(No Model.)

C. FALVEY.

LOOM SHUTTLE.

No. 320,919. Patented June 30, 1885.

Fig. 1.

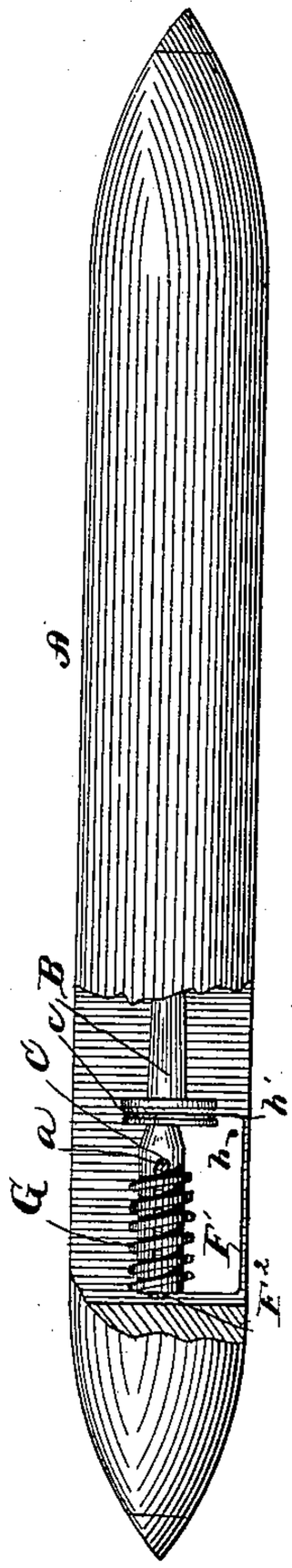
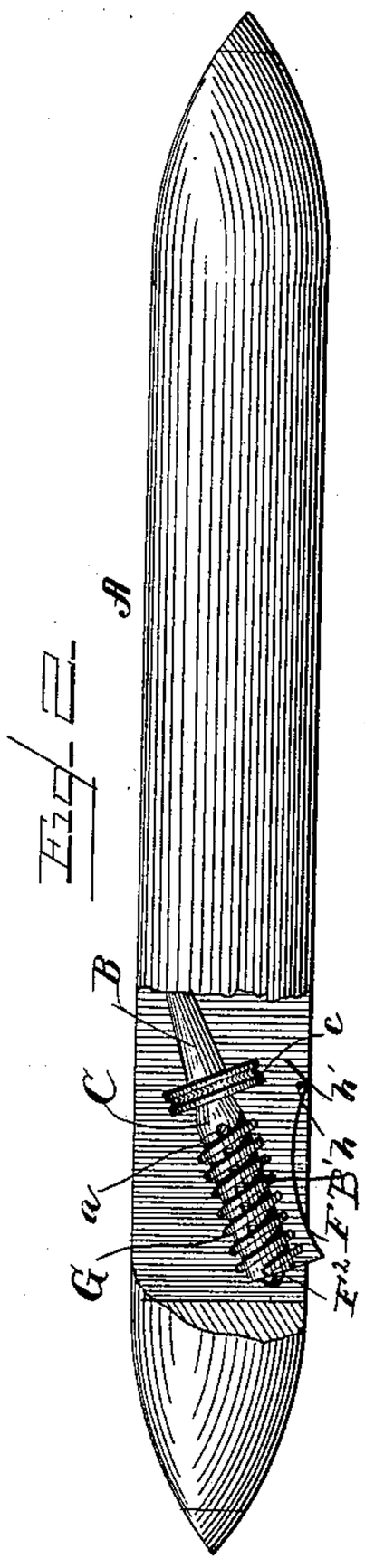


Fig. 2.



WITNESSES

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LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 320,919, dated June 30, 1885.

Application filed August 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS FALVEY, of the city of Norwich, county of New London, and State of Connecticut, have invented certain new and useful Improvements in Loom-Shuttles, which improvements are fully set forth and described in the following specification, reference being had to the accompanying drawings.

This invention relates to loom-shuttles for weaving cotton and woolen fabrics. The object of the invention is to overcome the tendency of the filling to strip from the bobbin when the loom is worked at an unusual rate of speed, and this is accomplished by the means hereinafter described, and particularly pointed out in the claim.

In the drawings, Figure 1 represents a side elevation of a shuttle embodying my invention, a portion of the side being broken away to show the relative arrangements of the several parts, and Fig. 2 represents a similar view of the same with the spindle raised.

Much trouble has been occasioned in mills heretofore by the irregular speed of the main shafting, especially in mills which are run by water-power. In such mills the stopping of a portion of the machinery tends to increase the speed of all that remains running, causing such machinery to move at a higher rate of speed than is practical or safe. When the shuttle of a loom is traveling at the augmented speed thus produced, and is suddenly stopped in the shuttle-box at either side of the loom, the momentum and the sudden stopping causes the yarn to slide forward and away from the bobbin. Thus the contents of the bobbin are wasted, and before the stripping of the filling is noticed a quarter of a yard or more of cloth may be woven and spoiled.

It is the object of my invention to obviate this objection, which is accomplished by the means hereinafter specifically set forth.

The letter A indicates the shell of the shuttle, which is of the ordinary or any approved construction, and C indicates the spindle, the shank of which is slotted longitudinally at B′, and is mounted upon a pin, *a*, passing through the shell of the shuttle.

The letter B indicates the bobbin, which is mounted upon the spindle in the usual manner, and is held thereon by the spring F′, the free end of which sits in an annular groove, *c*, in the head of the bobbin, or by any equivalent means. Surrounding the shank of the spindle is a spiral spring, G, which at its forward end abuts against the pin *a*, so as to permit the spindle and bobbin to shoot forward when the shuttle is suddenly stopped, and thus obviate the tendency of the bobbin to strip, overcoming the objections consequent upon such stripping. The spring after the spindle has thus shot forward returns it to its normal position. The said spring G at its rear bears against the rear end of the spring F′, which is connected to the rear of the spindle by means of a screw, F^2. The spring F′ near its forward end is bent upward, as indicated by the letter *h′*, so as to sit in the recess *c* in the head of the bobbin and hold it in place while the spindle is in a normal position. The letter *h* indicates a pin passing over the spring F′, near its forward end, against which said spring bears when the spindle is thrown up, as shown in Fig. 2, so as to release the end *h′* from the bobbin.

Having thus described my invention, what I claim is—

The combination, with the shell of the shuttle, of the spindle having a longitudinally-slotted shank, the pin to which said spindle is pivoted, and the spring surrounding the shank and abutting against the pin, the spring F′, and the pin *h*, substantially as described, and for the purposes set forth.

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Witnesses:
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