No. 676,141. Patented June 11, 1901.

H. LEON.

SPINDLE SUPPORT.

(Application filed Mar. 22, 1901.)

(No Model.)

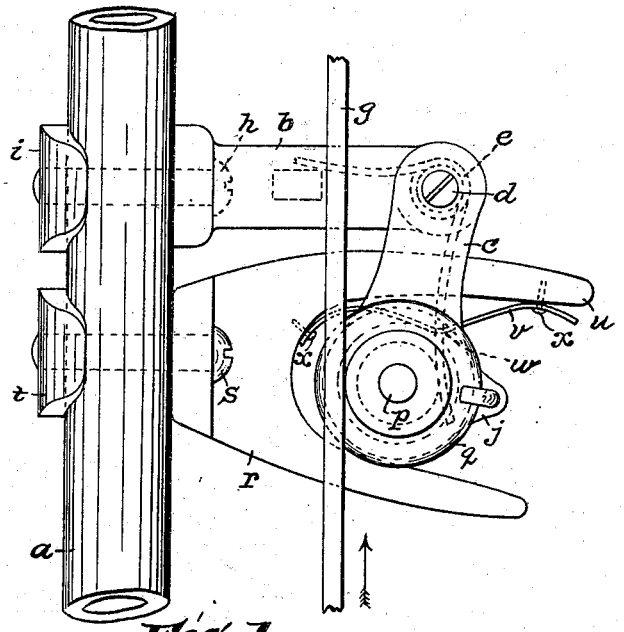

Fig. 1.

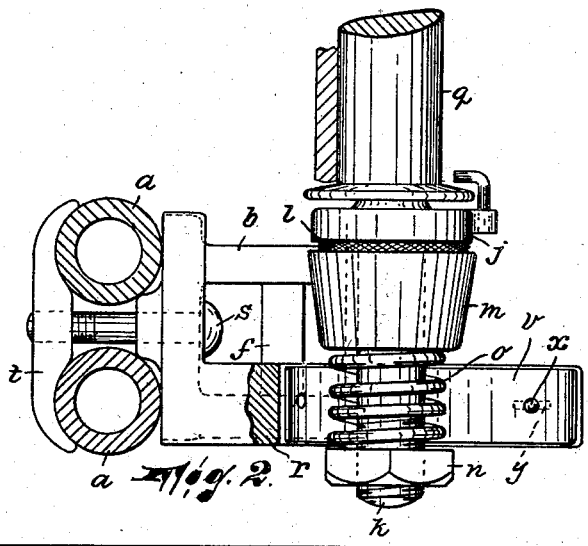

Fig. 2.

WITNESSES:

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HENRY LEON, OF BRADFORD, PENNSYLVANIA.

SPINDLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 676,141, dated June 11, 1901.

Application filed March 22, 1901. Serial No. 52,345. (No model.)

To all whom it may concern:

Be it known that I, HENRY LEON, a citizen of the United States, residing in Bradford, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Spindle-Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention consists in an attachment for spinning-frames, the same being adapted to be particularly used in connection with spindles which are mounted in flexible two-part brackets—for instance, as shown in United States Letters Patent to John E. Atwood, No. 302,814, dated July 29, 1884.

The object of the invention is to provide means auxiliary to the spring ordinarily used in the flexible support of the kind above indicated for more perfectly insuring proper contact of the spindle-whirl with the driving-belt.

A further object is to so construct this means that it may be used as a detent to maintain the spindle-whirl out of contact with the driving-belt when the spindle is idle.

The invention will be found fully illustrated in the accompanying drawings, wherein corresponding letters of reference indicate like parts, and wherein—

Figure 1 is a top plan view of my invention as applied to a structure substantially like that of the Atwood patent above referred to; and Fig. 2 is a side view of substantially what is shown in Fig. 1, certain parts being removed and others shown in section.

In said drawings, *a* designates a pair of parallel tubular rails which, being part of the frame of the spinning-machine, constitute the support for the series of spindles thereof.

b and *c* denote the members of the two-part bracket in which the spindle is mounted, the same being disposed substantially at right angles to each other and pivotally connected by a pin *d*. Around the pin *d* is coiled a spring *e*, one of whose ends engages a portion *f* of the member *b* of the bracket and the other of whose ends acts to force the spindle inwardly against the driving-belt *g*. The member *b* is secured to the spindle-rails by means of a threaded pin *h*, which extends between the spindle-rails *a* and is adapted to bind said member, the rails, and a clamp *i* together.

The spindle-bolster is of a well-known pattern, the same consisting of a head portion *j* and a downwardly-extending threaded portion *k*, the portion *j* resting on an elastic washer *l*, which is interposed between it and the tubular extremity *m* of the member *c* of the bracket, and the portion *k* penetrating said tubular extremity. The bolster is secured flexibly in the bracket by a nut *n* and a spiral spring *o*, which latter is coiled about the portion *k* of the bolster and is interposed between the member *c* of the bracket and the nut, which is screwed onto the portion *k*. In the bolster is stepped the lower end of the spindle *p*, carrying the usual whirl *q*.

r denotes another bracket, which I preferably secure to the spindle-rails substantially in the same manner as the member *b* of the spindle-supporting bracket is secured thereto—*i. e.*, by a pin *s* and a clamp *t*. The bifurcated portion of this bracket receives the threaded portion *k* of the bolster, and one of its arms, preferably the arm *u*, carries on its inner face a plate-spring *v*. This plate-spring is formed with an angular bend *w*, and it is preferably secured to the arm *u* by means of pins *x*. If desired, and as shown at *y* in dotted lines in Fig. 2, a slot may be provided in the plate-spring for the reception of one of the pins, so as to augment the resiliency of the spring.

The shape and arrangement of the spring are such that it bears against the spiral spring *o* and so tends to coact with the spring connecting the members of the bracket to force the spindle-whirl into perfect contact with the driving-belt. At the same time it is adapted as a stop or detent to maintain the spindle-whirl out of contact with the driving-belt, this being effected by turning the member *c* of the bracket on its axis *d* until the spring *o* is forced past the bend *w* in the plate-spring *v*.

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

The combination, with a spindle-driving device and a spindle-rail, of a spindle-support movable substantially toward said driving device, a bracket, sustaining means for said support and the bracket, said means being mounted on the rail and the one being adjustable toward the other, and a plate-spring carried by said bracket and adapted to engage the same on the side thereof relatively away from the driving device, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of March, 1901.

HENRY LEON.

Witnesses:
ALFRED GARTNER,
ROBERT J. POLLITT.