(No Model.)

A. SCHEID.

SPINDLE.

No. 576,059. Patented Jan. 26, 1897.

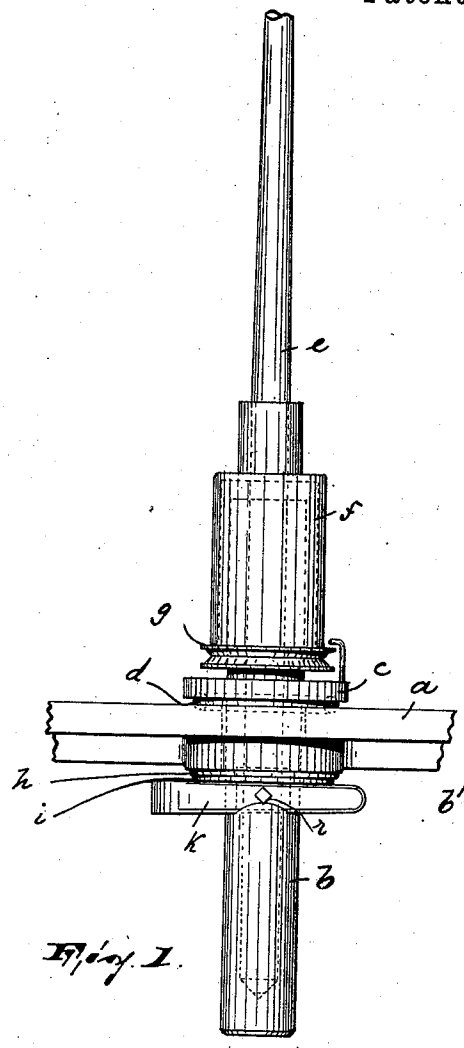

Fig. 1.

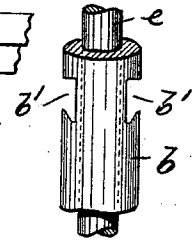

Fig. 3.

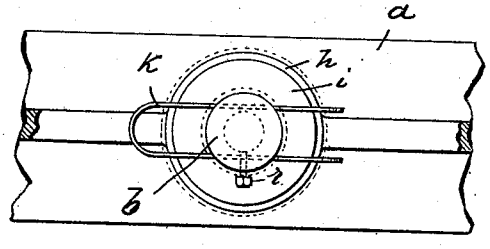

Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ADAM SCHEID, OF HARRISON, NEW JERSEY, ASSIGNOR TO THE SAWYER SPINDLE COMPANY, OF PORTLAND, MAINE.

SPINDLE.

SPECIFICATION forming part of Letters Patent No. 576,059, dated January 26, 1897.

Application filed November 17, 1896. Serial No. 612,518. (No model.)

To all whom it may concern:

Be it known that I, ADAM SCHEID, a citizen of the United States, residing in Harrison, Hudson county, and State of New Jersey, have invented certain new and useful Improvements in Spindles; 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.

My present invention relates to flexibly-mounted spinning-spindles; and its object is to provide simple means for adjusting the flexibility of the spindle and retaining the supporting-tube in the rail.

The invention consists in the improved spindle-support, its adjusting and locking mechanism, and in the combination and arrangement of the various parts thereof, substantially as will be hereinafter more fully described, and finally embodied in the claim.

In the accompanying drawings, Figure 1 is a front elevation of a spindle-rail, in which is mounted a spindle-supporting tube provided with my improvements; Fig. 2, an underneath view of Fig. 1, and Fig. 3 a detail side elevation of the supporting-tube.

In said drawings, *a* represents the spindle-rail, in which is loosely mounted the tube *b*, provided above the rail with an annular flange *c*, resting on the elastic ring or washer *d*. The tube *d* is provided at about its central portion and below the rail with two parallel grooves or recesses *b'*, having their lower sides upwardly tapering. Said recesses are adapted to be engaged by the tong-shaped key or forelock *k*, having its lower outer edges upwardly tapering to correspond to the taper of the grooves or recesses *b'*, the shanks of the key *k* being wedge-shaped, as clearly shown in the drawings. The horizontal top edges of said key bear against a washer *i* of suitable metal, such as steel, which in turn bears against an elastic washer *h*, placed between the metal washer and the under side of the rail. The key *k* can be provided with a tightening-screw *r*, if so desired.

The flexibility of the spindle is obtained by means of the upper and lower elastic washers *d* and *h*, respectively, and can be regulated by adjusting the tong-shaped key *k* within the grooves *b'* of the tube, which key also serves as locking mechanism for said tube and prevents its withdrawal.

What I claim is—

The combination with the spindle-rail, of a tube—containing step and bolster bearing—penetrating said rail, an annular flange projecting from said tube and above the rail, an elastic washer between said flange and the rail, an elastic washer surrounding the tube and bearing against the under side of the rail, the tube being provided with grooves and recesses, a tong-shaped key adapted to engage said recesses, a metallic washer between said key and the elastic washer, a tightening-screw in said key, and a whirl-driven spindle in the tube, all said parts, substantially as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of October, 1896.

ADAM SCHEID.

Witnesses:
ALFRED GARTNER,
WM. D. BELL.