

Spin'ning-jen'ny. James Hargreaves' invention, 1767. Up to the time of the invention of the
143

jenny, all the yarn and thread of the cotton, flax, and woolen manufactures were made by hand, each thread requiring the attention of one person. The cotton was given out from the card, and occupied the time of a multitude of women and children in the towns, villages, and rural districts in the vicinity of the looms. The cotton spun by the wheel was of so soft a character that it was only fit for weft, all the English-made cotton goods, at this time, having a linen warp. The cotton goods of the East Indies, imported under the name of *calicoes*, were all of cotton, both *warp* and *weft*, but the machinery at hand in England was yet insufficient for giving the required hard twist to the cotton thread to make it suitable for *warp*.

This was accomplished by Arkwright, a little later, in the invention of the *spinning-frame*.

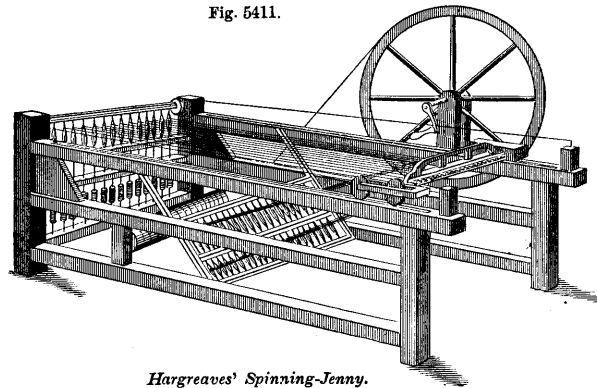
It appears that Hargreaves had long experienced the difficulty of getting a supply of weft-yarn for his loom, he being a weaver by trade. The idea of making a machine by which, under the care of one person, a number of threads might be spun at once, was a favorite project of his, and his success in this particular is what marks his place in the history of the cotton-manufacture.

He at first tried a number of horizontal spindles driven by bands from the same wheel, the rovings being held between the fingers of the left hand. The threads became entangled, and the attempt was unsuccessful. A tradition of the family records that while he was one day spinning, one or more of his twelve children upset the wheel, but continuing to hold the roving in his hand, he observed that it worked equally well, and he took a new start in his projected machine, placing eight vertical spindles in a row, each having a roving attached to it proceeding from a separate spool in another part of the frame.

The next thing was to contrive an apparatus which should simulate the action of as many hands in managing the rovings. This he accomplished with a fluted wooden clasp, which opened and shut like a parallel ruler, and, when pressed together, held the threads fast. The clasp traveled on wheels on the top of the frame, and was managed by the left hand, while the right hand turned the wheel whereby the spindles were rotated. The clasp being withdrawn a short distance from the spindles, the rovings between the two were twisted, and then the clasp was opened and retreated farther. This was repeated until the clasp reached the rear of the frame, when the threads were wound on to the spindles, and the clasp was returned to its recommencing position.

This may be called the first spinning-machine. Its name *jenny* was a modified contraction of the word *engine*, the term

Fig. 5411.



Hargreaves' Spinning-Jenny.

gin being a common local expression for a machine. The coal-hoisting machine is there called a *gin*; a pump moved by a windmill is called a *gin*; and the famous machine for separating the cotton fiber from the seeds is generally known as a *cotton-gin*. The machine being a *gin*, this mode of spinning was called *ginning*, and the machine a *ginny*; hence *jenny*.

Hargreaves increased the number of spindles to 80, and met with the usual fate of improvers during the last century and the first quarter of the present one. A mob, instigated by jealous rivals, broke into his house and destroyed his machine. He then removed to Nottingham, rebuilt his machine, took out a patent, and lived comfortably on the proceeds of his machine, though his patent was infringed and he made nothing by an exclusive right in it. He died in 1778, leaving but a small estate, having failed entirely in obtaining a proper remuneration for a work of such great national importance.