(e) *Pipe Clay.*—This is a plastic white clay, relatively high in silica. It is used in manufacturing porcelain and enamelware. It is used also in paint making, on which to deposit certain colours. For this purpose it should be free from grit, and uniformly white.

(f) *Sagger Clay.*—This clay is used in the mixture for making saggers, the vessels in which porcelain and pottery is placed for burning. The necessary degree of refractoriness varies according to the temperature of the heat the saggers must stand while in use.

(g) *Slip Clay.*—This term is applied to clay used as a glaze for stoneware. It contains a comparatively high percentage of fluxing impurities, and should melt at a low temperature to a greenish or brown glass. This clay is used also as a bond in abrasive wheels.

(h) *Stone Clay.*—This is the name given to the clay forming the body of stone ware. It is usually refractory or semi-refractory and should vitrify without losing its shape. It should be of good tensile strength and sufficiently plastic to work well on the potter's wheel.

PREPARATION OF CLAYS.

In most cases clays are sold in the condition that they come from the pit, though sometimes they are ground, washed and dried.

For certain purposes, such as paper filling and coating, grit in clay, even in small proportions, is objected to, as it is harmful to the apparatus used in manufacturing as well as giving an imperfect product. Impurities which would tend to colour or cause spots in white ware often occur in china clay. In order to remove these objectionable impurities and grit, the clay must be washed.

The washing treatment consists of thoroughly sludging the clay with water into an extremely thin mud, then by screening and differential settling the coarser and heavier particles are removed. The clay water is either passed through a filter press or the clay allowed to settle in settling basins and then dried.