

Convenient Kitchens



EXTENSION SERVICE OF THE COLLEGE OF
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THE UNIVERSITY OF WISCONSIN
MADISON

AN EFFICIENT KITCHEN is one so arranged that all work is reduced to the fewest possible movements. Such a kitchen saves the worker's time; makes the work easier; eliminates waste; and lowers the cost of light, heat, and cleaning.

The kitchen must be the most sanitary room in the house. It needs the sun at all hours of the day. There should be windows on two sides of the kitchen and a service porch connected with it and the back hall.

The size of the kitchen depends on the number of workers and the uses to which this room must be put. A small kitchen with an alcove dining space for either family or field workers saves many steps. A small kitchen with every inch of wall space used for storage or for working surfaces means greater efficiency for the housewife.

Convenient Kitchens

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CONVENIENT, attractive kitchens are more than an aid to housewives—they help to create happy, healthful home life.

The average kitchen, whether in town or country, makes work instead of saving work. Often it is gloomy and ill-ventilated and frequently so poorly arranged and equipped that the mother spends twice the amount of time and energy in preparing meals that she would need to do in a well-planned kitchen. This waste of time and strength means that the mother is often over-tired and that the children are deprived of attention they might otherwise have had.

Whether you are building a new house or remodeling the old one, plan your kitchen carefully, for it is one of the most important rooms in the house. A successful plan is always based on a careful study of the actual steps the housewife follows in doing her work and is arranged to prevent needless crossing and re-crossing of these main routes.

Location of Kitchen

A large part of the work of the home is done in the kitchen. The other parts of the house which have to do with carrying on this work must be carefully arranged in relation to the kitchen.

Dining Room. The distance between the preparation area in the kitchen and the place where the food is served should be as short as possible. A long or winding route increases by miles the walking which the housewife must do in a day. In the smaller house the dining room is being replaced or supplemented by the dining alcove with built-in table and benches.

Basement, Basement Stairs and Dumb Waiter. If food is stored in the basement, the housewife must make several trips there during the day. It should not be necessary to walk a great distance to reach the basement stairs. They may go down direct from the kitchen or from an entry close to the kitchen door. In

the basement the bins or shelves containing stored food should be readily reached. A dumb waiter by which food may be lowered or raised to the kitchen saves many trips to the basement.

Back Entrance. The back door should be near both kitchen entrance and basement stairs and so placed that the kitchen is not made a passageway in going from outside to the basement. In Wisconsin, where the problem of heating is important during most of the year, it is wise to have the back door open into an entry way or vestibule rather than directly into the kitchen.

Front Door. Since the housewife must frequently answer the doorbell, the front door should be located so that she walks as short a distance as possible. The passageway should be direct and not pass through other rooms. In some of the recently built houses this problem has been solved by putting the kitchen in the front of the house.

Laundry. If the laundry is on the first floor it must be near the kitchen both for convenience and to save on construction by centralizing the plumbing.

Planning the Kitchen

The modern kitchen is now used mainly for meal preparation. Since most housekeepers do their work in a definite order the kitchen plan must take into account the steps taken in preparing meals and allow work to be done in its natural order without crossing of paths.

These steps are: Preparing food, cooking food, serving food, and washing and putting away the dishes and utensils.

Preparing Food. (a) The perishable food is brought from the ice box or dumb waiter, stored food from the basement, or staple dry supplies from the storage cupboard. The necessary utensils are taken from utensil cupboards or from hooks or shelves above the work table.

(b) The food is then prepared for cooking by washing at the sink or mixing at the work table.

Cooking Food. This is done largely at the range. If gas is not used a place for the kerosene stove must be planned for summer use. If the kitchen is small, a cupboard on the floor level under the work table into which the fireless cooker may be pushed is a great convenience.

Serving Food. This takes place from the range if the food is hot or from the work table or ice box if the food is cold. Serving table, shelves and tea wagon are used to lessen the trips from range to dining room.

Clearing Away. From the dining room the soiled dishes come back to the sink. A work space of some sort should be near the sink where the dishes may be scraped, sorted and stacked. The drainboard on which the washed dishes are placed should be on the left because the average person reaches for a dish with the left hand, holds it with this hand and washes it with the right. If the drainboard is not on the left, each dish must be changed from one hand to the other as it is washed. A movable table or wheeled tray may be placed near the sink for the soiled dishes.

After the wiping process, the clean dishes and utensils are put away in their places.

Grouping of Equipment

To do this sequence of work with the greatest ease and speed, the equipment must be grouped compactly.

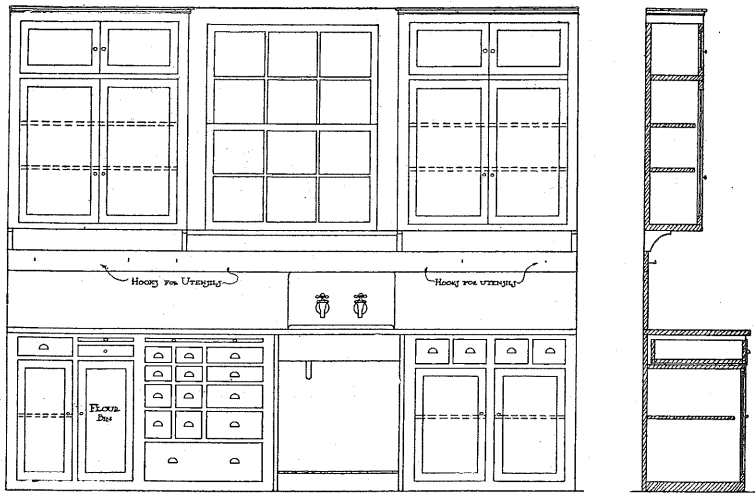
1. Work table, utensil cupboard, and supply cupboard, must be very close together, with the ice box or dumb waiter located near by. The sink must be conveniently near this group and also near the dining room so as to make the dishwashing easy.

The ice box must not be too near the stove. Placing the ice box in a separate room, such as a pantry or entryway, saves ice, but it is doubtful whether the saving is worth the extra walking.

2. The range, dish cupboard and serving area are very closely related. They must be near the meal preparation group and also near the dining room door so that the food may be served easily. The serving area is frequently of greatest convenience if it takes the form of a movable table which may be placed where wanted.

Because so much must be put into a small space in a compact grouping, the separate work table is not advisable. The space below is usually wasted; and food and utensils of all sorts must be brought to the table when they are wanted, instead of being at hand.

A very satisfactory type of compact equipment is shown in Figures 1 and 2, and has been used in most of the kitchens illustrated in this bulletin. The work table, at least 34 inches from the floor, extends across one end of the kitchen. Space below is built in solidly with cupboards except beneath the sink where it must be



ELEVATION SHOWING WORK TABLE
SINK AND CUPBOARDS

CROSS SECTION

FIG. 1.—ELEVATION OF KITCHEN A

This compact kitchen work area combines work table, cupboards and sink in a convenient, easily used group.



FIG. 2.—KITCHEN A IS WELL LIGHTED AND HAS A REST CORNER

A small set of book shelves, a tiny table and a comfortable chair make it possible for the worker to rest or make up her grocery list during intervals of working.

open to allow easy access to plumbing. Utilization of this area below the work counter is very desirable, as it is otherwise unused space, difficult to clean.

Above the work area, space is clear for 18 inches to keep the work table free for use. Cupboards fill in the space above this to the ceiling. A cupboard top left a number of inches from the top of the room is simply a dust catcher and wastes valuable space. Hooks are placed below to supply a convenient place to hang utensils most frequently used. The upper portion of the cupboard is in a separate division reached by smaller doors. These upper cupboards may be kept for less used utensils and supplies and need not be opened every time the lower part is used. Such equipment as this gives in one concentrated group the work table, sink and cupboards for utensils, staple supplies and dishes. The arrangement of the kitchen is much simplified by utilizing all the space in one particular spot. Such equipment is offered for sale by various makers of interior cabinet work or may be built according to the plan of the housewife by a local carpenter.

Size of Work Spaces

The height of all working areas is extremely important. No general height can be given which will suit all persons. Every housewife must discover the height which is best for herself and see that her work table and sink are installed at this distance from the floor. A few plumbing companies are now beginning to realize that there is no "standard height" at which a sink should be placed and are instructing their plumbers to ask for directions from the housewife. The average plumber, however, installs his sink at a height that is far too low, thereby causing much fatigue for the worker.

TABLE 1.—PROPER LEVELS FOR WORKING SURFACES.

Height of woman	Height of working surface
4 feet 10 inches	32½ inches
4 " 11 "	34 "
5 " 0 "	34½ "
5 " 1 "	35 "
5 " 2 "	35½ "
5 " 3 "	36 "
5 " 4 "	36½ "
5 " 5 "	37 "
5 " 6 "	37½ "
5 " 7 "	38 "
5 " 8 "	38½ "
5 " 9 "	39 "
5 " 10 "	39½ "
5 " 11 "	40 "

The range with the high oven should be chosen in preference to the old type which involves much stooping.

Do not have too wide a work table. A width of 22 inches to 28 inches is sufficient for any work. If a greater width is used, the back of the work space is used simply as a catch-all for various things which should be put in their places. The greater width means more space to be cleaned daily. Most of the cupboards should be shallow also, as this avoids shifting of utensils to find the article at the back. Fourteen inches is wide enough to accommodate the largest dish, but most cupboards may be narrower than this.

Materials

Walls. The walls must be finished with some hard-surfaced washable material. Hard finish plaster painted makes an excellent durable finish. Oilcloth glued to the wall gives an easily cleaned surface which may be replaced or repaired when necessary. Tile is good, but expensive.

While the color will depend upon the exposure of the kitchen, light colors are usually more desirable. They reflect more light, are more cheerful and give an impression of cleanliness. Blue and white are favorite colors which are easily carried out in utensils. A light green is easy on the eyes. Tones of creams and yellows are good if a warm color is desired.

Floors. The ideal kitchen floor is easily cleaned and non-absorbent of fat, not too expensive, "easy on the feet" after long standing, and not slippery. Hard wood floors are very expensive at the present time. Soft woods are not durable and are hard to clean. A very satisfactory floor covering is good quality linoleum, which may be laid over any type of flooring. Before it is cemented down it should be allowed to lie unfastened on the floor for several weeks to allow it to stretch and shape itself to the space and then be fastened down with a special cement. Brass strips should be placed across doorways or other places where raw edges may receive wear. Corners are more easily cleaned if rounded pieces of brass are placed here.

Table Tops. The material for the table top must be chosen with great care. Hard wood, especially oak or maple, gives satisfaction. Soft wood covered with heavy linoleum is easy to keep clean and is not fatal to dishes dropped upon it. A covering of zinc is durable and is not affected by the heat. It is discolored by

acids, however. Oilcloth wears out so rapidly that it is not recommended. Various composition tops, laid over wood, are very durable and are easily cleaned.

Lighting and Ventilation

The kitchen should have at least two windows placed on two sides of the room to give good light and cross ventilation. They may be placed high from the floor to be out of the way of furniture below, but should extend to the ceiling in order to allow easy escape of hot air. The casement window, opening out on side hinges gives the full area of the window for ventilation.

Ventilation is further aided by a hood placed over the range and opening into a chimney or ventilating shaft. By this means cooking odors escape from the room without spreading to the rest of the house. This is especially useful in winter when it is impossible to depend upon ventilation by windows. A small electric fan is an excellent aid to ventilation if electricity is available. Odors may be quickly driven from the room, or fresh air drawn in from the outside. The greatest factor in poor ventilation, especially in the kitchen and laundry, is excess of humidity or moisture in the air. Stirring the air by means of a fan will prevent the humidity being felt.

Artificial lights must be carefully placed so as to direct the light upon the working surface and not into the eyes of the worker. Oven, sink, and work table need special light, placed so that the worker does not stand in her own shadow. It is better to have two or more lights placed to give illumination where needed than to depend upon one general light placed in the center of the room. Bulbs should be shaded if necessary to keep the glare from coming directly into the worker's eyes.

KITCHEN PLANS

A number of kitchen plans have been selected to show how the problem of arrangement has been solved in various types of houses.

Kitchen With Rest Corner

The kitchen in Figure 3 is of medium size, large enough for two or three persons, but small enough for convenience for the single worker. Food is taken from the ice box or from the cupboard.

No. 1, above the work area on the left hand. It is placed on the work table near the sink. Utensils are hanging on the hooks above the work space or are taken from the cupboard below. Practically all the preparation of a dish may be done with only

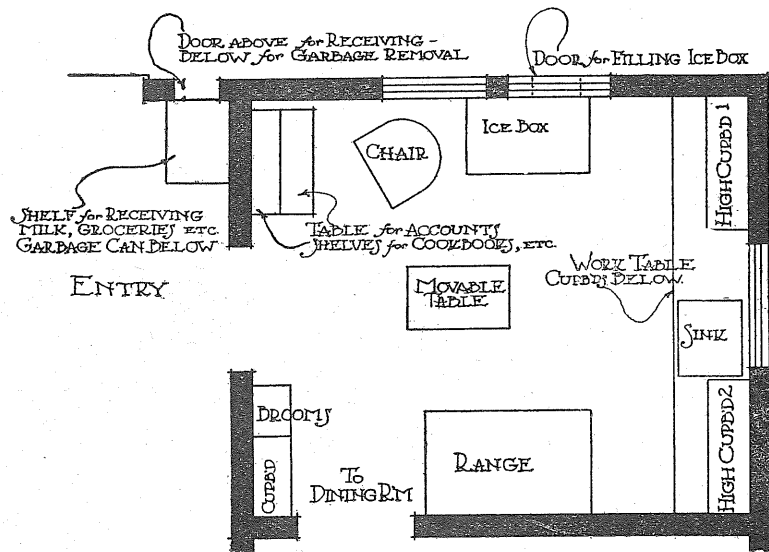


FIG. 3.—PLAN OF KITCHEN A

The equipment in this kitchen is well grouped and can be reached with little walking. Other views are shown in figures 1 and 2.

a few feet of motion. The range is placed on the right of the work area where it receives side light from the window and where it may be reached with only a short journey from the place where the preparation is done. Dishes for serving are kept in the right-hand high cupboard, No. 2, and the movable table is utilized for serving from either work area, ice box, or range.

A tea cart may take the place of a movable table and the food be taken directly to the dining room. It is only a step from the place where the food is put into the dishes to the dining room door. In clearing away, the food and soiled dishes are brought out by means of the table or tea wagon. The food is placed in the ice box, soiled dishes are washed at the sink, the utensils replaced in the lower cupboard, and dishes returned to their cupboard, No. 2, on the right.

The work table is adequately lighted, with one window directly above it high enough to protect the glass from spattering. (See

Fig. 1 and 2.) Two windows give side light and make good ventilation possible. These windows are placed high so as to allow space for the ice filling door beneath, so there is no need for the ice man to enter the kitchen or even the house.

In the entry just outside the kitchen door there is a shelf with a small door beside it where the grocery boy or milkman may leave his supplies, thus making it unnecessary for the housewife to be at home when he comes. The food is at once placed out of the sun, and out of the way of dogs and flies. Just below is space for the garbage can where it may be reached without entering the house and yet is readily available from inside. A shelf may be arranged on the door itself, if desired, so that the can swings outside with the door.

The very tiny rest corner is a special feature of this kitchen. There is a space for a small table, where one may consult recipe books or make up the grocery accounts, and a chair with a comfortable back and low arms. Above the table are a few shelves on which cook books and recipe file may be placed, and where there is space for milk tickets, menus, and memoranda pertaining to the kitchen. An extension of the telephone may be placed here, thus making it possible to take care of all telephone calls and to do the ordering without leaving the kitchen.

Broom closet and extra cupboard are in the corner available from the entry and the dining room, yet they do not disturb the main work area of the kitchen.

Figure 2 is a corner of this kitchen showing the compact work area in use. A glimpse of the rest corner with its table, bookshelves and chair is also seen.

Kitchen for General Needs

Another kitchen adapted to general needs is shown in Fig. 4. This is a somewhat larger room, 11 by 13 feet, and is therefore well adapted to the use of two or more workers. If only one worker is to use it, the kitchen may be smaller and the furniture brought closer together. Here the equipment extends around two corners, making a very convenient grouping. Beginning near the hall door is the ice box convenient for filling from the hall. Food may be easily transferred to the work table or washed at the sink. The work table is well lighted and adequate in size, so there is

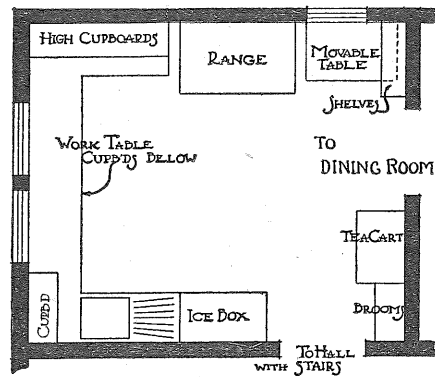


FIG. 4.—PLAN OF KITCHEN B

Work done in this kitchen moves easily from left to right about two corners of the room.

room for salads and other cold food to be prepared near the ice box and sink. Foods which must be cooked may be prepared at the right side and then easily transferred to the range. Dishes for salads and desserts may be kept in the cupboard at the left, while utensils and staple supplies needed for cooking are placed at the right. The movable table near the range may be pulled out into the center of the room or left near the range where it is convenient for serving. The shelves above it are of use for keeping holders, salt, pepper, and other supplies constantly needed while cooking. Below the table is a place for the fireless cooker, so often in the way unless a special place is provided for it. The tea cart, which is, of course, movable, is located in a place available for either kitchen or dining room use. Dishwashing and clearing away are made easy by bringing tea cart or movable table with soiled dishes near the sink from which the clean dishes may be transferred to cupboard.

Another Satisfactory Kitchen

Kitchen C, Figure 5, has been found very satisfactory after a number of years of use. The main work area is under the large window, and is near the large sink on the one side and the range on the other. Cupboards below and shelves above make it possible to have the equipment used for food preparation near at hand as shown in photographs (Figures 6 and 7). The flour bin is swung on a cupboard door to make it easy of access and to

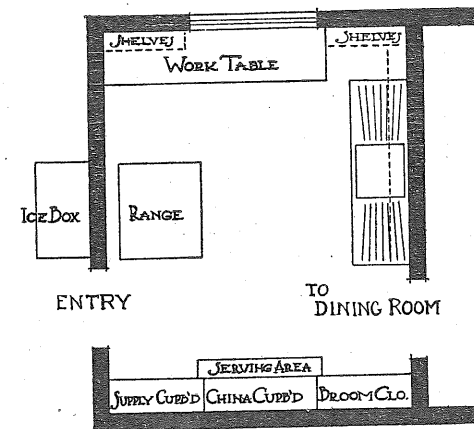


FIG. 5.—PLAN OF KITCHEN C

The working unit of range, work table, and sink with shelves above is here grouped near the large window with the serving area at the other end near the dining room door. These units are pictured in figures 6 and 8.



FIG. 6.—GROUPING OF EQUIPMENT IN KITCHEN C

The flour bin which swings on a cupboard door, tin-lined cake and bread drawers and conveniently small cutlery drawers are special features of this work table. The range at the left has a high oven which minimizes stooping.



FIG. 7.—ARRANGEMENT OF EQUIPMENT AROUND SINK IN KITCHEN C

Hooks and shelves above the sink place utensils within easy reach of the worker. The sink is placed high so that the worker need not stoop. The corner of the work table shown in figure 6 appears at the left.

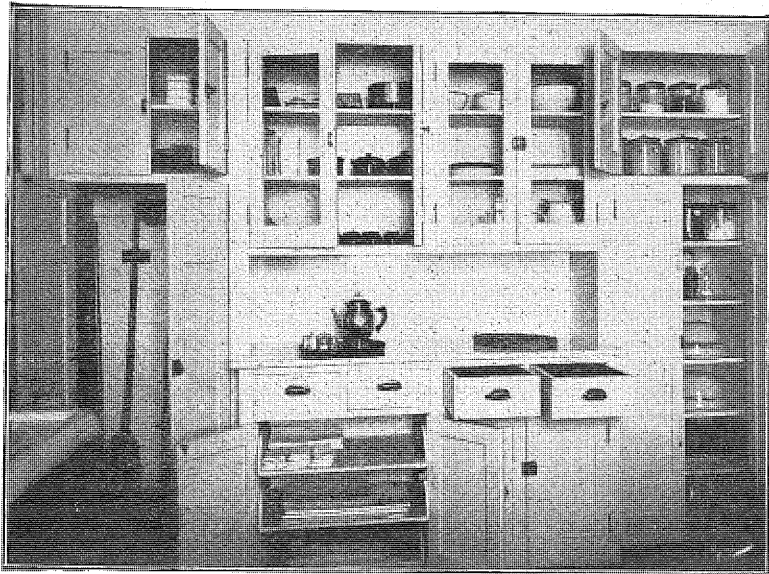


FIG. 8.—A CONVENIENT SERVING AREA IN KITCHEN C

This serving table has felt lined drawers for silver and trays for linen which slide forward on small castors. The higher cupboards open separately so that they need not be opened each time the lower cupboards are used.

facilitate cleaning (See Fig. 6). A storage cupboard for extra supplies is found in the corner near the range. The serving dishes are kept in the cupboard near range and near dining room door, easy of access for either cold or hot food. These cupboards have a serving area where serving dishes may be spread out (see Figure 8). The cupboards below this service area contain sliding trays for linen, and special felt-lined drawers for silver. The sink is near the dining room door so that the soiled dishes are placed on the drainboard, washed in the sink, and returned the very short distance to utensil or dish cupboard.

Kitchenette With Dining Alcove

Planning a kitchenette is a much more difficult problem than the larger kitchen. Since space is limited, any mistake in arrangement is sure to lead to dissatisfaction. Necessarily the equipment must be smaller in size than that of the ordinary kitchen. A kitchenette 6 by 10 feet is shown in Figure 9. The working space is adjoined by sink, ice box, and range; cupboards, and dumb waiter are easily reached. The cupboard between ice box and door is for extra storage, a convenience usually lacking in a very small kitchen. Here the dining space is supplied by the use of the alcove arranged in a small room next to the kitchenette.

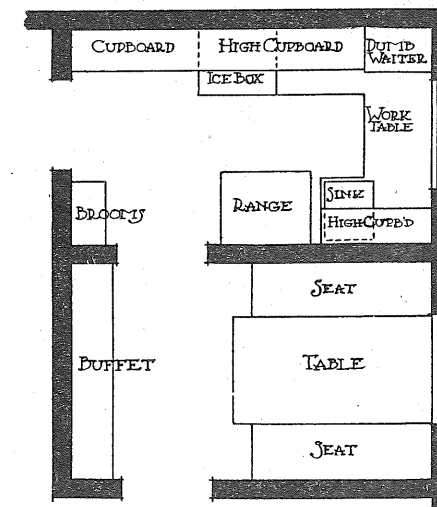


FIG. 9.—KITCHENETTE WITH DINING ALCOVE (KITCHEN D)

In spite of its small size this kitchenette is well arranged for one worker. None of the essentials of a well arranged kitchen have had to be left out.

The dining alcove or breakfast room is increasing in popularity, especially where space must be saved. In Figure 9 there is a table large enough to seat four to six persons comfortably, with built-in bench on either side. The window at the side lights the room amply. A built-in buffet opposite gives space for storage of silver, linen and dishes and is a great convenience in serving. The entire unit of kitchenette and dining alcove occupies a space only 10 by 12½ feet and is consequently adaptable for use in apartments or small houses.

Farm Kitchens

The farm house kitchen is a special problem. Necessarily many more types of work must be done in or near the kitchen. Frequently much of the cleaning incident to dairy work is done in the house. The laundry work is practically always done at home. If several men must be fed, it is especially necessary that there be an adequate place for disposal of coats, overshoes, and the like and that facilities for washing are easy of access. Too often

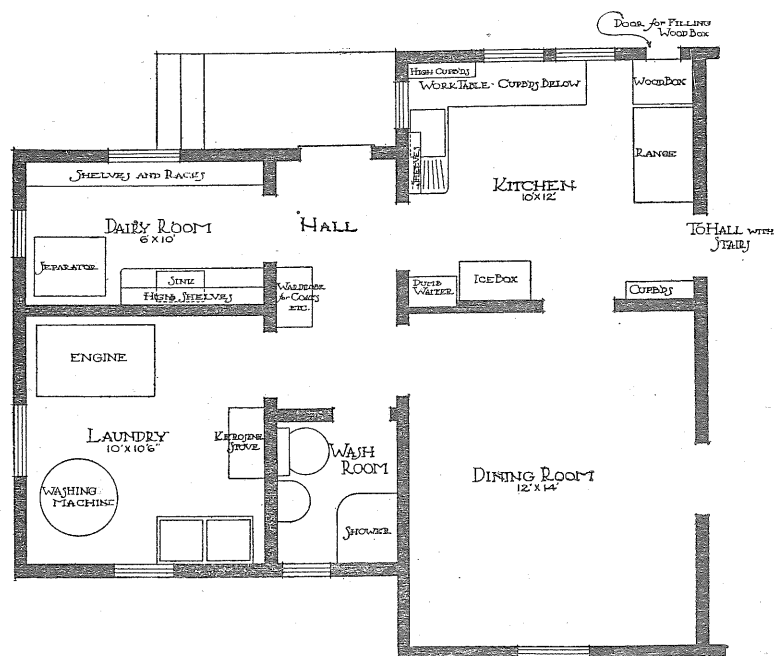


FIG. 10.—KITCHEN E REPRESENTS A FARMHOUSE SERVICE UNIT

Dairy room, laundry and wash room are entirely separate from the kitchen and are easily reached from the back door. The kitchen work of food preparation proceeds undisturbed.

the kitchen of the farm house is made to serve as a dairy room, laundry, wash room, coat room, as well as a place for meal preparation and possibly a dining room.

If possible in planning the farm house, separate space should be arranged to take care of these various activities, leaving the kitchen for food preparation alone. This has been done in kitchen E. Figure 10, by building a service unit as a one-story adjunct to the house in which the dairy work and the laundering may be taken care of without disturbing the kitchen. This service unit is so closely related to the kitchen and dining room that few steps are lost in reaching it.

The entrance from the barns and back of the house leads to a small hall from which the other rooms may be reached. The kitchen is readily available, yet need not be entered to reach the other rooms. The dairy room provides a space for the separator, run either by hand or by power provided by the engine in the laundry. Near it, lighted from the side, is a sink with large drainboards on either end where all dairy utensils may be washed. Narrow shelves and hooks above provide storage space for many of these. On the opposite side of the room are racks for milk cans and pails and shelves for bottles, separator parts, and other dairy necessities. The dairy work is thus entirely separate from the rest of the rooms.

Next to the dairy room is the laundry 10 by 10½ feet. This has space for the engine which by means of a line shaft, run near the ceiling through the wall, provides power for the separator and for the washing machine. The washer is placed between the two windows so as to receive a good light. The tubs are near it so that clothes may be taken from one to the other with the minimum of walking. The clothes are boiled on a kerosene stove near the tubs. The grouping allows one, two or three persons to work efficiently in the laundry without getting in each other's way or wasting time or energy by extra walking.

A wardrobe in the hall provides a place for hanging the men's wraps. The washroom is near at hand, and the men may come in from outside, wash, and go into the dining room directly. The wash room contains a shower in addition to the usual bowl and closet, in order to make it easy for the men to wash when coming from work—a great satisfaction and comfort on a farm. A shower is less expensive than a tub, takes up little space, is pleasant and quick to use, and is easy to clean and keep sanitary.

The kitchen itself in this service unit need not be larger than

any other kitchen since it is primarily a place for the preparation of food. The work table is of the compact space-saving type pictured in Figures 1 and 2, with the sink at the left end under a window. Shelves above the sink, and a cupboard above the work table provide storage space for utensils, dishes, and staple supplies needed for preparation. Extra storage is provided by the small cupboard near the dining room door. Near the work table is the range with the box for fuel in the corner. Much dirt and confusion are spared the kitchen by providing a door through which the woodbox may be filled from the outside. Food preparation and cooking are thus done on one side of this kitchen and it is only a short distance from the range to the dining room for serving. The dumb waiter is built into the corner of the kitchen and food may be raised from the cellar easily. The clearing-away process is easily done at the sink, ending by putting away the dishes and materials on shelves and cupboards.

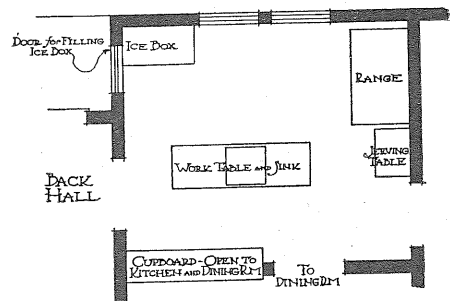


FIG. 11.—FARMHOUSE KITCHEN WITH WORKTABLE IN CENTER (KITCHEN F)

The room is divided into two areas by the worktable—preparation and cooking on one side and serving and dishwashing on the other.

For those who prefer to have their working space in the center of the room, Kitchen F, Figure 11, may be used instead of E, in the farmhouse service unit. Here the refrigerator has been moved under the window where it may be filled from the outside. From the icebox, food may be placed on the work table which with the sink and cupboards below is in the center of the room. The sink may be covered with a hinged top which when closed is flush with the rest of the table top and increases the size of the work table. Cooking is done at the range which is within easy reach of the work area. The serving is done from the range to the shelves and movable table, and thence the food goes to the dining room. Food which is not warm may be served through the cupboards which open into both kitchen and dining

room. Soiled dishes and food may be returned through the cupboard or placed on the movable table which is brought to the sink where dishes are washed. An advantage of such an arrangement is that work may be done on all sides of the work table. Furthermore, the kitchen is divided into two portions of the central work space—the part near the windows is the preparation area, that next to the dining room the serving and dishwashing area.

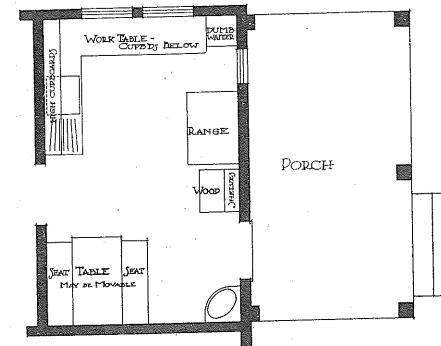


FIG. 12.—THE FARMHOUSE KITCHEN-DINING ROOM (KITCHEN G)

The men may come in from outside, wash and eat without disturbing the work area at the other end of the room. The porch may be used as a dining porch in summer. The dumb waiter in the corner will save many trips to the basement.

Small Kitchen also a Dining Room

In the smaller farm house the kitchen may need to serve more purposes. In Figure 12 is shown a kitchen which is also the dining room. The work area is concentrated in one end near the group of windows. The dumb waiter is convenient to the work table which adjoins the sink. Cupboards above offer space for storage of dishes and food. The food is prepared here, cooked at the range, and served at the table at the other end. Shelves above the fuel box are used as aids in serving. The table may be a movable dining table with chairs but space is saved if the built-in type of table is used with built-in benches which may be fixed or movable as desired. It is usual to have the sides of the table hinged a few inches from the table edge in order to make access to the seats more easy by dropping the table edges. The men enter from the outside, wash at the lavatory in the corner near the door, and sit down at the table without disturbing the work area at the other end of the room. The wood box is near the outside door so it may be filled without difficulty. A door might be

cut through to the porch to allow filling from the outside if desired. For a large part of the year, it would be possible to use the porch as a dining room, serving through the window by the range or through the outside door.

The same type of problem is shown in Kitchen H, Figure 13. Entrance is made into a small vestibule from which one may go to the basement. This hall contains a closet-like alcove where there is a box for the men's overshoes, with hooks for coats above. A lavatory is placed here, easy of access from the kitchen and from the outside.

The work space is grouped around two sides of the kitchen and is well lighted from two sides. All the equipment needed—work table, cupboards, sink, icebox, range—is found in small space but is not crowded. The dining table is movable, with drop leaves so that it may be pushed back when not in use, taking very little space. Broom closet and closet with ironing board are set into the wall near the table.

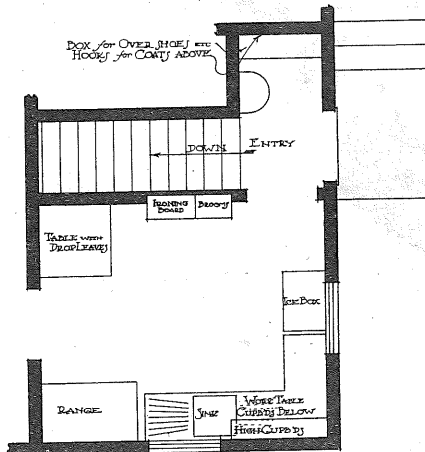


FIG. 13.—KITCHEN FOR THE SMALL FARMHOUSE (KITCHEN H)

The working space is compactly grouped near the light. The drop leaf table in the opposite corner may be pulled out into the kitchen and used for the dining table. Entrance to the basement and access to washbowl and coat hooks are easy either from the outside or from the kitchen.