

(Model.)

W. R. PARSONS.
SEWING MACHINE SHUTTLE.

No. 253,621.

Patented Feb. 14, 1882.

Fig. 1.

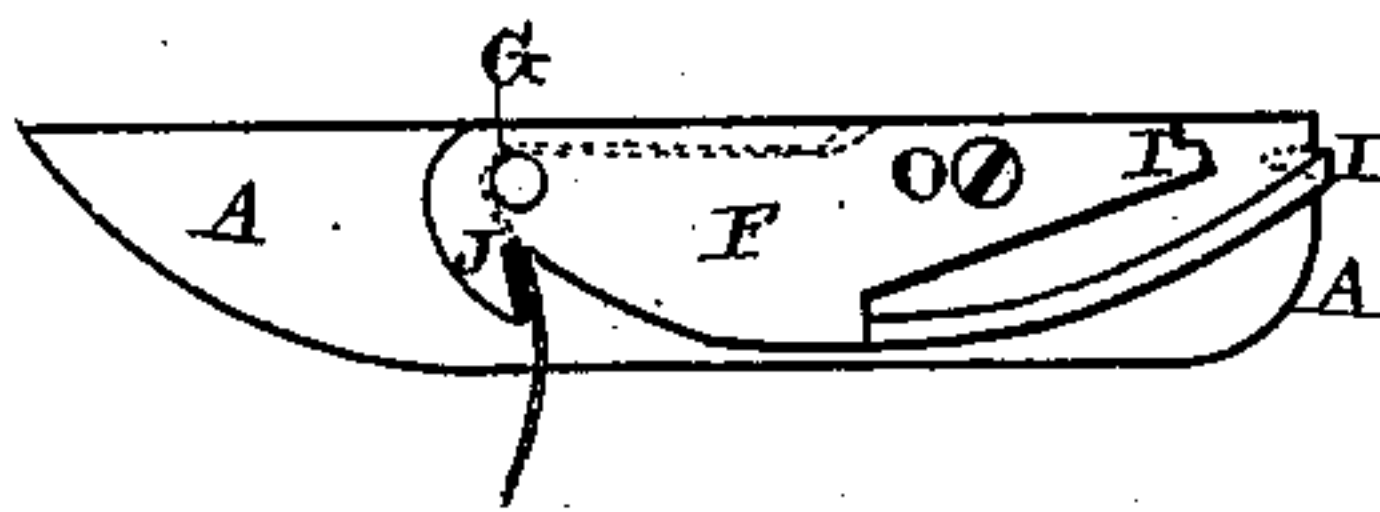


Fig. 2.

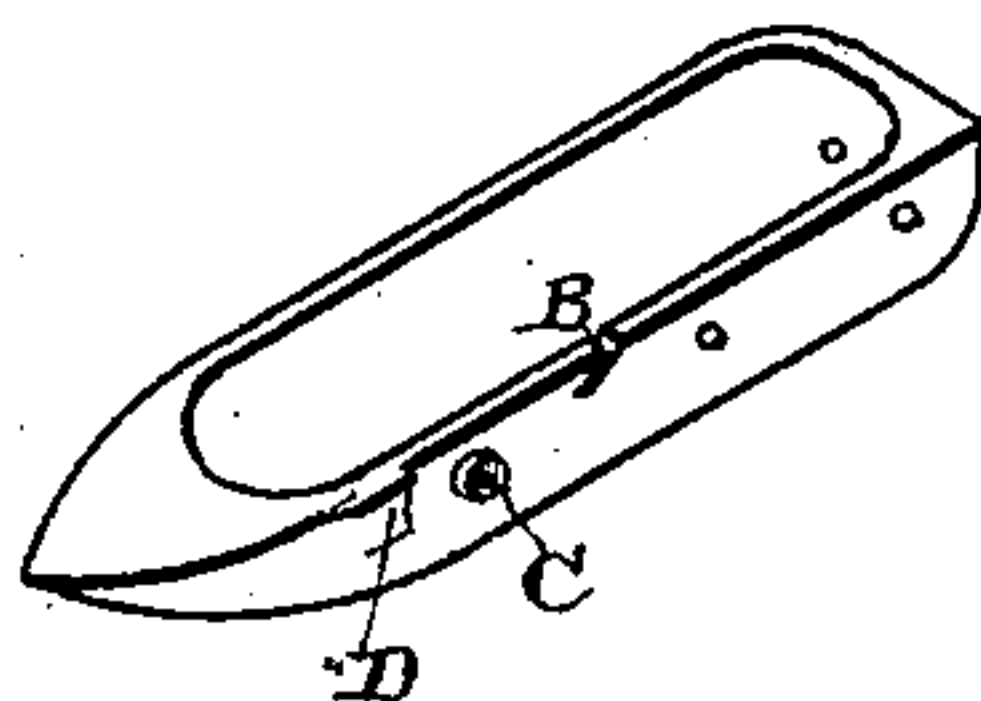
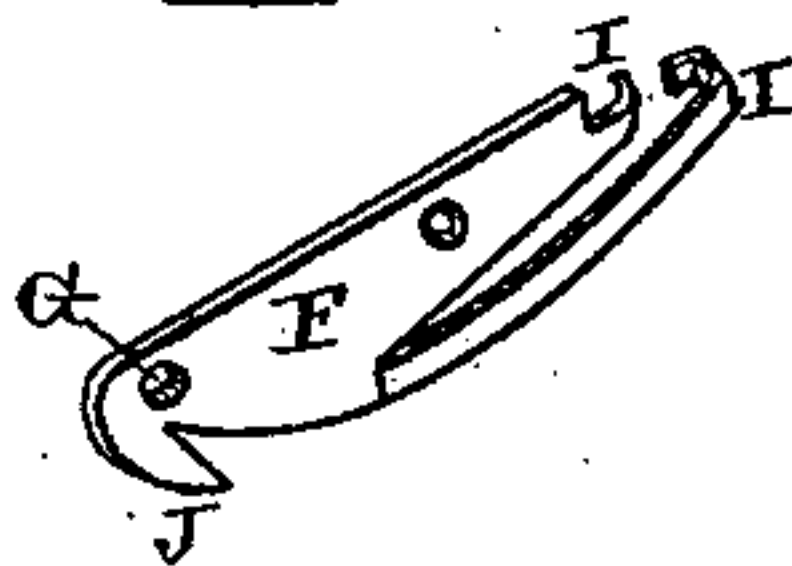


Fig. 3.



WITNESSES.

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SEWING-MACHINE SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 253,621, dated February 14, 1882.

Application filed July 28, 1881. (Model.)

To all whom it may concern:

Be it known that I, W. R. PARSONS, of Waterloo, in the county of Black Hawk and State of Iowa, have invented certain new and useful
5 Improvements in Shuttles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had
10 to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in shuttles for sewing-machines; and it consists in the combination of the shuttle having a
15 small slot or recess in its edge where the thread passes through, a raised surface on one side, and a stud or projection around which the thread is passed, with a tension-spring, which is held in position at one end by catching over
20 the projection around which the thread is passed, and which is secured in place by means of a set-screw and suitable points which catch in one end of the shuttle, as will be more fully described hereinafter.

25 Figure 1 is a side elevation of my invention complete. Fig. 2 is an enlarged perspective of the shuttle with the spring removed. Fig. 3 is a perspective of the tension-spring by itself.

A represents the shell of the shuttle, which
30 is constructed in the usual form, but has none of the openings or slots made through its sides which in some classes of shuttles are employed for obtaining a tension upon the thread. Through one edge of this shell is made a slot
35 or recess, B, and upon the outer side of the shuttle, toward its pointed end, is formed a small projection, C, and a raised surface, D, the edge of the raised surface next to the projection being formed into a curved shoulder, as
40 shown in Fig. 2.

The projection C is made rounding, so that no amount of tension on the string will cause it to be cut or injured, as would be the case were an angular or thin surface used, and the
45 raised surface forms a guard to keep the thread always in place.

Applied to the outside of the shuttle is the tension-spring F, which has a hole, G, made
50 through one end; so as to catch over the projection C on the shuttle, and has the two points

I, for catching in recesses in the side and end of the shuttle, as shown. The inner end of this spring is made curved, as shown, so as to correspond to the curve of the shoulder on the raised portion; and upon the lower edge of the
55 spring is formed a hook or projection, J, which serves to catch the thread and prevent it from unthreading when the shuttle is carried on the backward stroke. This tension-spring is held
60 in place upon the side of the shuttle by means of the set-screw O, by means of which the tension upon the thread can be increased or decreased at will without having to remove the shuttle from position. The thread from the bobbin
65 passes through the slot or recess B, passes toward the pointed end of the shuttle, in between the tension-spring and the side of the shuttle, is passed around the projection C, and then downward until it can be made to catch behind the point or projection upon the lower
70 edge of the spring. The raised surface upon the side of the shuttle prevents the thread from becoming displaced at any time by acting as a stop to prevent it from being drawn from under the inner end of the spring.

It will be seen that there is an even tension
75 applied to the thread from the point where it passes over the side of the shell to the point where it emerges from under the spring without the help of holes or slots of any kind.

80 By having the spring held in place by means of a set-screw the operator can loosen or tighten the tension upon the spring without having to remove the shuttle from position.

Having thus described my invention, I
85 claim—

The shuttle A, provided with the notch B, projection C, and shoulder D, in combination with the spring F, provided with the hole G, hook J, and the points I, and the set-screw O,
90 which is passed through the spring into the shuttle between the ends of the spring, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

WINSLOW RANDALL PARSONS.

Witnesses:

HERBERT E. WEATHERWAX,
WILLIAM BLOWERS.