Although many wallpapers are sold as washable, the degree of washability varies considerably even on glossy finished Wallpaper paper and once paper is on the wall, there is no marked difference to distinguish washable from unwashable finishes. Therefore, it is wise

to proceed with caution and to remember that the pigments and other materials

applied to wallpaper are not impervious to rubbing.

Before attempting to wash any wallpaper, it is important to try suds on a scrap of the paper or in an inconspicuous spot. After determining by test that colors will not run and that the paper is washable, the procedure for washing is much the same as that for fabric surfaces: Apply thick suds with a soft sponge to a small space at a time, rubbing as lightly as possible, and rinse with a sponge squeezed out of clear water. Because paper is always absorbent, it

is important to use as little water as possible.

Puttylike wallpaper cleaners are safer than soap and water on most finishes. These are made with water and a high-gluten flour to which salt, soda, coloring matter, and a scent are added. Art gum also may be used. They will remove light soil and sometimes will erase finger marks. Walls need to be brushed before and after their use. Grease spots sometimes may be removed with a paste made of Fuller's earth and cleaning fluid applied to the spot, allowed to dry, and then brushed off. There are several preparations for surfacing wallpapers to keep them from absorbing dirt and grease so readily.

Windows and mirrors ordinarily can be cleaned with clear warm water. Soap should never be used on them. Four Glass surfaces tablespoons of dilute ammonia to a gallon of water helps remove oily dirt that accumulates in some localities. In cold climates vinegar, or ammonia, added to the water prevents freezing, or either a weak alcohol solution or one of the various preparations now on the market for cleaning glass surfaces may be wiped on with a cloth or sponge or sprayed on with an atomizer. In using any fluid containing ammonia or alcohol, care must be taken not to spill the cleaning solution on painted, varnished, or lacquered surfaces.

Chamois may be used for both washing and polishing glass. Dip it in warm water and squeeze it as dry as possible. If the window is very dirty, the chamois may have to be rinsed again before the final polishing. Soft lintless cloths may be used instead of chamois, but with them it takes more time to dry the glass. Rubber squeegees save time and labor in drying windows and are inexpensive. When windows are only dusty, they may be wiped with soft tissue or newspaper. Sometimes moistened newspaper is used to remove dirt before polishing with chamois or dry cloth or paper.

China and enamel surfaces

Vitreous china and enamel surfaces when new have a smooth, glazed finish. The use of coarse abrasives on them develops tiny scratches that make them harder to keep clean. Soap and water often are sufficient cleansing agents. If an abrasive must

be used, it is desirable to select a fine one such as feldspar. Yellow stains on vitreous china plumbing fixtures, caused by iron in the water, may be removed by applying an acid, such as hydrochloric, sparingly on the stain and rinsing it thoroughly at once. Trisodium phosphate may be used on nonacid resisting enamel.

When food sticks on enamel cooking utensils, it may be soaked loose with water or by boiling a weak soda solution in them. A feldspar abrasive may be used lightly, but enamelware should not be scraped with sharp-edged instruments or coarse abrasives.

Tile, marble, and granite surfaces should be cleaned with Tile and marble soap and water and a mild abrasive used only where necessurfaces sary. Water on tile should be wiped up immediately or it may loosen the tiles.

Cement may be flushed with clear water, or scrubbed with a trisodium phosphate solution after wetting the surface first with clear water.

Metal surfaces include not only silverware, metal trim, and ornaments about the house, but also the kitchen pots and Metals pans. In general, highly polished metal surfaces require the use of fine abrasives. Less highly burnished surfaces, such as aluminum and iron, may be cleaned with fine steel wool or a feldspar abrasive.

Silver requires more care than any other household metal because sulfur compounds in the air cause it to tarnish readily. If soap is not rinsed off after washing silver, it tarnishes more quickly. Silver bags and chests sometimes are treated with various salts to retard tarnishing. Air should be kept away from stored silver as much as possible in order to reduce the need for frequent

polishing.

The easiest and quickest method for removing tarnish is electrolysis, although this does not produce as bright a luster as a good silver polish. By the electrolytic method the tarnish corroding the silver is removed, leaving a mosslike surface that does not reflect light so readily as a smoother surface. The "moss" can be reduced by rubbing the silver as it is dried. If the electrolytic method is used regularly, it may be advisable to use a silver polish about every fourth time the silver is cleaned. In the electrolytic method there is practically no loss of silver, whereas with polishes a small amount of the surface is rubbed or abraded away. In time this abrading action may be serious with some plated ware. Electrolysis cannot be used on silver where oxidation (the dark indented portions) is part of the beauty of the design because it removes the oxidation. Also, ware with hollow handles attached with cement may be ruined by this method because the hot water may dissolve or loosen the cement.

For cleaning silver by the electrolytic method, fill an aluminum vessel with hot water, or use an enamel pan with a sheet of aluminum or zinc in the bottom. An aluminum pan will be corroded in the process, so unless an old vessel that is no longer used for cooking or a very heavy cast aluminum vessel is available, it is better to use an enamel pan and aluminum sheet. The aluminum needs to be cleaned by boiling in a weak vinegar solution to keep it bright and active.

Add to the hot water in the vessel a teaspoon of salt and a teaspoon of baking soda for each quart of water. Bring the water to a boil and drop in the pieces of silver. If the water is kept boiling, the silver will be brighter. In a few seconds, the time depending upon the degree of tarnish, the silver will be bright. It must then be washed in soapy water, rinsed, and polished with a soft, dry cloth.

Silver polishes on the market vary in their abrasiveness. Quick-acting polishes usually are the most abrasive. It is well to observe carefully how much a polish scratches the silver, and adopt one that seems to scratch it the least. Hard pressure in rubbing will increase abrasive action. Silver pastes should be applied with a soft cloth or brush, thoroughly washed off with soap and water after the tarnish has been removed, and the silver carefully rinsed and dried.

Chromium plating used on modern plumbing fittings and metal dishes is one of the easiest metals to keep clean and stainless; it requires only frequent wiping with a damp cloth or washing with soap and water. The plating is very thin and an abrasive soon will wear it away. Some metal polishes may damage it, and none should be used.

Nickel, stainless steel, and nickel-copper alloy may be kept in good condition with soap and water. If they become dull and need polishing, a light rubbing with a feldspar cleaner will restore the finish. Coarser abrasives damage all these surfaces, and soon wear through thin nickel plating on the older type