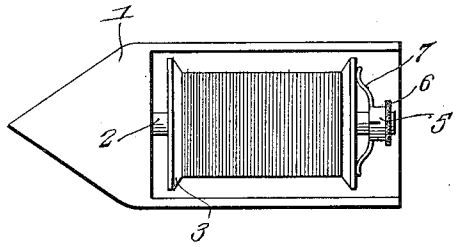
M. A. ROSS.

SEWING MACHINE SHUTTLE.

APPLICATION FILED FEB. 2, 1912.

1,075,860. Patented Oct. 14, 1913.

Fig. 1.



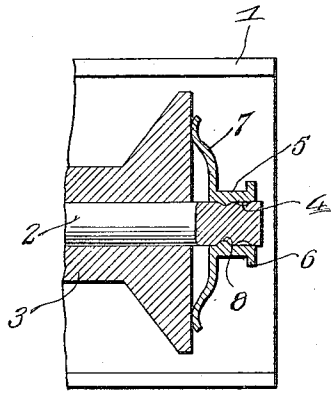


Fig. 2.

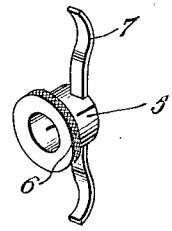


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

MABLE A. ROSS, OF CALEXICO, CALIFORNIA.

SEWING-MACHINE SHUTTLE.

1,075,860. Specification of Letters Patent. Patented Oct. 14, 1913.

Application filed February 2, 1912. Serial No. 674,859.

To all whom it may concern:

Be it known that I, MABLE A. ROSS, a citizen of the United States, residing at Calexico, in the county of Imperial and State of California, have invented new and useful Improvements in Sewing-Machine Shuttles, of which the following is a specification.

This invention relates to sewing machine shuttles, and has for an object to provide a shuttle which will be so constructed whereby it can receive and operatively support and hold an ordinary stock spool of cotton which will effectively serve the purpose of a bobbin.

Another object of the invention is to provide a shuttle which will include a spool spindle and removable means whereby the spool can be readily fitted to the spindle or removed therefrom as the occasion may demand.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a plan view of a shuttle constructed in accordance with my invention. Fig. 2 is a longitudinal section through a portion of the shuttle. Fig. 3 is a perspective view of the retaining device.

The shuttle 1 herein shown is of well known substantially cylindrical construction with the exception of the bobbin support. This bobbin is provided with a fixed longitudinally extending spool spindle 2 which is designed to rotatably receive an ordinary stock spool of thread 3, whereby the use of the old and well known form of bobbin can be entirely eliminated and the objections arising through the constant refilling of the bobbin entirely obviated. At one end, the spindle has formed therein concentric grooves 4, two of such grooves being herein shown, but it is stated that the use of any suitable number of grooves may be resorted to so that different adjustments of the retaining device 5 can be effectively accomplished. The retaining device comprises a springy member of substantially split sleeve form which is provided at its outer end with a knurled manipulating portion 6 and at its inner end with radial springy jaws 7 which project at diametrically opposite points from the outer side of the cylinder. The sleeve 5 is provided interiorly with an integral annular rib 8 which can be interchangeably fitted in the grooves 4 so that any desired adjustment of the device 5 can be accurately effected. By providing the retaining device 5 it is seen that when operatively associated with the spindle 2, as shown in Fig. 2 of the drawing, it forms a stop to prevent the accidental displacement of the spool from the spindle. The device 5 can be adjusted to cause the jaws 7 thereof to bear lightly against one end of the spool so as to hold the spool against longitudinal movements on the spindle. The jaws 7 by bearing against one end of the spool as just described also serve to hold the spool under like tension to prevent a too rapid unwinding of the thread.

I claim:

1. A stationary spool spindle having at its extreme outer end, a series of concentric grooves adapted to rotatably support a stock spool of thread, and means rotatably fitting the spindle and having a series of integral ribs formed interiorly thereof, said means being disposed at the extreme free end of the spool spindle, and the ribs thereof adapted to interchangeably fit the grooves of the spindle to hold said spool against displacement from the spindle, and a yielding portion formed integral with said means and projecting at diametrically opposite points from said means and adapted to bear directly against one end of the spool.

2. A spool spindle adapted to receive an ordinary stock spool of thread and adapted to rotatably support the spool thereon, and a split cylinder removably fitting the spindle and disposed at one end of the spool to hold the latter against displacement from the spindle, the said cylinder having formed integral and flush with its innermost extremity yielding portions, said yielding portions projecting at diametrically opposite points from the outer side of the cylinder and adapted to bear directly against one end of the spool.

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

MABLE A. ROSS.

Witnesses:
T. F. RAMSY,
J. A. HART.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."