(No Model.)

D. W. COREY.

BOBBIN FOR SEWING MACHINE SHUTTLES.

No. 323,916. Patented Aug. 11, 1885.

Fig. 1.

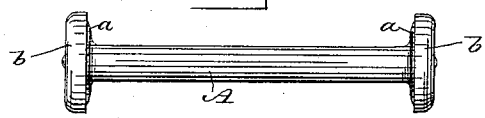


Fig. 2.

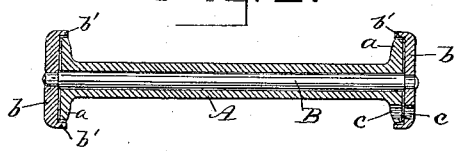
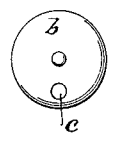


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

DANIEL W. COREY, OF GALENA, ILLINOIS.

BOBBIN FOR SEWING-MACHINE SHUTTLES.

SPECIFICATION forming part of Letters Patent No. 323,916, dated August 11, 1885.

Application filed February 2, 1885. (No model.)

To all whom it may concern:

Be it known that I, DANIEL W. COREY, a citizen of the United States, residing at Galena, in the county of Jo Daviess and State of Illinois, have invented certain new and useful Improvements in Bobbins for Sewing-Machine Shuttles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to bobbins for that class of sewing-machine shuttles which are open at their heel ends and which are known as "open-ended shuttles," my object being to provide bobbins for this class of shuttles from which the thread will run evenly and on which it can be conveniently wound.

To this end my bobbin, as herein shown, is formed in two parts, one of which is the bobbin proper, consisting of a hollow sleeve and end flanges, and the other being a holder or carrier having a spindle fitting loosely in said sleeve and connecting two heads, which are preferably rigidly fixed to the spindle and provided with annular inwardly-turned lips extending over the flanges of the bobbin.

In the drawings, Figure 1 is a side view of my bobbin. Fig. 2 is a longitudinal section; and Fig. 3 an end view of the same.

A indicates a hollow stem or sleeve having end flanges, *a*, of ordinary construction, said sleeve with its flanges constituting the bobbin proper. B is a spindle passing loosely through the sleeve A, and having secured to its ends heads *b*, between which the bobbin proper is held loosely, so that it may rotate freely on the spindle.

To enable the bobbin proper to be rotated with the holder in winding, holes *c* are drilled through one or both of the flanges *a* of the former, and one or both of the heads *b* of the latter for the reception of a small stud or pin on the rotary head of the bobbin-winder. Thus, when a hole in the flange *a* is brought into register with a hole in the head *b*, as in Fig. 2, said stud or pin can pass through the latter to engage the former and thus cause the bobbin proper to rotate with the holder in winding. These holes also enable the operator to see the amount of thread on the bobbin without removing the latter from the shuttle. The heads *b* of the holder are preferably provided with annular lips *b'* extending over the flanges *a* of the bobbin proper. This construction prevents the thread from getting between the flange *a* and the heads *b*, either in winding or when in use.

From the foregoing it will be apparent that while the bobbin proper can freely rotate on its holder it will be prevented by the latter from coming in contact with the interior of the shuttle or the horn of the shuttle-carrier, by which latter, in many open-ended shuttles, the bobbin is held in place. As such contact between the horn of the shuttle-carrier is intermittent when the machine is in operation, the tension of the bobbin-thread is varied, causing the thread to run somewhat unevenly from the bobbin and thus resulting in imperfect work. This difficulty is entirely avoided by my invention, and the flanges of the bobbin proper are prevented by the heads *b*, which are of greater diameter than the said flanges, from coming in contact with the interior of the shuttle.

I claim—

1. A bobbin for sewing-machine shuttles, consisting of a bobbin proper having a hollow sleeve and end flanges, and a holder on which said bobbin proper is secured, having a single or undivided central spindle fitting loosely in said sleeve, and having also heads secured to said spindle, substantially as set forth.

2. A bobbin for sewing-machine shuttles, consisting of a bobbin proper having a hollow sleeve and end flanges, and a holder having a central spindle fitting loosely in said sleeve, and heads provided with annular lips projecting over the flanges of the said bobbin proper, substantially as set forth.

3. A bobbin for sewing-machine shuttles, consisting of a bobbin proper having a hollow sleeve and end flanges, and a holder having a central spindle fitting loosely in said sleeve, and heads secured to said spindle, one or both of said flanges and heads being provided with holes, substantially as set forth.

4. A bobbin for sewing-machine shuttles, having end heads of greater diameter than the bobbin proper, the latter being loosely connected with said heads and thus adapted to rotate independently thereof, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL W. COREY.

Witnesses:
WILLIAM SPENSLEY,
MATHEW R. CHAMBERS.