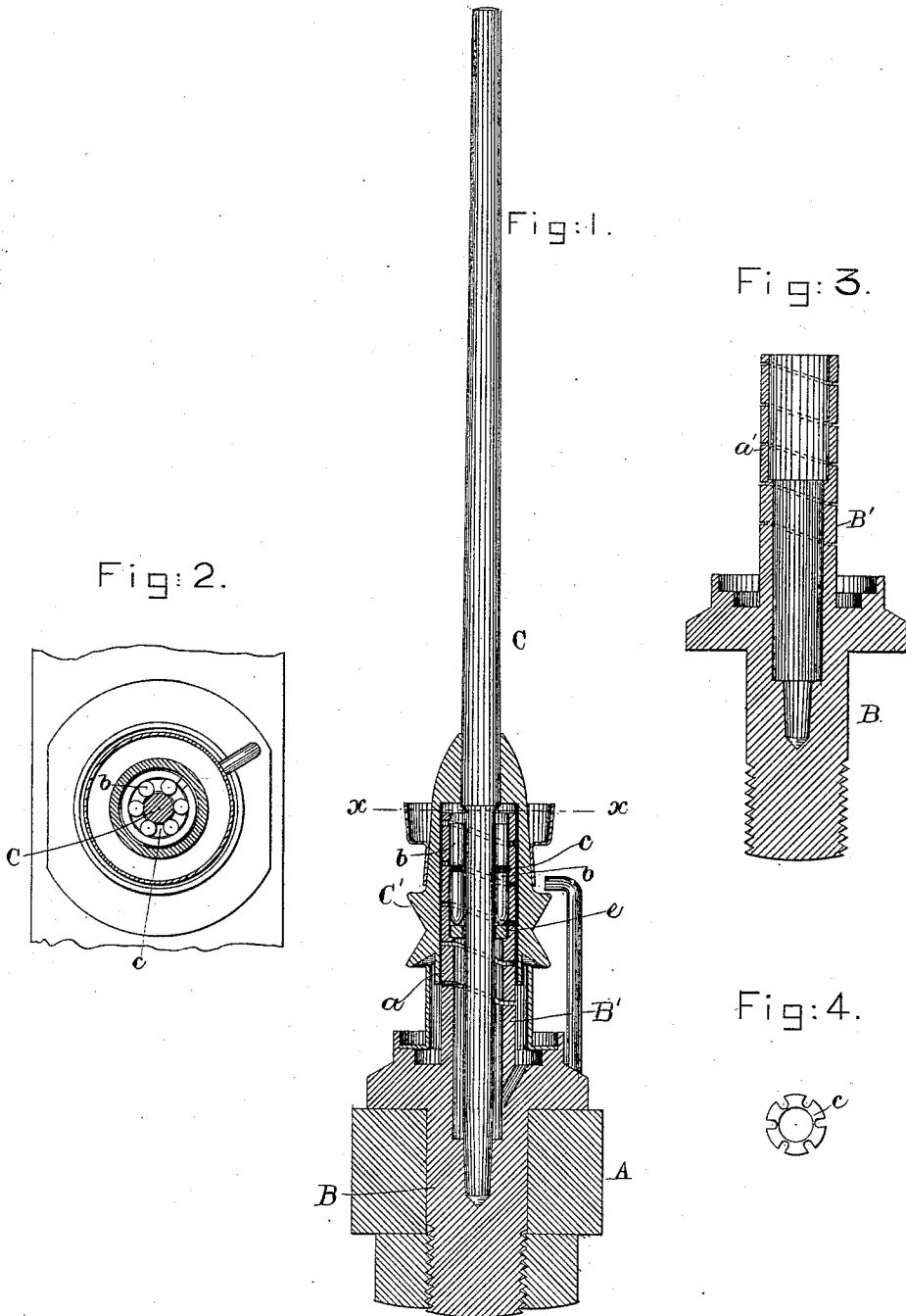


(No Model.)

W. F. DRAPER.  
SUPPORT FOR SPINNING SPINDLES.

No. 391,461.

Patented Oct. 23, 1888.



Witnesses:

Edgar A. Godkin  
Frederick L. Emery

Inventor:

William F. Draper,  
by Lemay & Gregory, attys.

# UNITED STATES PATENT OFFICE.

WILLIAM F. DRAPER, OF HOPEDALE, MASSACHUSETTS.

## SUPPORT FOR SPINNING-SPINDLES.

SPECIFICATION forming part of Letters Patent No. 391,461, dated October 23, 1888.

Application filed March 9, 1888. Serial No. 266,731. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM F. DRAPER, of Hopedale, county of Worcester, and State of Massachusetts, have invented an Improvement in Supports for Spinning-Spindles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a spindle-bearing which shall yield to the vibration of the spindle and yet present between the spindle and its surrounding case or holder rolling-surfaces.

The invention herein to be described is an improvement upon that described in the application, Serial No. 259,617, filed on the 3d day of January, 1888.

In this my present invention the bolster case or holder, in which is mounted the bolster, is slotted or scored, so as to enable it to spring or yield to the strain of the spindle in running, the said case or holder so weakened by slots or scoring receiving within it a bolster containing rolling-surfaces, the said case or holder, with the rolling-surfaces within it, being surrounded by the sleeve-whirl attached to the spindle.

My invention consists, essentially, in the combination, with a bolster case or support weakened by slotting or scoring, substantially as will be described, and a sleeve-whirl, of a bolster-bearing containing rolling-surfaces, the said rolling-surfaces being located within and so as to be inclosed by the sleeve-whirl.

Figure 1 in section represents a bolster-bearing containing my invention, it being set upon a rail, said figure also showing in elevation a spindle, the sleeve of the whirl of the spindle being in section. Fig. 2 is a plan view of the spindle and bearing shown in Fig. 1 below the dotted line *x*, and Fig. 3 shows a modified form of bolster case or support.

The rail A receives within it the shank B, a bolster case or support having extended up-

wardly from it a sleeve, as B', which is weakened and thereby made elastic either by slotting the same through, as shown in Fig. 1, by a spiral cut, as *a*, or by scoring the same and not cutting it entirely through, as at *a'* in Fig. 3. This bolster case or holder is not herein claimed, broadly. The spindle C is provided in usual manner with a sleeve-whirl, C'. The pintle or lower end of the spindle below the attachment to it of the sleeve-whirl is extended into and through a bolster-bearing consisting, essentially, of a series of rolling-surfaces, as *b*, which are herein shown as confined in place by a spider, *c*, (see Fig. 4,) the periphery of the pintle of the spindle bearing against the said rolls, while the rolls in turn bear against the inner wall of the bolster case or holder, as best represented in Fig. 1.

The sleeve-like portion *a'* of the bolster case or holder, as shown in Fig. 1, is shouldered to form a support for an annulus or ring, *e*, upon which the lower ends of the rolling-surfaces *b* rest and turn as they are set in motion by the action of the spindle against them.

The lower extremity of the spindle is shown as entering a cavity constituting a rigid or unyielding step.

I claim—

A bolster case or support having a sleeve weakened by slotting or scoring, substantially as described, and a sleeve-whirl spindle, combined with a bolster having rolling-surfaces and interposed between the pintle of the spindle and the interior of the said weakened case or holder, said bolster being located also within the sleeve-whirl, to operate substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. F. DRAPER.

Witnesses:

E. D. BANCROFT,  
H. F. SEARLES.