Wool, n. [A. wail, weal; O. Ger. wolle; Gr. oikos, a house, down.] A form used somewhat indifferently, but more generally applied to the fleecy coat, or soft hair of the sheep. It has always formed the principal material of the clothing of mankind in most temperate regions. The diameter of W. taken from a healthy sheep presents a beautifully polished and even glittering appearance. The fibers of W. are either straight or curled. The division into kinds formed by the coherence of the single fibers, varies in every species of W., and forms what is called the staple. The body of W. which is shown in connection with one animal is called a fleece. The W. of the same animal differs much on the various parts of the body; that on the back and sides is the best. The great difference in the W. of different sheep depends in general upon their descent, the crossing of breeds, climate, food, and manner of living; and among the individual animals of the same breed, upon age, sex, and outward circumstances; the W. in consequence, is divided into coarse W., which is long, either straight or irregularly curled, and fine wool, which is regularly curled. Eight or ten different kinds are frequently found in a single fleece. The qualities which mainly govern the classification and commercial value of W. are:—1. The fineness of the fibers; 2. its softness and fineness; 3. its sturdiness; 4. its length; 5. its weight; 6. the amount of staple; 7. its color; 8. its cleanliness. The average diameter of the cross-section of the W. used in the United States is 1.435,000th of an inch, while that of the finest sorts of W. ranges from 1.1090th to 1.1090th of an inch in diameter. If a lock of W. is held up to the light, it will be perceived that all its fibers are twisted into corkscrew-like rings; and if the fibers be subjected to a powerful microscope, they will be seen to consist of central stems, from which spring circlets of tiny leaf-shaped projections. The average diameter of the coarsest of these projections is between the fifth and the sixth degree of a scale. These fibrillae are an important element of the feeling properties of wool. See Roving. See also Wool, in the Supplement.

Mongol. After the bags of wool are delivered at the manufacturer, they are first aired, or divided into various qualities, generally called primes, seconds, and thirds. The wool is then either washed or washed to get rid of the animal grease. This is done at the dye-house, with water, heated to about 120°, and which is afterwards washed out in running water. The wool is now fit for