

G. M. Pratt,

Shuttle.

No. 111,678.

Patented Feb. 7. 1871.

Fig. 1.

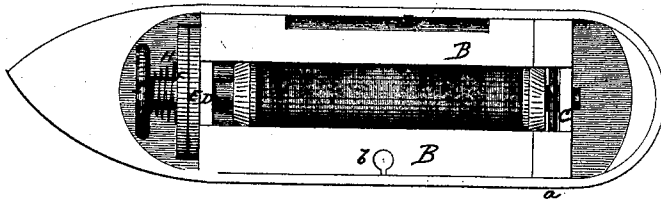


Fig. 3.

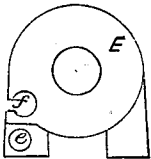
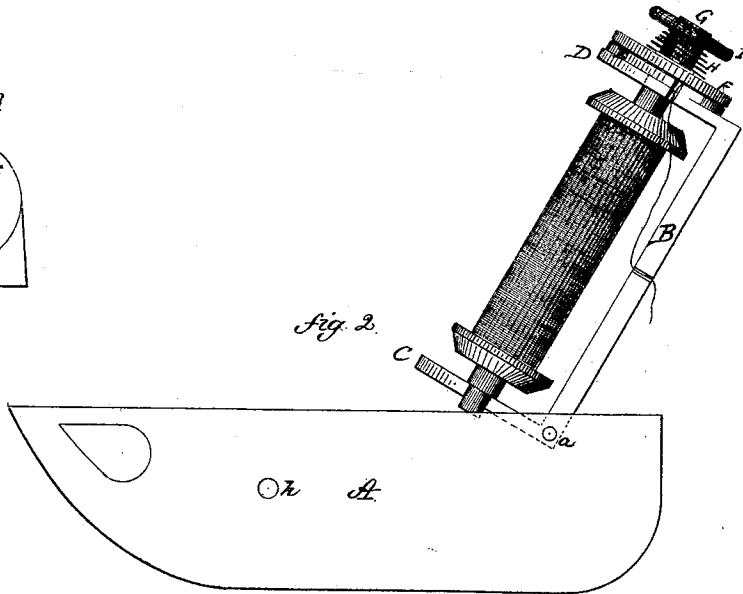


Fig. 2.



Witnesses  
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# United States Patent Office.

GEORGE M. PRATT, OF MIDDLETOWN, CONNECTICUT.

Letters Patent No. 111,678, dated February 7, 1871.

## IMPROVEMENT IN SHUTTLES FOR SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern :*

Be it known that I, GEORGE M. PRATT, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new Improvement in Sewing-Machine Shuttle; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification and represents in—

Figure 1, a view looking into the shuttle;

Figure 2, a side view with the bobbin-holder turned out; and in

Figure 3, an end view of the holder with the tension device removed.

I represent the drawing much enlarged to more clearly represent the construction and operation.

This invention relates to an improvement in sewing-machine shuttles, the object being to form within the shuttle an adjustable tension device; and

It consists in the arrangement of a spool-holder pivoted to one end of the shuttle so as to swing into or out of the shuttle, as may be required, combined with a disk or pair of disks, to which an elastic pressure is applied, and between which said disks the thread from the bobbin passes to the work, so that by adjusting the pressure of the said spring the tension is made greater or lesser, as may be required.

A is the shuttle, of common construction, being varied in shape as may be required to adapt it to various make of machines.

B is a plate, pivoted at *a*, near the heel of the shuttle, so as to turn into the shuttle, as seen in fig. 1, or out, as seen in fig. 2.

From the said plate B arms C D project, which serve to support the bobbin, as seen in figs. 1 and 2.

At the forward end a head, E, is formed, or disks arranged, over which a second disk, F, is placed. A central screw, G, projecting from the arm D, extends through the disk, and above the last disk a spring, H, is set, and compressed by a nut, I.

To thread the shuttle, run the thread from the bobbin out through the slot *d*, across and down through the perforation *b*; then through a perforation, *e*, in the forward end; then around between the two disks back through the perforation *f*, in the same head; thence out through the perforation *h*, as usual in this class of shuttles, or to an equivalent point in other shuttles.

The adjustment is made by turning the nut I down to give a stronger pressure, or loosening it to make the tension lighter.

I do not wish to be understood as broadly claiming the arrangement of a bobbin within a pivoted holder in the shuttle, and combining therewith a tension device, as such I am aware is not new; but

What I do claim as my invention is—

The combination, with the shuttle, of the pivoted bobbin-holder B C D, the tension device consisting of two disks or surfaces F E, the spring H, and adjusting nut I, all constructed and arranged to operate substantially as herein described.

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Witnesses:

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