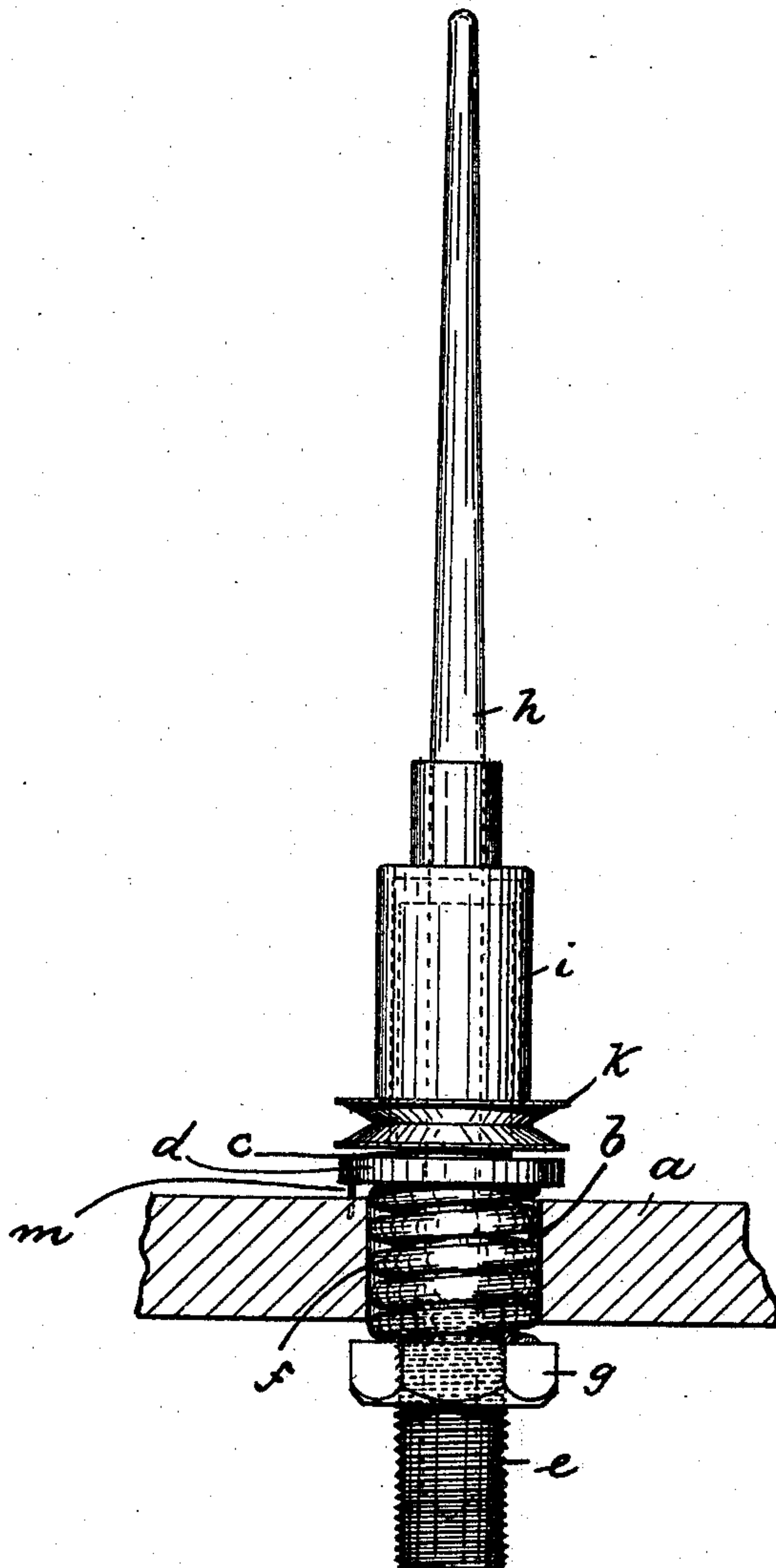


(No Model.)

A. SCHEID.
SPINDLE.

No. 580,728.

Patented Apr. 13, 1897.



WITNESSES:

Wm D. Bell.
J. D. Rumsey

INVENTOR :

Adam Scheid

BY *Partner & Co* ATTY'S.

UNITED STATES PATENT OFFICE.

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

SPINDLE.

SPECIFICATION forming part of Letters Patent No. 580,728, dated April 13, 1897.

Application filed December 29, 1896. Serial No. 617,336. (No model.)

To all whom it may concern:

Be it known that I, ADAM SCHEID, a citizen of the United States, residing in Harrison, county of Hudson, 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.

The object of this invention is to provide a support for spinning-spindles, permitting the said spindles sufficient yielding motion to adjust themselves to unbalanced loads.

It consists in the details of construction and in the combination and arrangement of parts, substantially as will be hereinafter described and claimed.

In the accompanying drawing, which is a front elevation of my improved spindle-support, the rail being shown in section, *a* represents the rail, provided with the vertical opening *b*, which latter is penetrated by the tube *c*. Said tube is surrounded by a heavy coiled spring *f*, bearing with its upper end against an annular flange *d*, arranged on and projecting from the tube *c* and with its lower end against the nut *g*, adapted to be operated on the screw-threaded portion *e* of the said tube. The diameter of the hole *b* is slightly larger than the diameter of the coiled spring when in normal position, but its surface is engaged by the respective coils when the spring is compressed.

The internal diameter of the spring is slightly larger than the diameter of the tube *c*. In other words, said tube fits loosely within the coiled spring *f*.

The tube *c* contains step and bolster bearing for the spindle *h*, which in the present case is provided with a sleeve *i* and whirl *k*, by means of which motion is imparted to the said spindle. To prevent rotation of the tube *c*, a pin *m* is arranged in the rail *a* and is

adapted to engage the flange *d*, as clearly shown.

The spring-coil *f* being compressed bears against the inner surface of the hole *b*. The tube rests with its annular flange on the upper portion of said spring-coil and is held therein by means of the nut *g*. The tube is thus given sufficient yielding motion to allow its spindle *h* to adjust itself to an unbalanced load, and the amount of yielding motion of the latter can easily be regulated by adjusting the nut *g* on the screw-threaded portion *e* of the tube *c*.

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 provided with a vertical hole or opening, of a tube penetrating said opening and provided above the rail with an annular flange, a spring-coil arranged within the opening of the rail and surrounding the tube and bearing against the under side of said flange, means for retaining said spring-coil within the opening and on the tube, and a whirl-driven spindle in the tube, all said parts, substantially as described.

2. The combination with the spindle-rail provided with a vertical hole or opening, of a tube penetrating said opening and having its downwardly-projecting portion screw-threaded, an annular flange projecting from said tube and arranged above the rail, a spring-coil within the opening of the rail and surrounding the tube and bearing against the under side of the annular flange, a nut on the screw-threaded portion of the tube and bearing against the said spring-coil, 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 17th day of December, 1896.

ADAM SCHEID.

Witnesses:

ALFRED GARTNER,
WM. D. BELL.