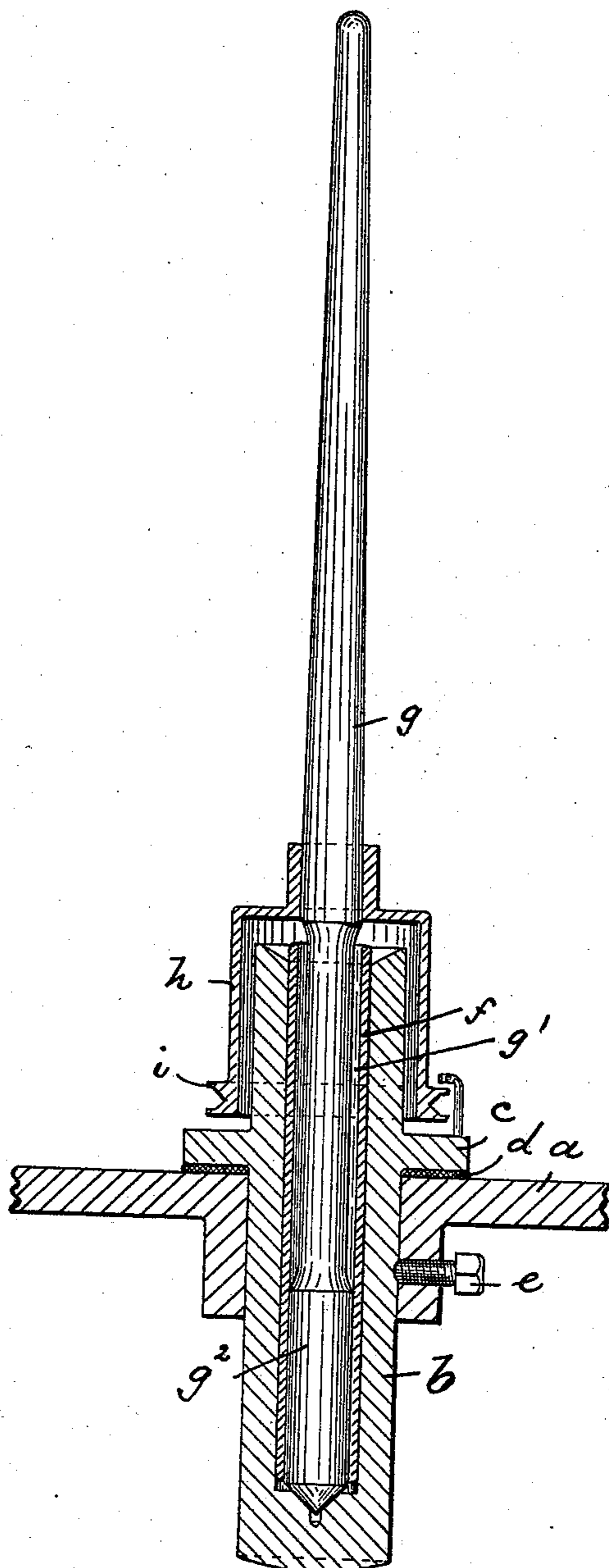


(No Model.)

A. SCHEID.
SPINDLE.

No. 576,060.

Patented Jan. 26, 1897.



WITNESSES:

Wm. D. Bell.

S. S. Runney

INVENTOR:

Adam Scheid

BY *Gartner & Co* ATTY'S.

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. 576,060, dated January 26, 1897.

Application filed November 17, 1896. Serial No. 612,520. (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
5 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
10 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 form a part of this specification.

The object of my present invention is to
15 provide a spinning-spindle and support therefor whereby the spindle is given a yielding movement, of simple construction and efficient in operation.

The invention consists in the improved
20 spindle-support and spindle and in the combination and arrangements of the various parts thereof, substantially as will be herein-
after more fully described and claimed.

In the accompanying drawing, which represents a vertical central section of my improvements, *a* represents the spindle-rail,
25 penetrated by the tube *b*, which latter is secured to said rail by means of the set-screw *e*. The tube *b* is provided with an annular
30 flange *c*, resting on an intermediate elastic washer *d*. Within said tube and adapted to

be revolved therein is the sleeve *f*, secured at its lower portion to the lower portion *g*² of spindle *g*, which latter is reduced in diameter within said sleeve, as at *g'*, and thus is
35 allowed a certain play or yielding movement within said sleeve sufficient to adjust itself to an unbalanced load. The spindle is provided with the sleeve *h* and whirl *i*, by means of which motion is imparted to the spindle. 40

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

The combination with the spindle-rail, of a tube mounted in said rail and extending above
45 and below the same, a sleeve revolubly arranged in said tube and extending below the spindle-rail, and a whirl-driven spindle secured with its lower portion to and within
50 said sleeve, and having the adjoining portion of smaller diameter than the internal diameter of the sleeve and its step bearing in the tube and below the spindle-rail, substantially as and for the purposes described.

In testimony that I claim the foregoing I
55 have hereunto set my hand this 14th day of October, 1896.

ADAM SCHEID.

Witnesses:

WM. D. BELL,
ALFRED GARTNER.