

(No Model.)

A. E. CHOQUETTE & L. E. WALLERMAN.

SEWING MACHINE SHUTTLE.

No. 266,096.

Patented Oct. 17, 1882.

Fig 1.

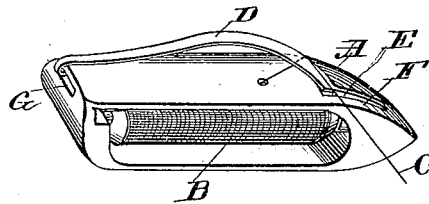


Fig 2.

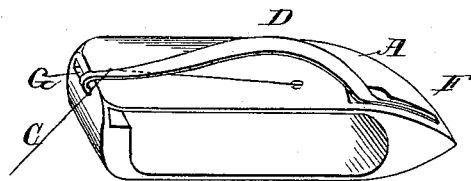
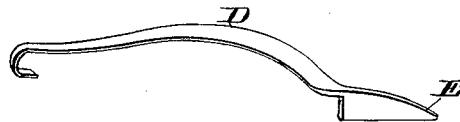


Fig 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALFRED E. CHOQUETTE AND LOUIS E. WALLERMAN, OF MILWAUKEE, WIS.

SEWING-MACHINE SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 266,096, dated October 17, 1882.

Application filed May 19, 1882. (No model.)

To all whom it may concern:

Be it known that we, ALFRED E. CHOQUETTE and LOUIS E. WALLERMAN, citizens of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Sewing-Machine Shuttles; and we 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in sewing-machine shuttles.

The object of our improvement is to provide a device to take up the slack of the thread as it is drawn from the shuttle, whereby the thread is prevented from being caught between the heel of the shuttle and the shuttle-race, and is less liable to be broken.

Our invention consists in providing a vibrating arm upon the upper side of the shuttle-case, over which the thread is adapted to be drawn as it escapes from the bobbin, said arm being actuated by a spring in such a manner that as the thread is slackened the arm moves back with the thread, and thus takes up the slack.

Our invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a perspective view, showing the arm thrown backward. Fig. 2 is also a perspective showing the arm drawn forward by the action of the thread. Fig. 3 is a detail view.

Like parts are represented by the same reference-letter through the several views.

A is the shuttle-case. B is the bobbin. C represents the thread. D is the vibrating arm by which the slack of the thread is taken up and the thread prevented from being caught around the heel of the shuttle-race.

Heretofore it has been common to attach the arms, similar in shape to that shown, rigidly at both ends to the case.

By our improvement the arm D is provided with an elastic flexible end, E, which is rigidly attached to the toe of the shuttle in a recess, F, while the opposite end engages and plays loosely in the slot G at the heel of the shuttle. The tension of the spring is backward, whereby when released from the thread it is thrown into the position shown in Fig. 1. As the shuttle moves forward the thread is drawn toward the heel of the shuttle, as shown in Fig. 2, whereby the arm is drawn toward the front end of the slot. When the thread is slackened the arm moves backward and takes up the slack. It is obvious that the arm by such movement not only takes up the slack of the thread, but that the thread, as it thus compresses the spring, checks the movement of the shuttle, causing it to be stopped more gradually, thus reducing the shock, and consequently the noise, which is ordinarily caused by the vibratory movement of the shuttle.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the case of a sewing-machine shuttle, of a vibrating arm connected to and adapted to move with said case, over or around which arm the thread is adapted to be drawn as it passes from the case, said arm being provided with an actuating-spring, by which it is thrown back and the slack of the thread is taken up, substantially as and for the purpose specified.

2. The combination of case A, provided with recesses F and G, and arm D, provided with spring E, said arm and spring being respectively secured to the case in the respective recesses F and G, substantially as and for the purpose specified.

In testimony whereof we affix our signatures in presence of two witnesses.

ALFRED E. CHOQUETTE.
LOUIS E. WALLERMAN.

Witnesses:

JAS. B. ERWIN,
AUG STAHL.