

W. M. PARKER.
Loom-Shuttles.

No. 148,135.

Patented March 3, 1874.

Fig. 1.

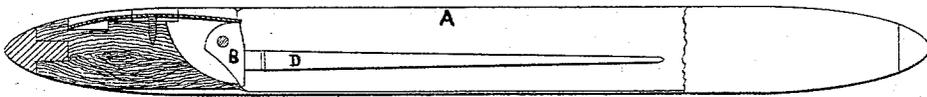
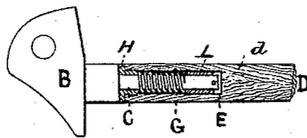


Fig. 2.



INVENTOR.

WITNESSES.

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WILLIAM M. PARKER, OF MEDFORD, MASSACHUSETTS, ASSIGNOR TO ALLEN WILSON, OF NASHUA, NEW HAMPSHIRE.

IMPROVEMENT IN LOOM-SHUTTLES.

Specification forming part of Letters Patent No. **148,135**, dated March 3, 1874; application filed January 20, 1874.

To all whom it may concern:

Be it known that I, WM. M. PARKER, of the town of Medford, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Loom-Shuttles, of which the following is a specification:

My invention relates to the shuttle-spindle and spindle-head, its object being to prevent the cop from starting forward on the spindle when the shuttle is stopped in the shuttle-box.

Figure 1 represents a shuttle with my improved spindle and spindle-head, showing a longitudinal central section of the rear part of the shuttle and a plan view of my improvement. Fig. 2 is a longitudinal central section of the several parts of my invention, except the spiral spring, of which a plan view is given.

A is the body of the shuttle. B is the spindle-head, provided with a forward projection, C. D is the spindle, having a hollow base. E. H is a bearing movable on projection C. The forward or smaller part of this bearing is screwed into the base end of spindle D, bringing the collar or larger part in contact with the end of the spindle. L is another bearing, held in position at the forward end of projection C by pin *d* and spiral spring G, spindle D being movable upon it. G is a spiral spring, placed on projection C between bearings H and L, under sufficient compression to hold the collar of bearing H firmly against the base or shoulder of projection C, except when the momentum of the spindle and cop, upon the sudden stopping of the shuttle when moving in the direction of the point of the spindle, is sufficient to partially overcome the force of the spring, when the spindle, carrying with it

bearing H, slides forward, compressing spring G, by which it is gradually stopped and brought back to its former position.

The yielding of the spring, which allows the spindle to move forward a short distance with the cop, and the gradual stopping of the same by the increasing tension of the spring, so far overcome the momentum of the cop that it will not start forward on the spindle; and when the spring, by the force of its recoil, throws the spindle back against the shoulder of projection C, the cop, if from any cause it has become loose on the spindle, will be driven back and tightened upon it by the force of its own momentum, acting in the direction of the base of the spindle.

The bearing L may be dispensed with, spring G occupying its place, being held in position by pin *d*, or otherwise, if bearing H be so extended in length that spindle D will have sufficient steadiness in the different positions in which it is placed in practical use.

I claim—

The combination, with a loom-shuttle, of the pivoted spindle-head B, having a forward projection, C, to support spindle D; spindle D, having a hollow base to receive projection C; bearing H, connected with the base end of spindle D, and movable on projection C; and spring G, placed and held on projection C forward of bearing H, and pressing against the forward end of said bearing; all combined and operating substantially as described.

WILLIAM M. PARKER.

Witnesses:

WM. E. CHAFFEE,
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