

Cal'en-der'ing. The series of operations, differing according to the goods, of straightening, damping, pressing, stretching, starching, drying, embossing, and watering woven goods; including the various processes intervening between the bleaching or dyeing and the packing for market.

The fabric is first passed over a water-cistern, kept constantly full, by which it is wetted, preparatory to being drawn through a pair of rollers, by which it is partially smoothed. It is also pulled out breadthwise, and the edges knocked against a smooth beating-stock.

It is now ready to go through the *mangle*, which consists of a number of rollers, adjustable to any desired pressure, so as to remove any creases which may remain. For this purpose, the bottom rollers are sometimes grooved, the grooves spreading outwardly from the center on either side. Above these are three smooth rollers, two of wood and one of brass, which equalize the surface and stretch the cloth.

The starching is effected by drawing the cloth under a roller, which dips into a trough of flour-starch, fermented, previous to boiling, to deprive it of gluten. Superfluous starch is removed by other rollers, between which the cloth passes, and falls back into the trough.

The stuff is now dried, by passing it over heated cylinders of tinned iron or copper in the case of heavy goods, while muslins are merely stretched on frames in a warm room. What is called *patent finish* may be given it by working the two long sides of the frame backwards and forwards in opposite directions, giving the muslin a diagonal motion, which is continued until it is quite dry. This removes the harsh and stiff appearance caused by the starch.

The process of giving the glossy surface-finish distinctively known as calendering is described under **CALENDERING-MACHINE**.