

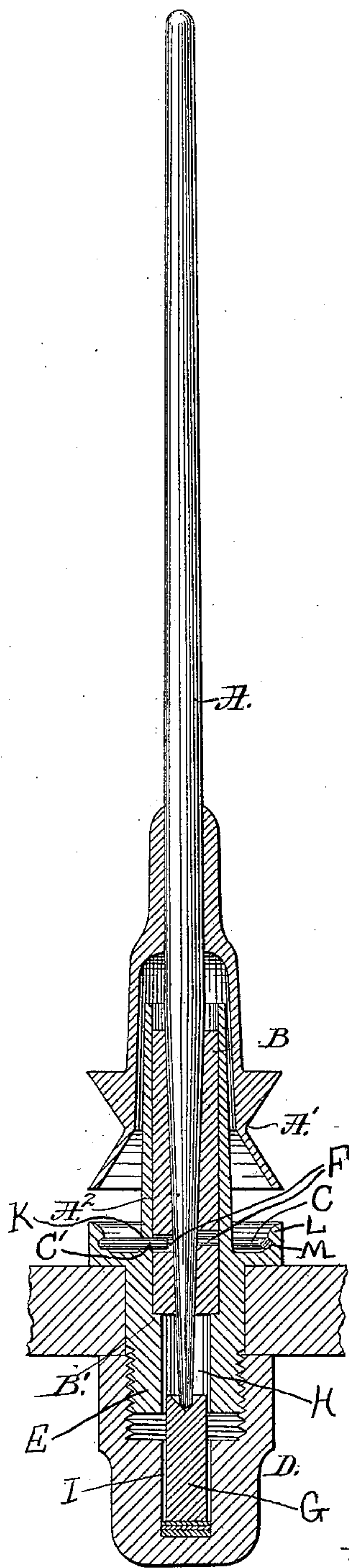
(No Model.)

W. HINCHLIFFE.  
SUPPORT FOR SPINNING SPINDLES.

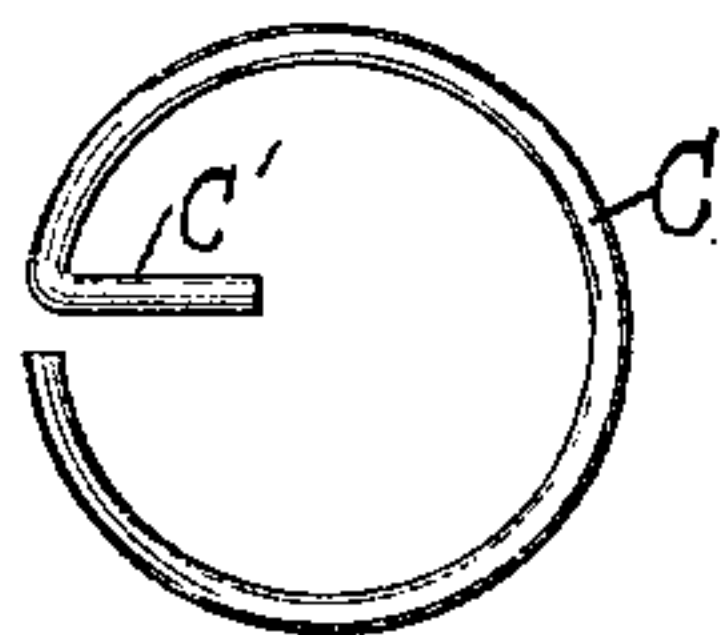
No. 433,897.

Patented Aug. 5, 1890.

*Fig: 1.*



*Fig: 2.*



Witnesses.

Frederick L. Emery-  
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Inventor.

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# UNITED STATES PATENT OFFICE.

WILLIAM HINCHLIFFE, OF NASHVILLE, TENNESSEE, ASSIGNOR OF ONE-HALF  
TO GEORGE DRAPER & SONS, OF HOPEDALE, MASSACHUSETTS.

## SUPPORT FOR SPINNING-SPINDLES.

SPECIFICATION forming part of Letters Patent No. 433,897, dated August 5, 1890.

Application filed January 28, 1890. Serial No. 338,354. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM HINCHLIFFE, of Nashville, county of Davidson, State of Tennessee, 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 provide a spindle-support with a simple and effective locking device to prevent the bolster from rotating with the spindle, and also to prevent the bolster from dropping out of the support-  
15 ing-case when the latter is being handled off the frame. I have also provided novel and simple means for adjusting the step vertically to thereby keep it at the proper height with relation to the lower end of the bolster  
20 when the bolster has a tapering internal opening to receive the tapering pintle of a sleeve-whirl spindle.

Figure 1 in elevation and section shows a spindle and its supports embodying one form  
25 of my invention. Fig. 2 shows one form of the locking device removed.

The spindle A, having a sleeve-whirl A', has a tapering pintle A<sup>2</sup>, which sets in and fits a conical or tapering seat in the bolster  
30 B, shown as resting on the shoulder B' of the supporting-case. The shank of the supporting-case E is hollow, as at H, and is held in place on the rail by a cup-nut D, screwed upon the said shank, as in Fig. 1, the cup-nut hav-  
35 ing a longitudinal central chamber I, in which is placed a loosely-fitting step G, the upper end of the step preferably entering the central opening H in the shank of the support-  
40 ing-case E. The cup-nut and the chamber in which the step stands will in practice be filled, or substantially so, with oil, which will cushion the step in its lateral movement with the foot of the spindle. The lower end of the  
45 step rests on a pile of small metal disks a, which in practice will be of different thicknesses, so that a greater or less number of such disks may be used to keep the top of the step at just the proper height to receive the foot of the spindle and yet insure the desired  
50 relative positions for the tapering surface of the pintle and the tapering interior of the bolster. The employment of these disks obviates connecting the bolster and step by a

screw-thread. The bolster has suitable oil-  
55 holes F.

The supporting-case is provided with a spring ring or lock C, having a projection C', which passes through an opening K in the supporting-case and enters one of the said  
60 oil-holes F or a suitable notch in the bolster, the said projection serving to prevent the loosely-held bolster not only from rotation with the spindle, but also from being dropped  
65 out of the supporting-case when the latter is not in place on the rail or from being lifted from the supporting-case by the spindle.

It is of advantage to keep the bolster in the case and prevent its accidental removal and possible loss and fracture while the case is off  
70 the rail.

The disks constitute a very simple and cheap means for adjusting the height of the step.

The lock can be easily detached and the bolster removed when desired.

In Fig. 1, where the curb L, forming part  
75 of the case E, is shown in section, it will be noticed that the inner side of the curb is provided with an annular groove M to receive the ring-like lock, the said ring or lock being  
80 thereby held against vertical motion or displacement in the curb.

I claim—

1. The spindle having a tapering pintle, the bolster-case, the loosely-held bolster therein having a tapering opening, and the cup-nut  
85 having a central chamber, combined with a step placed loosely in the said chamber, and with a series of disks on which the step rests, change in the number or thickness of the said  
90 disks effecting the adjustment of the step ver- tically, substantially as described.

2. The supporting-case having the inner side of its curb grooved, as described, and a loose bolster set into the supporting-case, com-  
95 bined with a ring-like lock held in place against vertical movement by the said curb and having a projection to engage and prevent rotation of the bolster within the sup-  
porting-case, substantially as described.

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

WILLIAM HINCHLIFFE.

Witnesses:

ED. BEAN,

THOMAS RIDINGS.