

Felt, *n.* [A. S. *felt*; Ger. *filz*, wool wrought together; O. Fr. *feulture*; Fr. *feutre*; Lat. *filtrum*, allied to Lat. *picare*, to fold, and Gr. *pilos*, wool or hair wrought into stuff.] (*Manuf.*) The material formed by uniting and compressing fibres of wool, fur, and other substances fit for the purpose, into a compact body, by what is termed the felting process. This consists in mixing the fibres of the materials employed until they become interlaced or matted together in the form of a soft, loose cloth or sheet, which is done by the instrumentality of carding- and doffing-machines. The cloth is then wound on a roller, and carried to the felting-machine, in which the fibres are combined and interlaced still more closely by the action of heat and pressure, until the loose substance is converted into a close, thick material, possessed of great strength and durability. *F.* of a fine kind is used for making hats (see **HAT**); and a coarser description is used for table-cloths and carpets. A stiff rough *F.* is also manufactured for making roofing for sheds, and coverings for hay-ricks and cornstacks, as well as supplying a lining to the copper sheathing of vessels; and another sort for covering steam-boilers, for which it is well adapted on account of its properties as a non-conductor of heat. The last-named material is made of the waste woollen cloths used in paper-mills, reduced to a pulp, and beaten together after being put on the boiler in a wet state. It is then allowed to dry, when it becomes stiff, solid, and utterly impervious to heat. All the other different kinds of *F.* are made by amalgamating the materials by the agency of heat, moisture, and pressure. Table-cloths of this material are either embossed, having a raised pattern in one color on a ground of another hue, or printed in a variety of tints and designs. Carpets of *F.* are also printed in colors. In addition to being inexpensive, they are warm and comfortable, the closeness of their texture preventing draughts of air from entering an apartment through crevices in the flooring; they are also tolerably durable, but, on account of the pattern being printed on the surface of the fabric, the colors are apt to fade and become obliterated by constant wear. Roofing-*F.* is rendered water-proof by being soaked with a preparation of tar or bitumen; it is cheap and much used for roofs, being impervious to rain. To preserve it from danger by fire and from the effects of the weather it is covered with coal-tar and a layer of sand or fine, clean gravel. Felt is also used for lining wooden buildings and the walls of rooms that are affected by damp. It is further used for water-tight compartments in ships, for some kinds of heavy clothing, for lining coats and dresses, and a great variety of other purposes. Some ascribe the invention of *F.* to St. Clement, who found the carded wool, placed in his shoes to protect his feet while on a pilgrimage, worked into a felt by the pressure and moisture; by others it is said to have been invented by the Saracens, who used it as a covering for their tents, and introduced into Europe at the time of the Crusades.