S. S. Bartlett,

Spindle Bolster.

No. 36,986. Patented Nov. 25, 1862.

Fig. 3.

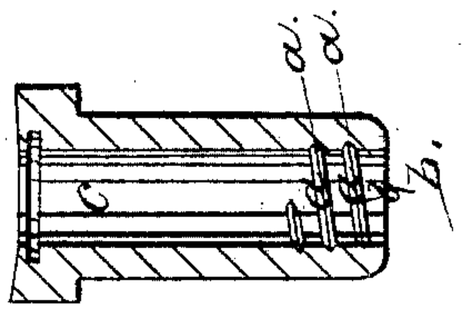


Fig. 2.

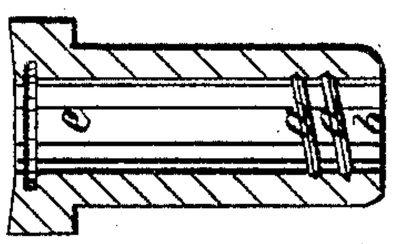
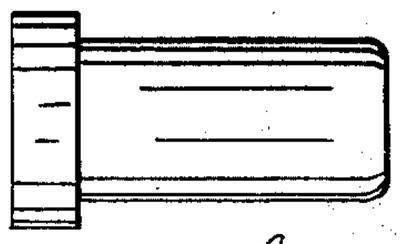


Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

STEPHEN S. BARTLETT, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN BOLSTERS FOR SPINNING-FRAMES.

Specification forming part of Letters Patent No. **36,986,** dated November 25, 1862.

To all whom it may concern:

Be it known that I, STEPHEN S. BARTLETT, of Providence, in the county of Providence and State of Rhode Island, have invented a certain new and useful Improvement in Bolsters for Spinning-Frames; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a side view of a bolster, and Figs. 2 and 3 longitudinal sections.

This invention consists in cutting a left-handed screw-thread, *a*, in the bottom part of the bolster, in such a manner as to leave the lower part, *b*, of the bearing-surface of the bolster perfectly smooth and of the same size as the upper part, *c*. In this way the bottom of the bolster is left perfectly even and true and the bearing for the spindle undisturbed.

The object of the screw-thread is to prevent the oil from running out at the bottom of the bolster. When the thread commences a short distance from the bottom of the bolster, as indicated in the drawings, the fibers of cotton or wool are not liable to be worked up into the bearings, as is the case when the thread extends to the bottom. Again, if the cutting of the thread commences at the bottom, it would require much labor to close it up, and, besides, the bearing for the spindle would be injured. By my present invention all these objections are obviated, and bolsters now in use can be changed in a neat and expeditious manner.

The mode which I adopt in order to effect the above is to use a small cutting wheel or gear to cut the screw-thread with, in lieu of using a "tap." The cutting wheel or gear must be smaller than the hole in the bolster, so that it can be passed into the same without coming in contact with the inner surface thereof. The small cutting gear or wheel is placed upon a spindle or arbor inserted in the mandrel of a lathe or engine, so as to be revolved therewith.

The tail-stock is provided with a mandrel having a screw-thread cut upon its rear outer surface to work in and through a female thread cut in a nut fast in the tail-stock of the lathe or engine. A small arbor of the proper size to enter the top of the bolster is fitted tightly in the front of the mandrel, and upon which the bolster is slipped and fastened. The tail-stock mandrel is now moved forward until the cutting gear or wheel has entered the proper distance into the bottom of the bolster, when the gear is put in motion and the tail-stock tipped laterally sufficient to give the required depth of screw. Then the mandrel which supports the bolster is revolved slowly by hand or otherwise, and as it is revolved it is moved forward by its screw working in the nut in the tail-stock, thereby cutting a screw-thread in the bolster.

Having described my improved bolster, I do not here claim the use of a screw-thread cut in the bottom of a bolster with a screw-tap; but

What I do claim, and desire to secure under this patent, is—

An improved bolster in which the screw-thread is cut by a gear or wheel in such a manner as not to vary the internal diameter of the bearing-surface of the bolster, but so as to leave the diameter the same throughout as it was before the screw-thread was cut.

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Witnesses:

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