

(No Model.)

A. R. SHERMAN.
BEARING FOR SPINNING SPINDLES.

No. 260,711.

Patented July 4, 1882.

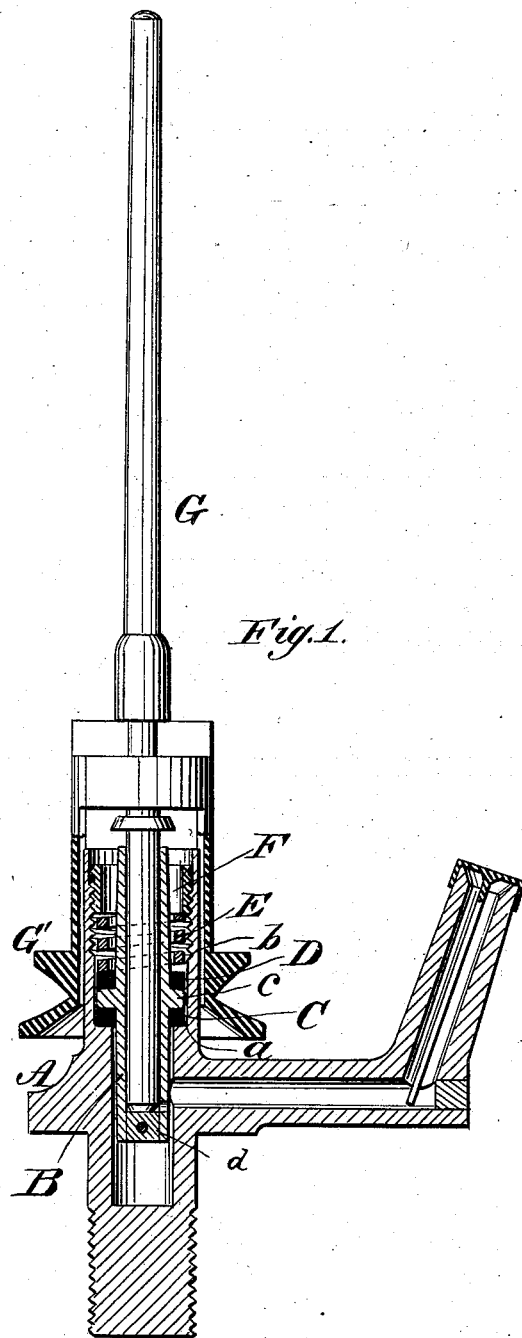


Fig. 1.

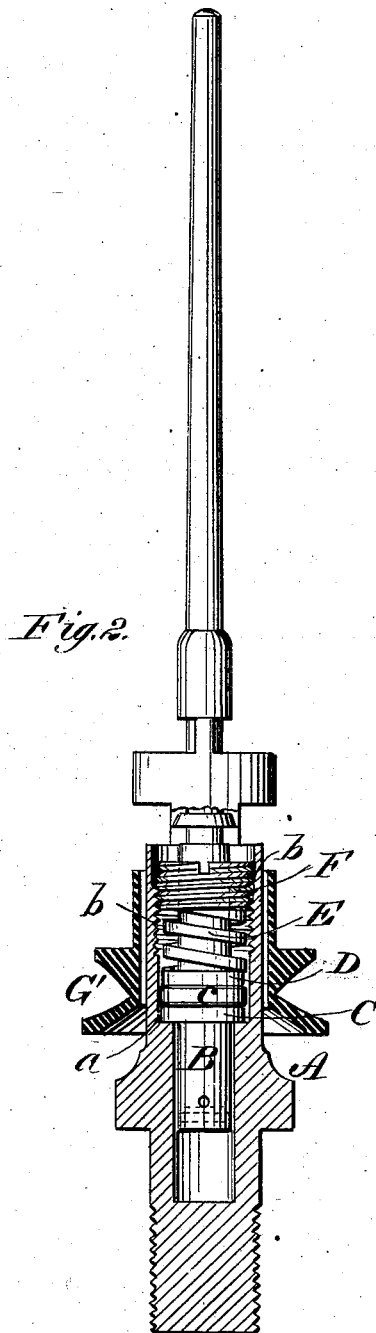


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT R. SHERMAN, OF PAWTUCKET, RHODE ISLAND.

BEARING FOR SPINNING-SPINDLES.

SPECIFICATION forming part of Letters Patent No. 260,711, dated July 4, 1882.

Application filed July 29, 1881. Renewed April 26, 1882. (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 useful Improvement in Bearings for Spinning-Spindles, of which the following is a specification.

The object of this invention is to cushion the bolster and step of a spinning-spindle so that the usual heavy jarring motion of said parts may be prevented and the spindle be run at a high rate of speed because of being free to oscillate or vibrate and conform itself to the uneven motion given by imperfect bobbins or caused by the pull of the yarn from the traveler.

The invention consists in the combination of the bolster provided with a collar, the elastic cushions on opposite sides of the said collar, and the thimble with the bolster-case provided with an annular shoulder, and the spindle stepped in the said bolster, all as herein-after fully described.

In the accompanying drawings, Figure 1 is an elevation, partially in vertical section, showing the bolster-case, bolster, and spindle constructed with my improvements. Fig. 2 is an elevation showing my improvement with bolster-case and whirl in section.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the bolster-case, provided with an interior annular shoulder, *a*, above which shoulder *a* said case A is internally screw-threaded, as shown at *b*.

B represents the bolster, provided at its lower end with the block *d*, on which the lower end of the spindle G is stepped, and about its center with a flange or collar, *c*, by means of which it is supported on the bolster-case shoulder *a*, said collar *c* being somewhat rounded on its edges to permit the rocking of the bolster. To prevent, however, the contact and wear of hard unyielding surfaces, and to give to the bolster B the desired freedom of lateral movement, an elastic washer or cushion, C, of leather or other suitable material is placed on the shoul-

der *a* to receive the collar *c*. For the same reason an auxiliary washer or cushion, D, is set on the upper face of the collar *c*, and above and in contact with said cushion D is a spiral spring, E.

To prevent the excessive movement of the bolster B, a thimble, F, is screwed into the case A down upon the spring E, whereby the tension of said spring E, and thereby the compression and consequent elasticity of the cushions C D, may be regulated or adjusted, according to the character of the work to which the spindle G, provided with a whirl, G', whose center is exactly opposite the center of the collar *c*, is applied, and by means of the adjustable thimble F and spring E the wear on the cushions C D can be compensated.

The spindle, being stepped in the yielding or oscillating bolster, is permitted to vibrate freely with the said bolster, so that it can be run more easily, steadily, and at a higher rate of speed, the oscillating bolster also giving the spindle freedom to rock slightly for the purpose of maintaining its center of gravity when carrying an unevenly-wound bobbin. The use of the spring E is not indispensable in all cases, as the cushions C D may be made sufficiently elastic for the intended purposes and the thimble F be screwed down on the cushion D, thus compressing the collar *c* between the cushions C D in such a manner as to allow sufficient play to the said bolster B.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the bolster B, provided with the collar *c*, the elastic cushions C D on opposite sides of the said collar, and the thimble F with the bolster-case A, provided with the annular shoulder *a*, and the spindle G, stepped in the said bolster, whereby the jarring motion is prevented and the spindle adapted to be run at a higher rate of speed, substantially as set forth.

ALBERT R. SHERMAN.

Witnesses:

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