

No. 632,895.

Patented Sept. 12, 1899.

J. CONROY.

BOBBIN FOR SEWING MACHINE SHUTTLES.

(Application filed July 12, 1899.)

(No Model.)

Fig. 2.

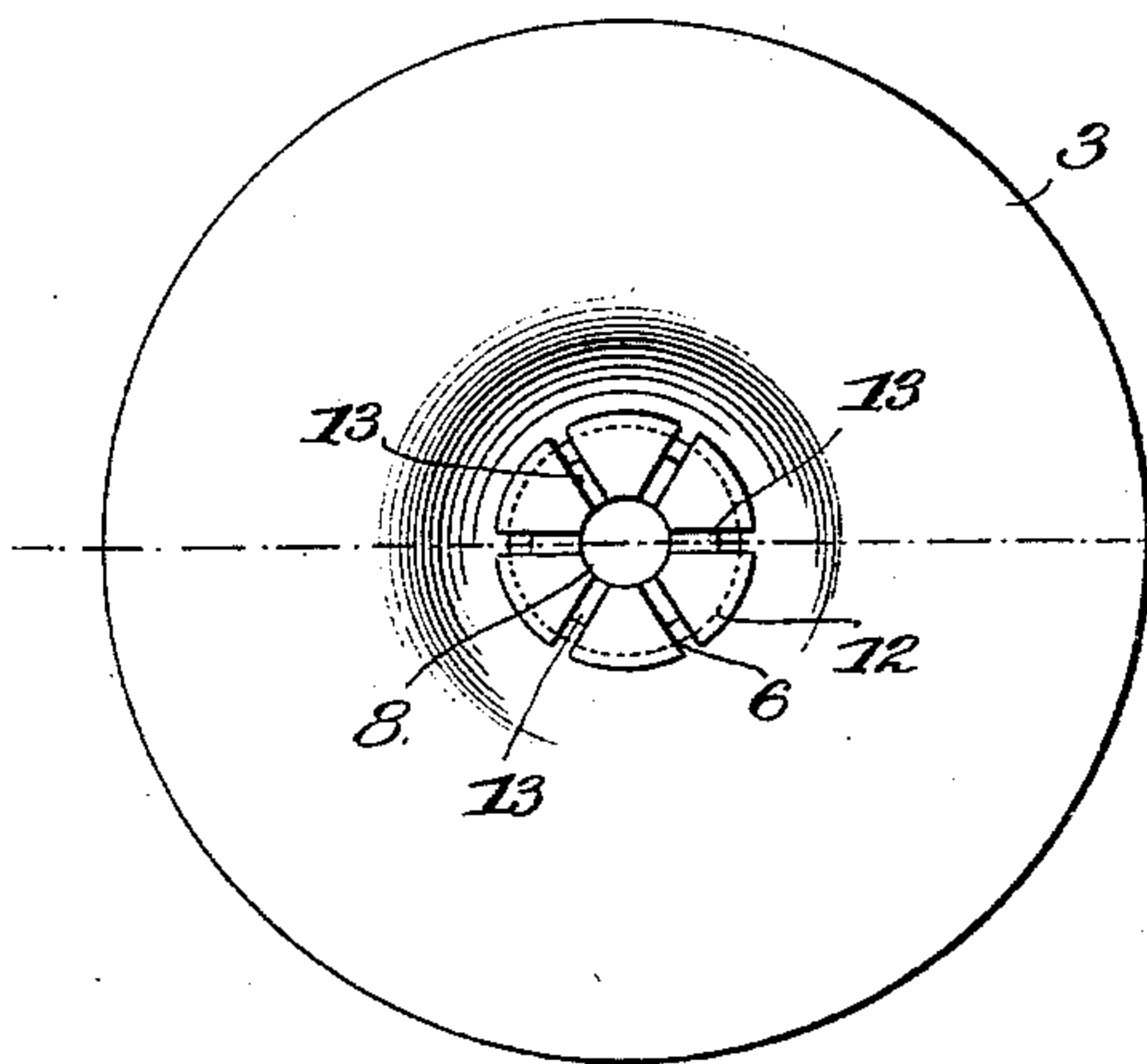
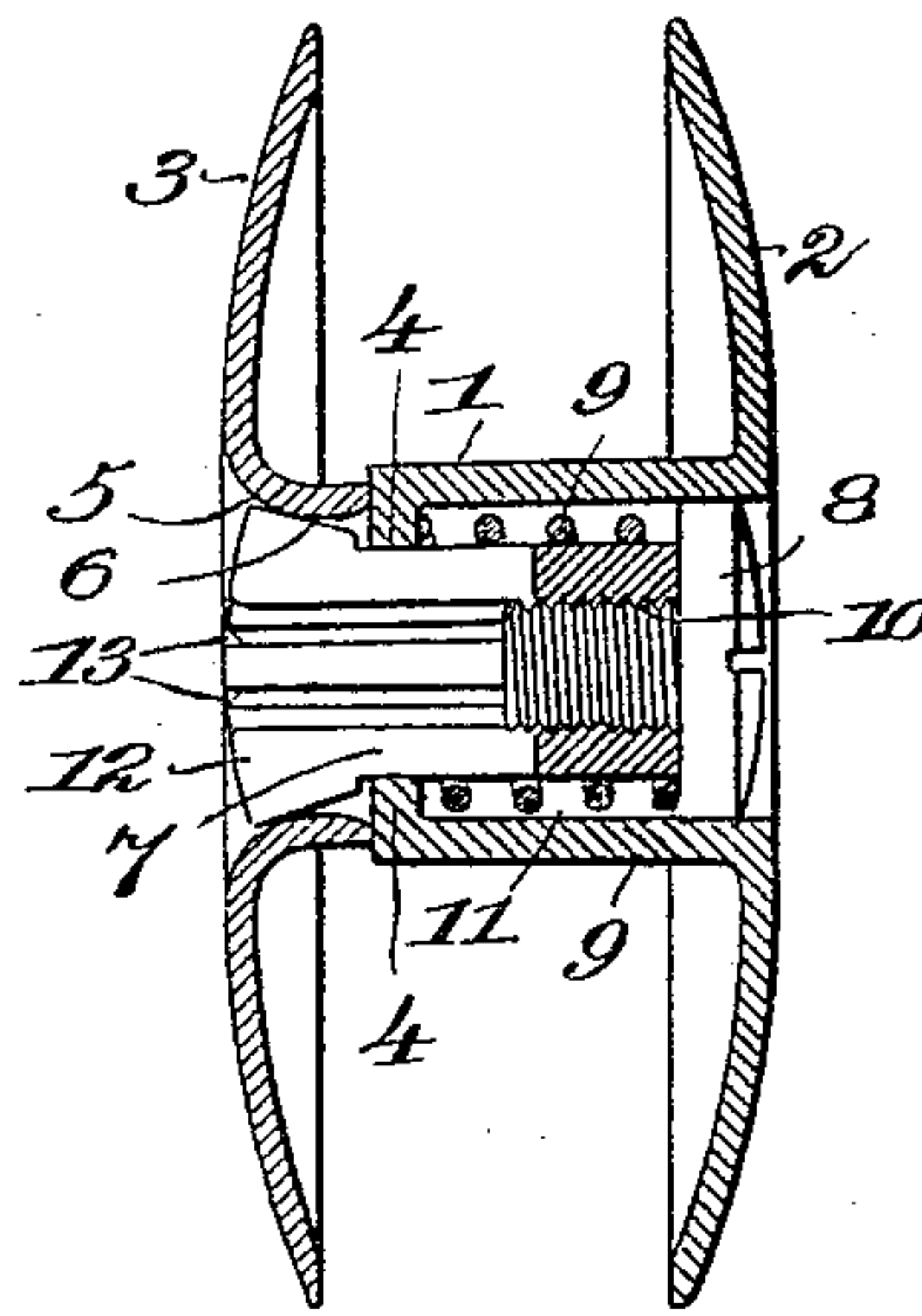


Fig. 1.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES CONROY, OF BROCKTON, MASSACHUSETTS.

BOBBIN FOR SEWING-MACHINE SHUTTLES.

SPECIFICATION forming part of Letters Patent No. 632,895, dated September 12, 1899.

Application filed July 12, 1899. Serial No. 723,588. (No model.)

To all whom it may concern:

Be it known that I, JAMES CONROY, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Shuttle-Bobbins; and I 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.

The present invention relates to an improvement in shuttle-bobbins, and more particularly to a shuttle-bobbin adapted for use in sewing-machines.

The object of the invention is to produce a shuttle-bobbin with a separable head which is easily removed to apply a new cop, easily replaced, and held in a certain and definite relation to the other head of the bobbin.

To the above end the present invention consists in the shuttle-bobbin hereinafter described, and particularly set forth in the claim.

In the accompanying drawings, illustrating the preferred form of my invention, Figure 1 is a longitudinal sectional elevation of the bobbin, and Fig. 2 is an end view of the bobbin looking from the left-hand end of Fig. 1.

The bobbin consists generally of a barrel 1, provided on one end with a fixed head 2 and on the other end with a removable head 3, removably secured to the barrel, and means for securing the head 3 to the barrel. The barrel and heads are preferably made of sheet-steel pressed or stamped into the desired form. The barrel and head 2 are conveniently made integral.

The barrel is a hollow cylinder provided on the end opposite the head 2 with an internal flange 4. The head 3 is provided with a hole 5 in its center, around which is the lateral flange 6, which is projected inwardly from the head 3, as shown, and normally presses against the end of the barrel 1.

The means for securing the removable head 3 to the barrel 1 consists of a bolt 7, a screw 8, and a spring 9. The body of the bolt 7 is hollow and cylindrical. One end thereof is screw-threaded interiorly at 10 to receive the

screw 8, the head of which loosely fits the inside of the barrel. The spring 9, formed of a piece of coiled wire, is placed in the space 11, bearing at one end on the internal flange 4 of the barrel and at the other on the head of the screw 8, thus tending normally to press the bolt 7 to the right, as seen in Fig. 1. The other end of the bolt 7 is provided with a head 12 of slightly larger diameter than the opening 5 in the head 3. In it are cut slots 13, so that the head is made elastic, and thereby capable of being compressed so that it can pass through the opening 5. The flange 6 on the head 3 is so proportioned with relation to the size of the head 12 of the bolt 7 and the other parts of the bobbin that the bolt 7 draws the flange 6 of the head up against the end of the barrel 1, and thus into a definite and certain relation to the barrel and the fixed head 2. It is thus seen that the bobbin may be used not only with the usual wound cops, but may also be wound with thread from a large spool by any of the well-known shuttle-winders.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a shuttle-bobbin, the combination with a hollow barrel having an internal flange at one end and a head fixed to the other end, a removable head provided with a central opening surrounded by a lateral inwardly-projected flange adapted to engage the adjacent end of the barrel, a hollow bolt having on one end a slotted compressible head adapted to engage the opening in the removable head, a screw, screwed into the other end of the bolt and a coiled spring interposed between the screw-head and the internal flange of the barrel, whereby the removable head is drawn against the barrel and into a definite position with relation to the other head, substantially as described.

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

JAMES CONROY.

Witnesses:

JOSIAH N. HORNBLOWER,
PRESTON J. CALLEY.