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Inventor:

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UNITED STATES PATENT OFFICE.

GEORGE W. FARNHAM, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO LOWELL MACHINE SHOP, OF LOWELL, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

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

1,047,187.

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To all whom it may concern:

Be it known that I, GEORGE W. FARNHAM, 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, (Case No. 1;) 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, and more particularly to spindle supports which comprise a bolster case, a bolster having a tapered bearing to receive the tapered pintle of the spindle, and a step for the pintle and means for connecting the step and the bolster for their relative adjustment.

The object of the present invention is to reorganize and improve the construction of such spindle supports and 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 the spindle and its supporting means; and Fig. 2 is an elevation of the lower end of the bolster and spindle with the step removed for the sake of clearness.

In the drawing the spindle rail 1 carries the bolster case 2 in which the bolster 3 is supported, being held from rotation in the bolster case by a pin 6 which projects therefrom into a groove 7 in the inside of the bolster case. The lower end of the bolster is provided with a reduced cylindrical portion 8 which is embraced by a cylindrical spring clip 9 secured to the cylindrical portion 8 of the bolster by the pin 10. (It is preferred to use the pin 10 to hold the spring clip on the portion 8 of the bolster because it conduces to security of adjustment of the step and bolster but it may be dispensed with without sacrificing the gist of the invention.) This spring clip 9 is provided with a helical guideway or slot 11 having at its lower end a longitudinal groove 12. The step 13 is provided with a bearing end 14

which projects into the lower end of the bolster and affords a bearing for the end of the spindle pintle. The step is provided with a knurled head by which it may be readily grasped by the hand. Between the head and the bearing portion of the step is a cylindrical clip engaging portion 15 provided with a projection 16 adapted to enter the guideway 11 in the spring clip. The cylindrical portion 15 of the step fits with some friction within the spring clip, and the resilience of the latter is sufficient to hold the step from turning in it. The step is assembled with the bolster by inserting it in the spring clip, the projection 16 first entering through the longitudinal portion 12 of the guideway, then the step is turned, the projection 16 moving up the guideway until the bearing portion of the step is brought into proper position inside the bolster to receive the thrust of the spindle pintle.

This invention is an improvement upon the invention described in the Morton Patent No. 988,128. In the construction illustrated in that patent the step and bolster are secured in adjusted position by means of a spring clip which engages both of those members and holds them in proper adjustment and position with relation to each other. In the present device the step is adjusted by turning it in the spring clip, the helical guideway advancing the step as it is turned in the spring clip. The resilience of the spring clip holds the step from movement with relation to it, and thus maintains the permanency of the adjustment. It is to be observed that the helical guideway taken in connection with the projection on the step forms a sort of bayonet joint for uniting the two and at the same time provides for longitudinal adjustment of the step within the bolster.

One of the advantages of the present construction resides in the fact that the bolster and step are not required to be provided with screw threads. This conduces to facility and cheapness of manufacture.

While the form of the invention illustrated in the drawing 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:

I claim—

1. A spindle support for spinning and the
5 like machines having, in combination, a
bolster case, a bolster and step, and laterally
acting frictional holding means for engaging
and connecting the bolster and step to
10 hold each of them from movement with relation
to the other, one part having a projection and
the other a cooperating guideway, substantially
as described.

2. A spindle support for spinning and the
15 like machines having, in combination, a
bolster case, a bolster and step, and laterally
acting frictional holding means for engaging
and connecting the bolster and step to
hold each of them from movement with relation
20 to the other, the one having an inclined
guideway and the other having a projection
engaging the guideway, substantially
as described.

3. A spindle support for spinning and the
like machines having, in combination, a
bolster case, a bolster and step, and a later- 25
ally acting frictional holding clip for engaging
and connecting the bolster and step
to hold each of them from movement with
relation to the other, said bolster and step
being connected by a bayonet joint having 30
a helical adjusting portion, substantially as
described.

4. A spindle support for spinning and the
like machines, having, in combination, a
bolster case, a bolster, a spring clip secured 35
to the bolster and provided with a helical
groove and a step provided with a projection
to enter the groove in the clip, substantially
as described.

GEORGE W. FARNHAM.

Witnesses:

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