

A. S. HOPKINS.  
Spindle-Bolsters.

No. 156,668.

Patented Nov. 10, 1874.

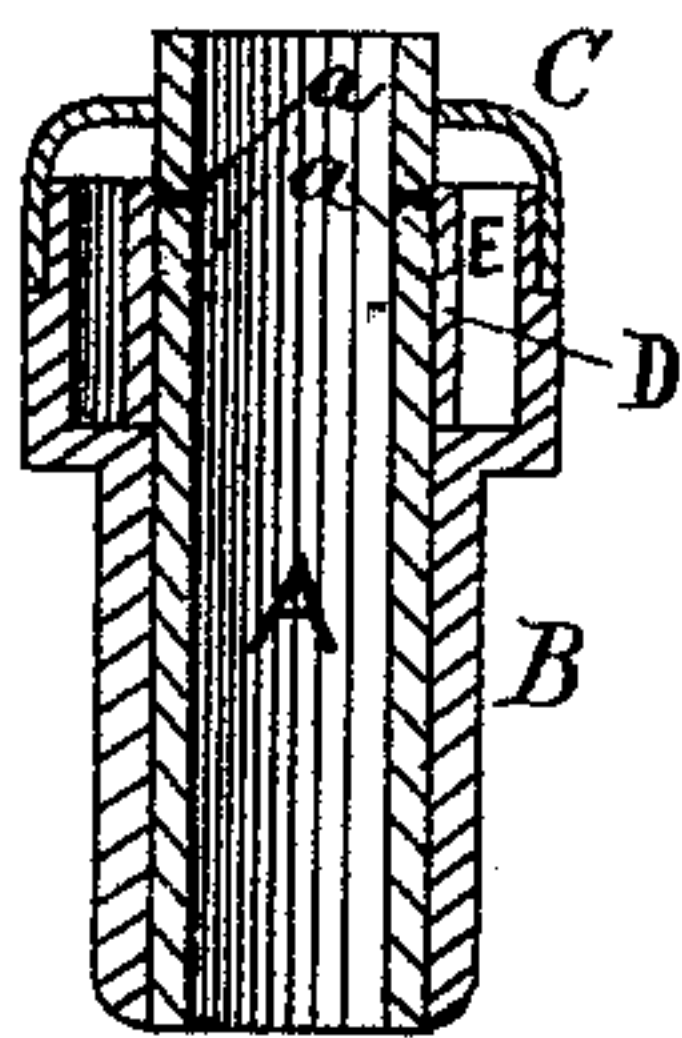


Fig. 1

Witnesses:

*Henry E. Metcalf,*  
*F. F. Burlock*

Inventor:

*Addison S. Hopkins,*

# UNITED STATES PATENT OFFICE.

ADDISON S. HOPKINS, OF PASCOAG, RHODE ISLAND.

## IMPROVEMENT IN SPINDLE-BOLSTERS.

Specification forming part of Letters Patent No. **156,668**, dated November 10, 1874; application filed August 12, 1874.

*To all whom it may concern:*

Be it known that I, ADDISON S. HOPKINS, of Pascoag, in the county of Providence, State of Rhode Island, have invented a certain new and useful Improvement in Spindle-Bolsters, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a vertical longitudinal section showing my improvement.

My invention relates more especially to that class of spindle-bolsters which are self-oiling; and consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a simpler, cheaper, and more effective device of this character is produced than is now in common use.

In the drawing, B is the body of the bolster; A, the box or bushing through which the spindle passes; C, the cap; E, the oil-cup; and *a a* oil-holes or perforations leading from the oil-cup to the spindle-opening. Within the oil-cup, and entirely encircling the bushing A, there is a loosely-fitting thin metallic ring, D. The object of this ring is to assist in conveying the oil from the cup to the apertures *a a*, and at the same time prevent it from passing too freely through them to the spindle, which it does, by capillary attraction, in a manner which will be readily obvious to all conversant with such matters.

In the lubrication of spindle-bolsters it is especially desirable that the oil should be prevented from running down the spindle below the bolster; for that reason no more oil should be used than is actually required for lubricating-purposes. I have found that when the apertures *a a* are located below the surface of the oil in the cup E, although the oil will be largely withheld by means of the ring, more is liable to be delivered to the spindle than is absolutely necessary. I therefore construct the apertures near the top of the ring, and, in use, do not fill the cup quite up to the aperture. The ring also prevents the passage of dirt and other impurities from the cup to the spindle, while the cap C prevents the entrance of dirt and cotton fibers into the cup.

It will be obvious that the ring and a cup provided with an oil-aperture are adapted to spindle-steps as well as bolsters, and may be used to advantage in journal-boxes and many other places where it is desirable to control and economize the lubricating-oil. I therefore do not confine myself to the lubricator described in connection with spindle-bolsters; but

What I do claim is—

In a spindle-bolster, the thin metallic ring D, arranged between the oil E and bearing A, having the openings *a a* near its top for the passage of the oil, as set forth.

ADDISON S. HOPKINS.

Witnesses:

C. A. SHAW,  
H. E. METCALF.