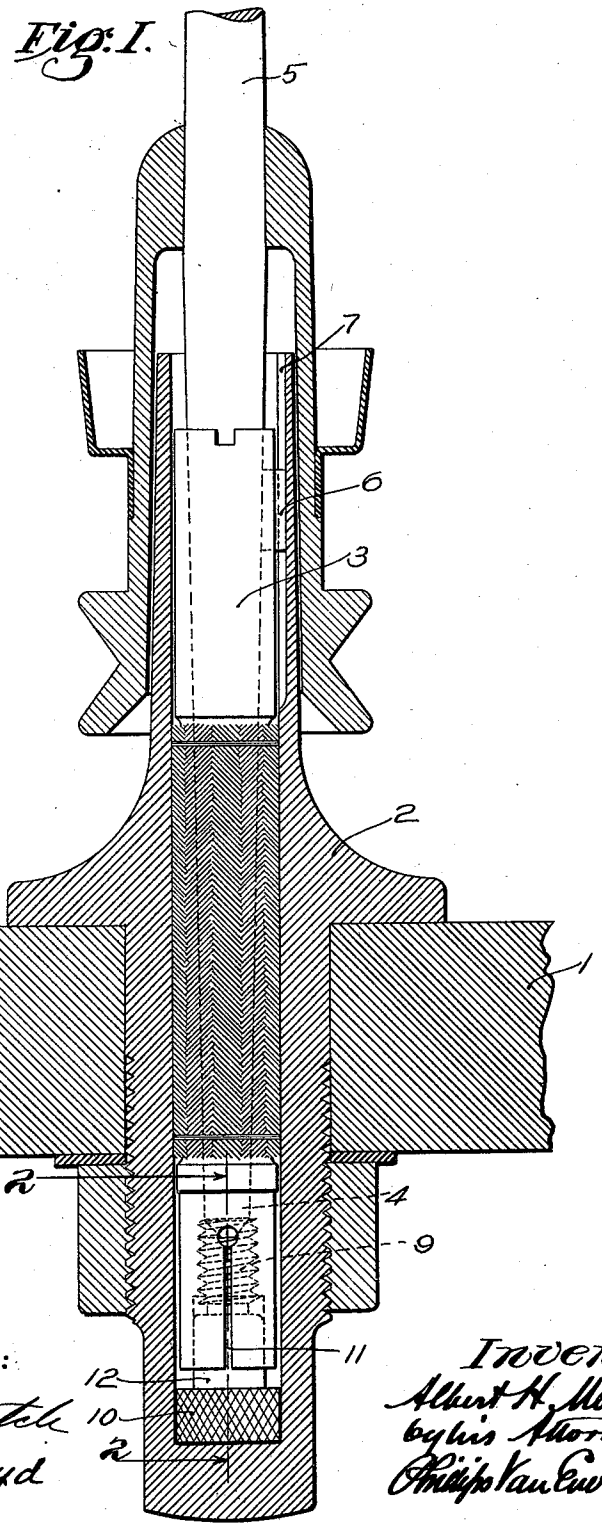
A. H. MORTON.

SPINDLE SUPPORT FOR SPINNING, TWISTING, AND LIKE MACHINES.

APPLICATION FILED FEB. 20, 1911. RENEWED OCT. 6, 1911.

1,008,855. Patented Nov. 14, 1911.

Fig. 1.



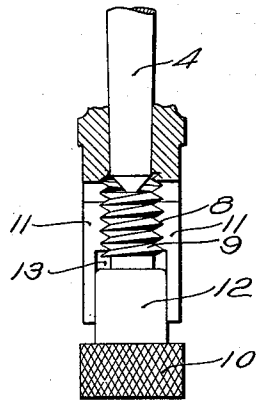


Fig. 2.

Witnesses:
Powell T. Hatch
Alice Ackroyd

Inventor:
Albert H. Morton
by his Attorneys
Phillips Van Everen & Fish

UNITED STATES PATENT OFFICE.

ALBERT H. MORTON, OF LOWELL, MASSACHUSETTS.

SPINDLE-SUPPORT FOR SPINNING, TWISTING, AND LIKE MACHINES.

1,008,855. Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed February 20, 1911, Serial No. 609,550. Renewed October 6, 1911. Serial No. 653,260.

To all whom it may concern:

Be it known that I, ALBERT H. MORTON, a citizen of the United States, residing at Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Spindle-Supports for Spinning, Twisting, and the Like Machines; 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 spindle-supports for spinning twisting and the like machines, that is, to spindle-supports of the class comprising a bolster case, a bolster having a tapered interior to receive the tapered pintle of the spindle, and a step for the pintle, with the bolster and step in screw-threaded connection with each other for their relative adjustment and for the relative adjustment of the pintle and bolster.

The object of the present invention is to reorganize and improve the construction of such spindle-supports by simplifying the construction, rendering it cheaper in production, easy of adjustment and certain in holding its adjusted position.

To these ends the invention consists in the spindle-support hereinafter described and particularly defined in the claims.

In the accompanying drawing illustrating the preferred form of the invention, Figure 1 is a vertical section of a spindle and its supporting means embodying the invention in its preferred form, and Fig. 2 is a vertical section of the lower end of the bolster taken on the line 2—2, Fig. 1.

In the drawing the spindle rail 1 has a bolster case 2 in which the bolster 3 is held from rotation in the bolster case by a pin 6 which projects therefrom into a groove 7 in the interior of the bolster case. The lower end of the bolster is screwthreaded at 8 to receive the screwthreaded end 9 of the step. The head 10 of the step is knurled to enable the hand readily and securely to grasp the step for turning it in the lower end of the bolster. The bolster case, bolster, spindle and step are, or may be, except as hereinafter described, all as is common in this type of spindle-support. The step is secured in adjusted position to the bolster by slotting the lower end of the bolster at 11 and providing the step with a friction drum 12 which is adapted to engage a friction recess 13 in the lower end of the bolster. The friction drum 12 is made slightly larger than the friction recess 13, so that the portions of the bolster on opposite sides of the slots 11 frictionally nip on and hold the step in adjusted position. The upper end of the friction drum 12 is chamfered or curved, as shown in the drawing, so that it will enter the friction recess 13 easily. By screwing the step into the bolster, the position of the pintle in the bolster is adjusted to the correct running fit.

The advantages of the present invention are found in its simplicity of construction, there being no additional parts required nor any devices projecting through the bolster case into the interior thereof for engagement with the bolster or step in order to maintain them in correct relative adjustment; in its facility of manufacture, the step of the construction shown being adapted to be manufactured in large quantities at a minimum cost and the bolster requiring but the simplest operations to be performed thereon in order to adapt it to the embodiment of the invention; in the security of adjustment afforded by the construction, for it will be seen that the resilient ends of the bolster will nip and securely hold the step in whatever position the latter may occupy in it against all running strains and yet permit it to be turned therein under adjusting strains.

While the form of the invention illustrated in the drawings and described in the foregoing description constitutes the preferred form of the invention, because of its simplicity and efficiency and because of its facility of manufacture, it is to be understood that the invention may be embodied in other forms within the scope of the following claims:

1. A spindle-support for spinning and the like machines having, in combination, a bolster case and a bolster and step having screw-threaded connection for relative adjustment, the bolster having an elastic portion frictionally engaging a portion of the step to permit rotation of the bolster and step with relation to each other under adjusting strains and holding them against relative movement under running strains, substantially as described.

2. A spindle-support for spinning and the like machines having, in combination, a bol-

ster case and a bolster and step having screw-threaded connection for relative adjustment, the bolster having a friction recess in its end and the step having a friction drum received within the friction recess of the bolster and held in adjusted position by the friction between the recess and friction drum, substantially as described.

3. A spindle-support for spinning and the like machines having, in combination, a bolster case and a bolster and step having screw-threaded connection for relative adjustment, the bolster case being provided with a friction recess in its lower end and having slots therein extending upward from the lower end a sufficient distance to render the friction recess elastic, and the step being provided with a friction drum adapted to be rceceived within the friction recess and to be engaged thereby to hold the step in adjusted position in the bolster, substantially as described.

4. A spindle-support for spinning and the like machines having, in combination, a bolster case and a bolster and step having screw-threaded connection for relative adjustment, the step having a head adapted to be grasped by the hand so as to be adjusted in the bolster, and one of said members being slotted and thereby rendered resilient in order to grasp and hold the other member in adjusted position, substantially as described.

5. A spindle-support for spinning and the like machines having, in combination, a bolster case and a bolster and step having screw-threaded connection for relative adjustment, one of said members having an elastic portion frictionally engaging a portion of the other member to permit relative rotation of the bolster and step under adjusting strains and to hold them against relative movement under running strains, substantially as described.

ALBERT H. MORTON.

Witnesses:
HORACE VAN EVEREN,
GEORGE E. STEBBINS.