

(No Model.)

A. WOOD.

SUPPORT FOR SPINNING SPINDLES.

No. 383,091.

Patented May 15, 1888.

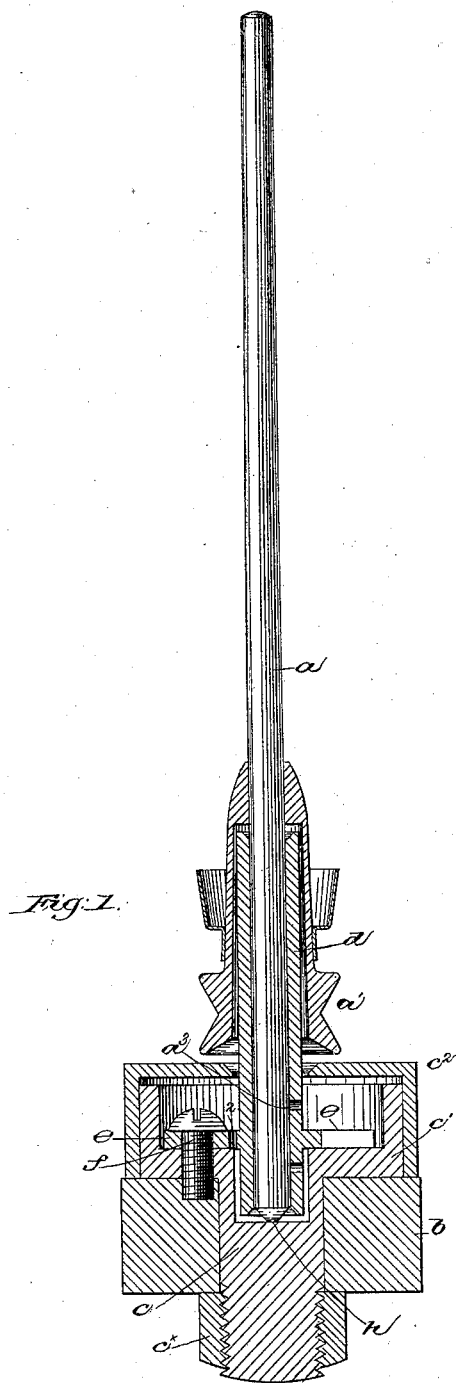


Fig. 1.

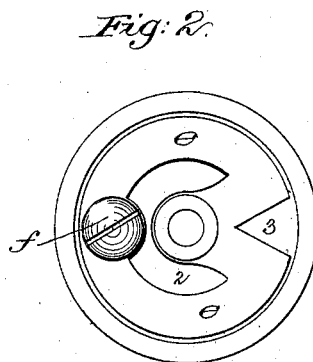


Fig. 2.

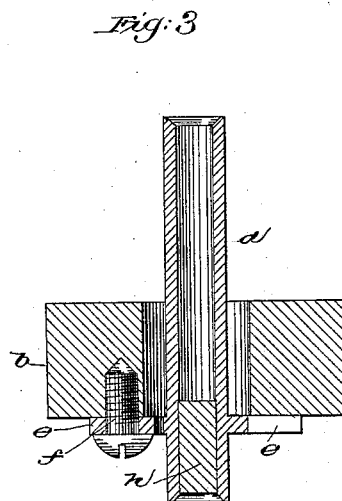


Fig. 3.

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UNITED STATES PATENT OFFICE.

AURIN WOOD, OF WORCESTER, ASSIGNOR TO THE SAWYER SPINDLE COMPANY, OF BOSTON, MASSACHUSETTS.

SUPPORT FOR SPINNING-SPINDLES.

SPECIFICATION forming part of Letters Patent No. 383,091, dated May 15, 1888.

Application filed June 29, 1886. Serial No. 296,591. (No model.)

To all whom it may concern:

Be it known that I, AURIN WOOD, of Worcester, county of Worcester, and State of Massachusetts, have invented an Improvement in
5 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.

10 This invention has for its object the production of an improved spindle-support capable of yielding to a limited extent to the requirements of the foot of the spindle as the latter gyrates or shakes when unequally loaded and
15 rotated rapidly, the employment of elastic packing being dispensed with.

My invention is shown as embodied in that class of spindle-supports wherein a bolster made as a stiff tube is extended up into the
20 sleeve-whirl and constitutes the only lateral bearing for the spring.

In accordance with my invention a stiff tube interposed directly between the pintle of the spindle and the sleeve-whirl and constituting
25 a yielding bolster has attached to or forming part of it a spring-arm constituting a foot, the said plate being secured to a base, which may either be a block resting upon the bolster-rail or the bolster-rail itself, the arm permitting
30 the bolster to yield or move to counteract injurious jar or vibration of the spindle.

Figure 1 in elevation shows a sleeve-whirl spindle supported in accordance with my invention, the spindle and the screw being in
35 elevation, all the other parts being in section; Fig. 2, a top view of Fig. 1 with the spindle omitted, the cover-plate shown in Fig. 1 being also omitted; and Fig. 3 illustrates a modified form of my invention.

40 The spindle *a*, its attached sleeve-whirl *a'*, and the bolster-rail *b* are all of usual construction.

In Fig. 1 the rail *b* receives the shank *c* of a base, *c'*, which thus rests upon the rail at its
45 upper side, the base being held in position by means of a nut, *c''*. The yielding bolster to receive the pintle of the spindle constitutes the only lateral support therefor, it being interposed directly between the pintle and the
50 sleeve-whirl, and not being connected to a rigid supporting-tube to thus take up room in

the sleeve-whirl, and is composed of a solid substantially rigid sleeve, *d*, in which the pintle has a running fit, the said sleeve having at or near its lower end a connected spring-arm, *e*,
55 the shape of which is shown clearly in Fig. 2, the said spring-arm being fixed with relation to the base or rail by a screw, *f*, which, as shown in Figs. 1 and 2, is extended through a hole in the base *c'* and enters the rail *b*; but in
60 the modification, Fig. 3, the said screw enters a hole in the rail, which thus constitutes the base or support for the bolster, the base *c'* (shown in Fig. 1) being omitted from Fig. 3. In Fig. 3 the spring-arm *e*, shaped as shown in
65 Fig. 2, is placed against the under side of the rail, which constitutes the base to which the arm is attached.

The bolster in Fig. 3 is shown as extended up through the usual hole in the rail, and the
70 screw *f* enters the lower side of the rail.

In practice I prefer to employ the base *c'*, (shown in Fig. 1,) for the reason that such a base may be made to constitute an oil-well, and when the said base *c'* is employed I shall
75 provide a cover, as *c''*, to prevent dust, &c., from entering the well.

I do not desire to limit my invention to the exact shape of the spring-arm *e*, as its shape
80 may be variously modified without departing from my invention. The shape shown for the arm in Figs. 1 and 2 is a desirable one, because of compactness, the arm being quite long, as will readily be seen by inspection of Fig. 2, wherein 2 and 3 represent open spaces. The
85 yielding bolster extended upward into the sleeve-whirl is the only tubular device or standard which enters the whirl, and hence the whirl may be made much smaller in diameter than were the bolster secured to and made an integral
90 part of a rigid supporting-tube extended into the whirl as far as the bolster extends into the whirl, which has been done. I am also aware that a bolster-tube has been provided with a rigid arm, which, extended therefrom,
95 has been secured to a yielding or spring stud.

I consider that a bolster provided with a yielding or spring arm is more serviceable for use and more economical to manufacture than either of the classes of bolster-bearing just
100 referred to.

The step of the spindle is designated by the

letter *h*, and may be of any usual shape or construction.

A bolster having a substantially rigid or solid tube and attached spring arm or plate, by which to secure the said sleeve or tube on or with relation to the bolster-rail, constitutes a bolster-bearing which is free to move above the rail to a limited extent in substantially every direction with the spindle as the latter gyrates, owing to unequal loading.

I do not herein broadly claim a sleeve or tube having an enlarged foot adapted to be pivoted upon or with relation to the rail, as that forms the subject-matter of another application filed by me, Serial No. 205,874.

I claim—

A sleeve-whirl spindle, combined with a yielding bolster consisting of a solid or rigid

sleeve interposed directly between the sleeve-whirl and the pintle of the spindle and constituting the only lateral bearing for the spindle and surrounded only by the sleeve-whirl, and of a spring-arm attached to or forming part of the said sleeve, the said arm being adapted to be attached to a suitable base, thus permitting the said sleeve constituting the bearing portion of the bolster to move to a limited extent in substantially every direction with the spindle, substantially as described.

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

AURIN WOOD.

Witnesses:

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