and alternate motions in different directions, during which he preserves the suppleness and flexibility of the material by slight asperions of water. The next operation is fulling, which is also often done. The hair intended for the manufacturing of hats is always cut off with a sharp instrument, and not pulled up by the roots; because the bulb of the hair, which would come out with it in the latter case, would render the end which was fixed in the skin very obtuse, and nearly destroy its disposition to unite with the adjacent hairs. The hairs should not be straight like needles, for then there would be no compactness in the stuff. The fibres of wool having naturally a crooked form, that substance is well adapted to the operation of felting. The hair of beavers, rabbits, hares, &c. being straight, cannot be used in felting, till it has been prepared for the purpose. See Hat.

FELTING, in the Manufactures, denotes the operation by which the fur, hair, and wool of animals are wrought into a species of cloth, without either spinning or weaving. A hatter separates the hairs from each other by striking the wool with the fling of his bow, thus causing them to spring up in the air, and they then fall in every direction on the table, spread and distributed in small flocks, which the workman covers with a cloth, slightly moistened; pricking it with his hands, and moving the hairs backwards and forwards in different directions. In this manner the different fibres are brought against each other, and their points of contact considerably multiplied; and the agitation gives each hair a progressive motion towards the root, in consequence of which the hairs become twisted together. As the mass becomes compact, the pressure should be increased, in order to keep up the progressive motion and twisting of the hairs, which is thus performed with greater difficulty. The various fibres of the materials being thus by a gradual pressure in different directions made to interweave and cross each other, form a piece of stuff of a soft and spongy texture; upon this first piece is placed another, formed in the same manner, and sometimes a third or fourth, according to the nature of the materials, and the intended thickness and consistence of the work. These different pieces are successively brought together, and disposed in a form suitable to the article which is to be fabricated; and in order to effect the cohesion, the operator uses a number of prelures