

KEATS' SILK THREAD TWISTING MACHINE.

CONSTRUCTED BY MESSRS. GREENWOOD AND BATLEY, ENGINEERS, LEEDS.

(For Description. see Page 63.)

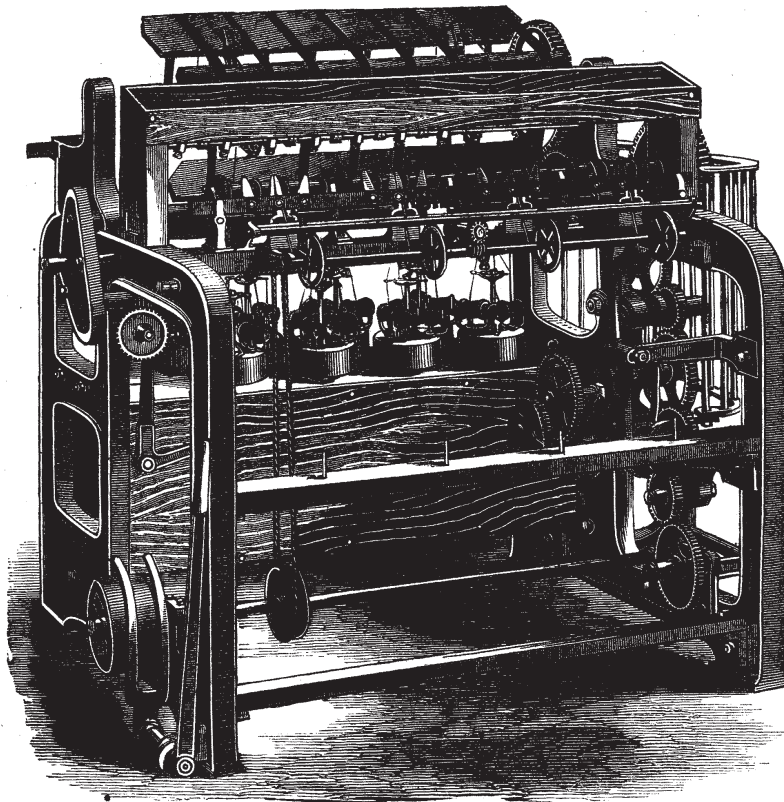


FIG. 1.

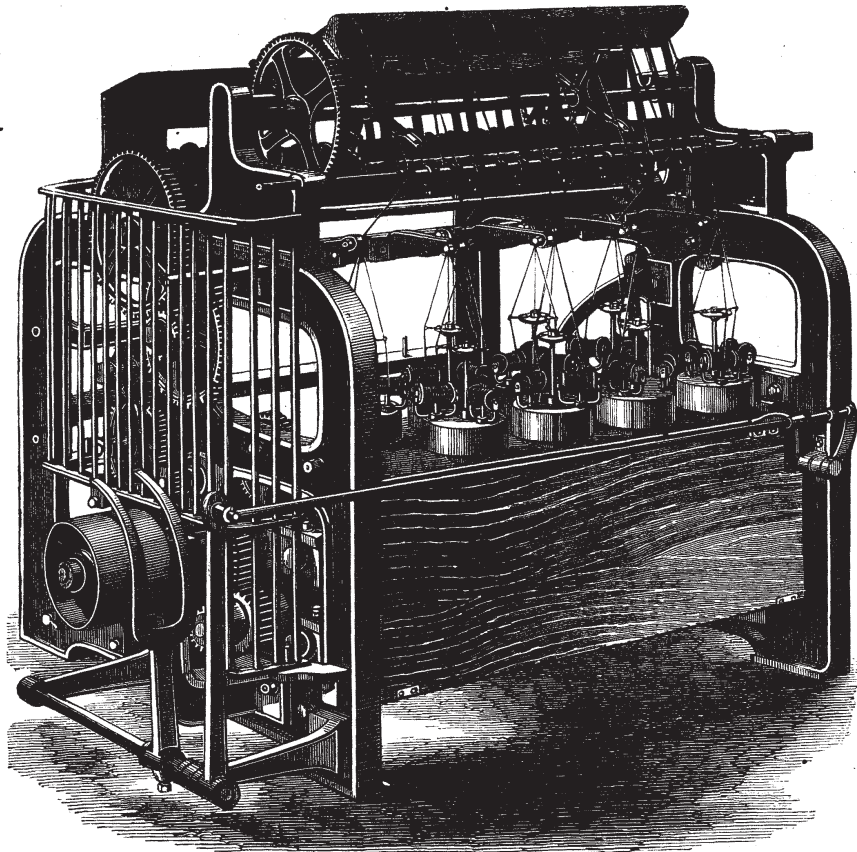


FIG. 2.

KEATS' SILK THREAD TWISTING
MACHINE.

THE operation of laying silk sewing threads has, up to recently, been performed entirely by hand, with the disadvantage that pieces of a given length only, and that comparatively short, can be made. Mr. John Keats, of Newcastle—a native of Leek—has, however, invented a machine which appears destined to make a complete change in the manufacture of sewing threads from neat silk. These machines, which we illustrate on page 61, are manufactured by Messrs. Greenwood and Batley, of Leeds, who exhibited one of them at the International Exhibition of 1873. The machine is designed to accomplish the twisting of silk thread, but it possesses the advantage of being able to produce a thread of almost any length with quite the same regularity, and much greater speed than the best hand labour. The machine exhibited was in reality a combination of two machines, which for manufacturing purposes are made separate. The first is the sizing machine, which is shown at Fig. 1. Upon this machine is placed the silk from the reeling machine. It is wound on to bobbins to measure a certain length; three of these bobbins are now taken to the laying machine, shown at Fig. 2, and fixed in three carriers on the upper end of three small spindles. These three spindles are mounted in a frame carried upon a larger spindle; the three small spindles have imparted to them a rotating motion, and at the same time the whole frame is rotated in an opposite direction. The effect of this is that the back twist is caused by the rotating of the three small spindles, and the laying or twisting together of the three strands is effected by the frame which carries these small spindles and bobbins being turned in the opposite direction. The finished thread is then wound upon a reel placed over the spindles. Messrs. Greenwood and Batley have constructed a large machine on this principle for one of the leading manufacturers at Leek.
