their heat as they pass up the chimney will produce a better draft than one which is not well protected and permits the gases to lose their heat and drop back. That is to say, an interior chimney, one running up through the inside of the house, will give more uniform draft than one built up as a part of the outside wall, unless it is protected.

In chimney operation, height produces draft and net cross-sectional area gives capacity. That is to say, the higher the chimney, the greater the “pull” on the chimney gases and the less the danger of smoking at the furnace or fireplace. Also, the larger the net area of the chimney, the more coal may be burned in a given time without choking the chimney enough to kill the draft. These two factors, height and area, are inter-dependent and each should be considered with the other.

Chimney Height

The least height of a chimney, for residences, is variously stated from 30 to 35 feet, according to James D. Hoffman, of Purdue University, in the Heating and Ventilating Magazine. Chimneys less than 30 feet high are likely to be erratic in their action. The furnace codes approved by the various engineering socie-
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ties interested in furnace heating give as a least value 26 feet above the furnace grate, which, to say the least, should be considered a minimum in all cases.

Cross-sectional Area

In the average residence the cross-sectional area more frequently causes trouble than the height. The ideal section for any air duct is a round one. This does not work in very well with the brickwork, however, and a square section should be approached as nearly as possible, keeping in mind that whatever shape is adopted, it must fit the usual sizes of bricks.

In practice, no chimney flue should be made of less internal area than an 8-inch round or an 8 by 8 inch, and in moderate sized houses the working conditions of the chimney are improved if this is enlarged to 8 by 12 inches.

There is a dead zone next to every frictional surface,—and that next to an ordinary brick wall is extravagantly large,—which is ineffective as free area. The gases moving along such a surface do not slide but roll and tumble, thus farther restricting the free passage up the chimney. In a chimney having a thin rough flue, this neutral zone may be sufficient to practically nullify the entire draft area.

One prominent authority states that this zone extends a distance of 2 inches or more from each brick surface toward the center of the chimney.

Chimney Lining

All chimneys should be lined with hard-burned flue-tile lining throughout the entire length of the chimney, the tile to be not less than \( \frac{3}{4} \)-inch thickness. This is especially necessary if the chimney is built of a single thickness of brickwork or of a cement block construction. There are two reasons for this. The smooth interior of the tiles eliminates a large amount of the friction usually found between the moving column of gases and the inner surface of the brickwork, and, in addition, tiles are a safeguard against fire, since they cover up any open joints or cracks often occurring in the average mortar joint in one-brick walls.

An examination of many attic chimneys will reveal such cracks. They are easily distinguished by a feather of black soot and dust around the opening. In normal operation, the draft within the chimney is sufficient to cause the surrounding air—say attic air, because most of the roof fires begin in the attic—to pull inward toward the chimney. When a heavy deposit of soot collects upon the inner surface of the chimney and this is fired by an extra hot fire in the furnace, the gases trying to escape from the top of the chimney are so great that the “pull” of the chimney is overcome and a reverse condition takes place. The pressure within the chimney now is greater than that of the air without and the hot gases are forced out through the cracks to the attic, igniting any combustible material in their path. Many of our mysterious roof blazes could probably be traced to this one defect in chimney construction. Tile linings effectually cut off gas leakages to the house, but emphasis should be laid upon the fact that the lining should be of the best and strongest quality, each section end should be well bedded in a good mortar joint, and the entire lining should be laid against the brickwork but should not be slushed in. This will permit the lining to expand and contract free from the chimney proper.

Heat Loss

If the loss and damage caused by buildings that leak heat too freely were as visible as the loss and damage a leaky roof makes, there would be in actual operating existence today a class of builders as extensive as roofers, fully prepared to protect every class of building against preventable heat losses.
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Building Experiences

What One Builder Did
Carl J. Nelson

Our magazine has given me many points and I enjoy reading it very much. I am a carpenter by trade, and am building my house after one of your designs. I am situated up on a high rock, with the most wonderful view in all directions. The front of the house faces north, and I have a good view from there, but from the back looking south I can see the Custom House tower in Boston, six miles from here, as clearly as if it were only a few blocks away. To the east about the same distance, about six miles, I see the ocean, Revere Beach, Boston's Coney Island. A good many people advised me to turn the back of house toward the street, but I could not do that very well, so now I have built just a little porch in front, and the large porch in back. Half of that back of the dining room I made into a sun room, with four large windows, a glass door from dining room and a glass door onto the back porch. I have taken two feet from back porch and two from kitchen and made into a back hall and pantry. I will have a beautiful place and easy to get up to—no noticeable hill to climb, just a long, gradual slope. I bought the 9,500 square feet of land for a small amount. No one dared to tackle it as they all thought it a solid rock. But on top of the ledge grew big trees, so I took a chance and I found good deep black soil and under that hard blue gravel, which gave no trouble getting the cellar.

A Place for the Telephone
W. J.

When we were remodeling our living room, the idea of the little telephone box attached to her newly decorated wall seemed like a desecration to the Lady of the House, and she demanded that something be done about it. The builder was an ingenious man who was usually able to find a way around building difficulties. He was something of a cabinet maker, too, as were so many of the good old builders. The place where the telephone should come into the room was fairly well settled by other conditions, and unfortunately there was not room for a table, or even for a telephone stand, though a chair could be placed there.

This is the solution which the builder found for the problem of placing the telephone. Before the replastering was done he recessed the wall between the stud where the telephone was to go in. Then he built wooden boxes or cabinets, one just big enough to receive the little telephone box without interfering with its usefulness, making openings for the wires, and placed it in the lower part of the recess just above the baseboard. He built the other cabinet larger and with a slightly projecting shelf at the bottom, for the standard with mouthpiece and receiver of the telephone: making the opening as wide as practicable between the studs, so that it should not seem like a hole in the wall. The openings were prepared to receiver these boxes when the plastering was done but they were put in place when the trim was put on, and finished with the rest of the wood work. Even had there been room for a table or telephone stand, the Lady of the House says that she would still have the recessed receptacles. The protruding box on the wall either interferes with the furniture or, if it is exposed to view, is unsightly. Often it is both in the way and an objectionable spot on the wall.

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Before me, a Notary Public in and for the state and county aforesaid, personally appeared M. L. Keith, who, having been duly sworn according to law, deposes and says that he is the owner of the Keith's Magazine, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, to-wit:

1. That the names and address of the publisher, editor, managing editor, and business managers are:
   Publisher—M. L. Keith, Minneapolis, Minn.
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2. That the owner is:
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3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are:
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Sworn to and subscribed before me this 29th day of September, 1923.

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My commission expires March 18, 1925.

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A Handbook Every Home-Builder Should Have

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Revised Edition
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Woman suffrage made the American woman the political equal of her man. The little switch which commands the great servant Electricity is making her workshop the equal of her man’s.

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