E. C. THAXTER.

Sewing-Machine Shuttle.

No. 111,275. Patented Jan. 24, 1871.

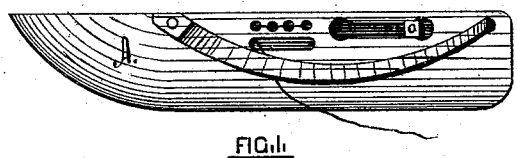

FIG. 1.

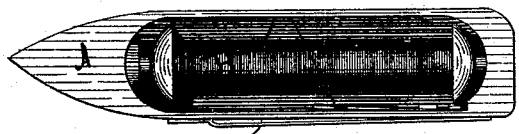

FIG. 2.

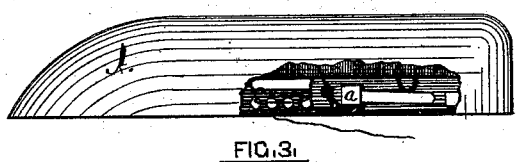

FIG. 3.

WITNESSES.

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EBEN C. THAXTER, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN SHUTTLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **111,275** dated January 24, 1871.

To all whom it may concern:

Be it known that I, EBEN C. THAXTER, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Sewing-Machine Shuttles; and I do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a side view. Fig. 2 is a face view; Fig. 3, side view, with shell broken to show spring.

The object of my invention in sewing-machine shuttles is to more perfectly regulate the tension of the thread during the operation of the machine, and thereby improve the appearance and durability of the work; and it consists in the improvements hereinafter described.

My invention relates more particularly to what is known as the "Singer" sewing-machine. I shall therefore describe it in connection with the same, although it may be used upon other, if not all, machines.

My improved shuttle, from its construction, belongs to that class which permits the tension of the thread to be changed without removing it from its place in the machine, and furnishes, by reason of the combination hereinafter described and claimed, a facility of adjustment and a regularity of tension, in my opinion, not heretofore attained.

A, Figs. 1, 2, and 3, represents the shuttle; B, Fig. 2, the bobbin. Upon the inside of the shuttle, and near the top, as shown in Fig. 3, I attach, by a rivet at one end, a slotted spring, C, the side of the shuttle A having a slot corresponding with the slot in the spring C, and moving in the said slots and connecting the spring with the shuttle is a slide, *a*. The thread, in addition to passing through the ordinary holes in the side of the shuttle, passes through a hole in and under the spring C. The tension of the thread may now be regulated and the friction increased or diminished by moving the slide *a*, which increases it if moved toward the end under which the thread passes, or diminishes it if moved in the opposite direction.

The slide *a* may be moved in either direction without removing the shuttle from the machine.

This device may be, if desired, applied to the outside of the shuttle instead of the inside.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the shuttle A, of the slide *a* and the slotted spring C, having a hole at one end, through which the thread passes, and riveted at the other end to the side of the shuttle, the whole constructed and arranged in the manner substantially as described, for the purposes specified.

EBEN C. THAXTER.

Witnesses:

WALTER B. VINCENT,

JAMES M. CLARKE.