(No Model.)

A. R. SHERMAN.

ELASTIC PACKING FOR SPINNING SPINDLE BOLSTERS.

No. 264,779. Patented Sept. 19, 1882.

Fig. 1.

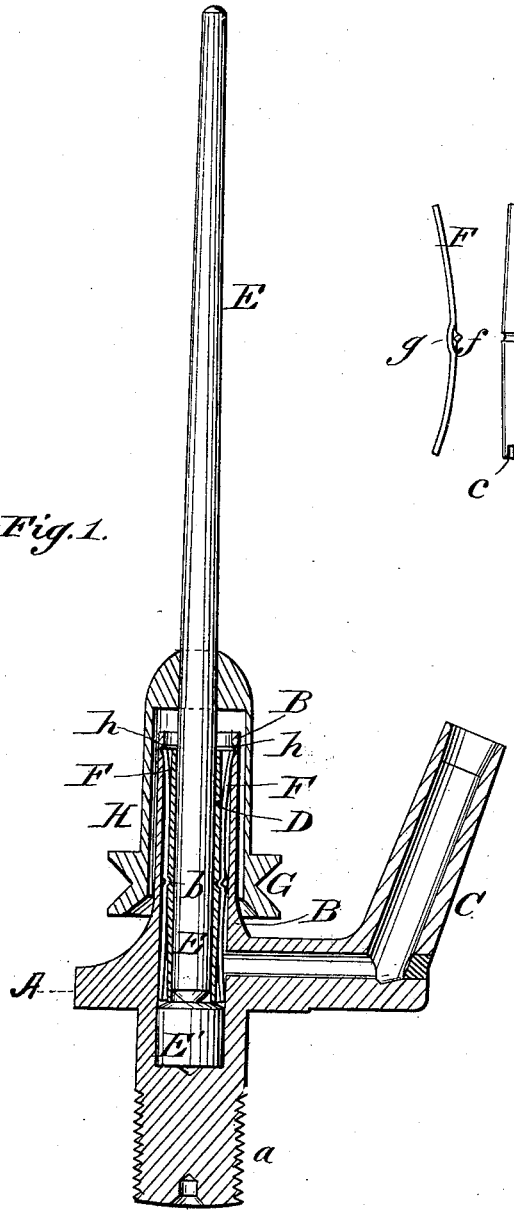
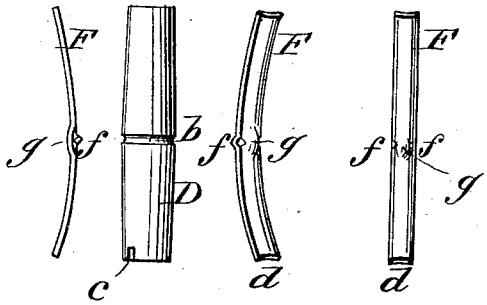


Fig. 2.



WITNESSES:

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ELASTIC PACKING FOR SPINNING-SPINDLE BOLSTERS.

SPECIFICATION forming part of Letters Patent No. 264,779, dated September 19, 1882.

Application filed April 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALBERT R. SHERMAN, of Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and Improved Elastic Packing for Spinning-Spindle Bolsters, of which the following is a specification.

The object of this invention is to prevent the vibration of the spindle and permit it, when revolving, to adjust itself to its true center of gravity; and, further, to provide a more elastic and durable packing than the wool packing commonly in use, which latter is liable to become charred or burned by the friction of the spindle in the bolster.

Figure 1 is a vertical sectional elevation, the spindle and step being in elevation and the connected parts in section. Fig. 2 represents elevations of the bolster and detached springs or packing.

Similar letters of reference indicate corresponding parts.

In the accompanying drawings, A represents the base of the bolster-support, externally screw-threaded, as shown at *a*, for screwing into the spindle-rail of a spinning-machine.

B represents the vertical tubular bolster case or support, and C is the oil-reservoir, communicating interiorly with the bolster-case B.

D is the bolster, set centrally within the case B, and having its lower end resting on the step E′ of the spindle E. This bolster D consists of a tube having a central annular groove, *b*, on its outside, whose use will be hereinafter explained, and in its lower edge one or more notches, *c*, to permit the passage of the lubricant to the interior of the said bolster D from the oil-reservoir C. Said bolster D is also made tapering on its outside from central groove, *b*, to both ends, as shown in Fig. 2, for the better accommodation and operation of the springs F F. Said springs F are preferably narrow strips of sheet steel, brass, or other metal, in sufficient number and of sufficient width to envelop the bolster D. Their inner faces are longitudinally grooved or concaved, as shown at *d*, and at their edges, at the center of their lengths, are inward-projecting burrs *f*, that, by engaging in the annular groove *b* of the bolster D, prevent said bolster D from moving upward. Centrally between these burrs *f* each spring F has a bulge, *g*, which bulges *g* constitute bearing-points for the bolster D against the bolster-case B when the band (not shown) running the spindle E is drawn tight on the sheave or whirl G.

The springs F are curved outward from centers to ends, as shown, their grooved or concave faces forming the outer line of the curve. When placed in position as shown in Fig. 1, the upper ends of said springs F reach nearly to an annular groove, *h*, in the bolster-case B, near its top, so that the bolster D may be withdrawn, if desired, without removing the said springs F, whose upper ends will engage in said groove *h* on any upward movement.

The spindle E is provided with a sleeve, H, on which is fixed the sheave or whirl G, over which is drawn the band that operates the device.

It will be seen that these springs F will yield laterally with equal freedom in all directions, and make it possible for the spindle E at all times, when carrying a bobbin, to revolve about its true center of gravity, so that all vibration of said spindle E is prevented.

What I claim as new and of my invention is—

1. The combination, with the spinning-spindle E, of the springs F, provided with burrs *f*, bolster-case B, having groove *h*, and bolster D, provided with annular burr-receiving groove *b*, substantially as herein shown and described, said burrs and groove preventing the bolster from moving upward, as set forth.

2. The springs F, constructed, substantially as herein shown and described, of curved and grooved strips of spring metal provided with burrs *f* and central bulges or bearing-points, *g*, as set forth.

3. The combination, with the bolster D and metal packing-springs F, of the bolster-case B, provided with annular groove *h*, substantially as herein shown and described, whereby said springs and bolster are retained in place, as set forth.

4. The combination, with the bolster-case B, spindle E, and springs F, of the bolster D, provided with central annular groove, *b*, and tapering from groove to ends, substantially as and for the purpose specified.

5. The combination, with a spinning-spindle, E, provided with sleeve and whirl H G and bolster-case and bolster B D, of the curved metal packing-springs F, provided with bearing-points *g*, substantially as and for the purpose described.

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