

A Set of Utensils for the Farm Kitchen

By

MAUD WILSON and HELEN E. McCULLOUGH



Fewer and Better Utensils

Wisely Selected

Well Cared for

Conveniently Stored

Oregon State System of Higher Education
Agricultural Experiment Station
Oregon State College
Corvallis



Above: Mixing center. Equipment occupies one shelf of cabinet above mixing table, and five shelves of the floor-to-ceiling cabinet. Note use of slots for flat utensils and shallow boxes for spoons and other small articles.

Below: Stove center. Cabinet above narrow wood box provides space for small articles used at stove.



Sink center. The space below the three-foot sink work counter is sufficient for the kettles and skillets listed.



Above: Sink center. Drawer for small equipment used in preparing vegetables and serving cold foods. Knives kept in slots, and other articles in shallow tray.

Below: Sink center. Space below sink is used for dish pans, dish drainer, and garbage can. Upper shelf is planned for cleaning supplies.

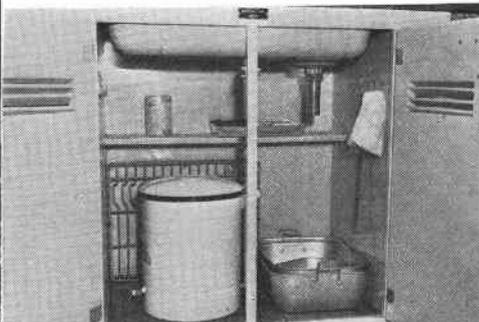
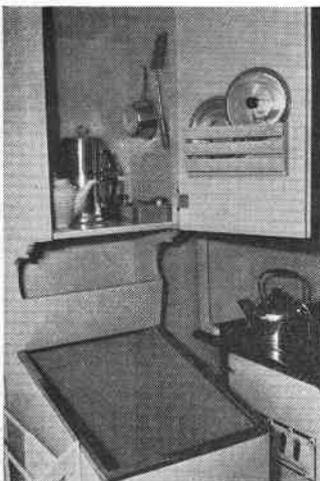


Figure showing the set of utensils listed on the following page. They are stored in the cabinets of the Oregon demonstration kitchen (Extension Bulletin 504).

A LIST OF UTENSILS FOR THE FARM KITCHEN

Following are the nonelectric kitchen utensils that constitute an adequate set for the average Oregon farm home where cooking is usually done for 4 to 6 persons, and where a wood range is used. Retail prices are given for the items in a set purchased in the spring of 1939. In assembling this set, each item in the list constituted an individual buying problem. Retail stocks in Corvallis and in Portland stores were examined, and in each case the selection made was that which seemed to the investigators to be the most practical choice for the average farm home. The total cost of the set was \$108.10.

Kettles—\$14.00

- 1 Kettle with lid, 8-quart lid clamps
- 1 Kettle with lid, 6-quart steamer inset
- 1 Kettle with special lid for draining, 4-quart
- 1 Double boiler; Upper 2½-quart, shallow; Lower, 3-quart
- 1 Double boiler, enamel-ware; Upper, 1½-quart, deep; Lower, 2-quart
- 1 Saucepan to fit top of tea-kettle
- 1 Teakettle, 6-quart

Skillets—\$5.75

- 1 Double skillet, 10-inch
- 1 Frying pan, 12-inch. Tin lid to fit
- 1 Frying pan, 8-inch
- 1 Griddle, 12-inch

Baking utensils—\$8.70

- 1 Casserole with lid, 2-quart
- 1 Pudding pan, 9" diameter
- 1 Pan, 12" diameter x 3" deep
- 2 Muffin pans, 8-muffin
- 1 Cake pan with tube

Baking utensils—Continued

- 1 Pan with straight sides, loaf cake, 9" x 9" x 2½"
- 2 Pans, layer cake, 9" x 9" x 1½"
- 1 Pan, roasting and baking, 10" x 14" x 2", with trivet
- 4 Pans, bread, 9½" x 5½" x 3½"
- 2 Cookie sheets
- 3 Pie pans, 9" diameter x 1½" deep
- 1 Bean pot, 3-quart, wide mouth, lid
- 1 Rack 10" x 14"

Tea and coffeemakers—\$5.55

- 1 Teapot, 1-quart
- 1 Tea ball, ¾ cup
- 1 Coffeemaker, 1-quart
- 1 Coffeemaker, 6-quart

Mixing bowls—\$4.35

- 1 Bowl, 6-quart
- 1 Bowl, 4-quart
- 1 Bowl, 2-quart
- 1 Bowl, 1-quart
- 1 Pan, bread mixing and raising, 2½-gallon, with lid

A LIST OF UTENSILS FOR THE FARM KITCHEN—

Continued

Measures—\$1.65

- 1 Measure, 1-quart, metal
- 1 Measure, 2-cup, metal
- 1 Measure, 1-cup, glass
- 1 Set of four measuring cups, metal, graded
- 3 Tablespoons
- 3 Teaspoons
- 1 Set of four measuring spoons

Knives, turners—\$4.05

- 1 Paring and slicing knife, 4-inch blade
- 1 Paring knife, 2½-inch blade
- 1 Butcher knife, 7- or 8-inch blade
- 1 Bread and slicing knife, 8-inch blade
- 1 Spatula, 7-inch blade
- 1 Spatula, 4-inch blade
- 1 Turner, 14 inches long

Spoons, forks—\$2.20

- 1 Spoon, wooden, 15-inch
- 1 Spoon, wooden, 11-inch
- 1 Perforated spoon, metal, 10-inch
- 1 Nonperforated, large bowl spoon, 11-inch
- 1 Ladle, ¾-cup capacity
- 1 Fork, 2-tine, 10 inches long
- 1 Fork, 2-tine, 15 inches long
- 1 Case fork.

Other small utensils—\$8.55

- 1 Grinder, medium size
- 1 Grater
- 1 Nutcracker
- 1 Round chopper
- 1 Reamer with saucer
- 1 Masher, metal
- 1 Sifter, 1-quart
- 1 Blender
- 1 Rotary egg beater
- 1 Rolling pin, roller 12" long
- 1 Cutter, 2½" diameter

Other small utensils—Continued

- 1 Cutter, 3" diameter
- 1 Double cutter, 3" diameter
- 1 Steel
- 1 Can opener
- 1 Can and bottle opener

Canning Equipment—\$36.60

- 1 Kettle, 3-gallon
- 1 Pressure cooker, capacity to process 7 quarts at one time
- 1 Jar lifter
- 1 Funnel, large mouth
- 1 Funnel, small mouth
- 1 Pot, with spout (for paraffin)
- 1 Colander with mallet
- 1 Processing vat with rack (clothes boiler adequate)
- 1 Capper and sealer

Utensils used at sink—\$8.20

- 1 Dishpan, 17" x 12" x 4½"
- 1 Pan, 16" x 11" x 4½"; nests into dishpan
- 1 Rack, wire covered with rubber, 15" x 19"
- 1 Scraper, metal
- 1 Pot cleaner
- 1 Strainer, triangular
- 1 Sieve on stand, wire
- 1 Brush
- 1 Pail, 3-gallon

Other utensils and tools—\$8.50

- 1 Freezer, 1-gallon
- 1 Scoop, ½-cup
- 1 Scoop, ¼-cup
- 1 Shaker, 2-cup
- 1 Dredger, 2-cup
- 1 Cookie jar with lid, 1-gallon
- 1 Scissors
- 1 Hammer
- 1 Screwdriver, large
- 1 Screwdriver, small
- 1 Pair pliers
- 1 Oil can

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CONTENTS AND PURPOSE OF LIST

IF the farm homemaker with a family of four to six members had exactly the kitchen utensils she needed, no more or no less, what would the list contain?

This question needs to be answered by the homemaker who is anxious to stretch as far as possible the dollar spent on household equipment. It must also be answered before any conclusions can be made with regard to the kind and amount of storage space that would be adequate for the average farmhouse.

This circular presents conclusions concerning articles of equipment which together are adequate for the preparation, serving, and clearing away of meals in a farm kitchen in western Oregon, where a wood range is used, where there is a sink with running water, where bread is usually made, and where cooking is regularly done for 4 to 6 persons and occasionally for as many as 12 persons. The list includes the uses that each article is intended to serve, the estimated frequency of use in the average home, and points in selection of the various utensils.

The list does not include electrical equipment. It does not include utensils used mainly for butchering, buttermaking, or the care of milk. Nor does it include food-storage containers, dishes, table silver, or articles used only for picnics, packed lunches, or the preparation of baby's food.

The list is intended for the situation in which the farm produces the meat, poultry, and dairy products, as well as the fruits and vegetables, that provide a well-balanced and varied diet.

SOURCES OF INFORMATION

Decisions concerning the types of utensils and specifications for their size and shape were based on information from western Oregon farm homes, on conclusions from laboratory tests, and on the recommendations of investigators and teachers of cookery principles. Decisions concerning materials were based on recommendations contained in the literature dealing with the subject.

* More detailed information is contained in a typed report, bearing the same title, which is available through interlibrary loan.

PROCEDURE IN SELECTION OF ARTICLES FOR LIST

In deciding what articles to include in the list, the goal was the minimum number of utensils needed to provide the kitchen worker with efficient tools for every process. This relatively high standard is justified by the fact that good tools save the time and energy of the worker. Work days of farm homemakers are long at best; furthermore, time saved from housekeeping can often be used productively in farm enterprises.

To make sure that this goal was achieved, separate lists were made of the utensils needed for each of the dishes commonly prepared in western Oregon and these lists were combined. The combined list was then reduced to as few articles as possible, by the simple process of assigning as many uses to each article as possible. In doing so, care was taken to provide enough utensils to make it unnecessary for the woman who does her work systematically to wash any during the preparation of a meal. It was assumed, however, that the utensils used in mixing cakes, pies, cookies, etc., would be washed up immediately after using.

In deciding what dishes the homemaker might be preparing at one time, the period of maximum need was provided for. For example, in summer the farm family may have as many as four vegetables at one meal; hence enough cooking vessels were included in the list to provide for this situation.

The capacities of cooking vessels provide for the amounts usually prepared at one time. It is the custom in farm kitchens, for example, to prepare enough of certain foods, such as apple sauce, for several meals, and to prepare enough food at dinnertime to warm over for supper or lunch.

GENERAL CONSIDERATIONS

The first step in acquiring a satisfactory set of kitchen equipment was described in the foregoing section; namely, deciding the types of articles needed and the number and size, or capacity, of each item.

The next step is to search the market for the articles which seem to be the best available, everything considered.

In judging the amount of money it is wise to put into a given article, suitability should be considered first, then durability, ease of cleaning and care, and appearance. For some articles it pays to buy the best on the market; for others, the cheapest article is satisfactory.

The principle of intelligent selection is to buy each article without regard to any other, except for those items that are to be used together. "Sets" of utensils are usually not advisable, for it is seldom that all articles in a set are equally well suited to their intended uses; nor is it advisable for the buyer to commit herself to a particular material, such as glass, aluminum, or enameled ware, since one material may be better suited to a certain cooking process than another.

If the homemaker is obliged to keep costs down, she will do well to select from among the well-established types, rather than newer materials and forms. It will pay also to plan closed cabinets for storing kitchen utensils. Those utensils that are sufficiently decorative to be suitable for storing in the open are costly.

For certain articles there is a wide range in the thickness of the material and a corresponding range in cost. Thickness, weight, or grade should be judged not only in relation to durability, but also in relation to efficiency in

performance and convenience in use. Cast-aluminum and cast-iron utensils, for example, hold heat better than sheet metal; hence it is wise to select them for long, slow cooking. Sheet-metal vessels, however, are satisfactory for quick cooking, and may be preferred to the heavier grade for certain uses because they are not so heavy to lift.

In considering the relative durability of various grades, it is well to bear in mind the treatment a utensil is likely to receive in use and in dishwashing, and to select a grade that will not buckle or dent easily. A woman who does all her own work and who is careful and thoughtful in handling utensils will have better success with the cheap grades of aluminum, tin, and enameled ware than will the person whose work is not so carefully done.

MATERIALS USED IN UTENSILS

To obtain the information summarized in this section, recent books on principles of cookery and kitchen equipment as well as reports of experimental work with foods were examined.

Aluminum is suitable for all types of stove and oven cookery and for many gadgets. It does not rust or chip, is light in weight, and is moderate in cost. Since it is a good conductor of heat, foods do not quickly scorch. Aluminum is discolored readily by alkalis in foods, boiling water, and soaps, and for this reason it is difficult to keep attractive. It is easily brightened with weak acids such as dilute vinegar, sour milk, or fruit acids, however, and may be scoured with a fine abrasive. Strong alkalis and soaps should be avoided in cleaning it.

Aluminum utensils are either cast or pressed and each comes in various weights. Except for long, slow cookery there is no value in the extra-heavy grades. The important factor is to have it heavy enough to keep its shape without denting or buckling. It is possible to buy aluminum utensils with a hard, stain-resisting finish which does not mark sinks or other surfaces.

Enameled ware is smooth and attractive in appearance and the better grades are not affected by acids or alkalis. It absorbs heat quickly but does not conduct evenly. For this reason foods scorch in it readily, making the utensil difficult to clean.

The quality of enameled ware depends on the metal base as well as the glosslike coating. In good grades the steel base is rigid enough to withstand ordinary knocks without bending, and it is covered with at least four coats of enamel.

The great disadvantage of enameled ware is that the glaze chips, exposing the metal base, which may be affected by water and acids. There is also danger of the chips being swallowed with food. The better grades of enameled ware chip less readily than the poorer grades because base and coating expand and contract at more nearly the same rate.

Enameled ware should be handled with care and should not be subjected to sudden changes of temperature. A wooden spoon should always be used for stirring food cooked in vessels of this material to lessen the danger of chipping. Enameled ware does not discolor food and is especially recommended for utensils used in making cream sauces and fillings.

Tin utensils are inexpensive, light in weight, and easily cleaned. Their durability is determined by the quality of the iron or steel foundation and the thickness of the tin coating. Block tin, the heavier type, wears well. In light-weight wares, the coating may be worn away by food acids and the

surface is easily scratched. When this happens rusting follows. Pans made from single sheets of tin with folded corners should be selected. Tarnish should not be removed from the surface since it acts as a protection. Because tin heats quickly and evenly, good qualities are especially recommended for cake, pie, cookie, muffin, and biscuit pans. It is also good for articles that do not have hard usage. Since tin affects some fruit colors, cans used in food preservation should be lacquered. Tin is somewhat porous, and since the foundation metal will rust when exposed, tin utensils should always be thoroughly dried.

Cast iron heats slowly and holds heat well, and is ideal for slow cooking. Foods brown well in iron. Cast iron needs to be tempered and cured when new, and if it is not to be used for a period of time, it should be oiled. If properly cared for, it improves with age and is very durable. Its disadvantages are that it is heavy to handle and not attractive in appearance. Its chief uses are for skillets, dutch ovens, griddles, and kettles for deep-fat frying.

Sheet iron is for light-weight frying pans. It has much the same properties as cast iron except that foods brown in it more quickly and it has a decided tendency to warp.

Stainless steel utensils containing a high percentage of nickel and chromium are suitable for hard wear, are attractive, rarely dent, and will withstand intensive heat. They require a minimum of care, and will last a lifetime. Expense is the chief disadvantage of utensils made of this metal. Stainless steel is used for both top-of-stove and oven utensils.

Copper, of all the metals used for utensils, is the best heat conductor, but it is hard to keep polished and looking well. When used for cooking purposes it should be heavily coated with tin or chromium, and this process makes it expensive. Copper is used for saucepans, kettles, skillets, and tea-kettles.

Heat-proof glassware is adapted to long, slow cooking, holds the heat well, is attractive, is easily cleaned, and is especially recommended when it may be used for serving as well as for cooking. It is heavy and requires more care than metals to prevent breaking. Sudden changes of temperature should be avoided. Glass is desirable for baking dishes, pie pans, and casseroles. It may also be used for double boilers, saucepans, frying pans, coffeepots, teapots, reamers, and measuring cups.

Earthenware and semiporcelain are similar in character to glass. They hold heat well, cannot be scraped off in mixing, can be used for serving as well as cooking, and are easily cleaned. The disadvantage of these materials is that they chip and crack readily. They are suitable for crocks, mixing bowls, casseroles, baking dishes, and teapots.

Wood is light in weight and inexpensive. It is valued for certain uses because it is quiet in operation and does not mar other surfaces.

The kind of wood used in kitchen utensils is important. It should be close-grained, free from cracks, knots, and odor, and should not warp.

Wood is favored for stirring and mixing spoons, chopping bowls, pastry and cutting boards, and grinder base. It is especially recommended for stirring spoons since it does not scratch nor mar metal utensils, nor cause corrosion resulting from electrolytic action when used in aluminum. Wood should not be soaked in water, and should be dried quickly and thoroughly.

STORAGE OF KITCHEN UTENSILS

Considerations in planning storage

The three main considerations in planning storage for utensils are (1) the care required to prevent blows or other injury to utensils, (2) accessibility, (3) appearance of kitchen. Usually the need for protection and accessibility are met by the same arrangements.

A good rule to follow in planning utensil storage is to make it possible to remove an article, or a set of articles habitually used together, without having to use both hands, and without knocking against or moving any other article.

From the standpoint of the care required, utensils may be divided into several groups. These groups, and the specific types of storage desirable for them, are given below:

KETTLES, DOUBLE BOILERS, CASSEROLES, SKILLETS. Should be stored separately, one row on the shelf or one hook for each utensil. A space of about an inch should be allowed between kettles, to reduce the likelihood of hitting them against each other.

SAUCE PANS, MIXING BOWLS, MEASURING CUPS AND SPOONS, BREAD PANS, COOKIE SHEETS. Should be stored separately, as for kettles, unless habitually used together, or unless only the topmost one is frequently used.

LIDS. Rounded lids, and those with knobs, should be stored with the utensils to which they belong.

KNIVES. Edges and points should be protected against dulling and blunting.

OTHER TOOLS. Stored separately.

While the chief consideration in the choice of materials for utensils is that of suitability to use, this choice is also influenced by the nature of storage arrangements available for the utensils and by the kind of handling they are likely to receive in use and in dishwashing. In the average farm home, time is at a premium at certain seasons of the year, and it pays to buy materials that do not break or dent easily and that do not require any special care.

Kitchen utensils that have been in use for some time and that were chosen primarily for use detract from the appearance of a kitchen, and the average homemaker prefers to keep them in drawers or in closed cabinets. Since beauty in appearance is one of the major goals in planning the modern kitchen, it is better policy for the average farm home to plan to store all or most of the kitchen utensils where they will not be visible.

Types of storage facilities

Storage arrangements suitable for utensils are discussed and illustrated in Oregon Station Bulletin 356, "Planning the Willamette Valley Farm Kitchen." In the study of which this publication is a report, each utensil is stored near the working surface where it is most frequently used, and in arranging storage facilities use was made of the space above and below each surface. Hence the form of storage was to a certain extent determined by the space available.

In planning utensil storage on the "center" principle, as this procedure may be called, it was found that the utensils listed in this circular could easily be stored in the following set of cabinets: (See page 2.)

One floor-to-ceiling cabinet, shelves 15" x 24".

Portion of shelf above mixing table, 30 inches long.

One lower cabinet at side of sink, 36 inches long.

One drawer at side of sink, 16 inches wide.

One shelf and hanging space above wood box, 20 inches wide.

Space below sink, 30 inches long.

When the same set of utensils was stored in a single floor-to-ceiling cabinet, it was found that the cabinet would need to be 36 inches wide by 20 inches deep. This is an economical way to store utensils, and one that is suitable for small kitchens.

POINTS IN BUYING AND CARE

There are certain considerations in buying utensils that apply to specific articles; these points are included with the recommended list of utensils. The considerations that apply to groups of utensils are presented in this section.

Mixing bowls

SHAPE: Mixing bowls should be relatively deep with smooth sloping sides. The bottom should be rounded to facilitate quick and efficient combination of ingredients.

The bowl in which a rotary beater is used needs to be deeper in proportion to height than that in which beating or mixing is done with a spoon. For this reason a set of bowls that are alike in shape but differ in size is less satisfactory than a set made up of bowls chosen for specific uses.

MATERIAL: A mixing bowl should be heavy enough to stay in place, not to slip or slide, while being used. For this reason glass or earthenware is better than metal or enameled ware. Glass and earthenware bowls also have the advantage of not chipping or scratching in beating, and of not discoloring foods mixed in them.

SIZE: In general, the depth of a mixing bowl should be twice that of the substance to be mixed or beaten in it. Four bowls, with 1-quart, 2-quart, 4-quart, and 6-quart capacity respectively are found to take care of practically all mixing needs.

CARE: Mixing bowls should be kept where it is easy to reach them. A shelf is better than a drawer for their storage unless the drawer is equipped to prevent shifting of contents.

Kettles

DESIGN: Sauce pans and kettles should have straight, smooth sides, rounded corners, flat, unpolished bottoms that are heavy enough not to warp readily, and lids that fit tightly. There should be no tendency for the vessel to tip when empty, due to poorly balanced handles. The joining of handles should be firm, smooth, and easy to keep clean. Heat-proof handles are a great convenience; also lips on both sides. Lids should not only be close fitting but should be heavy enough to stay in place.

CAPACITY: In determining the capacity of a kettle for specific purposes, for foods cooked in water there should be allowed a margin of two inches above contents. For other foods, such as milk, which creeps up when cooking, the capacity of the kettle should be twice that of its contents.

CARE: In storage, kettles should not be stacked. A shelf is better than a drawer, for storing kettles. Frequently used kettles should be placed so that they can be removed without moving other objects. Each kettle should have its own lid stored with it.

Frying pans

MATERIALS: Frying pans or skillets may be made from cast iron, sheet iron, aluminum, stainless steel, or chromium-plated copper. Sufficient thickness and weight to prevent warping is important. Cast iron, heavy aluminum, and chromium-plated copper are especially recommended. Cast iron is preferred by many because it is inexpensive, very durable, and adapted to long, slow cooking. Chromium finish improves its appearance. Weight is a disadvantage of cast iron, especially for large frying pans.

CARE: The frying pan or skillet should always be heated gradually to prevent buckling. If of cast iron, it should be tempered when new, and when stored, covered with oil or unsalted fat to prevent rusting.

Cake pans

Experimental cookery recommends straight sides for cake pans and a depth permitting at least 1" or $1\frac{1}{4}$ " of batter. Either tin or aluminum is suitable. Glass also is satisfactory but requires a lower temperature. Tin bakes most rapidly; aluminum next. Enameled ware is not recommended for cake baking.

Roasting pans

Experimental cookery has shown that the material of roasters is not so important as the method of roasting. For oven cookery in general, foods cooked in glass, enameled ware, or china require lower temperature and a shorter cooking period than when cooked in aluminum or tin. A dull finish for oven utensils also is recommended. Aluminum, iron, and steel are satisfactory for roasting.

Knives

Knives made from forged steel with a high carbon content take and keep the best edge. A stainless finish adds to the appearance, but may cover up poor steel or iron. Beware of buying "stainless iron," which is frequently sold for stainless steel, and which will not keep an edge. A good quality stainless steel gives a good cutting edge, but is expensive.

Handles for knives should be made of water-shedding materials which will not crack, chip, or peel, and which are noninflammable.

CONSTRUCTION: Good knife blades taper uniformly from top to cutting edge, and from handle to tip. The blade should extend far into the handle, preferably the entire length. The handle should be attached with two or three large tubular rivets rather than small wire rivets, since the latter may cause the handle to split.

A good precaution in buying knives is to choose only those which have the name of the manufacturer or a responsible dealer indelibly stamped or etched on the blade or handle.

CARE: Knives thrown carelessly in a drawer may be damaged more by having the edges knocked against other articles than by hard usage. They should be stored on racks, with only one knife in each groove. Such racks may be made easily and inexpensively, and may be placed in a drawer or on the wall.

To maintain a good edge, knives need to be properly sharpened. The frequency of sharpening will depend on the quality of steel in the blade, and the use given the knife.

Sharpeners

A steel sharpener is much better than a disk-type sharpener for blades with high carbon content, and since it is also suitable for those of stainless steel, it is recommended for household use. When use of a steel fails to resharpen a knife, a fine oilstone may be used.

The method of using a sharpener is important. The knife should be held at the correct angle, and heating should be avoided.

Can openers

A can opener should remove the cover from a can of any shape with a minimum of effort, and leave a smooth edge without shavings of metal.

Care of small utensils, general

Storage space for small utensils should provide a specific place for each piece. It should be possible to pick up any one piece without disturbing others. If kept in a drawer, an arrangement should be made to hold each article in place. Wood or composition handles should be kept out of water as much as possible, and the cog wheels of egg beaters should be kept dry.

Measuring cups

NUMBER: Time may be saved in cooking by using measures that are intended for specific purposes. For some processes, such as canning, a larger measure affords a satisfactory degree of precision with the least expenditure of time in handling ingredients. For other processes, as baking cakes, time is saved by having at hand a variety of small measures.

TYPES: The list includes a set of measures holding various fractions of a cup, since these are more easily used than graduated measures for dry ingredients. The list also includes a graduated cup of heatproof glass, which is the most practical type for measuring liquids in quantities of one cup or less, a 2-cup measure, and a 4-cup measure.

MATERIALS AND CONSTRUCTION: Metal is satisfactory for dry ingredients, and desirable for large measures because it is relatively light in weight. It should be thick enough to resist denting, and rustproof.

Glass is desirable for graduated measures, since it permits visibility, and for liquids, since a margin above the scale can be allowed to prevent spilling.

Handles should be of such size and shape as to permit a firm grasp. Handles on metal cups should be firmly attached, and made of a nonconducting material. The handle should not overbalance the cup when empty.

RECOMMENDED SET OF UTENSILS

In the following list, there are included the utensils which together constitute a set that is considered adequate for the farm home. As stated previously, the list includes no electric appliances, and it has been developed primarily for the kitchen where most of the cooking is done on a wood range. Economy in the use of space in the oven and on the surface of the range has been considered in selection.

In the second column there are included the names of the utensils and a brief description of each one. The points included are those essential to the uses each utensil is expected to serve as a part of the entire set. These uses are listed in the third column.

In the last column there are included data on estimated frequency of use. Each item refers to the number of different dishes in a year's time for which it is expected the specified utensil will be used. For example, if a paring knife is used in the preparation of potatoes 700 times a year, that number was combined with similar data concerning the other uses of the knife in question, to form the total included in the column.* These frequencies do not include canning or serving to large numbers.

UTENSILS FOR TOP-OF-STOVE COOKERY

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1...	Kettle with lid—8-quart No handle; lid clamps on	For cooking vegetables, soups; canning; also serves as container for food taken to picnics	184
1...	Kettle with lid and steamer inset—6-quart Steamer with solid bottom (results of research show that this type is best for cooking frozen vegetables)	Lower part used for cooking vegetables, stews, mush, rhubarb, and applesauce; steamer used for frozen vegetables, steamed breads, warming left-overs	371
1...	Kettle with lid—4-quart Special device to hold lid and handle in place while draining is an advantage	For cooking potatoes and other vegetables, rice, macaroni, prunes	604

* The procedure followed in obtaining data for the estimated times per year that each dish is prepared in the average Western Oregon farm kitchen is described in Oregon Station Bulletin 356, "Planning the Willamette Valley Farm Kitchen."

UTENSILS FOR TOP-OF-STOVE COOKERY—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Double boiler—upper part, 2½-quart, lower part, 3-quart Top part shallow, with two handles, to be used as casserole; lower part with straight sides, lid that fits well, to be used as sauce pan	Used together for cooking cereals; pie filling; custard; tapioca and chocolate puddings; reheating left-overs. Upper alone, for reheating left-overs Lower alone, for heating milk for toast; scalding milk for bread-making; cooking creamed dishes	Parts used together, 696 Upper alone, 300 Lower alone, 209
1....	Double boiler—upper part 1½-quart, lower part 2-quart Deep upper section to be used for foods that are beaten with egg beater while cooking; enamel and glass are suitable materials since they prevent discoloration of food and are not scratched by beater; lower section should be suitable for use as separate sauce pan	Used together for cooking icing and salad dressing; upper alone, as container for meat, vegetables, and fruit being prepared for cooked mixtures; lower alone, for cooking icing; boiling eggs; container for raw vegetables and fruits for cooked dishes; reheating canned foods	Together, 51 Upper alone, 35 Lower alone, 666
1....	Double skillet—10-inch Double skillet may be used as dutch oven, roaster, or two separate skillets; lower section should be deep; the two sections should fit together securely	For frying chicken; pot roasts; upper part used as all-purpose skillet	322
1....	Frying pan and lid—12-inch A relatively light-weight utensil desirable; short handle	For frying meats, fish, eggs, potatoes	354
1....	Frying pan—8-inch	For frying small quantities	100
1....	Griddle—12-inch Round griddle easier to keep uniform in temperature than oblong or oval	For cooking griddle cakes	102

UTENSILS FOR TOP-OF-STOVE COOKERY—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Teakettle—6-quart Wide spout to permit filling is a convenience; well-balanced heatproof handle important; smooth exterior	For heating water	1,257
1....	Sauce pan to fit top of teakettle—1-pint Should be fitted to teakettle; handle should not overbalance pan when in teakettle	For melting small amounts of fat, chocolate, etc.	108
1....	Teapot—1-quart China, glass, and pottery recommended for teapots because they hold heat well; top should be large enough to insert tea ball holding an adequate quantity of tea; spout should pour well	Making tea for family	161
1....	Tea ball— $\frac{3}{4}$ -cup Lid easily but firmly attached; perforations large enough for quick penetration of water, but not large enough for leaves to pass through; capacity three times bulk of dry leaves	Making tea for family	161
1....	Coffee maker—1-quart Material that retains heat well; smooth surfaces; seamless body, easy to clean; well insulated; firmly attached handle; heatproof glass or china, all aluminum, or aluminum and glass suitable for coffee makers	Making coffee for family.	481

UTENSILS FOR TOP-OF-STOVE COOKERY—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Coffee pot—6-quart Large inexpensive pot adequate for infrequent occasions when a large quantity of coffee is needed; enameled ware satisfactory	Making coffee for large number

UTENSILS FOR OVEN COOKERY

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Casserole with lid—2-quart, oval Heat-proof glass or china, suitable for serving as well as baking	Baking scalloped dishes, puddings and souffles	40
1....	Pudding pan, diameter 9-inch, depth 3-inch	Baking puddings	71
1....	Pan, diameter 12-inch, depth 3-inch Tin suitable for this purpose	For setting casserole or pudding pan in hot water	52
2....	Muffin pans—8-cup Investigators recommend tin, steel, and stainless steel for best results; pans should have flat surfaces and few joints.	Baking muffins, cup cakes	46
1....	Cake pan with tube—diameter 10-inch, depth 5-inch Investigators recommend either tin or aluminum; tube or handles should extend above surface of pan to act as rests when pan is inverted for cooling; removable tube facilitates taking cake from pan	Baking angel and sponge cakes	18

UTENSILS FOR OVEN COOKERY—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Cake pan—9" x 9" x 2½"	Baking loaf cakes; molding gelatin salads	66
2....	Cake pans, layer—9" x 9" x 1½"	Baking layer cakes, biscuits	129
1....	Pan with trivet—14" x 10" x 2" Shape and size make it adaptable for both baking and roasting; may be inverted and used as a cookie sheet	Baking rolls, apples and pears, dumplings and cobblers, cornbread, plain cakes, roasts; also preparation of vegetables at sink; trivet used alone as cooling rack	Pan, 256 Trivet, 167
4....	Bread pans—9½" x 5½" x 3½" For 1½-lb. loaves	Baking bread, meat loaf; mold for mush	102
2....	Cookie sheets Baking sheets without sides are thermally more efficient than pans with sides; investigators report that aluminum gives best results for cookies; sheet iron and tin next best; sheets should be as nearly the size of the oven as practicable; 2" margin recommended	Baking cookies, oven toast, biscuits	38
3....	Pie pans — diameter 9-inch, depth 1½" Aluminum, tin, or glass satisfactory	Baking pies	284
1....	Cooling rack—14" x 10" Close mesh; sufficient space underneath for circulation of air	Cooling breads, cakes	191
1....	Bean pot—3-quart Earthenware advised for long, slow baking; glass also appropriate; wide top a convenience	Baking beans	19

UTENSILS FOR MIXING, ROLLING, CUTTING DOUGH,
MAKING BREAD

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Bowl—6-quart Shape suitable primarily for mixing with spoon; hence relatively broad in proportion to height	Mixing cookies, dough-nuts, large cakes	141
1....	Bowl—4-quart Shape suitable primarily for mixing with spoon; hence relatively broad in proportion to height	Mixing cakes; beating egg whites for angel cakes; mixing pastry, quick breads, salads	750
1....	Bowl—2-quart Shape suitable for use of rotary beater; hence relatively deep in proportion to height	Beating eggs	538
1....	Bowl—1-quart Shape suitable for use of rotary beater; hence relatively deep in proportion to height	Beating eggs; mixing dry ingredients	417
1....	Sifter—1-quart Sifters operated with one hand are more efficient; those that sift more than once not included in list since many recipes call for only one sifting; sifter should be strongly constructed, and easy to clean	Sifting flour and sugar	620
1....	Blender Firm, pliable, thin blades; piano wire excellent; small can with holes punched in top is satisfactory for use as blender	Making pie crust and biscuit mixtures	181
1....	Rotary egg beater Strong, light weight; simple construction; finish smooth, nontarnishing; deep, broad cogs that interlock smoothly; gear ra-	Beating eggs, batters, whipping cream	648

UTENSILS FOR MIXING, ROLLING, CUTTING DOUGH,
 MAKING BREAD—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
	tio 1 to 4 or 1 to 5 desirable; blades thin and arranged to fit closely to bottom of bowl; handle of smooth, nonchipping material, shaped to fit hand; shank of handle long enough to avoid danger of contact with cogs; handle on drive wheel easy to grasp, and long enough to keep hand from gears		
1....	Rolling pin Smooth, nonabsorbent surface; long roller decreases strokes necessary; handles should be easy to hold	Rolling pastry, cookies	219
1....	Cutter—2½" diameter Smooth edge, easily grasped top desirable	Cutting biscuits and small cookies	79
1....	Cutter—3" diameter Smooth edge, easily grasped top desirable	Cutting cookies	38
1....	Cutter—3" diameter Double cutter with smooth edges, easily grasped top	Cutting doughnuts	5
1....	Bread-raising pan — 2½-gallon Smooth, deep bowl with sloping sides and rounding cover; capacity sufficient to make 6 pounds of bread, allowing for double expansion of dough; aluminum or heavily plated tin satisfactory; pottery too heavy	Mixing and raising bread	74

UTENSILS FOR PREPARING VEGETABLES AND FRUIT,
DRESSING POULTRY

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Sieve with wire stand—9" diameter Tin satisfactory for ordinary uses; should be reinforced to prevent sagging; wire screen securely fastened to rim; supporting stand a convenience	Draining foods, washing fruit	361
1....	Brush Firm bristles; shape easy to grasp, easy to clean	Scrubbing vegetables	558
1....	Pail—3-gallon Heavy tin, enameled ware, or galvanized iron is suitable	Scalding chickens; washing garden dirt from vegetables	66

NOTE—Dishpan or drain pan also used for washing vegetables. Frequency of use (725) included with frequency for dishwashing.

TOOLS FOR PARING AND CUTTING

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Paring knife—2½" blade Thin, narrow, flexible, pointed blade; edge may be rocker-shaped, straight, or concave; the latter is especially adapted to paring round fruits and vegetables; comfortable handle is important; paring knife should be chosen by individual who will use it most	Paring; removing eyes and blemishes	709
2....	Paring and slicing knife—4" blade Thin, pointed blade; longer than ordinary paring knife, to give greater range in use	Paring and slicing fruits and vegetables; dressing poultry	1,446

TOOLS FOR PARING AND CUTTING—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Butcher knife—7- or 8-inch blade Heavy, stiff blade	Cutting meats and large vegetables; dressing poultry; used also in butchering	717
1....	Bread and slicing knife—8-inch Thin, long, semiflexible blade; finely serrated edge desirable for slicing knife, but limits its range of uses	Cutting bread and cakes; shredding cabbage; slicing cooked meat	934
1....	Can opener — small, roll type Hand opener instead of wall opener chosen on the assumption that the farm family would do home canning rather than buy canned goods; therefore, frequency of use of can opener would not be high	Opening tin cans, all shapes
1....	Can and bottle opener, with cork screw, bottle opener, and cutting blade Combination opener chosen for opening bottles and punching holes in cans when pouring is to be done; low frequency justifies inexpensive opener	Perforating cans; removing caps and stoppers

TOOLS FOR GRINDING, GRATING, SHREDDING, MASHING, ETC.

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Grinder—medium size Medium-sized grinder takes care of ordinary household needs; good steel cutting edge on blades necessary, and variety of blades desirable; cup for catching juices an asset; should be easily cleaned	Grinding meats, vegetables, dry bread	128

TOOLS FOR GRINDING, GRATING, SHREDDING, MASHING,
ETC.—Continued

Number	Tensil, and points of selection	Uses	Estimated frequency of use
1....	<p>Grater</p> <p>Drilled, rather than punched, openings give a smooth sharp edge; variations in openings, to permit fine, medium, or coarse gratings, are needed; should be simple in construction, stiff, and easily cleaned and stored; a tin grater of sturdy construction is satisfactory</p>	Grating lemon peel; slicing vegetables	110
1....	<p>Chopper—round, 2½ inches in diameter</p> <p>Small can with holes punched in top is effective and adequate for chopping potatoes in a skillet</p>	Making hash; chopping potatoes while frying	119
1....	<p>Nutcracker</p> <p>Strong leverage, easy to manipulate, easy to hold nut</p>	Cracking soft-shelled nuts	30
1....	<p>Reamer with saucer—6-inch diameter</p> <p>Deep saucer to hold juice; deep blades, not too sharp for extracting juice; inexpensive glass reamer is satisfactory since frequency of use does not justify the greater expense of a mechanical juice extractor</p>	Extracting juice of lemons and oranges	126
1....	<p>Masher—medium</p> <p>Slotted masher better than solid, because used for whipping as well as mashing; narrow spaces between wires or slots prevent lumps; should be shaped to fit close to edge of container; easy to clean; rigid</p>	Mashing and whipping potatoes and other vegetables; mashing strawberries	107

TOOLS FOR GRINDING, GRATING, SHREDDING, MASHING,
 ETC.—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Case fork—4 tines Sharp, slender steel tines	Mashing small amounts, such as boiled egg yolks; pricking pie crusts; testing doneness of foods	246

UTENSILS FOR MEASURING

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Measure, 4-cup—metal Aluminum or heavy tin	Measuring in connection with canning, bread making, large quantity cookery	158
1....	Measure, 2-cup—metal Aluminum or heavy tin	Measuring dry or liquid ingredients for recipes calling for 2 or more cups	727
1....	Measure, 1-cup—glass Heat-proof glass; graduated	Measuring liquids; useful also as container for softening yeast and gelatin	1,324
1 set	Measuring cups, set of four—metal, 1 cup, $\frac{1}{2}$ cup, $\frac{1}{3}$ cup, $\frac{1}{4}$ cup Set of four individual cups permits accurate measuring of either solids or liquids; especially desirable for solids that may be leveled off at top; aluminum recommended since it does not rust	Measuring dry ingredients, one cup or less; melting fats used in batters	732 for all
3....	Tablespoons Deep bowls, rounded edges and points; non-rusting; do not bend under ordinary wear	Measuring; mixing small quantities; stirring small quantities while cooking; making drop cookies	2,372 for all
3....	Teaspoons Deep bowls, rounded edges and points; non-rusting; do not bend under ordinary wear	Measuring, tasting	1,028 for all

UTENSILS FOR MEASURING—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1 set	<p>Measuring spoons, set of four—tablespoon, teaspoon, half teaspoon, fourth teaspoon</p> <p>Set of measuring spoons gives accuracy in measuring; "jack-knife" arrangement of this set makes it easy to use any one spoon without interference from others; aluminum satisfactory; should not bend easily</p>	Measuring when small quantities of several ingredients are needed	878 for all

TOOLS FOR SPREADING, LEVELING, LOOSENING, TURNING

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	<p>Spatula—7-inch blade</p> <p>Flexible, broad blade; handle securely attached, as for knives (see previous section, Points in Buying and Care.)</p>	Folding in egg whites or whipped cream; spreading icing; removing batters from bowls	245
1....	<p>Spatula—4-inch blade</p> <p>Narrow, flexible blade; handle securely attached, as for knives (see previous section, Points in Buying and Care.)</p>	Loosening cakes, muffins, etc.; leveling measures; spreading butter; making sandwiches; making drop cookies	1,482
1....	<p>Turner—14 inches long</p> <p>Shaped to fit close to skillet or griddle; length adapted to size of largest skillet and griddle in list; handle securely attached; perforated, pliable blade, with rounded corners.</p>	Turning and taking up fried foods and hot cakes; removing hot dishes from oven	451

TOOLS FOR TESTING, STIRRING, SERVING

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Fork—2 tines—10 inches long Sharp, slender, smooth, stiff tines; handle firmly attached. (See under knives.) Long enough to use for testing foods cooked in kettles listed under "Top-of-stove cookery"	Testing doneness; stirring; taking up meats and vegetables	1,190
1....	Fork—2 tines—15 inches long Sharp, slender, smooth, stiff tines; length suitable for reaching to back of oven	Removing vegetables from back of oven	215
1....	Spoon, wooden—15 inches long Rounded end, shallow bowl	Stirring foods in large kettles; mixing yeast bread	291
1....	Spoon, wooden—11 inches long	Stirring foods cooking in smaller kettles; mixing batters	763
1....	Perforated spoon — 10 inches long Flat bottom for efficiency in stirring in shallow utensils	Mixing batters; taking up certain foods; stirring gravies	534
1....	Large-bowl spoon — 11 inches long Deep bowl; short handle	Serving; basting; filling baking pans; filling jars in canning	1,627
1....	Ladle— $\frac{3}{4}$ -cup capacity Deep bowl, flat end	Skimming off fat or scum; taking up soups, stews, and creamed dishes; filling jars while canning	142

UTENSILS FOR DISHWASHING

(Assumes inside bottom of sink is at least 20" wide and 28" long)

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	<p>Dishpan—17" x 12" x 4½"</p> <p>Oblong pans permit use of both dishpan and drain pan in sink at the same time, or on table side-by-side without dripping water between. Dishpans should be light weight, resist denting, rust-proof. Stain-proof finish recommended for bottom of aluminum pan, to prevent marking sink. Oblong dishpans may be used as roaster and for large quantity cookery.</p>	Washing dishes; washing fruits and vegetables; dressing poultry; canning	1,869
1....	<p>Draining pan—16" x 11" x 4½"</p> <p>(See above)</p>	Rinsing dishes; washing vegetables; dressing poultry; canning	1,869
1....	<p>Draining rack—19" x 15"</p> <p>Should be firmly made of wire heavy enough to be rigid when carried full of dishes; sides not less than 3½" or 4" high; wires in plate-rack section should extend up high enough to hold plates securely, about 2½"; rubber coating decreases breakage</p>	Draining dishes at sink	360
1....	Scraper	Cleaning iron utensils	360
1....	<p>Pot cleaner</p> <p>Flexible cleaner recommended for aluminum; should be easy to clean and should not tarnish</p>	Cleaning aluminum and other easily marred utensils	1,144

UTENSILS FOR DISHWASHING—*Continued*

Number	Utensil, and points of selection	Uses	Estimated frequency of use
1....	Sink strainer Material needed that is rustproof and that will not discolor fruits nor stain sinks; aluminum with hard finish, enameled ware, or stainless steel recommended; smooth holes	For straining out liquids from garbage; washing vegetables and fruits	1,144

CANNING EQUIPMENT*

Number	Utensil, and points of selection	Uses
1....	Kettle—3-gallon	Open-kettle canning; blanching and pre-cooking vegetables and fruits; cooking jams and preserves
1....	Pressure cooker—capacity to permit processing 7 quarts at one time	Processing vegetables, meats, fish, poultry, under pressure
1....	Jar lifter Should operate easily, hold jars firmly, and fit a variety of sizes of jars	Handling hot jars
1....	Funnel, large mouth—bottom 2" diameter Aluminum better than tin, since tin discolors some fruits	Filling jars
1....	Funnel, small mouth—bottom 1/2" diameter	Filling bottles
1....	Pot with spout—1-quart	Melting paraffin and pouring it; also container for paraffin between periods of use
1....	Colander with mallet	Making butters, jams, apple sauce, vegetable purees
1....	Processing vat Wash boiler may be used for this purpose	Water-bath canning
1....	Capper and sealer	Bottling juices

* Includes only articles used mainly for canning.

CANNING EQUIPMENT—*Continued*

Number	Utensil, and points of selection	Uses
1...	Wire basket to fit 3-gal- lon kettle Strongly constructed, with bail for lifting	Blanching vegetables and fruits

OTHER UTENSILS

Number	Utensil, and points of selection	Uses
1....	Freezer—1-gallon	Making frozen desserts
1....	Scoop— $\frac{1}{2}$ -cup	Scooping flour
1....	Scoop— $\frac{1}{4}$ -cup	Scooping sugar
1....	Shaker—2-cup	For salting
1....	Dredger—2-cup	For dredging with flour
1....	Jar with lid—1-gallon	Container for cookies
1....	Pottery jar with lid—1 pint	Container for salt
1....	Scissors	Cutting paper used to line cake pans; cutting vegetables
1....	Steel—15" long	For sharpening knives
1....	Hammer	
1....	Screwdriver—large	
1....	Screwdriver—small	
1...	Pair pliers	
1....	Oil can	

NEEDS NOT MET BY UTENSILS LISTED

The foregoing list did not provide for certain kitchen needs. For example, no containers were included in the list (unless it was desirable, as in the case of salt, to have a specific type of utensil) because the average kitchen household has empty fruit jars, cans, etc., that make satisfactory containers.

Following is a list of these needs. They are included here because they are needed to supplement the articles recommended above, in order to form a complete list of utensils needed in the average western Oregon farm home.

- Waffle iron Assumes electrical appliance, if any
- Meat saw } Can use those used at butchering
- Board for cutting raw meats } time and kept in storage room
- Board for cutting bread, making sandwiches, at least 9" wide } Assumes built-in boards
- Board for cutting vegetables, and slicing cooked meat; at least 14" wide }
- Board for rolling pastry, cookies, doughnuts, making bread; 22" wide }
- Containers for bread, cake, flour, sugar, and cereals Assumes built-in drawers or bins
- Containers for salad dressing Assumes use of fruit jars
- Containers for drippings Assumes use of empty tin cans or pails
- Containers for staples, other than those listed above Assumes use of containers in which they are purchased
- Containers for left-overs Assumes use of table dishes and fruit jars
- Containers for canned foods, pickles and other preserved foods
- Containers for vegetables or fruits brought in from the garden or store-room
- Utensils used in care of meat after butchering, care of milk, buttermaking
- Picnic equipment; lunch boxes

HOW TO USE THIS LIST

Guide to replacements

The list of utensils described in this circular, taken in its entirety, may be used by the farm homemaker as a guide in making additions or replacements. To serve this purpose satisfactorily, the list must be adapted to individual needs. This may be done by the following procedure:

1. Check the list of uses. Note whether any articles can be omitted because they are not needed. For example, if you do not bake your own bread, omit the bread-raising pan.
2. Note where a given utensil would have greater, or less, importance in your household than that indicated by the list. The estimates given for frequency of use serve in part as a basis for judging the relative importance of the various utensils.
3. Check over the utensils you have on hand, after altering the list to meet your requirements. Discard those that are useless; put away duplicates. Decide what you need to buy as soon as possible and what purchases may be deferred till later.

Guide when buying a whole set at a time

Procedure is somewhat different when one is obliged to buy a whole set of utensils at a time. The first two steps are the same as that outlined in the foregoing section, but if one cannot afford to buy the entire set, it is desirable to get those articles first that are used most frequently and which can be made to serve the greatest number of uses.

Guide in planning utensil storage

The list of utensils described in this circular can be used as the basis for a long-time program of storage improvement. For example, in planning a knife drawer, provision may be made for the recommended set of knives and spatulas, with a separate slot for each article. For flat pans, pigeon-holes may be built between two shelves of a cabinet. Other suggestions for the improvement of storage facilities may be found in Oregon Station Circular 131, "Planning the Kitchen."

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* A more detailed bibliography is contained in a typed report bearing the same title, which is available through interlibrary loan.