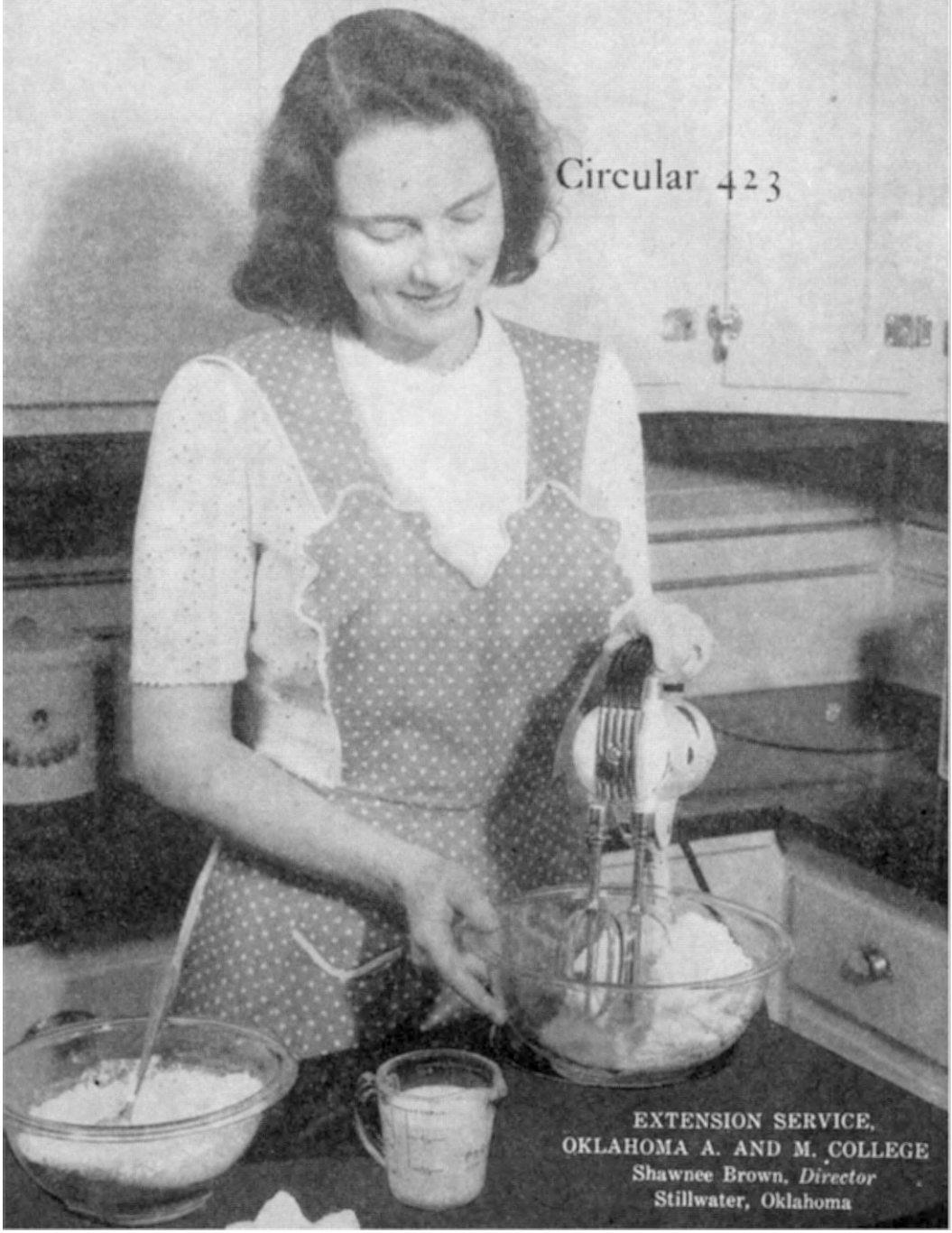
Household Equipment

Circular 423



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HOUSEHOLD EQUIPMENT

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Homemakers everywhere agree that the equipment they use determines whether or not the job of homemaking is hard or easy. Homes are operated more efficiently where first class labor saving devices and the right equipment for each job is used. Efficient household equipment saves the homemaker hours of time, makes her task easier and does the job better. Good equipment makes a happier family. Homes are better cared for, more time is available to enjoy the fellowship of family members in pleasant surroundings. Attitudes are more pleasant and harmony exists when minds and muscles are not tired.

Choosing and using household equipment wisely will demand the atention of homemakers in the future.

Equipment is defined as those appliances generally used in the kitchen and laundry of the home and implies action in addition to use.* Efficient use of equipment includes the correct selection, arrangement, operation and care of appliances so that the homemaker may accomplish the greatest amount of work with the least amount of effort in the shortest possible time.

Bright indeed would be the future for the homemaker, if she could choose from the long list of equipment, with the many improvements, all the items she really needs in her job of homemaking. She may be limited to only a few pieces at a time. If she cannot have everything, first choice should be given to the piece that will do the most for her and her family, for the money she has to spend. The rule of putting first things first must not be forgotten.

There is proof that correct operation, good care and needed repair lengthens the time of usefulness for all equipment. This lesson was learned the hard way but should never be forgotten. It is smart and thrifty to hold on to equipment as long as it can be kept performing economically and giving satisfactory results. It is a wasteful practice to discard a good piece of equipment because the newer and more streamlined model has more eye appeal. Consider spending the money for another article that can do another job.

Intelligent buying of household equipment will require the buyer to know something about the materials used in con-

* As defined by Peet and Sater.

struction, its durability and efficiency. Correct operation and proper care are important facts to learn for satisfactory results.

It would be impossible to give all the points to consider in the selection, use and care of all the available equipment, but many of them will be pointed out in the following pages.

USE AND CARE OF MATERIALS USED IN HOUSEHOLD EQUIPMENT

Materials used in the making of household equipment have certain qualities that make them better for some purposes than others. Wherever they are used, they require the same care. The principal materials, their use and care will be treated together and not discussed with each piece of equipment in which they may be found.

ALUMINUM: Aluminum has little use in its pure form. It is combined with copper to make cooking utensils. It combines readily with most materials to form strong materials used for many purposes in household equipment.

Characteristics

1. Light in weight
2. Takes and holds a high polish
3. If rolled, is very hard and durable
4. Does not rust
5. Does not corrode readily
6. It is affected by alkalies and certain food acids—alkalies cause darkening and pitting.

Care.—Do not wash with strong alaklin soaps or scour with powder containing free alkali. Dark aluminum may be brightened by rubbing with 00 steel wool, vinegar or lemon juice and whiting. After cleaning, acids must be washed off. Wash aluminum pans as soon as possible after food has been cooked in them.

CAST IRON: Cast iron is used in cooking utensils, but is brittle and not durable for mechanical parts of appliances. It is used largely for skillets, Dutch ovens and griddles.

Characteristics

1. Heavy
2. Difficult to keep attractive
3. May discolor acid foods
4. Holds heat well
5. Usually inexpensive
6. Rusts easily
7. Brittle

Care.—Some cast iron utensils are seasoned before leaving the factory to prevent food sticking. If not, they must be seasoned at home. To do this, wash the utensil and dry thoroughly. Brush with unsalted fat. Heat very slow on the top of the stove until fat smokes and is evaporated. This process requires about an hour in the oven at 350°.

Do not allow foods to stand in cast iron utensils. Wash and dry thoroughly soon after each use. Store uncovered in a dry place away from salt or acids. Avoid dropping cast iron utensils as they break and crack easily.

STAINLESS STEEL: Stainless steel is made of steel and chromium, or steel, chromium and nickle. Low heat should be used with stainless steel utensils. Foods stick readily if not watched closely.

Characteristics

1. Very strong and require little care
2. Attractive in appearance and keeps its highly polished surface through use
3. Resistant to corrosion
4. Does not scratch with scouring and is not affected by food acids and alkalies

Care.—Wash with ordinary soap and water and clean with scouring powder, if necessary. If overheated, stainless steel develops a brown coat. This can be removed with scouring powder. Hot spots may develop if used on high heat.

GALVANIZED IRON: Iron and steel coated with zinc are used to make galvanized iron. It is used principally in utensils requiring little strain such as buckets, wash boards, tubs and jar lids.

Characteristics

1. Zinc is not as pliable as iron and steel
2. Heavy coatings of zinc are likely to crack and peel off with hard use
3. Darkens with use
4. Inexpensive

Care.—Wash in ordinary soap and water, rinse and dry thoroughly after each use, avoid severe strain and store to prevent dents. Brighten by scouring with powder, if necessary. Provide a place for hanging wash tubs when not in use.

TIN: Tinware is sheet iron or steel coated with pure tin. It is used for such utensils as buckets, cups, plates, cookie sheets and canister sets. There are different grades of tinware, depending on the quality of the base plate and tin coating. The cheaper grades are less desirable.

Characteristics

1. Readily affected by food acids
2. Light in wieght and inexpensive
3. Darkens with use
4. Rusts if tin coating is scatered

Care.—The surface tarnish that occurs forms a protective coating for the tin and should not be scoured just to make the utensil bright. Avoid scratching the utensils. The exposed base rusts quickly. Wash tin utensils with soap and water, rinse and dry thoroughly before storing. To remove burned or stuck foods, boil a few minutes in a weak solution of soda water.

PORCELAIN ENAMEL: Porcelain enamel is a glasslike substance on a metallic base. There may be from one to three coats applied to the base. Enamels with two or more coats are more durable. Colored porcelain enamels are produced by adding coloring matter to the enamel itself. Colors never wear off. There are good and poor grades of enamel. Some are acid resistant and will maintain a permanent glaze through use. This material is used widely in cooking utensils, sinks, ranges, refrigerators, washing machines and in the cabinets of many other pieces of equipment.

Characteristics

1. Will not rust or discolor
2. Moisture does not affect porcelain enamel
3. Will chip or crack if receives a blow or subjected to extreme temperatures
4. Marks easily with metal spoons and beaters
5. If not acid resistant is affected by acid
6. Foods stick easily in enamelware utensils.

Care.—Wash with soap and water, rinse and dry after use. Avoid dropping or licks. Do not pour cold water into a hot enamelware utensil. Wipe acids from an enamel surface immediately, if not acid resistant. Acids ruin the surface finish. Do not scrape with metal spoon or scouring pad. They will leave dark marks. Use a wooden spoon. Remove stains with borax. Boil a weak solution of soda water in utensils to remove burned foods. Be careful not to let utensils boil dry. Scour with whiting or fine abrasive—coarse powder ruins the finish. Keep surfaces of porcelain enameled equipment waxed to protect the surface.

COPPER: Copper is very strong and durable and has many uses. It is one of the best conductors of electricity. The inner surface of cooking utensils is usually tinned to prevent corrosion.

Characteristics

1. Strong—durable
2. Tarnishes easily and requires much care to keep it bright
3. Does not mar easily.

Care.—To clean discolored copper or brass, rub with hot vinegar and salt or buttermilk. The weak acid dissolves the tarnish. Wash with soap and water, rinse and dry after using the acid. Dry whiting will polish copper to a high luster after using the acid.

NICKEL AND CHROMIUM: Nickel and chromium are corrosion resitant, have a high metallic luster and are used extensively in electrical appliances, heating elements, trims and utensils. Base metals are usually iron and steel.

Characteristics

1. Durable and attractive
2. Has a hard, highly polished finish
3. Are not affected by moisture
4. Do not corrode.

Care.—Nickel plating tarnishes very little. It may be cleaned with whiting and alcohol. Chromium plating needs little care, wiping with a damp cloth is usually sufficient. Avoid high temperatures with nickel plating. It may discolor permanently if high temperatures are used. Chromium plated cooking utensils should be washed with soap and water but never scoured with steel wool or metals.

MONEL: Monel is a trade name for a material made of nickel and copper. It is used extensively in sinks, table tops, laundry equipment, oven linings and other appliances.

Characteristics

1. Strong and durable
2. Does not scratch, dent, stain or corrode easily
3. Food acids and alkalies do not affect monel
4. Retains a high polish
5. Comparatively expensive.

Care.—Monel requires little extra care. Wash with soap and water, rinse and polish with dry cloth.

GLASS: Glass is being used extensively for many purposes, for cooking utensils it has been treated to make it heat resistant. Glass utensils used on top of the range are flame proof.

Characteristics

1. Hard, if handled with care strong and durable
2. Breaks easily if dropped or subjected to extreme changes in temperatures
3. Scratches and become dulled with use
4. Some minerals in water affect glass
5. Inexpensive.

Care.—Wash with soap and water, rinse and dry. To remove brown discoloration due to fats baked on, use a paste of ammonia and whiting. Avoid scratching the glass and roughening the surface.

EARTHENWARE: Earthenware is a clay product and is used principally in jugs, mixing bowls, baking dishes, churns and pitchers. Glazine is necessary to make them moisture proof.

Characteristics

1. Inexpensive
2. Coarse in texture
3. Is little affected by changes in temperature
4. Breaks easily if dropped, breaks and chips easily if struck
5. Acids and alkalies do not affect earthenware.

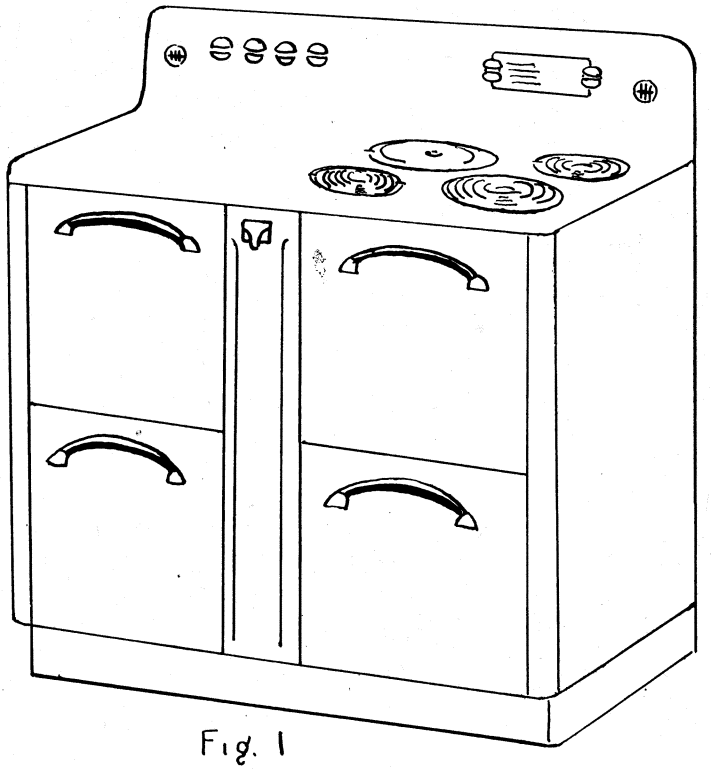
Care.—Wash with soap and water, rinse and dry. To remove burned or dried foods, soak in mild soda solution. Scouring powder may be used. Avoid dropping or blows.

Ranges

The family who is to select a range for the home will have many choices. The types of ranges according to the method of heating include (1) Electric, (2) Natural Gas, (3) Liquified Gas, (4) Gasoline, (5) Kerosene, (6) Wood, (7) Coal. Whatever the type, consideration should be given to the following points:

1. Original cost with respect to its performance
2. Operating cost
3. Upkeep in time, money and labor of the operator
4. Durability
5. Making repairs
6. Quality of cooked foods.

Each manufacturer makes a number of models at different prices. As a rule, all ranges put out by a reliable manufacturer are fundamentally the same, regardless of the price. The dif-



Cabinet type table top range

ference in cost is due to special features which add to the convenience and appearance of the range, but not necessarily to its performance. It must be borne in mind that gadgets come high. Some convenience features, which may be omitted without affecting the efficiency in cooking are condiment sets, two ovens, warming drawers, separate broiler compartment, minute minders, timer clocks, master pilot, oven lights, illuminated oven dial, pilot lights, and others.

The two most common models in ranges, regardless of the source of the heat, are table top and console ranges. Apartment models are popular where space is limited. The table top has a work surface beside the surface units. They may be cabinet or leg type. There is more drawer or storage space in the cabinet model. The storage, however, may be provided less expensively and more conveniently elsewhere. It is necessary to stoop to use the oven and broiler and some may object to this feature. The table top range lends itself well to modern kitchen arrangements. The leg types are usually less expensive and easier to clean under.

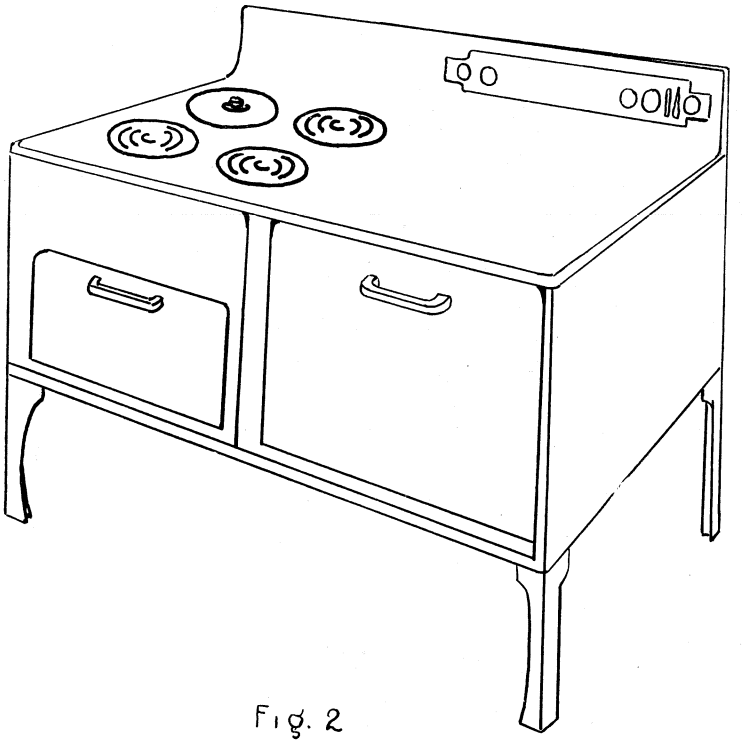


Fig. 2

Leg type table top Range

In the console type, the bottom of the oven is on the level with the cooking surface. Stooping is not necessary in using the oven and broiler, but the cooking units next to the oven wall are not as easy to use, especially with large utensils.

Easy sliding, lock stop shelves, that remain almost level and will not tip when pulled out are a good feature in any range. They are a safety feature and eliminate much of the need for stooping.

Construction features

Many fundamental construction features can be expected in any range. Features that apply specifically to the various types of ranges will be discussed separately.

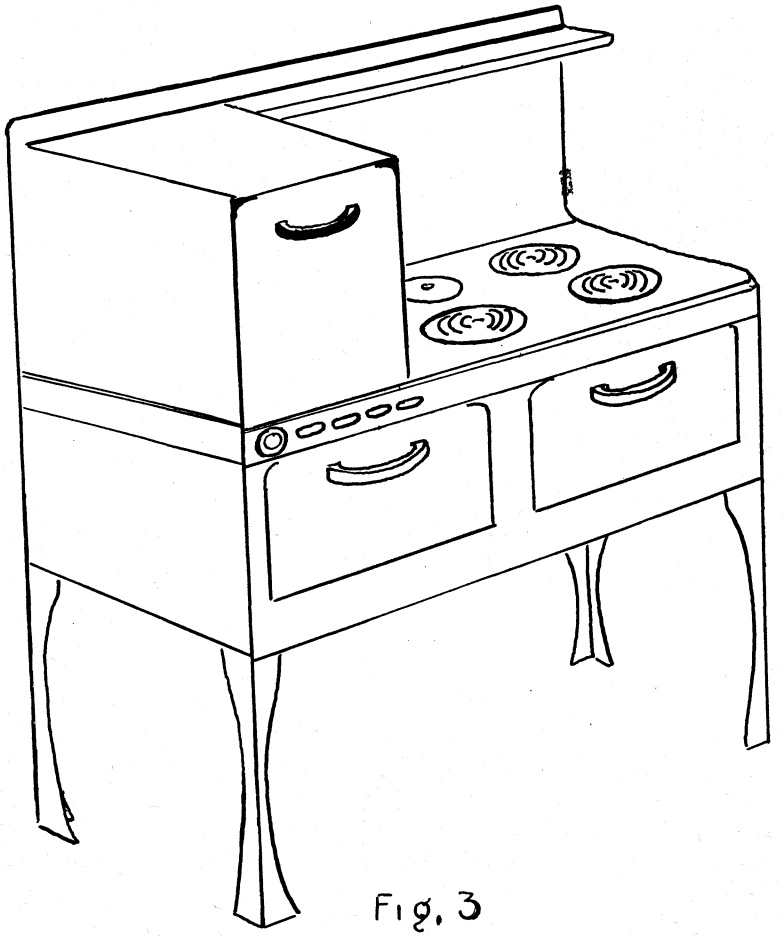


Fig. 3

Console type Range

Look for these when buying a range.

1. Sturdy and durable construction.
2. Outside body surface in rust proof, acid resisting material. Porcelain enamel is considered best. It is easy to clean. Baked on synthetic enamel is cheaper but less durable. It may discolor.
3. In the leg model range, legs should be firmly attached.
4. Door hinges should be strong, sag and rust proof.
5. Inside walls and linings should be rust resistant and durable. Dark blue enamel with white specks is common, durable and easy to clean.
6. Oven linings should be vapor tight to keep moisture from penetrating the insulation.
7. Ovens should be well insulated with material that will not sag or settle.
8. One piece construction in range top and back splasher does away with cracks and makes cleaning easier.
9. Decorations make the range more expensive and harder to clean.
10. Automatically controlled ovens or ovens with reliable heat indicators are desirable.

Electric Ranges

Cooking with electricity is a convenient, cool, clean, safe and reliable way. Electrical cookery is no longer considered slow. The electric range is controlled by the turning of switches. Special wiring is necessary for it. In most localities there is a special and lower rate for cooking and heating. The average amount of electricity used by a family for cooking is 100 to 150 kilowatt hours per month. Your rate per kilowatt hour times the amount used will give your approximate operating cost. While counting the cost, ask if there is an installation cost and how much.

Because very little heat is given off, the electric range cannot be used to heat the kitchen. A heating stove may be necessary.

No flue is required, making it possible to fit the range into any convenient kitchen arrangement. Ranges with vents opening against the wall discolor the wallpaper.

Cooking on the electric range may be done on the surface units, the oven, broiler, or in most models, the deep well cooker.

Surface Units: Surface units are either open or enclosed types, with several different forms of each. They are given different trade names by various manufacturers. Two heating elements will be found in each surface unit. They may be used one at a time or together to obtain the various heats.

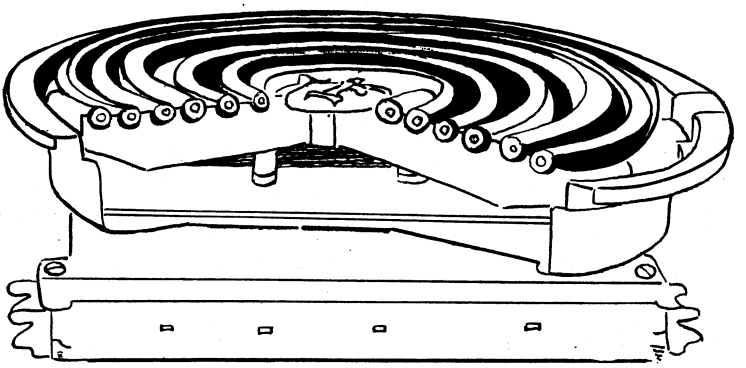


Fig. 4

Enclosed type surface unit

Surface units vary in diameter from 6″ to 8″, and in power capacity from 1,000 to 2,200 watts. Older type ranges had three heating speeds, "high," "medium," "low." Newer ranges may have from three to seven and there is even a motor driven switch which provides many speeds. At least one large, high power unit should be available on each range.

The metal encased surface unit is considered more efficient, longer lasting and is easier to clean.

Oven: The oven is heated usually by two heating units, a lower for baking and upper for broiling or preheating the oven. A few ranges have only one unit, others have separate broiler compartments. The upper unit is never used in baking. The oven, like the surface units may be either open coil or enclosed. They should be easily removed, much the same as an iron plug, for cleaning and repair. The upper and lower units are not interchangeable.

A metal sheet known as a baffle is placed over the lower unit in most ranges to evenly distribute the heat. Because of its design, it is not reversible from bottom to top or back to front. It may be attached to the lower heating unit or separate.

Oven walls molded into one piece with rounded corners and finished on both sides with porcelain enabel to prevent rusting are most satisfactory for use and ease in cleaning.

Broiler pans are usually made of porcelain enamel or aluminum. Wire racks hold the food off the bottom of the pan. Some, known as the smokeless broilers, have a separate solid rack with an opening for drainage into the lower compartment which fits over the broiler pan to support the food. The drip-

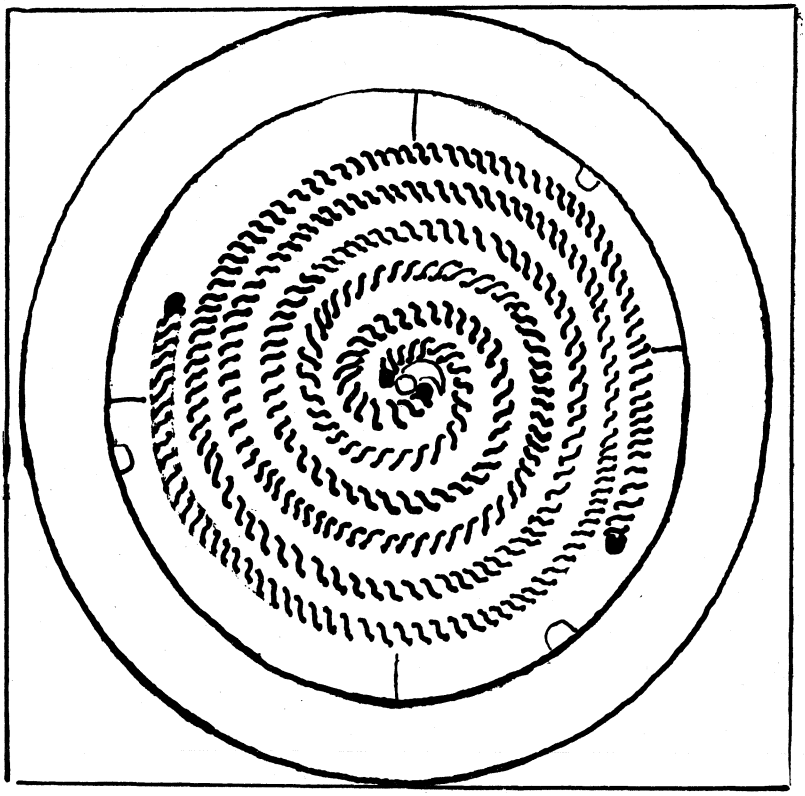


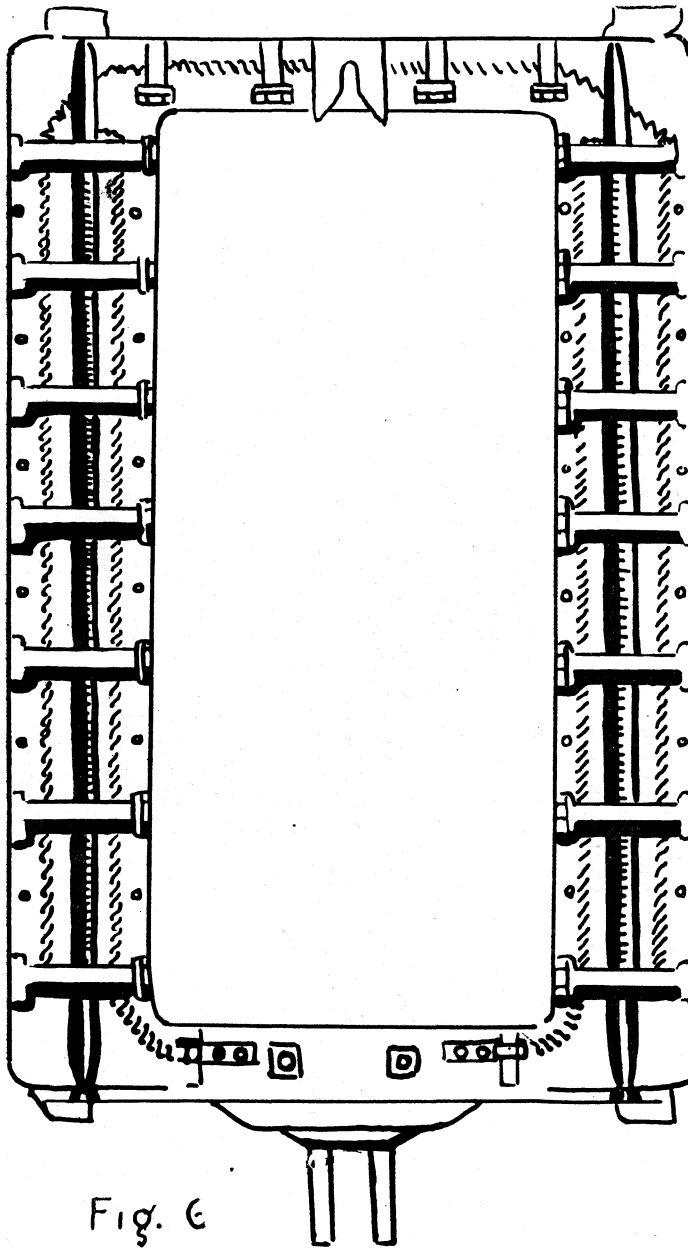
Fig. 5

Open type surface unit

pings from the food are protected from direct heat and do not smoke.

Electric ovens are controlled by automatic temperature regulators. The dial is usually located on the switch panel. It is advisable to have the thermostat checked for accuracy when the range is installed.

Insulated Cooker: The insulated cooker is standard equipment on most electric ranges now. It is composed of an insulated well and metal container, usually 5 to 6 quarts, in size, which fits into the well, with an insulated lid. It may be used for steaming, boiling, deep fat frying and sterilizing. It is considered an economy feature.



Open type oven unit

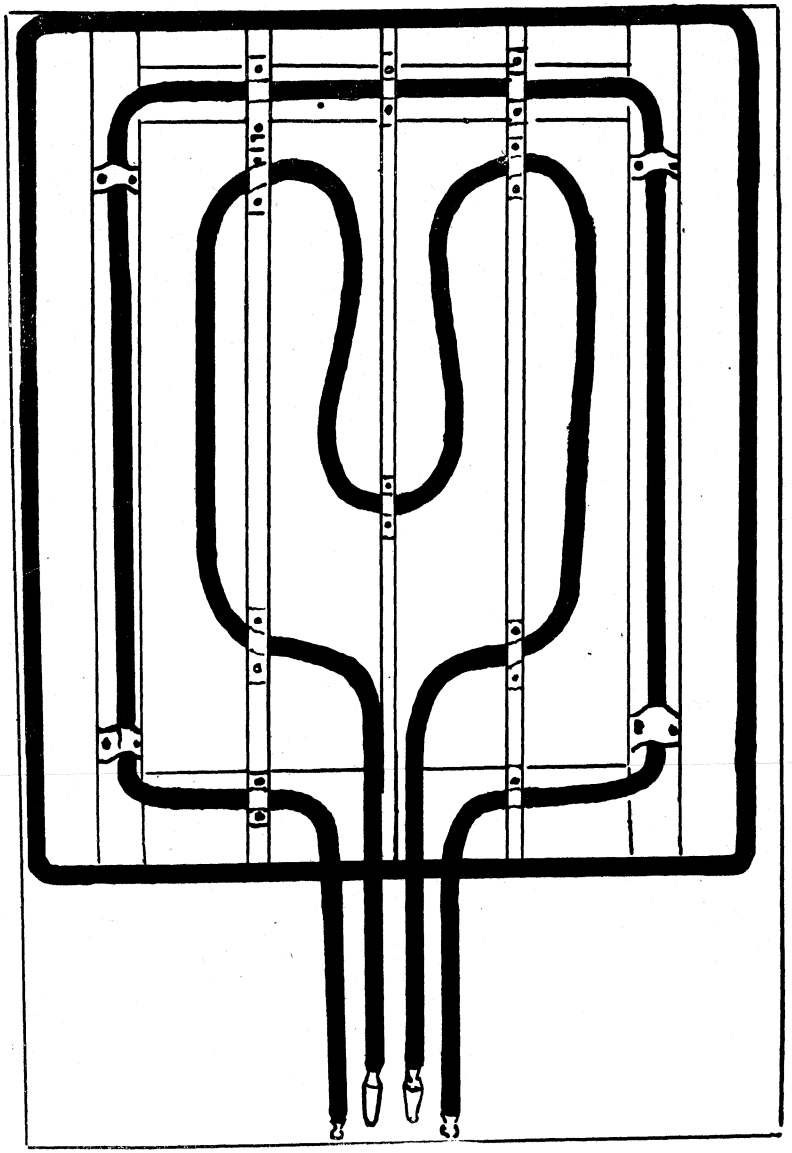


Fig. 7

Enclosed type oven unit

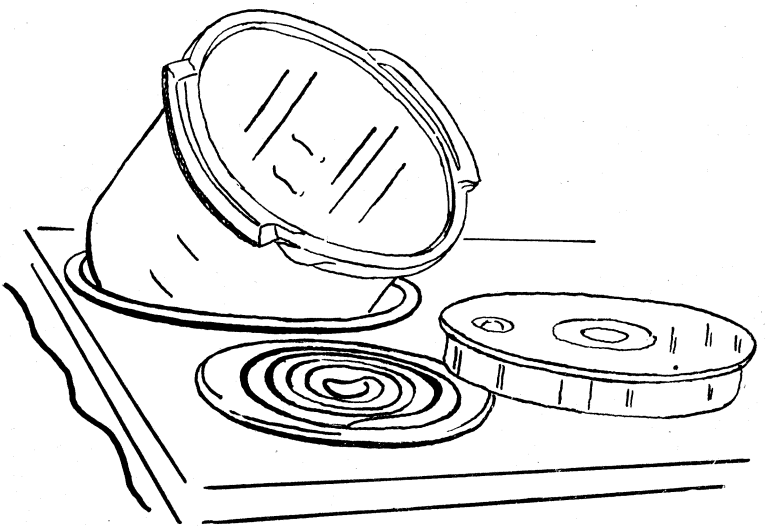


Fig. 8

Deep well cooker

Using the Electric Range: The electric range will be more economical and give better results if operated efficiently. Some of the general rules to follow are:

1. Choose utensils with flat bottoms, straight sides and tightly fitting covers. Utensils that do not entirely cover the heating unit waste electricity.
2. Use small amounts of water, usually ½ cup. Cooking with large amounts of water is expensive from the standpoint of electricity used and food waste.
3. Use high heat only to bring food to boiling point. Use medium or low heat to finish the cooking process. The last 10 or 15 minutes of cooking may be done on stored heat with the switch turned off.
4. Place pans on the unit before turning it on.
5. When baking, plan to use the oven for the entire meal.
6. Entire meals may be cooked in the deep well cooker.
7. Place pans in oven so none will be directly over the other and without touching each other or the sides of the oven.
8. Leave the oven door closed for the entire baking time, but slightly open when broiling.

Care.—

1. Wash the outside of the range with warm soapy water only when cool. Wipe up any spilled foods from the range top immediately.
2. Spilled foods are to be removed from open surface units by turning the unit to high heat and burning the food off. Remove charcoal by blowing it away or with a very soft brush. Never use stiff brush or sharp instrument. Salt, soda, soap and sugar are especially harmful to the open type unit. They may cause the wires to burn out. Most surface units can be raised and cleaned around the edge. Most enclosed units can be raised and the pan beneath removed and cleaned. Remove the unit gently and do not twist it; the wires may be broken.
3. Rotate the use of surface units.
4. Be sure the range is setting level for best results.
5. Leave the oven door open after baking so the oven will cool, and dry thoroughly after use.
6. Never store foods in the oven.
7. It is hard on an oven door to slam it. Do not use it to rest heavy weights.
8. Never leave the heat on under an empty deep well cooker. Never let it boil dry. Never place the insulated lid in water.
9. Remember the oven heating units may be removed to clean them and the oven bottom. Be sure the unit terminals are pushed firmly into place in replacing.
10. Many rack supports on the side of the oven can be removed and cleaned as easily as a cookie sheet.
11. Drip pans under the surface units are removable, keep them clean.
12. Turn off all switches when unit is not in use.

Have the thermostat checked occasionally by a competent person from your utility company. If something goes wrong, call your service man. Remember it is always well to follow the manufacturer's instructions.

Gas Range

Gas ranges are available in styles and sizes to meet the needs of families who have gas as an available fuel. Both natural and liquified gas ranges that are well designed and construction are efficient and dependable performers. Builtin vents eliminate wall stains. If the vent is not built in, it should be connected to a chimney for disposing of fumes. On

the modern ranges, the horizontal pipe through which the gas flows is concealed behind the front panel of the cooking top. This feature makes a more attractive and easily kept range. Some ranges have safety features which prevent turning on the gas when the top cover is down, or closing the top while the burner is lighted.

If a range bears the A. G. A. (American Gas Association) laboratory seal of approval, a blue star surrounded by a double circle, bearing the following statement, "complies with National safety standards, approved American Gas Association," the range will meet minimum requirements for safety, efficient performance and durability.

Burners: Gas burners are of three sizes—giant for rapid heating, regular for ordinary cooking, and simmer (which may be a part of the large one) for low heat. The principal parts of a burner are mixer head, mixing tube and burner head. These parts are cast in one piece to prevent gas leakage. The air shutter on the mixer head serves as a regulator. The port holes or openings in the burner through which the gas passes may be vertical, horizontal or drilled at a 45° angle. Flames from a 45° angle or horizontal slit port hole spread uniformly over the bottom of utensils.

Most modern ranges are equipped with a pilot light to light burners. The pilot light is a convenience and safety measure.

The tops of ranges may be open, closed or semi-closed.

Ovens: Insulated ovens with automatic heat regulators are desirable. The regulator maintains a constant heat and makes baking results more certain. Time, energy, and gas are saved. Oven linings should be easily cleaned and rust proof.

Broilers: Broilers may be heated by oven burners and are frequently the drawer type which pulls out away from the

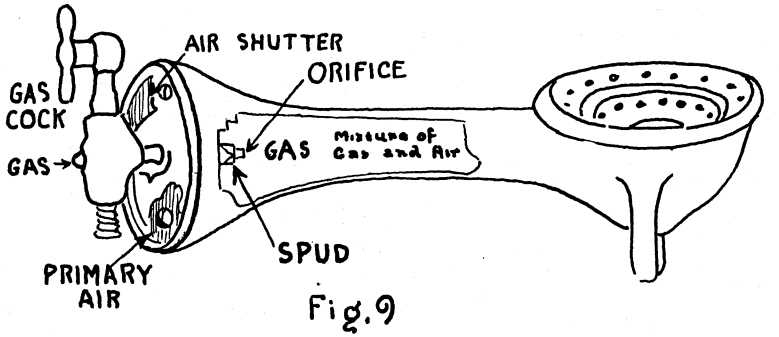


Fig. 9

Gas burner

flame. In some models, the broiler is adjustable in height. In ranges with separate broiler compartment, the pan may be atached to the door and swing out when the door is opened. Broilers should have racks to protect the food dripping to prevent their catching on fire.

Cerified Performance: If the range is a C. P. (Certified Performance) range, it must fulfill 22 requirements.

Using the Gas Range: The gas range will perform better and more economically if operated correctly.

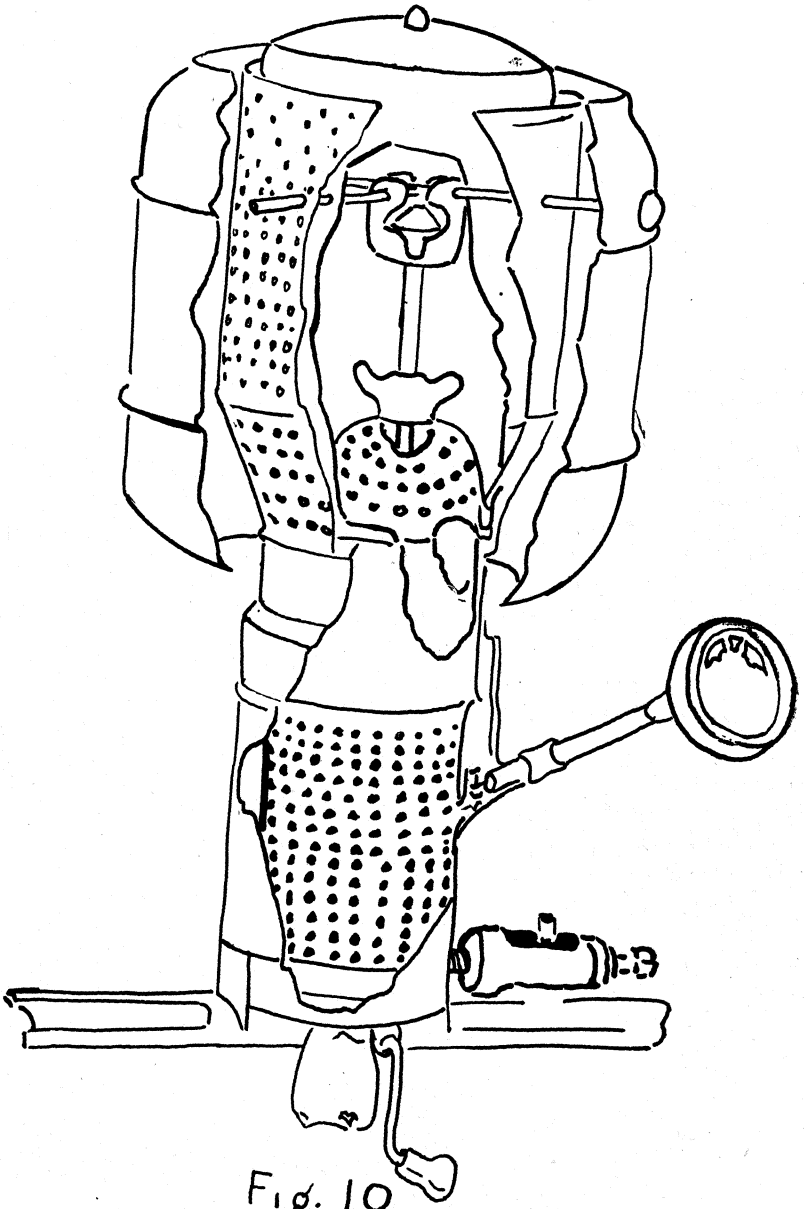
1. Keep all burners correctly adjusted to a clear blue flame and thoroughly clean.
2. Use the small burners instead of large one when possible.
3. Place utensil on burner before lighting.
4. When water begins to boil, turn the flame low enough to keep the water just boiling or use simmerer.
5. Use utensils of proper size, with flat bottoms, straight sides, with tightly fitting covers.
6. Avoid preheating the oven too long before it is to be used.
7. Turn all burners off when not in use. Relight if needed.
8. When baking use the oven for several things.
9. Stagger pans on racks and place so the air will circulate freely.
10. Use the oven regulator to maintain correct temperature. Low temperature when roasting meat prevents spattering grease.
11. Use the stored heat insulated ovens to finish the cooking process.
12. After using the broiler, reove the pan at once.

Care of the Gas Range: Proper care of the gas range will insure more years of use and better performance.

1. Allow to cool before wiping with cloth and water.
2. Remove the oven bottom and sliding racks and clean occasionally. If oven bottom is insulated, do not immerce in water.

3 Leave the oven door open 2 or 3 minutes after lighting oven. Leave the door open for oven to cool.

4. Do not store foods in oven.



Short chimney kerosene burner

5. Clean cast iron burners by boiling them in a solution of washing soda and water, (1 tablespoon of soda to 3 quarts of water) then wash in soap and water. Use a bottle brush to clean the inside of the tube leading to the burner head. Rinse the burners in clear water and wipe dry. Put them upside down in the oven for a few minutes to finish drying. Use a small wire to clean port holes, never a toothpick, it might break.
6. Burners of materials other than cast iron should never boiled in soda water. Use soap and water for cleaning.
7. If the oven burner can be removed, clean it as you do the surface burners.
8. Keep the air shutter clean with a brush.
9. The pilot needs cleaning and proper adjustment.
10. Wash the drip tray under the top burners frequently.

Liquified Gas: Satisfactory results cannot be obtained from liquified gas if unaltered natural gas type ranges are used. Special burners are necessary.

Liquified gas is heavier than air and ventilation requires special attention. Some of the liquified gases have been ordorized so leaks or escaping gas can be readily detected.

Gasoline: The modern gasoline range is about the same in appearance as gas or electric ranges and should have about the same structural features. The same rules for operation, care and use may be used.

Fuel tanks should be rust proof and the generator tubes made of stainless steel. The automatic safety drain is a good feature.

The burners are much the same as for a gas range, since the gasoline is converted into gas before it is used.

Care must be taken to keep the air pressure in the tank high enough. The higher the pressure, the hotter the flame. The flame is regulated by a generator valve. The fuel tank needs to be kept clean. Dirty or poor grade gasoline causes inefficiency in the performance of the range.

The gas tip of the generator tube should be kept free of carbon. Some of the new ranges have two full reservoirs with indicator guages. Time reminders are extra.

Kerosene Ranges: The modern kerosene range is attractive and has much the same appearance as other ranges. It is economical to operate but requires more care than gas or electric ranges.

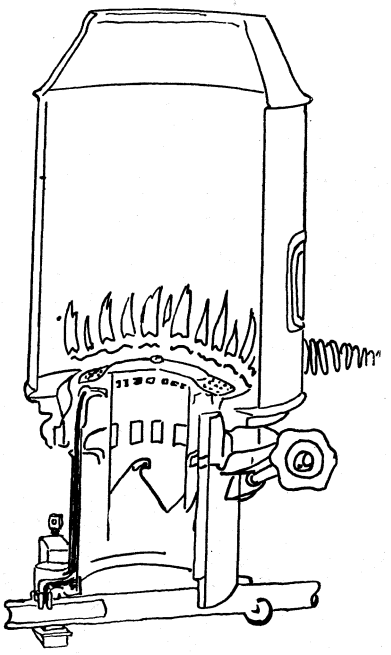


Fig. 11

Long chimney kerosene burner

Burners: Burners may be long or short chimney, asbestos rings or wickless. The range works better if the sides and back are enclosed to cut off draft. The long chimneys have a higher operating efficiency. A removable head on the wick chamber makes wick changing easier. The inner combustion tube should be of a heat resistant material to insure longer service.

Some ranges have a giant burner for fast heating. Burners that are simple to operate and easy to clean are most satisfactory.

Some ovens have insulated walls, heat indicators, and distributors.

Sturdy construction features are essential.

The kerosene range must be perfectly level if it operates well. Avoid turning wicks too high and produce smoking.

Care:—

1. Fuel pipes should be drained and cleaned at frequent intervals.
2. The pipe may be cleaned with a stiff wire and a soft cloth attached to one end. Rinse the pipe with clean kerosene.
3. Wash the storage tank with soap and water, rinse and dry well.
4. Clean wicks frequently. To clean the wick, turn it level with the wick tube and wipe from inside out with a clean soft cloth. Trim all loose threads. If wick cleaner is provided, use it.
5. Wicks need replacing when burned down to the carrier.
6. Let new wicks become saturated with oil before lighting.
7. Perforated sections of the burner must be kept free from dust.
8. Select ranges for which repair parts are available.
9. Keep the stove wiped clean of any surplus kerosene to prevent objectionable odors.

Refrigerators

Refrigerators of some type are present in most homes today. They are considered a necessity to prevent food spoilage. This is important from the standpoint of health and economy. Great strides have been made in the field of refrigeration and each year has brought about improvements in the refrigerator. Refrigerators may be ice or mechanical. The mechanical refrigerators are operated by electricity, gas or kerosene. The electric are by far the more common.

In both ice and mechanical refrigerators the principal of refrigeration is the same. Heat passes from a warm place to a cool one. In the ice refregerator, the ice absorbs the heat, which causes it to melt. The ice must be replaced. In the mechanical refrigerator, the refrigerant absorbs and carries off the heat. Temperatures are more constant in a mechanical refrigerator.

Sizes from 5 to 8 or 10 cubic feet are available, making it possible for each family to choose a size to meet their needs.

Principals of good construction in the cabinets of all refrigerators are practically the same. As in ranges, many convenience features add to the cost but not necessarily to the efficiency of the refrigerator.

Cabinets: Cabinets may be made of wood, but the newer models are made of steel with a finish of porcelain enamel or baked on enamel on the outside. Porcelain enamel is more durable. Linings are usually finished with two coats of vitreous enamel. Moisture will not go through this finish. Seamless linings with rounded corners are easily cleaned. The bottom of food compartments should be of special acid resistant porcelain. Racks of rust resistant metal are best. Refrigerators should set flat on the floor or be high enough above the floor to clean under.

Insulation: More heat enters the refrigerator through the walls than when opening the door. The door and walls must be well insulated. Insulation 3 inches thick, of the type that will not pack or settle is desirable. Gaskets should be installed in the doors to prevent leakage.

Hardware: Hinges and latches should be rust proof and substantial to hold the door securely. Most refrigerator doors swing from the right. A door that swings from the left may fit into certain kitchen arrangements better. Latches that can be manipulated by the foot or knee may be more convenient.

Ice Refrigerators: In the modern ice refrigerator, the ice is usually stored in the top with one or two vertical doors. Some models have dampers to vary the temperature in the food compartment. Ice should never be covered in the refrigerator; this hinders the cooling process.

Brass, copper, nickel or chromium covered drain pipes are desirable. Unplated copper is best since slime will not form on it. The drain should have a trap to prevent undesirable odors and heat entering the refrigerator. The drain pipe should be held securely but should be removable. A permanent drain into the sewer pipe is desirable. Never run the drain pipe through an opening in the floor and drain directly on the ground below.

Electric Refrigerators: Most new models will have sealed refrigerating units. Some of the newer features include compartments for freezing and storing fresh foods, or storage space for frozen foods. Adjustable shelves are a convenience.

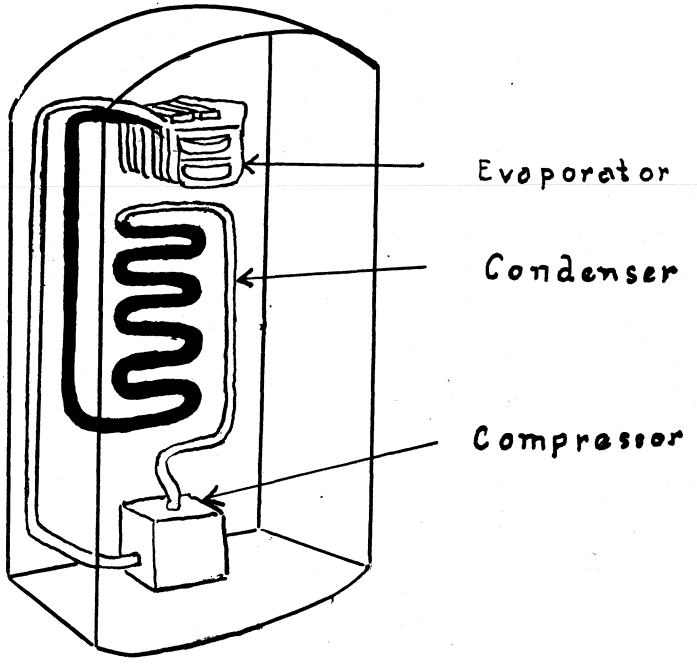


Fig. 12

The units of the compression system may be sealed or conventional type. The sealed type requires no additional lubrication. The convention type requires more servicing.

The temperature is controlled by a thermostat which may be set for the desired temperature.

Gas Refrigerators: The gas refrigerator is noiseless. The amount of heat or height of flame is controlled by a thermostat. When defrosting, the temperature control is turned to defrost. When defrosting is completed, the control is moved back to operating position. Gas refrigerators are considered economical to operate.

Oil Burning Refrigerators: Oil burning refrigerators are usually chosen when gas or electricity is not available. There are two types of burners and storage tanks. One has a wick burner as a part of the storage tank, the other a wickless burner separate from the tank. The wickless type burner has an automatic cut off to prevent an overflow of kerosene and a cutoff that closes the valve if the burner temperature becomes too high.

A good grade of kerosene is necessary for good refrigeration. Always use the filter in the funnel when filling the tank.

Location of Refrigerator: Mechanical refrigerators should be placed so there is from twelve to eighteen inches space above and three or four inches to the back for air circulation to remove heat. Locate the refrigerator in the coolest place possible, where the sun will not shine directly on it.

Placement of Foods: The modern refrigerator has a vaviety of temperatures within the cabinet. Correct placement of foods is necessary.

1. Ice cubes, frozen desserts, and frozen foods go in the freezing chamber.
2. Meats and cheese are placed directly under the freezer, covered lightly or in a special container.
3. Place milk, cream and beverages at the top on either side of the freezing unit.
4. Custards, pudding, left-overs, fruits, etc., go on the second shelf below the freezing unit.
5. Vegetables should be placed in a crisper on the bottom shelf.
6. Eggs keep best in a covered container.

Care: For the best use and longer service the refrigerator should be given proper care.

1. Clean the exterior with warm soapy water, avoid scouring powder. Wax two or three times a year.

2. Clean the interior, shelves and freezing compartment with warm water, to which baking soda has been added (1 teaspoon baking soda to 3 qts. of water).
3. Defrost when the frost is ¼ inch thick on the freezing compartment.
4. Do not open the door unnecessarily.
5. Wipe up spilled foods immediately.
6. Avoid getting grease on the rubber gasket. It is sometimes necessary to replace the gasket.
7. Test the door for air leakage by closing it on a piece of paper. If you can pull it out easily, the door needs adjusting.
8. Clean the condenser once or twice a year with a long handled brush. Disconnect the refrigerator first.
9. See to it that the refrigerator is perfectly level.
10. A loose or worn belt should be replaced or tightened.
11. Cover all foods.
12. Remove foods from packages before placing in refrigerator.
13. If mechanical trouble develops, call a service man.
14. Never connect refrigerator to an extension cord. Use a convenience outlet.

Washing Machines

The washing machine renders a great service to the homemaker. With the great variety of types on the market, she can make her choice to meet her needs. Washers available on the market may be completely automatic, partially automatic or non-automatic. Cost may determine which, since the automatic type is more expensive. Other factors influencing the choice are how much hot water is available, how much time shall be saved and how often the washing is to be done.

The three general types of washers are (1) agitator, (2) vaccum cup, and (3) cylider. The agitator is the most common type. The style and shape of agitators may vary, but the result they give is practically the same. The standard agitator is located at the bottom of the shaft.

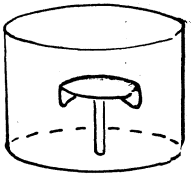


Fig. 15

Agitator

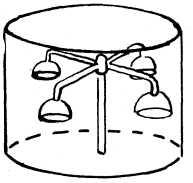


Fig. 14

Vacuum cup

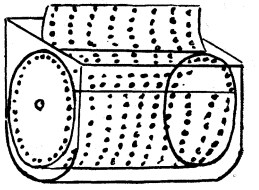


Fig. 13

Cylinder

Different speeds are possible on some agitators. Washers with automatic controls may be set to wash different fabrics for different lengths of time.

The capacity of washers is usually given by the number of pounds of dry clothes they will wash effectively at one time. The capacity ranges from 6 to 9 pounds.

Machines equipped with a motor driven pump and drain hose are easily emptied.

Moisture is removed from clothing by wringer or by a whirl dryer.

Completely automatic washers wash, rinse and damp dry the clothes without the operator's assistance other than placing them in the washer and turning the dial. Controls regulate the washing time and the water temperature. This type is connected to the hot and cold water supply and drain. Wash and rinse water is changed with each load. They may be installed in kitchen or bathroom. No extra tubs are necessary.

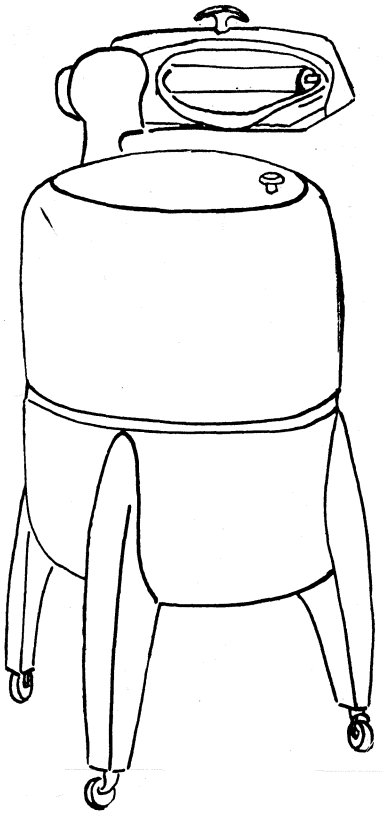


Fig. 17.

Agitator type washing machine

Wringers: Wringers are made of hard, soft or semi-soft rubber. One roller may be hard the other soft. The latest tendency is toward the balloon, soft-rubber type. There seems to be little difference in their ability to remove water from clothing. The hard rubber is more durable. The soft rubber is much easier on clothing, buttons and zippers and does not crease the fabric. The semi-soft has the good qualities of both.

Wringers should be equipped with simple control and easily operated safety device. Rolls and drainboards are reversible. It is well to have the tension on the rolls vary automatically in order to carry thick or thin materials.

The centrifugal dryers are easy on clothes and buttons. If clothing is not placed in evenly, there is much vibration which is hard on the machine. Wet clothes must be lifted from the washer into the whirl dryer. The use of a wringer eliminates part of the strain of lifting. The second tub of clothes may be washing while the first is whirling dry.

Construction:

1. The frame of the machine must be stable and durable.
2. Adequate size casters should be placed on the leg.

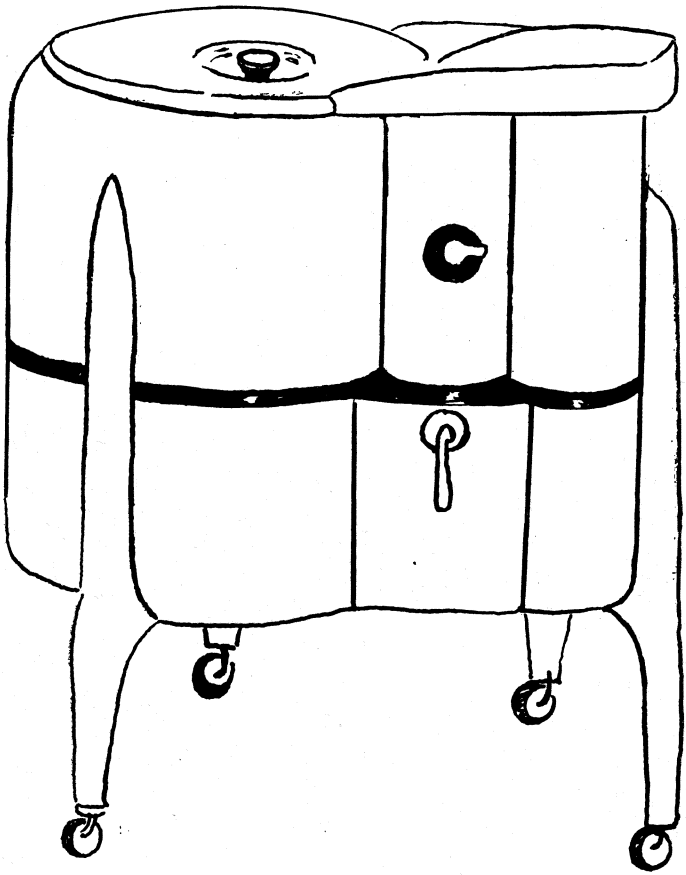


Fig. 16

Cylinder type washing machine

3. Spinner must be in compartment that can be covered and locked during spinning.
4. The connecting cord should be heavy duty, water proof cord bearing the underwriters seal.
5. Tubs should have smooth, hard surface, unaffected by alkalies. Porcelain enamel is good but will chip if treated roughly. Aluminum is satisfactory but hard to clean. The bottom should be designed for complete drainage.
6. The motor should be well protected if machine is electric.
7. The drain board should be rust resistant and have round corners.
8. Read and save the guarantee.
9. Adjustable heights are desirable.
10. Be sure servicing and repairs are available.

Care.—

1. Drain tubs immediately after use. Rinse both tub and agitator well and dry. Remove all lint and soap curd from the drain by flushing with clean water.
2. Leave the cover ajar.
3. Protect the washer with a cloth covering between wash days.
4. Dry rolls and frame of wringer. Release pressure on the rolls when not in use.
5. Dry the connecting cord and wind loosely on hooks.
6. The washing machine may be grounded to the water pipe with a copper wire to prevent shocks.
7. Keep the machine lubricated according to manufacturers' instructions.
8. Keep all rubber parts away from oil.
9. Do not turn the motor on while machine is in gear.
10. Avoid overloading the tub.
11. If porcelain enamel, warm tub gradually in cold weather.
12. Stop the agitator before starting the wringer.
13. Disconnect the washer before cleaning.
14. Wax the exterior occasionally to keep it bright and easy to clean.
15. Keep washing time at a minimum.

Irons and Ironers

Ironing is a weekly job in every household. The type of iron and how well it works has most to do with how hard or easy the job is. Homemakers have become conscious of the simplest and easiest way of doing housework. The best tool for the job will be kept in mind when selecting and using the iron.

Because of the ease of operation, convenience and dependability, the electric iron is usually the choice where electricity is available.

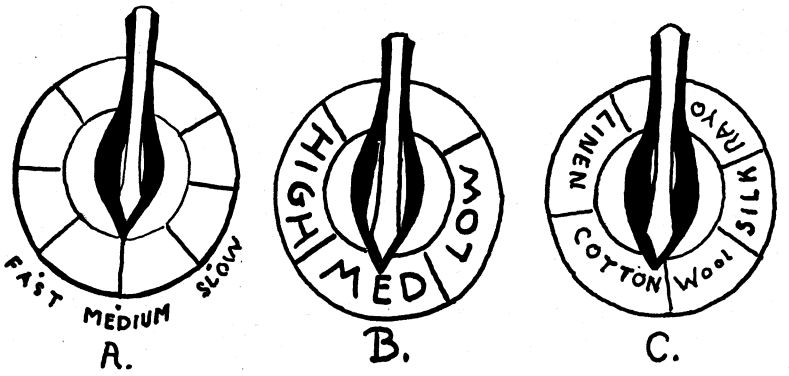
The electric iron has undergone many changes in design, weight, handle, heat control, iron rest, weight and heating time in the past few years. The war-time iron was stripped of most of the extra conveniences. The new irons will offer many choices.

The make of iron, as long as it is put out by a reliable manufacturer, is a matter of personal preference, so long as it meets certain fundamental requirements.

Irons vary in price. The lower priced irons are usually more cheaply constructed, have fewer conveniences and do not last as long. The present day trend is toward the lighter weight iron (automatic 3½ or 4 pounds, non-automatic 4 to 6 pounds) that is automatically controlled. The larger sole plate (25 square inches average) with tapering point, beveled edge or button groove for ironing around buttons are fast winning favor.

The well tapered, beveled point makes ruffle and tuck ironing easier. Sole plates of sooth, scratch and rust resistant metal is preferable. Elements are constructed so the point will be the hottest place on the sole plate, with the heat reduced gradually toward the back. A good iron is well insulated so heat is not given off at the top.

Care should be given to selecting a smooth, well shaped handle to fit the hand comfortably. Handles set at a backward sloping angle help to reduce fatigue. The forward sloping handle is undesirable. The handle should be of heat resistant material. Some of the hard rubber handles become soft and sticky with use. The space between the handle and top of the iron must be great enough to prevent burning the kunckles while ironing. The type of thumb rest, its position, or whether there is one at all is a matter of personal preference. It should allow the hand to be held in a comfortable, relaxed position while ironing.



Automatic Heat Control Dial

The iron with an automatic heat control can be operated more economically and does away with guess work in ironing different fabrics. Dials may be marked "high," "medium," "low," or "rayon," "wool," "silk," "cotton" and "linen." Those with fabric markings are considered more satisfactory. Their position on the iron varies. Some are on the handle others on the iron itself. They should be easily seen.

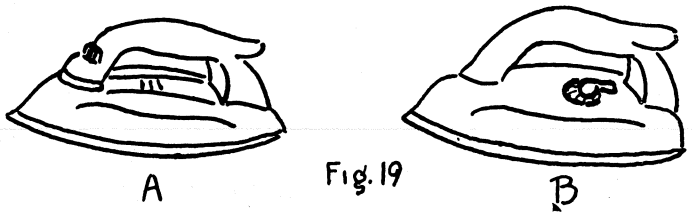


Fig. 19

Automatic Heat Control on Handle **Automatic Heat Control on Iron**

The non-automatic iron should have a cutoff switch on the ironing plug so it can be turned on and off to control the temperature without stooping to disconnect the cord from the outlet.

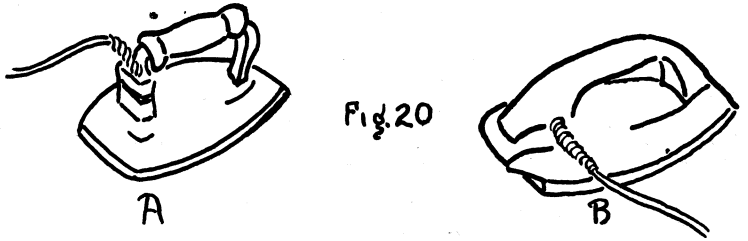
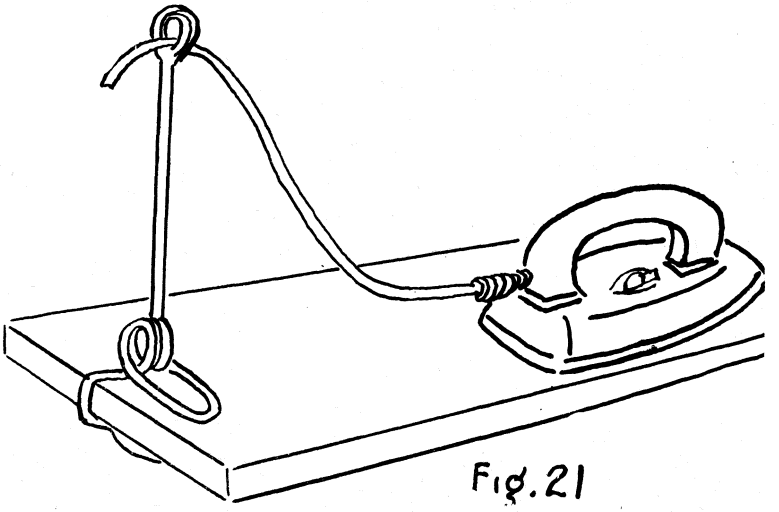


Fig. 20

Iron with Removable Cord **Permanently Attached Cord**



Cord Support Attached to Ironing Board

Many of the newer irons have permanently attached cords. The cord receives much twisting and bending while the iron is in use. If there is no cord support, it also rubs along the edge of the ironing board. Choose a durable cord bearing the underwriter's seal. The permanently attached cord has a cord protector or guard at the point of attachment. They are harder to repair at home. The guard should be flexible to prevent the cord breaking at that point. Springs are more satisfactory than the hard rubber variety. There are cord supports on the market which may be attached to the ironing board.

The iron rest is a part of the permanent construction of most new irons. It eliminates lifting the iron to a separate stand. The separate stand may be in the way while ironing. The rest on the end of the iron places the iron in a better position for handling.

The steam iron, eliminating the job of sprinkling and especially designed for pressing, is one of the newest developments. These irons have a reservoir above the iron which must be filled with water. Steam flows through a series of openings in the sole plate. Those with fingertip control to start and stop the flow of steam are more satisfactory than those whose reservoir must be emptied before dry ironing can be done. Some control the amount of steam for different fabrics. Complete thermostatic control is important. Never use hard water in the iron. Rust or minerals may clog the steam openings.

Care.—

1. An important rule is always disconnect the iron while not in use.
2. Dropping the iron is a bad practice. Handles are easily broken or dislocated. The heating element and thermostat may be injured.
3. Do not place the iron in water. Store it in a dry, well ventilated place and be sure it is cool before putting it away.
4. If starch sticks on the iron, allow it to cool, then wipe the starch away with a cloth dampened with household ammonia. Other methods requiring more time may be used.
5. Keep the upper part of the iron clean to prevent injury to the finish.
6. Never wrap the cord around the iron while hot. Coil cord loosely, never kink or bend the cord sharply.
7. Disconnect the cord from the outlet by pulling on the plug not the cord.
8. The iron gives better results when attached at the convenience outlet rather than to a drop cord or extension cord.
9. Disconnect the cord from the convenience outlet before pulling the plug from the iron.
10. Repair cord when necessary.

The electric ironer could be considered a labor saving device. The operator sits while ironing, fewer muscles and movements are used. Everything from flat work to shirts and ruffles can be effectively ironed on the ironer, but because of the initial cost it has not been extensively used in the home. The ironer uses more electricity per hour than the hand iron, but since the speed of ironing is greater, some dealers say there is little difference in the operating cost.

Fig. 22

Steam Iron

Ironers

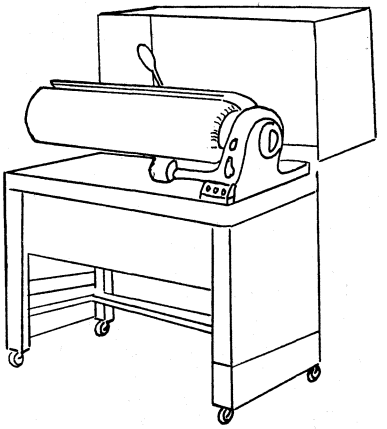


Fig. 23

Rotary Ironer

There are two types on the market (1) Rotary and (2) Flat plat. It is wise to try both types before making a decision. Standard and portable sizes with knee or fingertip or foot controls are available. One or both ends of the roll may be open.

Desirable features to look for in an ironer.

1. Shoe or ironing surface smooth rust resistant metal.
2. Back of shoe insulated to prevent heat loss.
3. Two separate heating elements makes it possible to heat only one end of the shoe to iron small articles.
4. Thermostatically controlled heat, with fabric dial insures economy and better results.
5. Even pressure is easier to maintain if the roll support is sturdy and the shoe is self aligning.
6. A well padded roll (rotary) or buck (flat plate) is necessary.
7. Safety release and controls easily reached, are desirable.
8. A protective edge on the shoe saves the fingers from burns.
9. Some like the rocker that moves the roll back and forth for finishing.
10. Platforms to hold finished work are a convenience.
11. Moisture traps keep the pad dry.

Skill will need to be developed in learning to use the ironer effectively and economically. It is better to start with simple pieces while learning to manipulate the ironer. Soon short

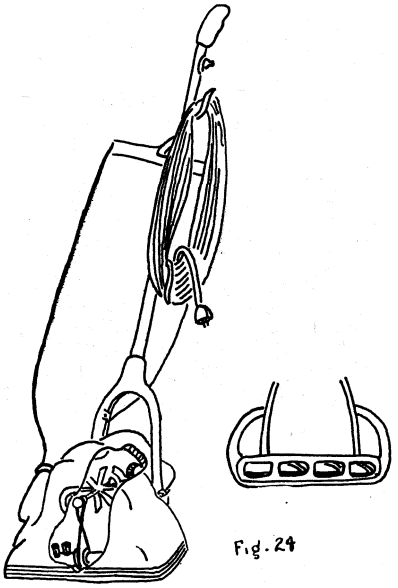
cuts that save time and electricity like ironing small flat pieces like handkerchiefs, napkins and towels while running sheets or tablecloths through. Use stored heat after turning the current off, for pieces requiring low heat.

Care.—

1. The outer cover of the roll should be removed and washed occasionally.
2. Use same method to clean shoe as to clean iron.
3. Reverse padding and fluff occasionally, if removable.
4. Don't do all the ironing on one end or in the center. Distribute the pressure to prevent uneven packing of the padding.
5. Turn buttons, snaps, and hooks to the pad to protect them as well as the shoe.
6. Leave the shoe released while stored.
7. Ask for a demonstration to get the best method of placing and turning various articles while ironing.
8. Keep oiled according to manufacturer's instructions.

Vacuum Cleaners

Vacuum cleaners make the job of house cleaning easier and more pleasant. They are no longer designed for cleaning fabric rugs alone but adapt themselves to many uses. The modern cleaner with its many attachments takes care of the



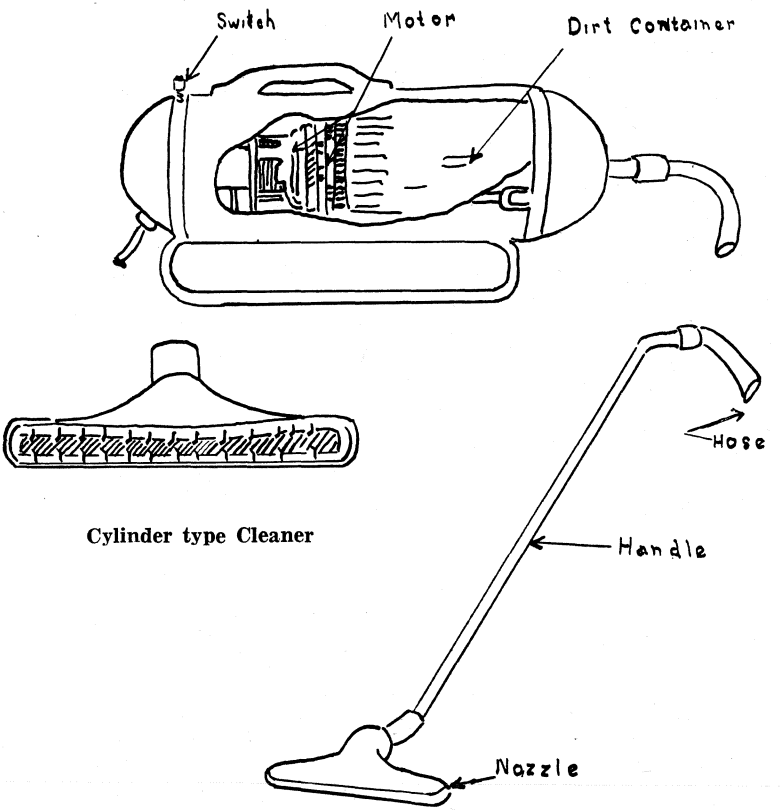
Brush type nozzle **Upright Cleaner**

floor, upholstery, screens and hard-to-get-to places. Some have floor brushes, sprayers, demothers, dusting brushes and waxers. The homemaker will need to decide if the attachment will be used enough to justify her extra investment since they add to the expense of the cleaner.

Vacuum cleaners are either straight suction type or motor driven brush type, according to the method used in cleaning. There are variations of each type.

The straight suction type depends on suction alone for the cleaning action. Some may have brushes mounted on the outside.

The brush type cleans by suction, brushing and carpet vibration. Metal beaters, in addition to the brushes, are sometimes employed. The beater-brush combination removes more from a rug, but they will do less harm than the dirt and grit left in the rug.



Cylinder type Cleaner

Fig. 25 Straight suction type nozzle

Cleaners may be upright, mounted on wheels with upright handle. The dirt container is a bag held upright by a hook on the handle.

The tank cleaner has a horizontal cylinder which houses the fan and dirt container with the nozzle attached to a rigid hollow tube.

The dirt bags vary in many ways. Some have disposable linings that may be removed without releasing the dirt. All should be firmly woven and free from leaks. A wide mouth makes emptying easier.

Heavy duty cords are best for use on the cleaner.

The homemaker planning to buy a vacuum cleaner should try the various types before making a decision. Ask about the fan and motor. Some have two speeds. Get as many desirable features in one cleaner as possible.

Care.—

1. Every owner of a vacuum cleaner should get acquainted with it. Read the instruction book carefully and locate the parts on the cleaner. Examine the nozzle, brushes and dirt container. Learn how to take off and clean removable parts.
2. If the cleaner is straight suction type, be sure the nozzle makes a good seal with the rug. Some are automatically adjusted; others require hand adjusting.
3. Cleaners with brushes or beaters should have them correctly adjusted. Brushes must be kept free from hair and threads. When brushes wear down, the brush or roll needs lowering or replacing. To test for proper brush length, lay a piece of cardboard across the nozzle. The bristles should extend about 1/32 of an inch above the edge of the cardboard.
4. The belt that turns the roll should be kept properly adjusted to prevent slipping.
5. Do not run the cleaner over pins or sharp instruments. String will collect on the brushes and roll.
6. Keep dirt container emptied and clean. If of a fabric, turn wrong side out and brush occasionally. If water is used as a filter, keep the pan emptied and clean.
7. When ready to store, wind the cord loosely around the clips.
8. Store in a dry place.
9. Store attachments in a handy place.
10. Oil according to manufacturer's instructions with a good grade of oil.

Carpet Sweepers

Hand operated sweepers make rug cleaning easier if no vacuum cleaner is available. Suction and brushes remove the dirt.

The sweeper gives better results if run with smooth easy strokes, with no more pressure than necessary. The dust pan should be empties after each cleaning job. Avoid hanging the cleaner by the handle. Keep the brushes adjusted and free from hair and ravels. This may be done with a coarse comb. The brush is removable, wash it in gasoline or cleaning fluid to remove wax and oil.

Follow the manufacturer's instructions for oiling. The wheels must be kept oiled for free rolling.

Elecrtic Toasters

Electric toasters can be had in two types, the turn-over type, with the heating element in the center with vertical racks on each side, and the well type with the heating elements enclosed. The turn-over types are usually non-automatic and require turning the slices of bread by hand. In some models the slices of bread are reversed when the doors are opened. Some have signals or reminders to when the toast is done. The heating elements may have open coils or flat metal ribbons on mica sheets. Bread has a tendency to dry out during the toasting process in a turn-over type toaster. They usually toast two slices of bread at a time. Sometimes the heating elements warps in case of the mica plate, or sags if the coil type, and causes uneven toasting.

The well types are more expensive but may be fully automatic or semi-automatic. They may toast two or more slices of bread at one time. In the completely automatic type, the toast pops up when brown. Most models are adjustable to permit a choice of the desired degree of brownness in the toast.

Look for durable finish with insulated bottom to prevent table damage and heat resistant handles in all models. A removable plate at the bottom makes cleaning and the removal of crumbs easier.

The toaster should be kept clean by wiping the outside with a damp cloth or a cloth dampened with a little household ammonia. Brush the crumbs away with a soft brush. Shaking crumbs out may injure the heating element.

Never clean or store toasters while hot and do not wrap the cord around a hot toaster.

The automatic lever on some models may need a drop of oil occasionally.

The amount of money to be spent, the amount and quality of toast desired at one time, may be determining factors in the choice of a toaster.

Waffle Irons

Waffle irons are available in various sizes and shapes. They may be round, square, oblong or hexagonal. They may bake one or two waffles at a time

More expensive models have heat indicators, may have a device to control the brownness of the waffle, or have signals to remind the operator when the waffle is done.

The grids are usually of heavy cast aluminum and as a rule, are treated at the factory so the seasoning process may not be necessary. The height and number of the knobs determines the crispness of the waffle. Taller knobs, placed close together give a crisper waffle.

The outside finish should be non-tarnishable chrome plate. The tray attached to the bottom of the waffle iron should be wide enough to catch any batter that may drip over. Some irons have an overflow trough. The base tray is usually held on with one screw which may be removed for cleaning.

Enclosed expansion hinges that allow the lid to raise when the waffle is baking, should hold the lid in place.

Insulated bases protect the table and heat resistant handles protect the fingers.

Grids do not need oiling before baking. Waffle receipes for electric irons usually contain more fat than those for the non-electric type.

The outside of the waffle iron should be cleaned after each use but only after it is cool. Silver polish, or household ammonia and whiting may be used to brighten the outside. The griddle may be brushed with a fine steel brush to remove batter that might have burned.

If the griddle becomes dark and rancid, it may be cleaned by applying a paste of household ammonia and whiting and scrubbing with a stiff or fine metal brush. Let the paste stand on the grid for an hour to penetrate the burned fat. Wash the grid carefully to remove the paste but be careful not to wet the heating element. Rinse with a vinegar solution.

To treat the griddle after cleaning, brush with unsalted fat, bring to smoking point. Throw away the first waffle baked. Further oiling is not necessary.

It is desirable to have a convenience outlet near the table or place where the iron is to be used or safety reasons.

Avoid dropping the iron.

Fans

Fans are used primarily for summer comfort. They are obtainable mounted on floor pedestals, may have wall bracket mountings or base for desk and table use. Older and less expensive fans circulate air in only one direction. The oscillating type is considered more desirable. They will circulate air in one direction or turn from side to side. In the better models the fan may be tilted up or down.

The size of the fan is determinde by the diameter of the blades. They range from 8″ to 16″. The 10″ and 12″ fans are more generally used for home use.

A good fan will have a well weighted, scratch proof base and well guarded blades.

Blades are made of metal or hard rubber. The rubber blades are considered safer but are less durable and cannot be adjusted. They are not as easily thrown out of line if the fan is accidentally dropped or turned over.

Fans give better results if placed two to three feet above the floor and ten to twelve feet from occupants, with the face of the fan turned toward them.

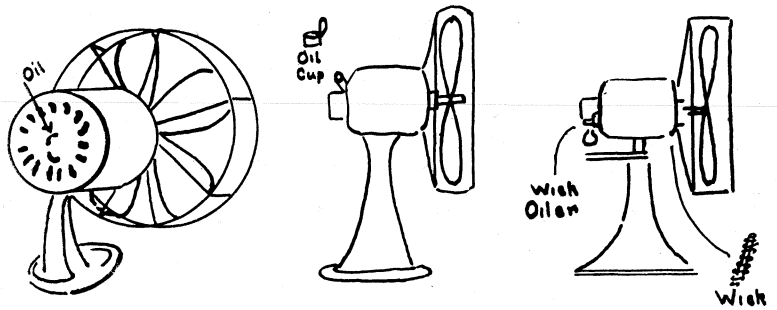


Fig. 26

For cooling a room at night, place the fan on a table in front of an open window, facing outward. The fan will drive the hot air out and bring in the cool.

Keep the fan clean and well lubricated according to the manufacturer's instructions. Oil is recommended for some, white petroleum jelly is best for others.

Kinks and knots cause cords to wear. Cords should bear the underwriter's seal. Wrap the fan well before storing.

Mixers

Mixers are available in many models and sizes. The larger mixers are expensive but are much more efficient in mixing or beating mixtures of a thick consistency. They save time and energy and may justify their cost in work done. The cheap varieties are good only for beating liquids, eggs, cream or mixtures of a very thin consistency. Cords should bear the underwriter's label.

Mixers are motor driven and care must be taken not to overload or operate the mixer for too long a period, or the motor will heat. Keep it oiled according to the manufacturer's instructions.

Motors with adjustible speeds are preferred. Some have "high," "low" and "medium" speeds, while others have many intermediate speeds. The consistency of the substance being mixed may slow the speed of the beater somewhat. Beaters with automatic speed controls keep the speed of the rotating beaters pracitcally constant, regardless of the mixture.

Motors that are removable from their supporting stands are desirable. They may be used at work center where there is a convenience outlet or even used for beating mixtures like seven minute icing at the range.

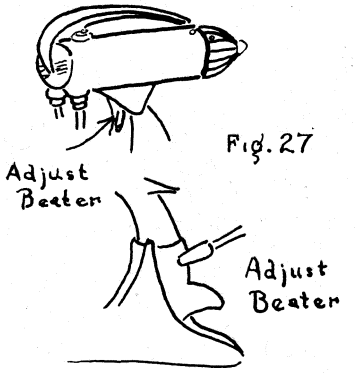


Fig. 27

Beater blades should be well constructed from rust resistant material. Thin, smooth edges are desirable. Beaters should be easily removed from and replaced in their sockets.

Mixing bowls are held in place by a supporting arm. They may rotate during the beating process. Bowls that do not chip or scratch are best. Glass bowls are easily broken and are not heat resistant.

In selecting a mixer look for a quiet motor and one that is easy to use and clean. Attachments of various kinds are available but add to the expense of the ixer.

Mixers should be cleaned thoroughly after each use. Clean the motor case and stand with a damp cloth. Keep the motor out of water. Clean batter from the holes into which the beaters fit.

Add flour to the outside of bowl to preevnt beaters throwing it into the motor air vent. Use a hand air pump occasionally for blowing flour from the motor vent.

Keep the bowl adjusted to the proper height to prevent beaters striking. Beaters should just clear the bottom of the bowl.

Avoid getting fats or oil on the cord. Wind the cord loosely when storing.

Coffee Makers

Coffee making is not an essential but is an established custom in most homes. There are several types of coffee makers with many models of each. There are personal preferences as to how the coffee is made. Small sizes of one and two cups do not operate as well as the larger ones.

Coffee makers may be percolators, dripolators, or the vacuum type. Percolators may be electric or used on other types of heat. Dripolators are usually not electric but may have an electric heating element. The same is true of the vacuum type. Coffee makers, made in one piece without seams, are easier to keep clean. Materials most commonly used are aluminum, glass, copper plated with nickel or chromium, porcelain or china.

Electric percolators should have a fuse or cut-out for safety's sake, in case of boiling dry. Fuses are easily replaced at home.

Tightly fitting covers, or attached covers prevent accidents caused by the lid falling. Serving is done more easily if handles are heat proof. Spouts should not drip.

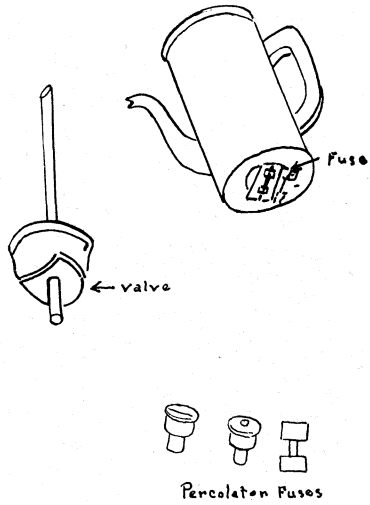


Fig. 28

In the vacuum type, mouth of bowls and tube should be large enough to permit thorough cleaning. A bottle brush is helpful in cleaning.

Dripolators with handles on both compartments and with a lock perforated basket are preferable, an extra container is then unnecessary for heating water. Water may be heated in the lower compartment, then poured into the upper part, with the basket attached, which can easily be put in place, by the heat proof handle.

All coffee makers should be kept spotlessly clean. Boil soda water occasionally in all coffee makers other than aluminum ones. They may be cleaned in a like manner with a vinegar solution.

Homemakers are reminded of the fact that whether equipment is old or new, it is worthy of the best care and operation possible. It will give better and longer service if kept repaired as the need arises. Well cared for equipment doesn't wear out readily and should not be replaced as long as it performs efficiently and economically.

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