J. D. Moore,

Shuttle,

No. 112480. Patented Mar. 7. 1871.

Fig. 1.

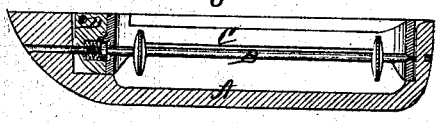
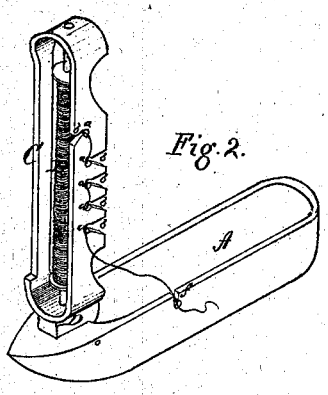


Fig. 2.



Witnesses.

C. L. Evert.

C. R. Mason

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per

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attys.

UNITED STATES PATENT OFFICE.

JAMES D. MOORE, OF GRINNELL, IOWA.

IMPROVEMENT IN SHUTTLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **112,480**, dated March 7, 1871.

To all whom it may concern:

Be it known that I, JAMES D. MOORE, of Grinnell, in the county of Poweshiek, in the State of Iowa, have invented certain new and useful Improvements in Shuttle for Sewing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a shuttle for sewing-machines, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 represents a longitudinal vertical section of my shuttle, and Fig. 2 is a perspective view of the same, the bobbin being thrown open.

A represents the shuttle, and B the bobbin. C is a frame or thread-guide, made of any suitable metal, of one continuous piece, and soldered to a metal block, D, which is pivoted within the front end of the shuttle. The bobbin B has its journal-bearings in the block D and in the outer end of the frame C. The frame C is provided with holes *a a*, as shown in Fig. 2, to each of which a slot, *b*, leads from the edge of the metal, said holes receiving the thread after passing through the slots, thus enabling the operator to thread more easily, than by putting through regular holes.

Within the block D is a cavity, in which is placed a headed pin, *d*, surrounded by a spiral spring, *e*, as shown in Fig. 1. The spring *e* forces the head of the pin *d* inward, so as to cover the hole through which the journal of the bobbin passes, pushing it into place. The head of the pin is so large that when it comes up against the frame it ceases to press the end of the bobbin, yet it keeps the bobbin in its place and leaves it room to play without friction.

In Fig. 2 I have represented how the thread is passed through the holes *a a*, one of said holes having its slot extending to one edge of the frame, while all the others have their slots through the opposite edge. The hole in the shuttle through which the thread passes out has also a slot, *f*, as shown, so as to obviate the difficulty in threading.

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

1. The frame C, made of one piece of metal, and provided with holes *a a* and slots *b b*, substantially as shown and described, and for the purposes herein set forth.

2. In combination with the frame C, with its holes *a* and slots *b*, the block D, provided with a recess containing the headed pin *d* and spring *e*, all substantially as and for the purposes set forth.

3. The combination of the shuttle A, bobbin B, frame C, and block D, all constructed and arranged substantially as shown and described, and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of December, 1870.

JAMES D. MOORE.

Witnesses:

JAS. H. SCOTT,

CHAS H. SPENCER.