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 ſtring 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; preſſing 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 preſſures and alternate motions in different directions, during which he preſerves the ſuppleneſs and flexibility of the material by ſlight aſperſions of water. The next operation is *fulling*, which ſee. 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.