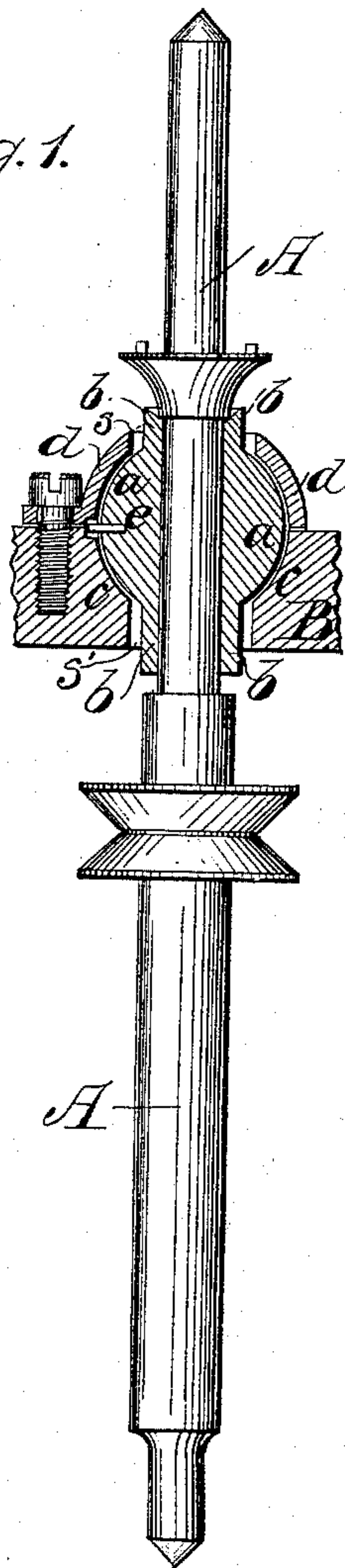


B. H. JENKS.
SPINDLE BEARING.

No. 66,091.

Patented June 25, 1867.

Fig. 1.



Witnesses:

R. S. Campbell
Edw. Schaffer

Inventor:

Barton H. Jenks
by his agent
Mason Sewick Lawrence

United States Patent Office.

BARTON H. JENKS, OF BRIDESBURG, PENNSYLVANIA.

Letters Patent No. 66,091, dated June 25, 1867.

IMPROVEMENT IN SPINDLE-BEARINGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, BARTON H. JENKS, of Bridesburg, in the county of Philadelphia, and State of Pennsylvania, have invented a new and improved Self-Adjusting Support for the Spindles of Spinning Machinery; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical section of a self-adjusting bolster, having a spindle through it.

This invention relates to a new and useful improvement in supporting the spindles of spindle-frames, speeders, twistors, and other like machinery requiring spindles to run at a very high rate of speed; the object of which improvement is to effectually prevent spindles from binding or working hard in their bearings in consequence of the expansion and contraction of their supporting frames, or the settling of the floors of factories, or from other circumstances which affect the positions of the bearings of spindles after they have been adjusted to run true.

The nature of my invention consists in the manner shown of constructing and fitting the spherical part of the spindle-bolster to the spindle-rail, whereby weakening of the rail to as great an extent as heretofore is avoided, and whereby, also, a lighter rail possessing sufficient strength may be adopted; and whereby, also, increased simplicity is attained and great convenience for manipulating the bolsters and spindles afforded.

To enable others skilled in the art to make and use my invention, I will describe the same more minutely with reference to the drawings.

In the accompanying drawings, fig. 1, I have represented a bolster which is adapted for sustaining and guiding a spindle, A, at a point above its step-bearing, and which will adjust itself to any changes or untruthness of the frame of the machine. This bolster is of a spherical form, with tubular extensions formed on it for extending or increasing its length. The spherical enlargement *a*, with its extensions *b b*, is drilled out so as to form a passage for the spindle A, and if found desirable the bore of this bolster may be recessed and provided with cloth for supplying oil to the spindle and preventing the escape of oil below the lower end of the bolster. The upper tubular extension *b* may be constructed with an oil-supply cup of any of the well-known or most improved forms, for supplying oil to the bolster and its spindle. The spherical portion *a* of the bolster, or what I shall term the ball of the bolster, is neatly fitted into a half socket, *c*, which is made in the upper surface of the supporting rail B, and this ball is held down in place by means of a cap, *d*, which is suitably secured to the rail B so that it can be removed from the latter at pleasure. To prevent the bolster from rotating with its spindle A, a small stud, *e*, projects from it and enters a recess formed in the cap and rail, as shown in fig. 1. This recess will allow a rocking movement of the bolster, but prevent it from being turned about its axis. The tubular extensions *b b* pass through holes *s s*, which are made through the cap and rail of sufficient diameter to allow a free "ball-and-socket" movement of the bolster.

It will be seen that I make a true semi-spherical seat in the upper part of the rail, and that I use a cap, which also is a true semi-sphere, the top of the rail and the base of the cap being the central division of the hollow sphere formed by the seat in the rail and the seat in the cap. Thus I avoid the difficulties above referred to, which difficulties are in a great measure experienced with the spindle-bolsters of John C. Whittin, patented June 7, 1864, and of Fethney, patented in England in 1861, and numbered 2,777.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the bolster-cap and rail, arranged as shown and described, and constructed and operating as set forth.

BARTON H. JENKS.

Witnesses:

WILLIAM DOBSON,
OMAR J. KINSLEY.