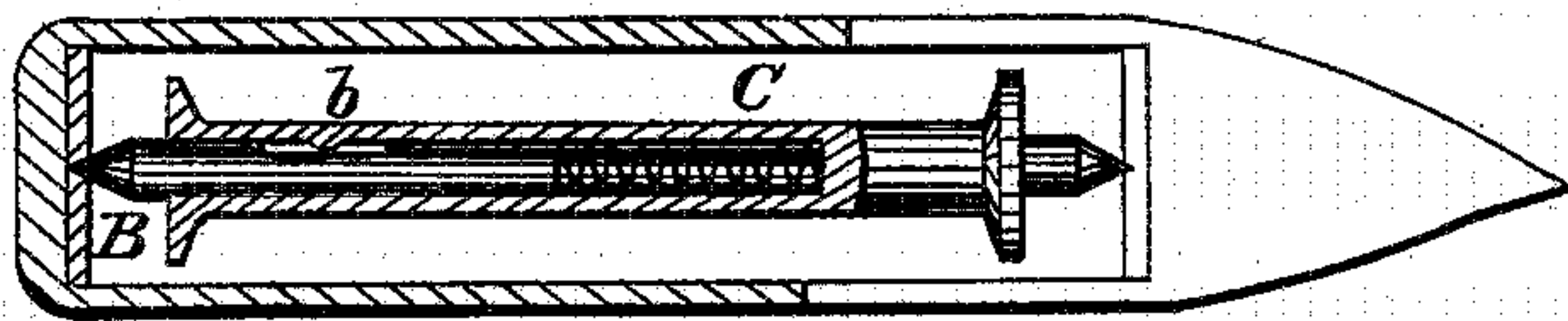


R. S. MERSHON.

Sewing-Machine Shuttle.

No. 93,463.

Patented Aug. 10, 1869.



Witnesses,
Wm A Morgan
D. C. Dietrich

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United States Patent Office.

R. S. MERSHON, OF ZANESVILLE, OHIO.

Letters Patent No. 93,463, dated August 10, 1869.

IMPROVEMENT IN BOBBIN FOR SEWING-MACHINE SHUTTLES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern :

Be it known that I, R. S. MERSHON, of Zanesville, in the county of Muskingum, and State of Ohio, have invented a new and improved Bobbin for Sewing-Machine Shuttles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention consists in constructing a tubular bobbin, having one fixed and one movable pivot or journal, said pivot being operated or forced outward, to maintain the bobbin in its place in the shuttle, by a spiral spring, enclosed within the tube of the bobbin, and arranged to bear against the inner end of the pivot. The said pivot is forced inward against the spring by the hand when the bobbin is to be put in or taken out of the shuttle, the object of which is to produce a more perfect tension on the thread, to admit of the bobbin being made of greater capacity, and to provide a more durable and reliable arrangement.

In the accompanying drawings, a partial plan and horizontal view of a shuttle provided with my improved bobbin is represented.

Hitherto, the pivots or journals of the bobbins have usually been rigidly connected to the said bobbins, and a yielding bearing for one point has been arranged in the end of the shuttle, a coiled spring being commonly arranged behind the bearing, to allow it to yield for the insertion or removal of the bobbin, and to produce the tension. This arrangement involves two serious objections, viz: it requires considerable space in the end of the shuttle for the spring and the movable bearing, which may otherwise, and according to my

improved arrangement, be occupied by the shuttle, allowing a corresponding increase in the size of the same; and, secondly, in order to occupy as little of such space as possible, the springs are commonly so short as to soon become set, and, consequently, useless, and at best giving very unsatisfactory results.

According to my improved arrangement, I make the bobbins tubular from end to end, or nearly so, as represented at A, and insert a movable journal, B, with a spiral spring, C, behind it.

In order to prevent the journal from falling out, I provide a recess, as represented at *a*, in the side, and punch the shell of the tube down into the said recess, as shown at *b*, sufficiently to prevent it from falling out, while allowing it to slide freely for its proper action.

This plan admits of arranging the spring within the space occupied by the bobbin, and at the same time making it of sufficient length to give it ample play without unduly straining or disarranging it.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

As an article of manufacture, a shuttle-bobbin having one of its projecting journals stationary, and the other arranged to move longitudinally in the bobbin, a spring to press on the movable journal, and a pin or projection in the bobbin, entering a groove in the movable spindle, to prevent its falling out, all constructed as described.

R. S. MERSHON.

Witnesses:

JOHN QUIGLEY,
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