

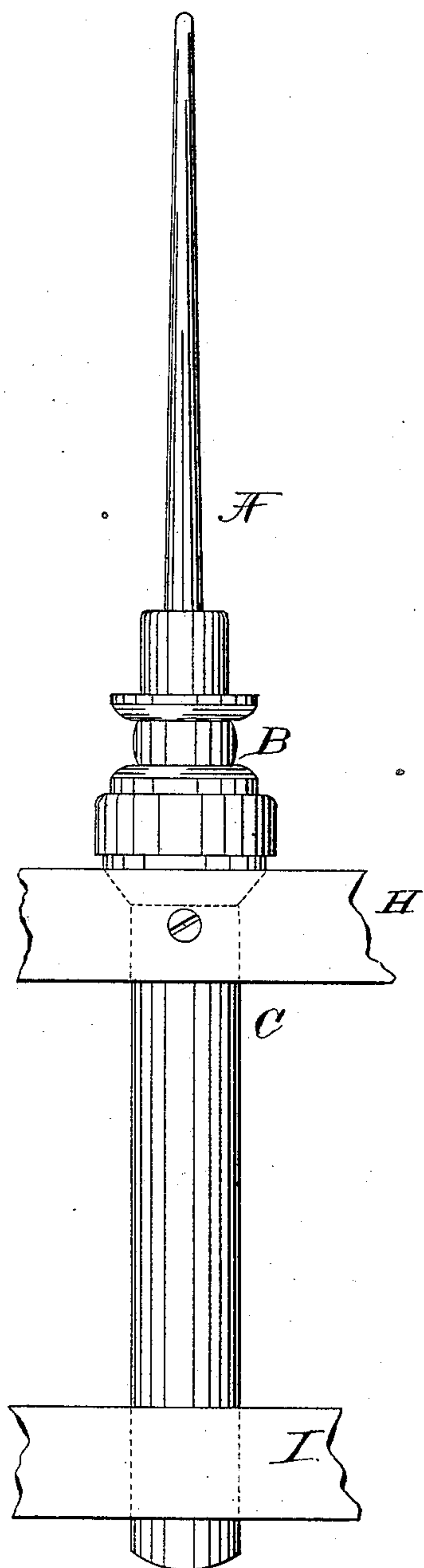
(No Model.)

G. JAQUITH.  
SUPPORT FOR SPINNING SPINDLES.

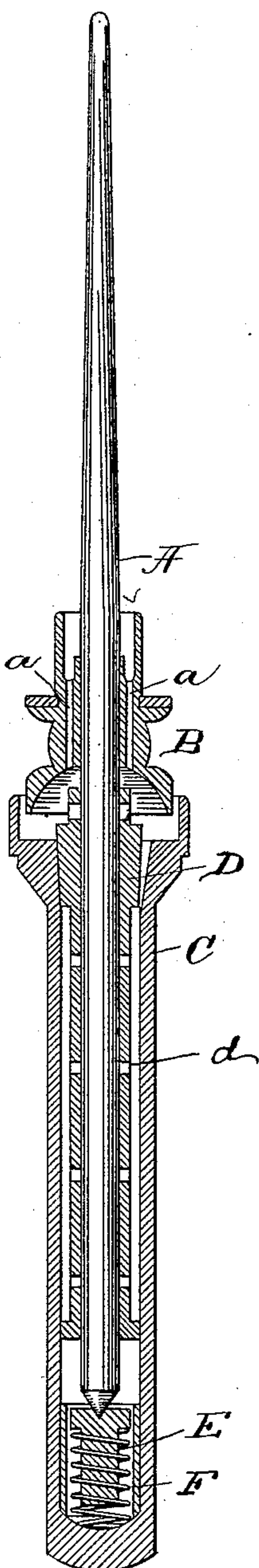
No. 410,974.

Patented Sept. 10, 1889.

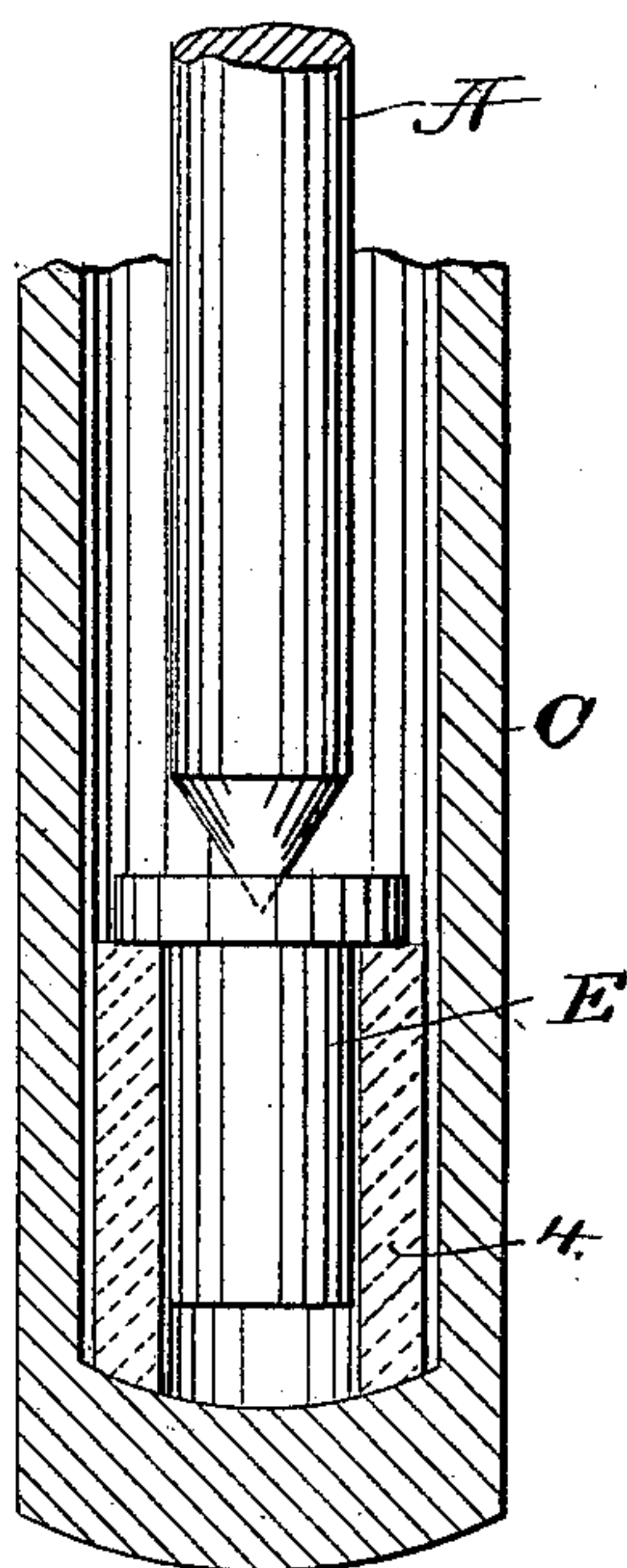
*Fig. 1.*



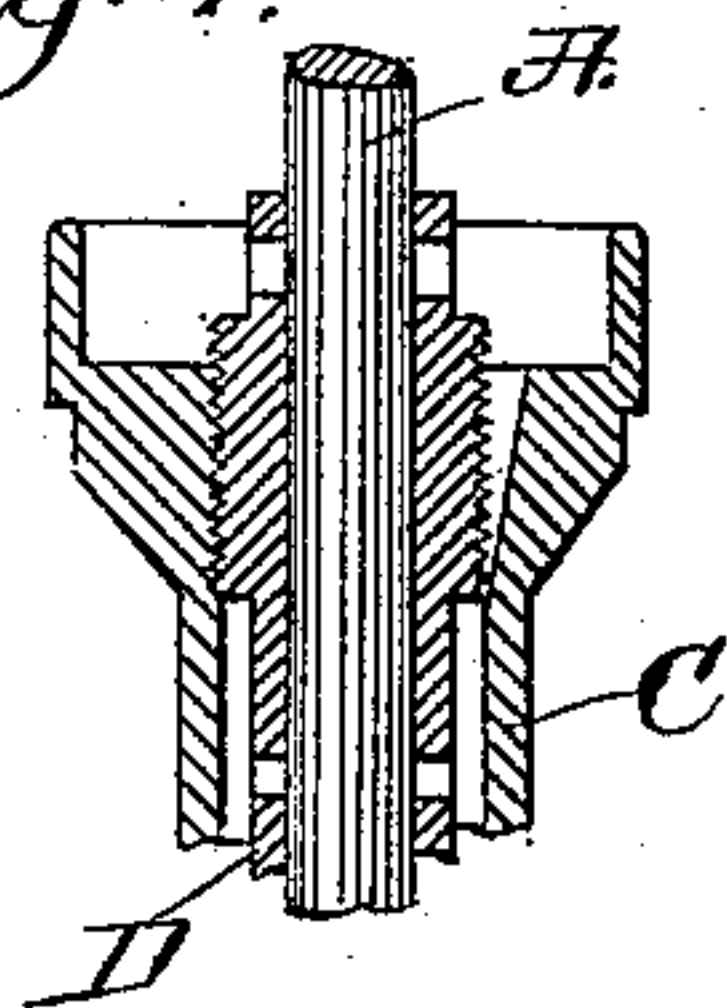
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses.  
Fred. S. Greenleaf.  
Fred. A. Emery.

Inventor.  
G. Jaquith.  
by Lemmy & H. H. Hays.



# UNITED STATES PATENT OFFICE.

GILMAN JAQUITH, OF SAILOR SPRINGS, ILLINOIS, ASSIGNOR TO GEORGE DRAPER & SONS, OF HOPEDALE, MASSACHUSETTS.

## SUPPORT FOR SPINNING-SPINDLES.

SPECIFICATION forming part of Letters Patent No. 410,974, dated September 10, 1889.

Application filed November 3, 1887. Serial No. 254,150. (No model.) Patented in England June 6, 1883, No. 2,823.

*To all whom it may concern:*

Be it known that I, GILMAN JAQUITH, of Sailor Springs, county of Clay, and State of Illinois, have invented an Improvement in  
5 Supports for Spinning-Spindles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object to improve that class of spindle-support having independent bearings for the lower end of the spindle below the whirl.

My invention consists, essentially, in the  
15 combination of a supporting-tube, an upper bearing therein, a step loose therein, and an elastic support for the step, with a spindle free to move laterally at its lower end, and having a conical point projecting slightly  
20 into the step, thereby enabling the lower end of the spindle to tip the step, as will be described.

My invention has been patented in England, No. 2,823, dated June 6, 1883.

25 Figure 1 in side elevation represents a spindle-bearing and spindle embodying my invention, the holder or support for the bearing being shown as held in two rails, or two flanges, it may be, of one rail; Fig. 2, a vertical section of Fig. 1; Fig. 3, a sectional elevation of a part of a holder or support with a modified form of loose lower bearing or  
30 step; and Fig. 4 is a modification.

A is the spindle, and B its attached sleeve-whirl, bored at *a* for the passage of oil to the  
35 surfaces below.

C is a holder or support, herein shown as closed at its bottom to form an oil-well; D, a fixed or rigid tube-like bearing surrounding  
40 the spindle below the whirl; and E is a second independent bearing located at the lower end of the said holder, the end of the spindle entering a seat or pit in the bearing, and F a cushion, (shown in Fig. 2 as a spiral spring  
45 surrounding and supporting the same,) the said bearing E receiving in it the extremity of the spindle. The bearing F is provided with a head to rest on the top of the cushion or spring, the latter being capable of yielding  
50 vertically to a limited extent. The external diameter of the bearing F is enough less than

the internal diameter of the chamber at the lower end of the holder or support as to afford freedom of movement to the lower extremity of the spindle as the latter vibrates  
55 when running with an unbalanced load.

The tube-like bearing D has at its upper end a shoulder which fits snugly the interior of the holder or support, and at its lower end a flange which also fits the holder snugly.  
60 This bearing may be threaded, as shown in Fig. 4, so as to be screwed into the holder, if desired. The tube is provided with holes for circulation of oil.

The hole 3 enables oil to be introduced into  
65 the holder C.

The holder C, as herein shown, is confined in position upon a rail H, the lower end of the holder being steadied by a rail or flange I.

In Fig. 4, instead of a cushion made as a  
70 spiral spring, I have employed a cushion of cork, (marked 4.)

The peculiarity of my step-bearing G is, that while it rests upon an elastic support, so as to move vertically, it is also free to tip as  
75 well as to move laterally, and the lower end of the spindle is conical and enters the step for so short a distance that a lateral movement of the lower end of the spindle need not necessarily move the step laterally with it  
80 while standing erect, but may tip the top of the step in one way and its lower end in the opposite way.

I do not claim a rigid bearing and a movable step, nor do I broadly claim a step supported by a spring.

I claim—

The supporting-tube, an upper bearing, and a loose step therein, and an elastic support therefor, combined with a spindle free to  
90 move laterally at its lower end and having a conical point projecting slightly into the step, thereby enabling the lower end of the spindle to tip the step, as described.

In testimony whereof I have signed my name  
95 to this specification in the presence of two subscribing witnesses.

GILMAN JAQUITH.

Witnesses:

JOHN H. ODELL,  
WM. D. DILLMAN.