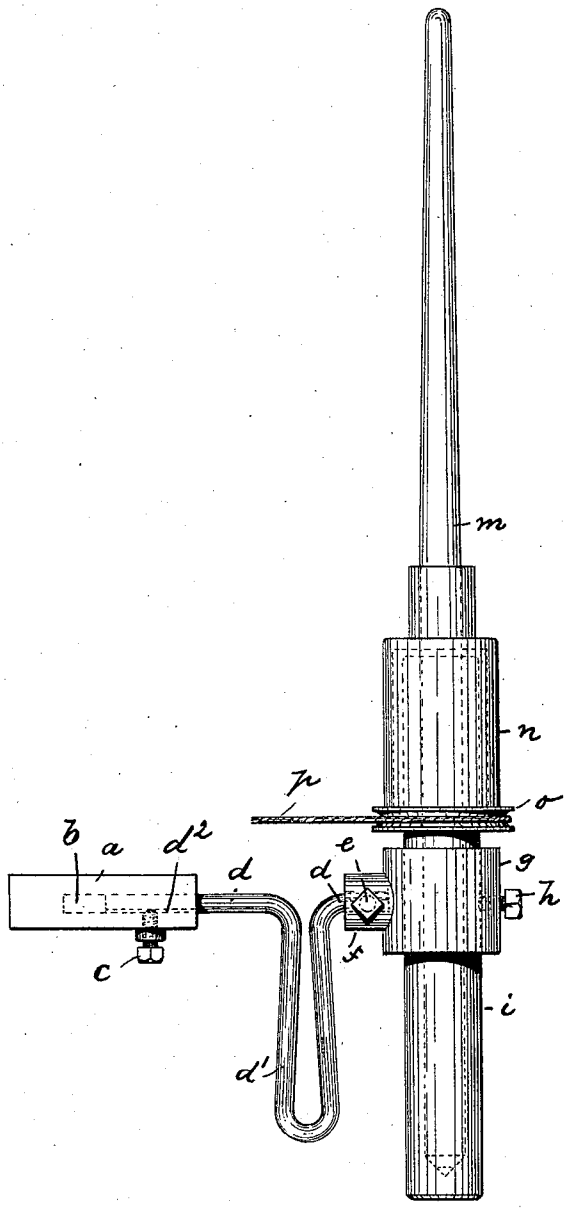
(No Model.)

A. SCHEID.

SPINDLE.

No. 574,945. Patented Jan. 12, 1897.



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. 574,945, dated January 12, 1897.

Application filed November 17, 1896. Serial No. 612,513. (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 drawing, and to letters of reference marked thereon, which forms a part of this specification.

This invention relates to spinning-spindles having a combined step and bolster bearing rigidly mounted in a support which in turn is flexibly mounted on the spindle-rail.

The particular object is to provide a spindle of the above character of simple, strong, and durable construction, reliable in operation, and allowing a vertical and horizontal adjustment of the combined step and bolster bearing with relation to the spindle-rail for purposes hereinafter specified.

The invention consists in the improved spindle and its supporting means, in the means for flexibly and adjustably mounting said supporting means on the spindle-rail, 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.

In the accompanying drawing, which is a side elevation of my improved spindle and its supporting means, *a* represents the spindle-rail, provided with a horizontal hole or opening *b*, in which is arranged one end of the rod or wire *d*, having an intermediate substantially U-shaped loop *d'*, and secured with its other end by means of a set-screw *e* to a lug *f*, projecting at substantially right angles from the vertically-arranged sleeve *g*.

The rod *d* is provided at its inner end portion with a groove d^2, adapted to be engaged by a set-screw *c*, having its bearing in the spindle-rail or in a lug secured thereto or projecting therefrom, and by means of which set-screw *c* said wire can be adjusted in a horizontal direction within the spindle-rail *a*, but is prevented from turning, as the said screw engages the elongated groove d^2 of said rod *d*. In the sleeve *g* is adjustably secured, by means of the set-screw *h*, the tube *i*, containing step and bolster bearing for the spindle *m*, which latter by preference is provided with the sleeve *n* and whirl *o*, and is thus adapted to receive motion from the belt or band *p*, as will be manifest.

The intermediate loop *d'* of the rod or wire *d* furnishes sufficient flexibility and thus yielding movement to the spindle, and by raising or lowering the tube *i* within the sleeve *g* the "center of oscillation," or, better, the radius of oscillation, can easily be changed, as will be manifest, and by simply adjusting the rod or wire *d* within the rail *a* the tension of the driving belt or band can be quickly regulated.

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 rod or wire adjustably arranged in said rail, and provided with an intermediate loop, a vertically-arranged sleeve carried by said rod or wire, a tube containing step and bolster bearing, rigidly but adjustably arranged in said sleeve, and a whirl-driven spindle in said tube, all said parts substantially as and for the purposes described.

2. The combination with the spindle-rail, of a rod or wire arranged in said rail and provided with an intermediate loop, a vertically-arranged sleeve adjustably secured to said rod or wire, a tube containing step and bolster bearing rigidly but adjustably secured within said sleeve, and a whirl-driven spindle in said tube, all said parts, substantially as and for the purposes described.

3. The combination with the spindle-rail, of a rod or wire adjustably arranged in said rail and provided with an intermediate loop, a vertically-arranged sleeve adjustably secured to said rod or wire, a tube containing step and bolster bearing rigidly but adjustably secured within said sleeve, and a whirl-driven spindle in said tube, all said parts, substantially as and for the purposes described.

4. The combination with the spindle-rail, provided with a horizontal hole or opening, a

rod or wire provided at its inner end with an elongated groove slidingly arranged in said rail and adapted to engage said elongated groove, said rod or wire being provided with an intermediate loop, a vertically-arranged sleeve adjustably secured to the outer end of said rod or wire, a tube, containing step and bolster bearing, rigidly but adjustably secured within said sleeve, and a whirl-driven spindle in said 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.