(No Model.)

A. SCHEID.

SPINDLE SUPPORT.

No. 555,129. Patented Feb. 25, 1896.

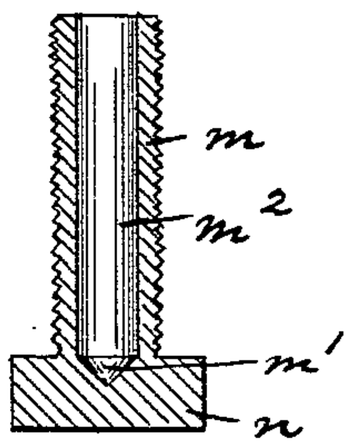

Fig. 2.

Fig. 1.

Fig. 3.

WITNESSES:

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SPINDLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 555,129, dated February 25, 1896.

Application filed November 29, 1895. Serial No. 570,402. (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 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.

My said invention pertains to what are known as "self-adjusting spindles." Its object is to provide a support for spindles of simple construction, flexibly mounted and easily adjusted on the spindle-rail, and having the step and bolster bearing separate, and yet in firm connection with each other when mounted on the said spindle-rail.

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

Referring to the accompanying drawings, Figure 1 is a central vertical section of a mounted spindle embodying my invention; Fig. 2, a detail view of another form of adjustable step which can be used in connection with my support, and Fig. 3 a detail view of a modification of my improvement.

In said drawings, *a* represents the spindle-rail provided with the vertically-arranged circular bore or opening *b*. The bolster *c* is provided at its lower end with a flange *g* having in its under side an annular groove *h*, (preferably rectangular in cross-section,) in which is arranged the ring *i* (preferably circular in cross-section) and made of rubber, leather, or any other suitable flexible material. Said ring projects below the surface of the flange *g* and rests on the top of the spindle-rail and around the opening *b*.

The lower portion of the bolster is provided with a screw-threaded bore or socket *k*, adapted to be engaged by the screw-threaded portion *m* of the bolt *n*, which latter passes through the opening *b* and is of smaller diameter than the diameter of the same.

A washer *p* made of rubber or any other flexible material is placed between the head of the bolt and the under side of the rail, as in Fig. 3, or if preferred between the rail and a metallic washer *o* carried by the head of the bolt, as in Fig. 1.

The spindle *d* having the sleeve *e* and belt-pulley *f* is arranged and adapted to rotate in the bolster and has its step-bearing *m'* in the bushing *q* removably arranged in the upper end of the threaded portion *m* of bolt *n*. A pin *r* is arranged in the flange *g* and engages a socket in the spindle-rail *a* to prevent rotation, as will be manifest.

In Fig. 2 of the drawings the threaded portion *m* of the bolt *n* is provided with a vertical opening m^2, terminating in the step-bearing *m'*, and thus gives a larger bearing-surface to the spindle *d*. Substantially the same result can be obtained by providing the bolster *c* with a shank or extension *c'*, projecting downward into the opening *b* of the spindle-rail, in which case the threaded portion *m* of the bolt *n* engages the internally-threaded opening *k'* in the said shank or extension *c'*, as clearly shown in Fig. 3.

By tightening or loosening the bolt *n* the flexibility of the spindle and its carrying-bolster can be decreased or increased, the rubber ring having sufficient play in the "rectangular" annular groove *h*.

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

1. The combination with the spindle-rail, of a bolster provided in its lower end with an internally-threaded hole, a flange on the lower end of said bolster, a flexible packing between the under side of said flange and the top of the spindle-rail, a screw-threaded bolt, having the step-bearing for the spindle, penetrating the rail and vertically adjustable and secured in the internally-threaded hole of said bolster, and of the spindle supported by said bolster and bolt, all said parts, substantially as and for the purposes described.

2. The combination with the spindle-rail, of a bolster provided in its lower end with

an internally-threaded hole, a flange on the lower end of said bolster, a flexible packing between the under side of said flange and the top of spindle-rail, a screw-threaded headed bolt, having the step-bearing for the spindle, penetrating the rail and vertically adjustable and secured in the internally-threaded hole of said bolster, the spindle supported by said bolster and bolt, and a flexible packing between the head of the bolt and the under side of the spindle-rail, all said parts, substantially as and for the purposes described.

3. The combination with the spindle-rail, of a bolster, a flange on the lower end of the bolster and provided at its under side with an annular groove, an annular flexible ring in said groove and resting on the spindle-rail, a bolt, having the step-bearing for the spindle, penetrating the spindle-rail and adjustably secured in the bolster, and of the spindle supported by said bolster and bolt, all said parts, substantially as and for the purposes described.

4. The combination with the spindle-rail, of a bolster, a flange on the lower end of the bolster and provided at its under side with an annular groove, an annular flexible ring in said groove and resting on the spindle-rail, a headed bolt, having the step-bearing for the spindle, penetrating the spindle-rail and adjustably secured in the bolster, the spindle supported by said bolster and bolt, and a flexible packing between the head of the bolt and the under side of the spindle-rail, all said parts, substantially as and for the purposes described.

5. The combination with the spindle-rail, of a bolster, a flange on the lower end of the bolster, a flexible packing between the flange and the top of the spindle-rail, a bolt penetrating the spindle-rail and adjustably secured in the bolster, a bushing, forming the step-bearing for the spindle, removably arranged in the bolt, and of the spindle supported by said bolster and bushing, all said parts, substantially as and for the purposes described.

6. The combination with the spindle-rail, of a bolster, a flange on said bolster, a flexible packing between said flange and the top of the spindle-rail, a headed bolt adjustably secured in the lower end of the bolster, an elastic washer between the head of the bolt and the under side of the rail, a bushing, forming the step-bearing for the spindle, removably arranged in said bolt, and of a spindle supported by said bolster and bushing, all said parts, substantially as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of November, 1895.

ADAM SCHEID.

Witnesses:

ALFRED GARTNER,

DUNCAN M. ROBERTSON.