

FULLING, is the art of cleansing, scouring, and pressing cloths, stuffs, and stockings, to render them stronger, closer, and firmer: it is also sometimes called *milling*.

The fulling of cloth, &c. is performed by a kind of water-mill, thence called a *fulling*, or *scouring-mill*. Without describing the mechanism of this manufacturing process, we cannot omit to remark, that urine is sometimes employed, as well as soap and fuller's earth, to prepare the stuffs for receiving the first impressions of the pestle. They are first steeped in urine, then in a solution of fullers'-earth and water, and lastly in soap, dissolved in hot water. Soap alone would fully answer this purpose, but it is too expensive, especially as, according to the present mode of dressing, fullers'-earth is of equal efficacy. The *scouring* of cloth, however, is not the only object in fulling it; the alternate pressure communicated by the pestles, or stampers to the stuffs, occasions in its advanced stages an effect analogous to that produced upon hats in the operation of *felting*. Thus, the fibres of wool which compose one of the threads, whether of the warp, or the woof, assumes a progressive motion, first introducing themselves among those of the contiguous threads, then into those which follow, so that gradually all the threads, both of the warp and the woof, become completely felted. The cloth, after having by this process become contracted and shortened in its dimensions, partakes in a great measure of the nature of *felt*: hence it may be cut without being liable to unravel; and consequently there is no necessity to hem its edges. Farther, as the threads of both the warp and woof are more intimately combined, the web, which acquires a greater degree of thickness, likewise forms a warmer clothing.

The process of *fulling stockings, caps*, &c. is performed in a manner somewhat different from that in the mills; namely, either with the feet or hands; or a

kind of rack or wooden machine, armed with teeth of the same materials; or, which is still better, horses' or bullocks' teeth may be substituted. In this operation, urine, green soap, white soap, and fuller's-earth are employed; but the first of these ingredients is detrimental to the texture. Stockings manufactured in a loom, should be full-ed with soap alone; but, for dressing such as have been knit, earth may likewise be added. Lastly, knit worsted is by this process rendered less subject to *run*, if a stitch should happen to drop in the stockings.