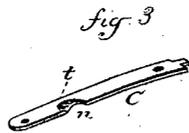
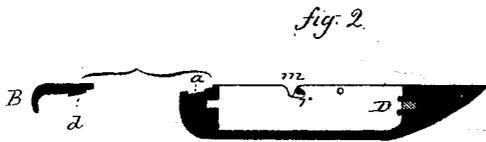
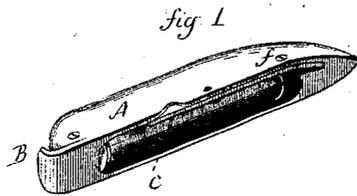


W. H. HOCKENSMITH.
Shuttles for Sewing-Machines.

No. 148,457.

Patented March 10, 1874.



Witnesses.
A. H. Shumway
A. J. Tibbets

Wm. H. Hockensmith
Inventor
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UNITED STATES PATENT OFFICE.

WILLIAM H. HOCKENSMITH, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO
THE BRIDGEPORT SHUTTLE COMPANY, OF SAME PLACE.

IMPROVEMENT IN SHUTTLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 148,457, dated March 10, 1874; application filed
February 11, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. HOCKENSMITH, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new Improvement in Shuttle for Sewing-Machines; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the shuttle complete; Fig. 2, a longitudinal central section, the hook at the heel detached; and in Fig. 3, the tension-spring detached.

This invention relates to an improvement in that class of shuttles for sewing-machines which are driven by means of a hook on the heel of the shuttle.

In this class of shuttles the hook is usually forged upon the heel of the shuttle; hence, when the hook is broken or worn the shuttle is lost, and the forming of the hook on the shuttle adds very greatly to the expense of making the shuttle. My invention consists, first, in forming the hook independent of the shuttle, and constructing the heel of the shuttle with a seat, to receive and properly locate the hook, so that the hook set therein and secured will be chiefly supported by the form of its seat.

The shuttle-case A and hook B are of the usual form. The heel of the shuttle is recessed, and in that recess a groove, *a*, formed transversely across the heel. The hook B is formed to extend over and fill the said recess, and with a tongue, *d*, corresponding to the said groove *a*, as seen in Fig. 2; or the tongue may be on the shuttle and the groove on the tongue; therefore, in claiming the groove on one and the tongue on the other, I wish to be understood that I include the reverse. When set together the tongue *d* will pass into the groove *a* in the shuttle, and in that position the hook is secured to the shuttle by any convenient device.

This brings the entire strain in driving the shuttle upon the tongue *d* and groove *a*, and at any time, if desirable to remove the hook, it is only necessary to take it from its seat, and this is done without in any way interfering with or injuring the other parts of the shuttle. C is the tension-bar, one end of which is fixed in the point of the shuttle, and adjusted by a transverse screw, *f*, in substantially the manner described in my patent before referred to, and through and between which and the shuttle-case the thread is interlaced. The thread passes through a notch, *n*, in the bar, and lies between the bar and shuttle-case, and out through a notch, *m*, in the case. Between these two points the thread is liable to slip out from the tension, and to prevent this I form a groove, *t*, on the tension-bar, and a corresponding groove, *r*, in the case, the groove from each notch running toward the other, but leaving a space between the notches where there will be no groove, but the flat surfaces bear directly upon the thread. These grooves retain the thread in place, and the notches make the threading much easier than the perforations. D is a step or seat for the forward end or bearing of the bobbin. This is made of an independent piece of steel, and a cavity formed in the head of the shuttle to receive it. The step is formed, tempered, and finished complete, and forced into the cavity in the head of the shuttle. This enables the tempering of the step to the desired extent without heating the shuttle.

I claim as my invention—

A shuttle provided with a hook, B, at its heel, the hook independent of the shuttle, and formed with a transverse tongue, *d*, and the heel of the shuttle with a recess and groove, *a*, corresponding to the tongue on the hook, to form a seat to receive the said hook, substantially as described.

WM. H. HOCKENSMITH.

Witnesses:

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