

*SERGE, Manufecture of London.* For wool, the longest is chosen for the warp, and the shortest for the woof. Before either kind is used, it is first scoured, by putting it in a copper of liquor, somewhat more than lukewarm, composed of three parts of fair water and one of urine. After having staid long enough therein for the liquor to dissolve, and take off the greafe, &c. it is stirred briskly about with a wooden peel; taken out of the liquor, drained, and washed in a running water, dried in the shade, beaten with sticks on a wooden rack, to drive out the coarser dirt and filth, and then picked clean with the hands. Thus far prepared, it is greased with oil of olives, and the longest part, destined for the warp, is combed with large combs, heated in a little furnace for the purpose. To clear off the oil again, the wool is put in a liquor composed of hot water, with soap melted in it: whence being taken out, wrung, and dried, it is spun on the wheel.

As to the shorter wool, intended for the woof, it is only carded on the knee with small cards, and then spun on the wheel, without being scoured of its oil. Note, the thread for the warp is always to be spun much finer, and better twitted than that of the woof.

The wool both for the warp and the woof being spun, and the thread divided into skains, that of the woof is put on spools (unless it have been spun upon them) fit for the cavity or eye of the shuttle; and that for the warp is wound on a kind of wooden bobbins to fit it for warping. When warped it is stiffened with a kind of size, of which that made of the shreds of parchment is held the best; and when dry is put on the loom.

When mounted on the loom, the workman raising and falling the threads (which are passed through a reed), by means of four treddles placed underneath the loom, which he makes to act transversely, equally and alternately, one after another, with his feet, in proportion as the threads are raised and lowered, throws the shuttle across from one side to the other; and each time that the shuttle is thrown, and the thread of the woof is crossed between those of the warp, strikes it with the frame to which the reed is fastened, through whose teeth the threads of the warp pass; and this stroke he repeats twice or thrice, or even more, till he judges the crossing of the serge sufficiently close: thus he proceeds till the warp is all filled with woof.

The serge now taken off the loom is carried to the fuller, who fulls, or scours it in the trough of his mill, with a kind of fat earth, called fullers-earth, first purged of all stones and filth. After three or four hours scouring, the fullers-earth is washed out in fair water, brought by little and little into the trough, out of which it is taken when all the earth is cleared; then, with a kind of iron pincers, or plyers, they pull off all the knots, ends, straws, &c. sticking out on the surface on either side; and then returning it to the fulling trough, where it is worked with water somewhat more than lukewarm, with soap dissolved therein for near two hours: it is then washed out till such time as the water becomes quite clear, and there be no signs of soap left; then it is taken out of the trough, the knots, &c. again pulled off, and then put on the tenter to dry, taking care as fast as it dries to stretch it out both in length and breadth till it be brought to its just dimensions. When well dried, it is taken off the tenter, and dyed, shorn, and pressed.