(No Model.)

C. PARTON.

SHUTTLE FOR SEWING MACHINES.

No. 323,068. Patented July 28, 1885.

Fig. 1

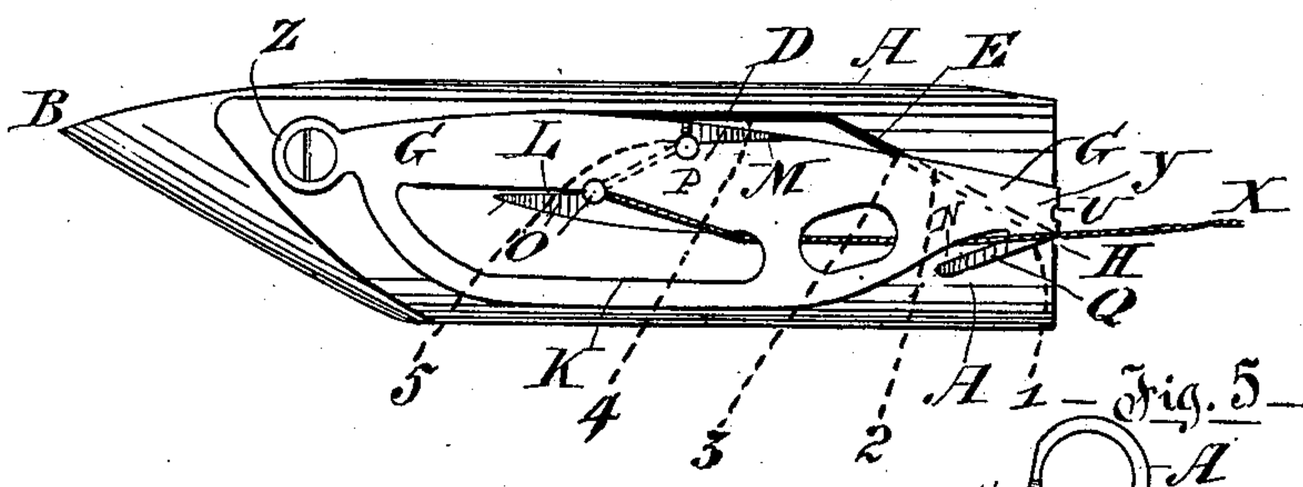


Fig. 5

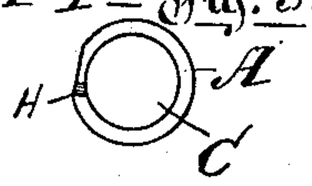


Fig. 3

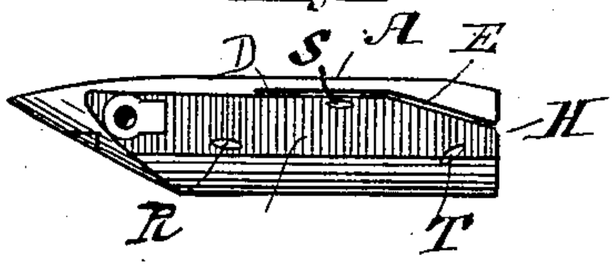


Fig. 6

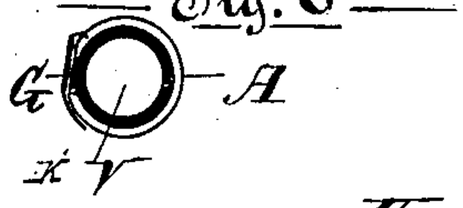


Fig. 2

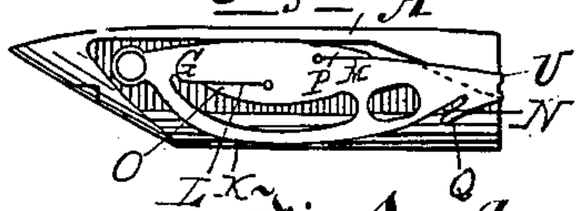
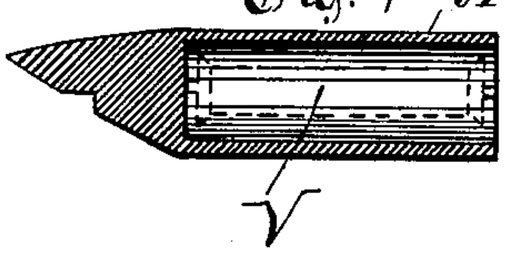


Fig. 4



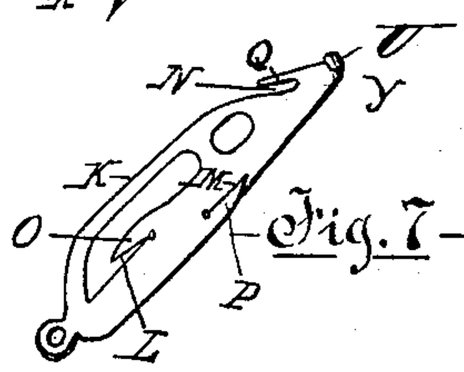


Fig. 7

Witnesses:—
Owen N. Evans
C. P. McDowell

Inventor:—
Charles Parton
Per:
Reynolds & Bellows
Attys

UNITED STATES PATENT OFFICE.

CHARLES PARTON, OF PLATTSBURG, NEW YORK, ASSIGNOR OF ONE-HALF TO DUGALD GRAHAM, OF MONTREAL, CANADA.

SHUTTLE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 323,068, dated July 28, 1885.

Application filed July 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PARTON, of Plattsburg, in the county of Clinton and State of New York, one of the United States of America, have invented certain new and useful Improvements in Shuttles for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention consists of improvements relating to the shell and tension-spring in that class of shuttles adapted to be threaded by simply drawing the thread into position after the wound bobbin is placed in the shell.

Figure 1 is an enlarged view of the shuttle, showing one form of the improvements, with the thread in position. Fig. 2 is a smaller view of the same, with the thread removed. Figs. 3, 4, 5, 6, and 7 are detail views of portions thereof.

In the form of construction shown, the shell A is cylindrical and has a front, B, open end C, and slots D E. The slot E extends under the end of the tension-spring G, and is beveled at its outer end, H, at the open end C of the shell A, for the easy admission of the thread X. The tension-spring G is fastened to the shell A by set-screw Z, by which also the tension is regulated. The tension-spring G has a guide, K, connected to the body of the tension-spring G at both ends, slots L M N, projections or tongues O P Q, turned down into recesses R S T in the shell A, and hook U at its end Y hooked over the open end C of the shell A into the opening H of the slot E.

The shuttle is threaded by placing the wound bobbin V in position in the shell A through its open end C (the hook U of tension-spring G being disengaged from the open end H of slot E) and drawing the thread X into the enlarged opening H of slot E, and forward until it engages the projection Q, into the slot D until it passes into the slot M and entirely under the projection O, as shown by dotted lines 1 2 3 4 5; then drawing it backward into the slots L and N and over the projections O and Q, when the threading is completed. The projection Q and the slot N prevent the thread from being broken by being caught at the end Y of the tension-spring G or in the open end of the slot E during the action of the shuttle.

The details of construction and operation may be varied within the scope of the improvements. For example, the end Y of the tension-spring G may be turned down into a hole near the open end C of the shell A, instead of being hooked over its open end C, and the slots D E may be one oblique slot.

My invention, as will be seen, overcomes the serious objection found to all shuttles with slots open to the heel—viz., the breaking of the thread by its catching at that point; and I am also enabled to use a tension-spring of that desirable kind which allows the thread to be quickly drawn into place without going through a tedious process of threading.

What I claim, and desire to secure by Letters Patent, is as follows:

1. The combination, with a shuttle having a threading-slot extending to the heel of the shell, of a tension-spring having a tongue or projection near its rear end and the open end of said slot, said tongue or projection being arranged to point away from the rear end of the spring and to support the thread so as to prevent it from being broken, substantially as described.

2. In combination, with a shuttle having a threading-slot extending to the heel or rear edge of the shell, a tension-spring extending to and covering the open end of the threading-slot, and having a tongue or projection near the rear end of said spring and the open end of said slot, and pointing away from same, substantially as and for the purpose specified.

3. The combination, in a shuttle, of shuttle-shell A, having open slots D E and recesses R S T, and tension-spring G, having slots L M N, projections O P Q, guide K, and hook U, substantially as set forth.

CHARLES PARTON.

Witnesses:
CHAS. H. BORDO,
F. B. MCCUNE.