

W. Wilder.
Loom Shuttle.

N^o 43,940.

Patented Aug. 23, 1864.

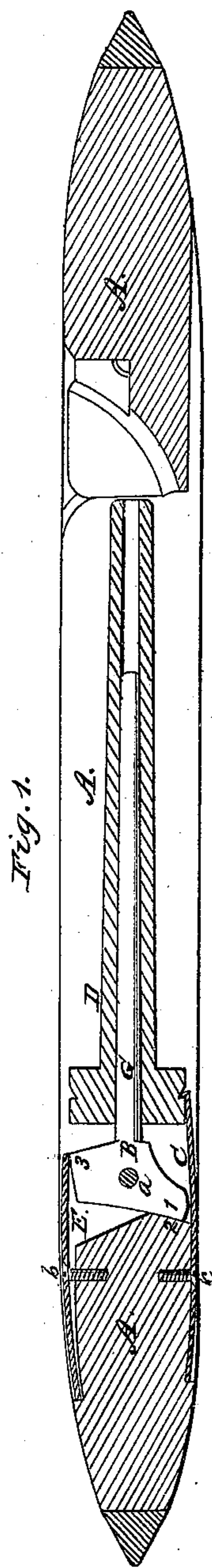


Fig. 1.

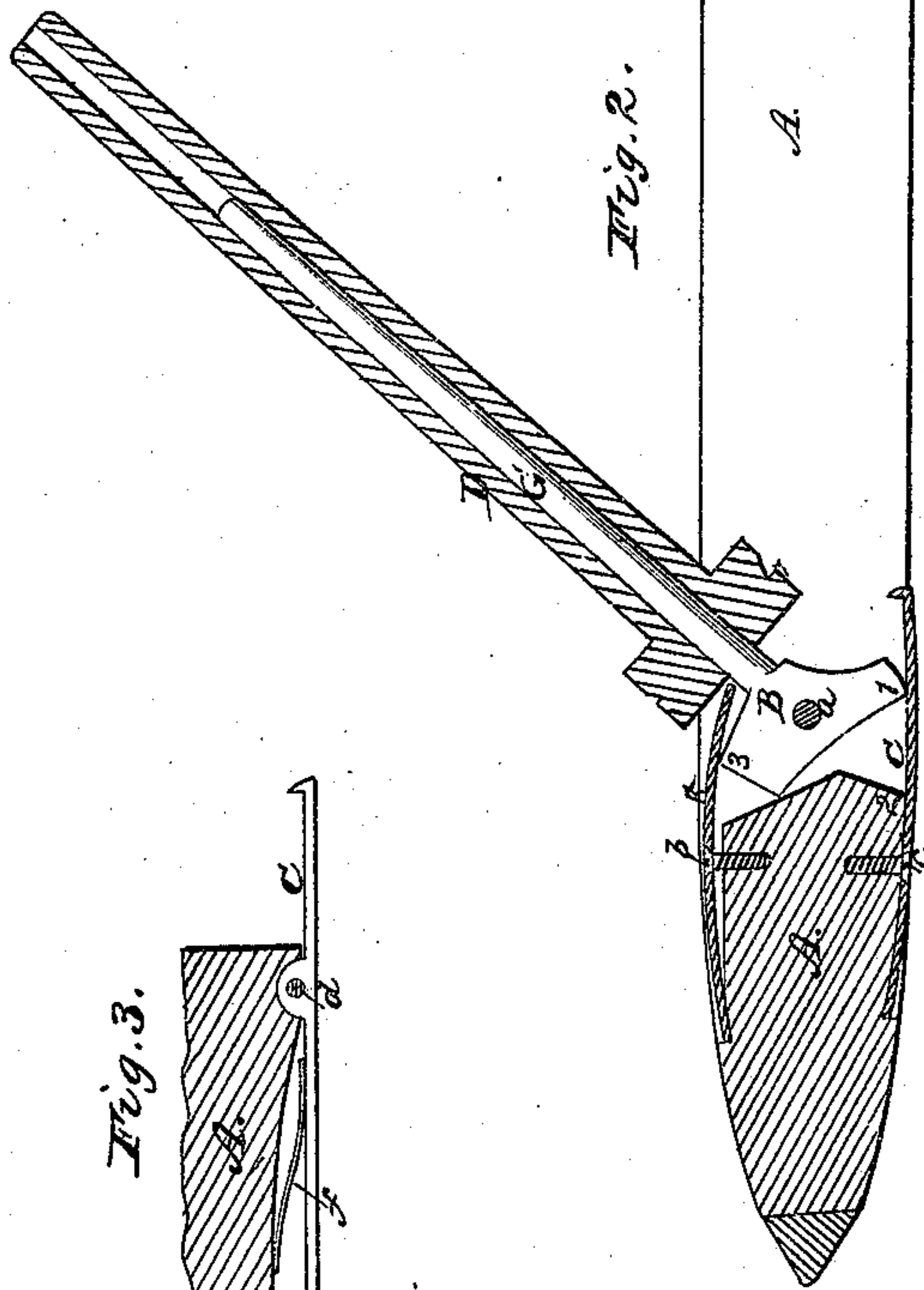


Fig. 2.

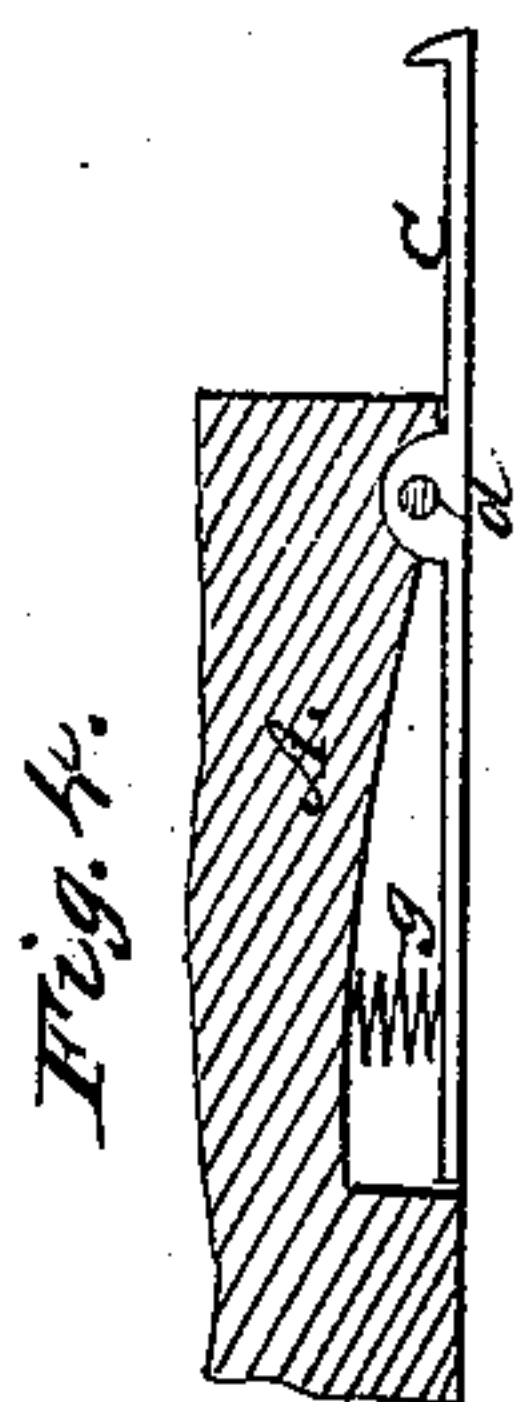


Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

WARREN WILDER, OF WILKINSONVILLE, MASSACHUSETTS.

IMPROVEMENT IN SHUTTLES FOR LOOMS.

Specification forming part of Letters Patent No. **43,940**, dated August 23, 1864.

To all whom it may concern:

Be it known that I, WARREN WILDER, of Wilkinsonville, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Shuttles for Looms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical section through said shuttle. Fig. 2 represents a similar section through the same, showing the spindle in an elevated position. Figs. 3 and 4 represent detached views hereinafter to be referred to.

My invention relates to an improvement on Baldwin's patented shuttle, in which a single spring-catch is used to hold the hinged spindle in a fixed position, and also to hold the bobbin on the spindle. In that arrangement the spring-catch has to be made so strong that it causes great friction upon the bobbin-head, causes considerable wear on it, and interferes with the free action of the shuttle.

My invention consists in extending the spindle-head upward, and in attaching in combination therewith a spring-plate to the top of the shuttle, which presses upon the spindle-head, while the lower shank of the latter rests against the wood of the shuttle, and thus keeps the spindle in a fixed position.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the shuttle. B represents the spindle-head; G, the spindle, and D the bobbin. The spindle-head is hinged to the shuttle by means of pin *a*, and its lower shank, 1, bears on the wood 2 of the shuttle. The head of the spindle is extended upward at 3, and a spring-plate, E, which is secured to the upper side of the shuttle, bears on the spindle-head and keeps it in a firm position while the shuttle is in operation. The spring-catch C, which

is secured to the lower side of the shuttle, has therefore no other function than to keep the bobbin D in its place on the spindle, and it may thus be made of thin material, which does not exert any hard pressure upon the bobbin-head, while the bobbin can be removed and replaced with great ease. The pressure of the top spring, E, upon the spindle-head can be regulated by means of the screw *b*, as the spring-plate E is somewhat curved, and is at its end only in contact with the wood of the shuttle, while the inner end bears directly on the spindle-head. The spring-catch C is secured to the shuttle by means of the screw *c*, and when the spindle is turned up, as represented in Fig. 2, the heel 1 of the spindle head presses it downward and the bobbin-head is thus released.

The construction of the spring catch C may be modified, and it may be hinged to the shuttle wood by means of a pin, *d*, and be kept in contact with the heel 1 of the bobbin-head by means of a spring, *f*, as represented in Fig. 3, or by means of a spiral spring, *g*, as represented in Fig. 4.

In removing or inserting the bobbin, the part 1 of the spindle-head lifts the spring-catch C, which is thus pushed out from the bobbin, thereby releasing the latter, and thus bobbins having different sized heads can be readily used in my shuttle.

Having thus fully described the nature of my invention, what I claim herein as new, and desire to secure by Letters Patent, is—

The combination of the extended spindle-head B, as seen at 1 3, with the top spring, E, and shuttle and catch-spring C, when the extensions of said spindle-head are in contact with and operate upon spring E and catch C, in the manner and for the purposes shown and described.

WARREN WILDER.

Witnesses:

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