(No Model.)

# M. H. McINTIRE & S. B. BARTHOLOMEW.

## SEWING MACHINE SHUTTLE.

No. 266,041. Patented Oct. 17, 1882.

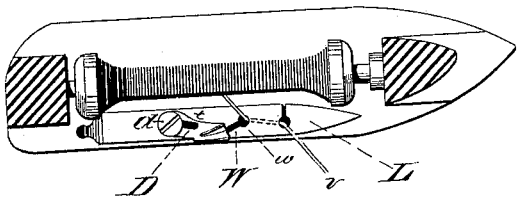


Fig I.

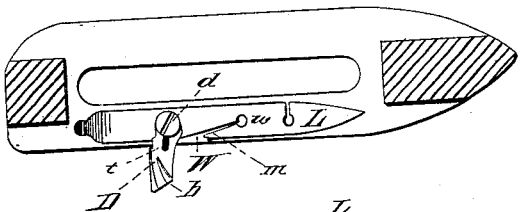


Fig II.

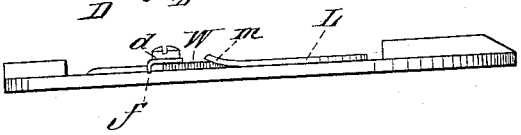


Fig III.

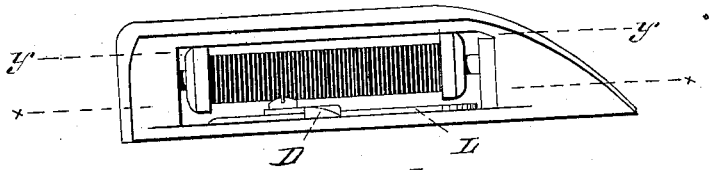


Fig IV.

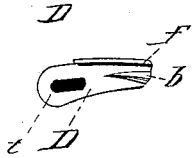


Fig V.

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# UNITED STATES PATENT OFFICE.

MILVERN H. McINTIRE AND SAMUEL B. BARTHOLOMEW, OF SPRINGFIELD, MASSACHUSETTS.

## SEWING-MACHINE SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 266,041, dated October 17, 1882.

Application filed March 21, 1882. (No model.)

*To all whom it may concern:*

Be it known that we, MILVERN H. McINTIRE and SAMUEL B. BARTHOLOMEW, citizens of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have jointly invented new and useful Improvements in Thread-Guards for Tensions of Sewing-Machine Shuttles, of which the following is a specification.

Our invention relates to an improved thread-guard for the tensions of sewing machine shuttles, and is fully illustrated in the accompanying drawings, in which—

Figure I is a plan view of a shuttle in partial section on dotted lines *y y* of Fig. IV. Fig. II is a plan view in partial section on line *x x* of Fig. IV. Fig. III is the same as Fig. II in side elevation. Fig. IV is a side elevation of a shuttle having our improvement, and Fig. V is an enlarged detail view.

This invention consists essentially of a latch secured to the tension-spring to either swing or slide thereon and close the thread-passage to the eye or pulley therein, and formed to lock itself in position against any but manual movement; to present an outer edge in continuation of the straight edges of the outside of the shuttle and tension-spring and upon which the thread cannot catch, and to permit an upward deflection at the mouth of the thread-passage to catch the thread only in threading, so as to form of the shuttle when the latch is opened a complete self-threader.

The latch D, secured at one end to the tension-spring L by the screw *d* through the elongated opening *t* in the latch, is swung or slid into the position shown in Fig. I to close the passage W, leading to the eye *w*, and entirely inclose the thread *v* to prevent the possibility of its escape from its eye. When in this position the latch D is held in place by a slight projection or cam, *b*, upon its under surface, which is received into the passage W and held there by the wall of the passage over which it is moved. The projection *b*, when so received in the thread-passage W, forms a spring-catch to retain the latch D in place, the spring being supplied by the latch itself, by the portion of the spring L over which it is moved, or by both. The latch D is also provided with the flange *f*, which, when the latch is closed, as in Fig. I, forms a continuation of the edge of the spring L over the mouth and edges of the thread-passage W, and, having the angle of its edge slightly beveled, as shown, presents a surface upon which the thread cannot catch, and over which it may travel without being cut. In Fig. V an enlarged view of the latch D is shown in reverse.

By the combination, with the thread-passage W, of the latch D so constructed and operated, we are able to form the mouth of the passage W of a V shape vertically, as well as horizontally, by flaring the corner *m* from the inner face of the shuttle, as shown in profile in Fig. III, by means of which configuration the corner *m*, when uncovered by the latch, as shown in Figs. II and III, forms an easy guide for the thread to its eye *w*. This form of mouth, which would be impossible but for the covering-latch D, may supply the spring to retain the latch closed against being swung open by means of its part *b*, or, as before stated, may only supply an edge against which the spring of the latch creates sufficient friction to prevent its movement.

Although the latch, when closed, cannot be moved by any action of the shuttle or thread, it may readily be moved by the fingers when the thread is to be put in tension.

Now, having described our invention, what we claim is—

1. In a sewing-machine shuttle, the combination, with the tension-spring having the thread-passage W, of the spring-latch D, secured thereupon and adapted to be moved upon the spring to catch in said passage to close it, and so entirely inclose the thread.

2. In a sewing-machine shuttle, the combination, with the tension-spring having the thread-passage W, of the spring-latch D, provided with the flange *f* and cam *b* and adapted to be moved upon the tension-spring to catch in the passage W to inclose the thread and form a smooth surface over the mouth of said passage.

3. In a sewing-machine shuttle, the combination, with the tension-spring L, having the passage W, and with the latch D, secured thereon and adapted to move thereupon to close the mouth of said thread-passage, of the vertically-flaring surface *m*, arranged to operate as and for the purpose set forth.

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