

of plumbing fittings. Some metal polishes contain materials that discolor the nickel-copper alloy.

**Copper and brass** utensils and ornaments may be polished with a product made for the purpose, or with salt on a piece of lemon. The salt and lemon will remove the tarnish but they must be rinsed off completely. Some polishes contain wax, which may prevent these metals from tarnishing again quite so readily.

**Pewter** is a soft metal and should be polished only with a fine powder or with a product made for this purpose. Silver polish will keep it bright if used regularly.

**Zinc**, the coating on galvanized-iron water, scrub, and garbage pails, may be cleaned with soap and water and a volcanic ash or similar abrasive. Feldspar is not quite abrasive enough.

**Tin** cooking utensils discolor with use and it is unwise to try to keep them bright. The foundation of these utensils is iron and the tin coating is relatively thin. When it is scratched off, the utensil will rust. Burnt-on food stains may be removed by rubbing gently with feldspar powder, or by heating for a few minutes in a weak soda solution and then washing thoroughly with soap and water.

**Aluminum and iron** utensils may be kept clean and stainless with steel wool or feldspar powder. Strong soaps and scouring powders that contain alkaline salts discolor aluminum and should not be used. Discoloration on aluminum may be removed by boiling it in water to which vinegar or cream of tartar has been added. Rust on iron may be removed with steel wool. If iron utensils that are not used very often are dried thoroughly and oiled lightly with mineral oil, rust will be prevented from forming again.

**Refrigerators** must be cleaned every week to keep them sweet and sanitary. As soon as anything is spilled in a refrigerator it should of course be wiped up immediately.

Mechanical refrigerators require periodic defrosting of the freezing unit because moisture from the air and from foods is drawn to the unit. Some manufacturers recommend defrosting every 2 weeks, but this may not be often enough in humid climates or during summer weather. Immediately after the refrigerator has been defrosted, the food may be removed, the shelves taken out and washed in suds to which a little mild alkali may be added, and the interior including the evaporator should be washed thoroughly with the same suds. Both shelves and interior should be rinsed with clear water until all traces of soap are removed, and wiped dry. If the interior is free from spots where food has been spilled, it may be washed with clear warm water in which soda has been dissolved. The use of soda or other equally mild alkali helps to remove odors.

Ice refrigerators may be cleaned when the ice supply is low. Even if the ice is always washed off before it is placed in the refrigerator, the ice compartment and pipes need to be cleaned thoroughly at least once a week. The procedure for the interior is the same as that for mechanical refrigerators. In addition, the drain pipe must be detached, washed carefully to remove the slime in which organisms thrive, the drain trap washed, and the pipe itself scalded.

**Stoves** should be wiped after each meal. They also need careful cleaning every week, or they become so caked with soot and grease that it is impossible to restore them to their original condition.

Gas and electric stoves usually are finished with enamel, which is easily kept clean with a cloth wrung out of soapy water. Since enamel is a glasslike coating, the stove must not be wiped with a cold wet cloth while it is hot or the coating may crack. Abrasives roughen the enamel and metal trim, and their use will not be necessary if the stove is wiped after each meal, and if food that boils over is wiped up immediately. In modern stoves many parts are detachable. These

should be removed first and washed. Trisodium phosphate may help to remove stubborn spots. If some abrasive must be used, it should be fine like feldspar. Wiping cast-iron gas burners and oven racks with light mineral oil or kerosene may help to keep them from rusting.

When food is spilled on an electric heating element, it should be allowed to char and then be brushed off. The charring may be done while cooking over the burner, to save electricity.

Coal and wood ranges need to have ashes emptied every day. Soot must be brushed from the bottom of the lids and from the inside of the fuel box each week. About once a month the flues should be cleaned, especially those over and under the oven, so the heat will circulate satisfactorily. The outside of the stove and oven should have grease washed off with soap and water and when cold should be rubbed with a cloth moistened in kerosene or light lubricating oil. Stove blacking gives a higher polish, but it should be used sparingly and rubbed off well; otherwise it will blacken the bottom of pans.

Kerosene and gasoline stoves, in addition to regular washing with soap and water, need to have the wicks cleaned and the fuel tank drained and cleaned. Wicks should be wiped off once a day. To do this remove the chimney, outside collar, and flame spreader, turn the wick even with the top of the wick tube and wipe it from the center outward until the charred edge is removed. After the fuel tank is removed uneven wicks may be burned down and then wiped off. Loose threads may be clipped with scissors, which should not be used for other trimming. If the wick has a beveled edge, this may be maintained by the way the wick is wiped. Fuel tanks usually need to be drained and cleaned every 3 months, and oftener if water gets into the fuel and causes the flame to sputter. The fuel tank is tipped back, the cap removed from the fuel line, the stove tipped to drain out the fuel, and the pipe cleaned with a stiff wire. It is then washed out with a little clean fuel.

**Lighting fixtures** need frequent cleaning or the light they are intended to provide is seriously diminished. They should be dusted frequently. Electric light bulbs, diffusion bowls on semi-indirect and indirect fixtures, and portable bowls should be dusted weekly and washed once a month. Cloth or similar types of shades need a regular rubbing off with cleaning fluid.

Kerosene lamps should have the chimneys washed daily and char rubbed off the wicks. Glass shades should be dusted daily and washed once a month or oftener.

**Cleaning a room** Daily cleaning consists chiefly of dusting. In bedrooms, the beds, which have been airing while the family was at breakfast, are made first. Then in all rooms inside sills may be dusted, then furniture, wood floors, and finally rugs are cleaned. If a broom is used, upholstered furniture is brushed first and covered, then rugs swept, and finally floors, woodwork, and furniture dusted.

**Weekly cleaning** follows the same general procedure but is more thorough. Pictures and mirrors, light bulbs and lighting fixtures, closet floors, backs of furniture, and window shades and venetian blinds are dusted. Baseboards are brushed, and if much dirt has blown in it may be advisable to wipe the floor and baseboard with a damp cloth. Furniture should be moved so that every inch of the floor is cleaned. Every other week upholstered furniture is cleaned with a vacuum cleaner if possible. Mattresses are turned side for side one week and end for end the next. Light bulbs, enclosing globes, and diffusing bowls and shades in a few rooms are cleaned each week so that all are included once a month. The brushing of walls, wood trim, and draperies, and washing of windows, mirrors, and pictures may be rotated in the same manner.