

A. Morton. Loom Shuttle.

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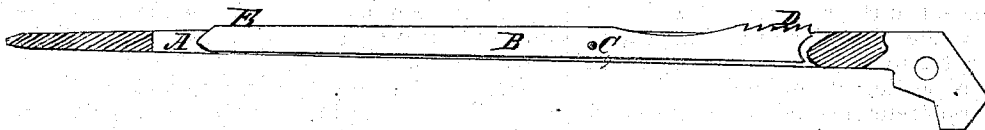
Spindle.

PATENTED AUG 1 1871

Fig. 1.



Fig. 2.



Witnesses:

John Becker.
J. B. C. Smith.

Inventor:

A. Morton.

PER

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UNITED STATES PATENT OFFICE.

ALBERT MORTON, OF SALMON FALLS, NEW HAMPSHIRE.

IMPROVEMENT IN SPINDLES FOR LOOM-SHUTTLES.

Specification forming part of Letters Patent No. 117,556, dated August 1, 1871.

To all whom it may concern:

Be it known that I, ALBERT MORTON, of Salmon Falls village, town of Rollinsford, in the county of Strafford and State of New Hampshire, have invented a new and useful Improvement in Loom-Shuttles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in loom-shuttles; and it consists in the application to the spindle of the shuttle of a lever or cam, in such manner that when the cop or tube is applied to the spindle it causes the cam or lever to engage it in the interior near the base in a manner to insure the holding of the cop or tube till all the yarn is properly delivered, and prevent the escape of any except in the regular course.

Figure 1 is a side elevation of a shuttle-spindle provided with my improvement, and Fig. 2 is a longitudinal section of the same.

Similar letters of reference indicate corresponding parts.

A long slot, A, is made through the spindle, between the heel and point, nearly its whole length, and a long flat lever, B, of steel or other suitable metal, is fitted in said slot and pivoted at C, so that near both ends it will rise above the surface of the spindle, as indicated at D and E. At D the part so rising above the spindle is

preferably notched, as shown, but not necessarily, for it will answer well without. The spindle and lever are so arranged as to size, relatively to the cop or tube to be put on, that the end E will be forced down sufficiently to raise end D up to press hard against the wall of the hole through the bobbin or cop thereabout, and hold them from slipping off when the yarn becomes slack, when nearly all drawn off, so that the friction is not sufficient to hold it. The said lever is also so arranged with the spindle that the weight of the arm terminating at E, which is much longer than the other arm, throws the latter up, when the yarn is unwound from the part of the spindle along the said long arm with sufficient power to retain the yarn. Two or more of these levers or cams may be used, if preferred.

This improved cop-retainer may be applied to other spindles as well; for instance, the spindles of spoolers; and I propose to make such applications.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The flat lever B pivoted at C in a long slot, A, of the spindle, and having one arm, E, heavier than the other, D, when applied as and for the purpose specified.

ALBERT MORTON.

Witnesses:

W. H. MORTON,
SAML. M. CARLTON.