

C. PATCH.
Sewing Machine Shuttle.

No. 43,426.

Patented July 5, 1864.

Fig. 1,

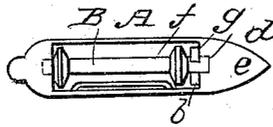


Fig. 2,

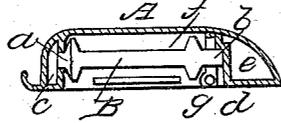


Fig. 3,



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UNITED STATES PATENT OFFICE.

CHARLES PATCH, OF SOUTH READING, MASSACHUSETTS.

IMPROVEMENT IN SEWING-MACHINE SHUTTLES.

Specification forming part of Letters Patent No. 43,426, dated July 5, 1864.

To all whom it may concern:

Be it known that I, CHARLES PATCH, a resident of South Reading, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Shuttles for Sewing-Machines; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes an under side view of a shuttle provided with my invention. Fig. 2 is a longitudinal section of it. Fig. 3 is a transverse section taken through the spring presser and catch, to be hereinafter described.

The nature of my invention consists in an improved arrangement or application of a spring-catch, whereby it is made to subserve two purposes—viz., not only to produce friction on the spool or bobbin, in order to insure the requisite retardation of it in the process of unwinding the thread from it, but to hold the bobbin or spool in place within the shuttle.

In the drawings, A denotes the shuttle-case, of the usual construction and form, and as provided with a bobbin, B. This bobbin has two journals, *a b*, one of which—viz., that marked *a*—rests in a bearing or socket, *c*, made in the heel of the shuttle. The other journal is the longer of the two, and is inserted in an open notch, *d*, formed in the toe part *e*, as shown in the figures. Close to this notch there is arranged within the bobbin-recess *f* a curved spring catch or latch, *g*, having the form shown in Fig. 3. This spring, while the longer journal of the bobbin may be in the act of being

pressed down into the notch *d*, will give way against the pressure until the journal may reach or about reach the inner terminus of the notch, when the spring-catch will move forward up to the journal, and so embrace it as not only to serve as a bearing to hold it in place and keep it from falling out of the notch when the shuttle is inserted or in use, but so press against the side of the journal as to produce friction tending to retard the rotary motion of the bobbin, so as to prevent its thread from being drawn too readily from it. The said spring-catch also enables a person to easily remove the bobbin from the shuttle whenever the same may be desirable.

I do not claim the application of a friction-plate and the spring thereof to a shuttle in such manner as to cause the said plate to bear on the periphery of the mass of thread wound on the bobbin of such shuttle, the same being to produce friction to retard the unwinding of the thread from the bobbin; but

I claim as my invention—

The application of a spring-catch, *g*, within the bobbin-recess of a shuttle, and with respect to a journal, *b*, of the said shuttle, and a recess, *d*, thereof for receiving such journal, and so as to operate with the said journal, substantially in manner and for the purposes hereinbefore specified.

CHARLES PATCH.

Witnesses:

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