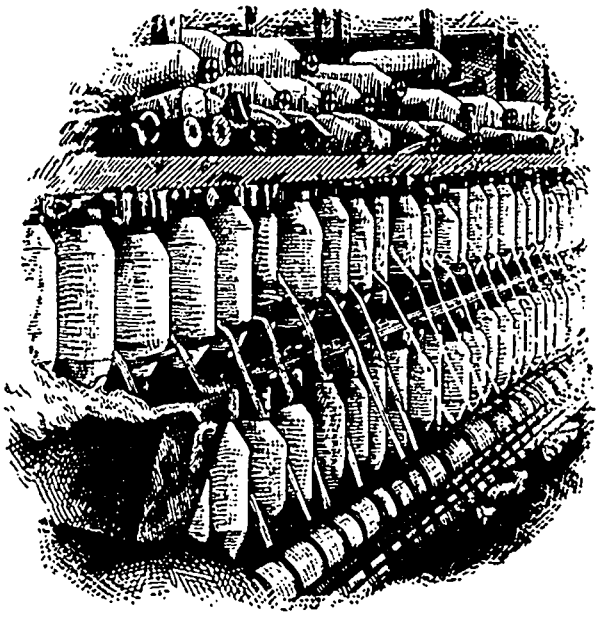
The *carding* room is the next stage, where, I am sorry to say, our little friend of the lap is again torn to pieces. A frame of rollers is waiting to receive it—rollers set closely together and each covered with very fine steel wire points. But they do their duty kindly, very kindly, and by a most beautiful process of rolling and pulling, and pulling and rolling, they convert the lap into a sheet of the finest and daintiest cotton spider web. This, then, almost of its own accord, the whole thing goes so gently, gathers itself together into a soft cord of an inch thick, and quietly coils itself into narrow, deep tin cans waiting to receive it. This is the first indication of the future thread.

It is then drawn out very gradually and ever so gently, with just the slightest of twists, and still as soft and white as snow, sent on to reels which hold a given quantity, and are ready for the

SPINNING FRAME.

The reels are set in the frame. The thread unwinds from the reels, and is drawn through several pairs of rollers, one after the other, until the proper fineness is produced, after which it is gently twisted and wound, ready for the weaver. When wanted very fine, it goes to the *mule-jenny*, where it is treated in a most wonderful fashion. To help it in its dainty refinement the frame here moves backward and forward to take its share of the risk. It runs out for a few yards to make the thread fine, and as it comes back it slyly winds up what it has stretched out and is ready for more. Before the mule-jenny was invented to go shares as it were with the thread, we thought we did well if we got two hundred hanks of yarn from a pound of cotton. Now we get seven hundred, and, indeed, a French firm has succeeded, as an experiment, in producing from one pound of cotton as many as four thousand seven hundred and seventy miles of thread. Hargreaves was the inventor of the jenny, which, some think, was called after his wife, whose name was Jane. But a descendant of the great inventor says that jenny is from *gin*, and gin is a contraction of engine.



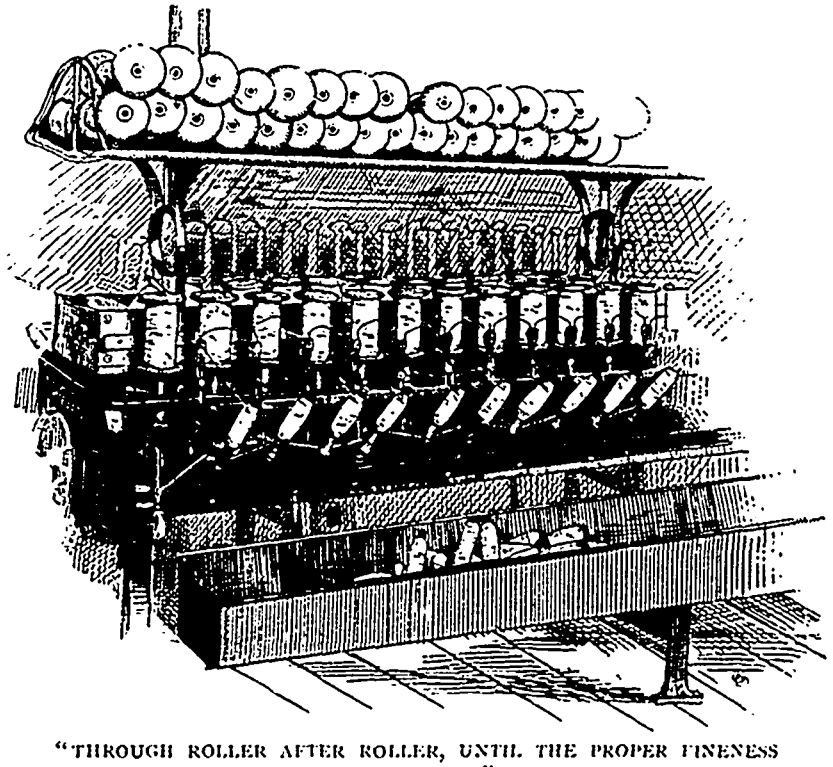
"SENT ON TO REELS, WHICH HOLD A GIVEN QUANTITY."

WEAVING

is simply an interlacing of threads in order to make a cloth. The *warp* threads run lengthwise and the *weft* across. In plain weaving the weft thread runs alternately over and under each thread of the warp. In twills, and other varieties, the effect is produced by the weft taking, instead of each alternate thread, say one and two, or one and three: and as there are sometimes as many as two thousand threads in a warp, the scope for originality in the texture is almost equal to the demand for it nowadays. In spite of the revolution by the application of steam, many of our loveliest fabrics are still made by hand. In India the most exquisite silks are woven by the most primitive form of loom. Two palm trees standing near each other form the frame, and a few pieces of bamboo with some bits of twine complete the outfit.

The loom merely assists the weaver to lift and lower his threads so that the shuttle can pass between. At each end a roller is placed, and the warp is stretched between. The warp is divided into two parts by raising every alternate thread. A smooth rod is inserted to prevent entangling. When one set of threads is lifted, the shuttle, laden with thread, is thrown across, and the other set of threads is raised before it is thrown back. The simplicity, the exactness, the smoothness of the shuttle in its flight are a marvel, and upon its dexterity depends the whole beauty of the cloth.

Then comes the preparation for the market. From the weaving machines the cloth goes to be inspected, and when it passes



"THROUGH ROLLER AFTER ROLLER, UNTIL THE PROPER FINENESS IS PRODUCED."