

No. 694,604.

Patented Mar. 4, 1902.

W. E. BASS & A. C. CHASE.
BOBBIN HOLDER FOR SPINDLES.

(Application filed Nov. 29, 1901.)

(No Model.)

FIG. 1.

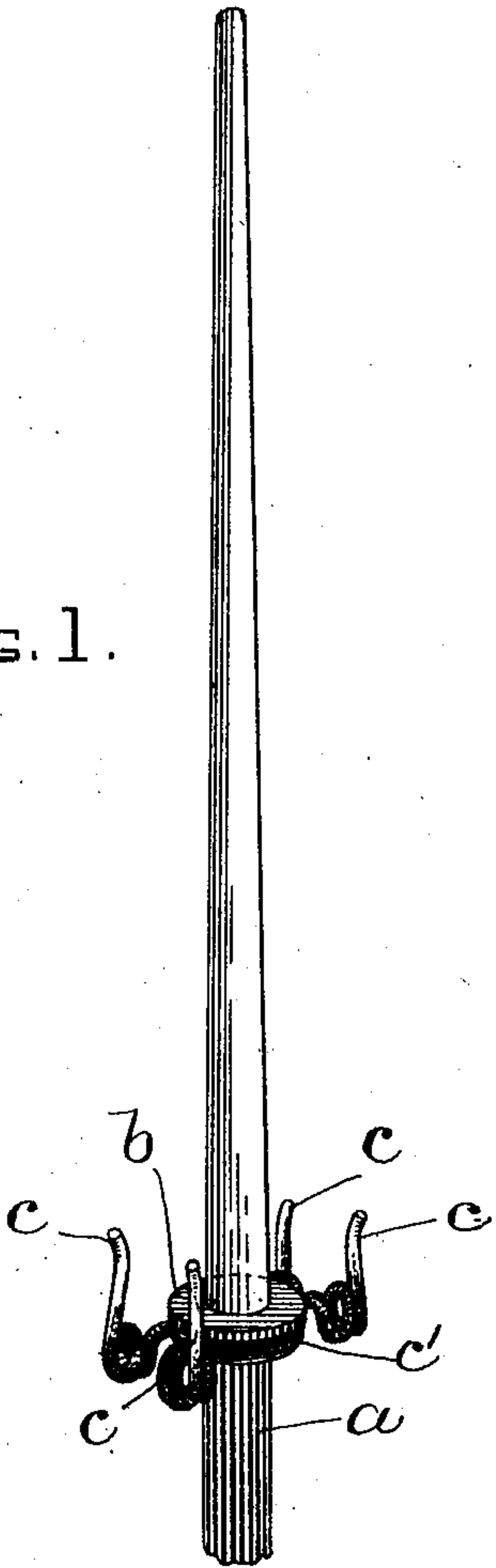


FIG. 2.

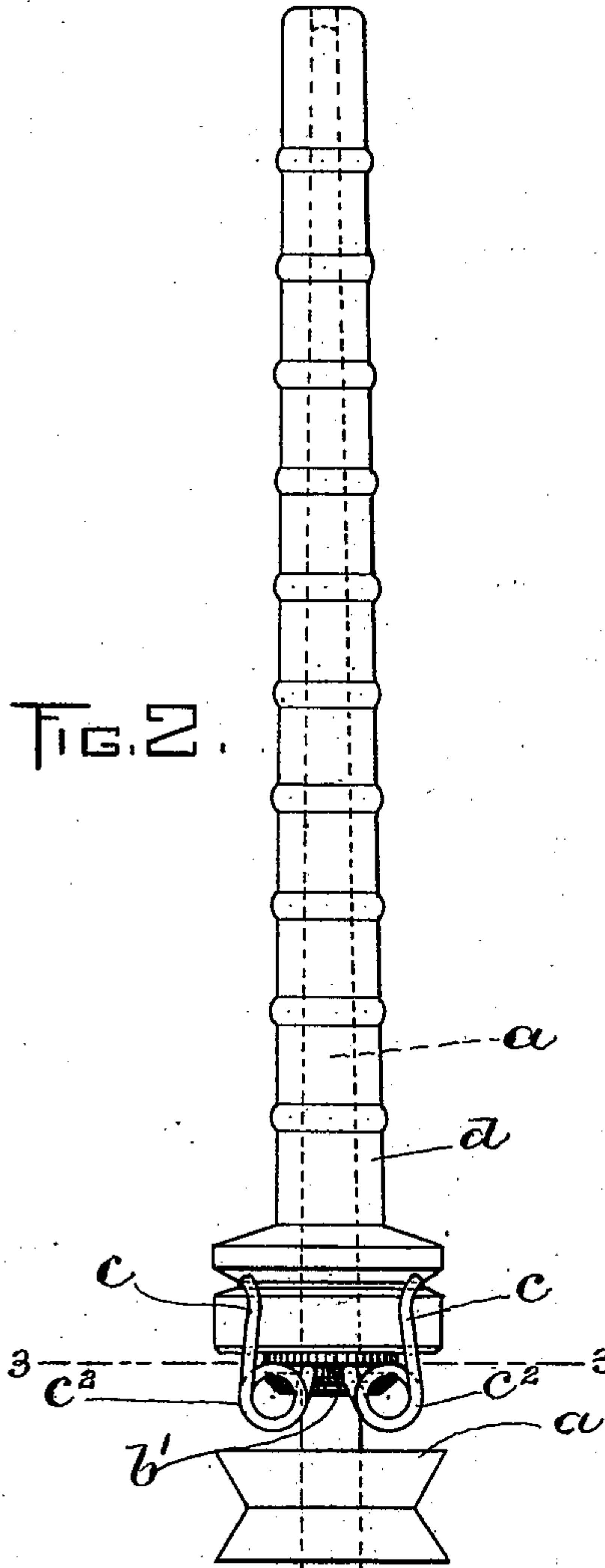


FIG. 3.

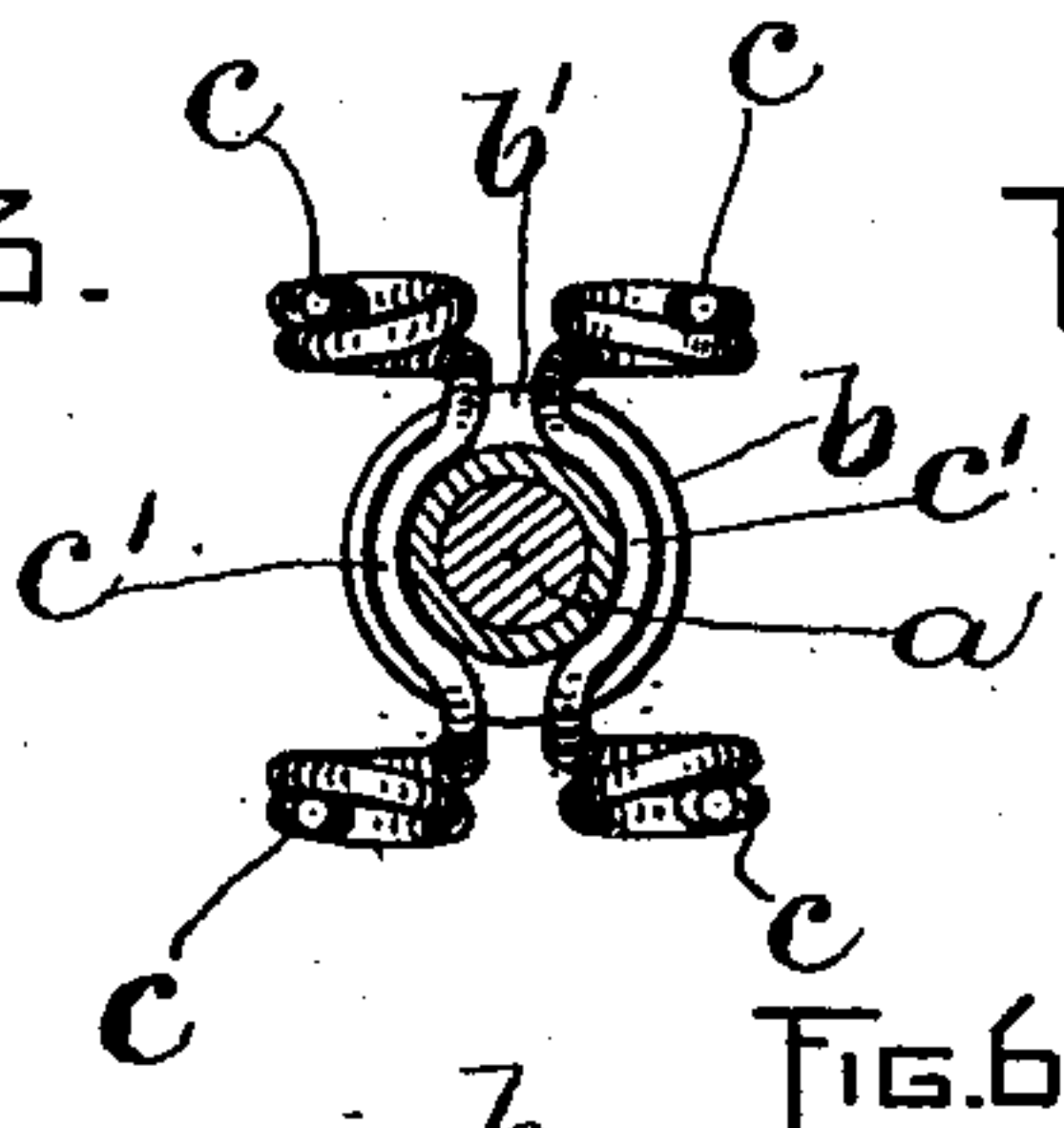


FIG. 4.



FIG. 5.

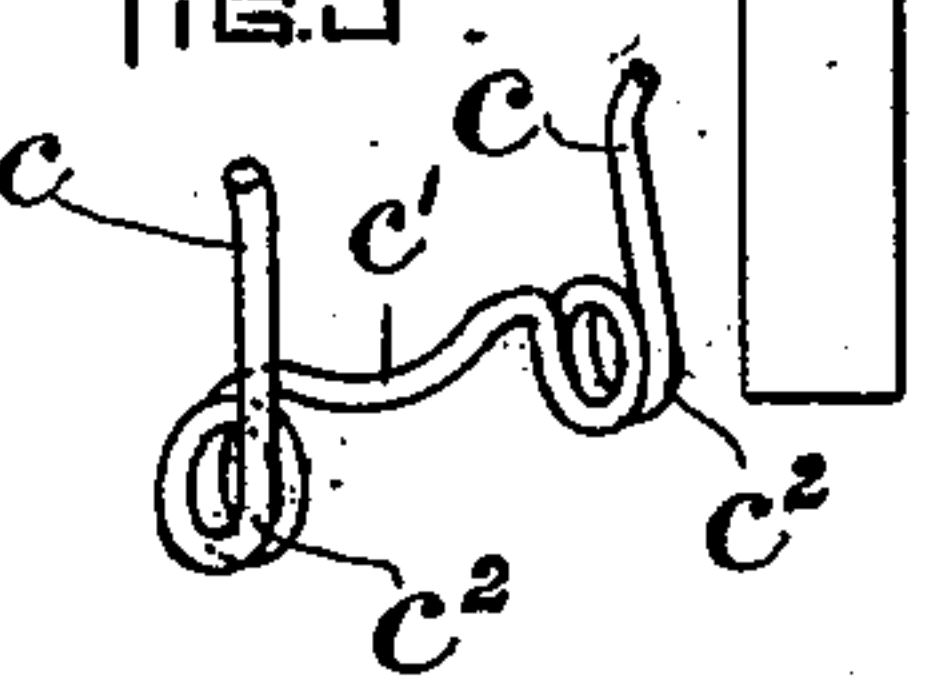


FIG. 6.

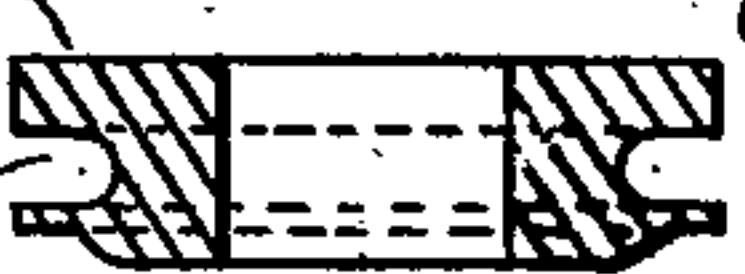
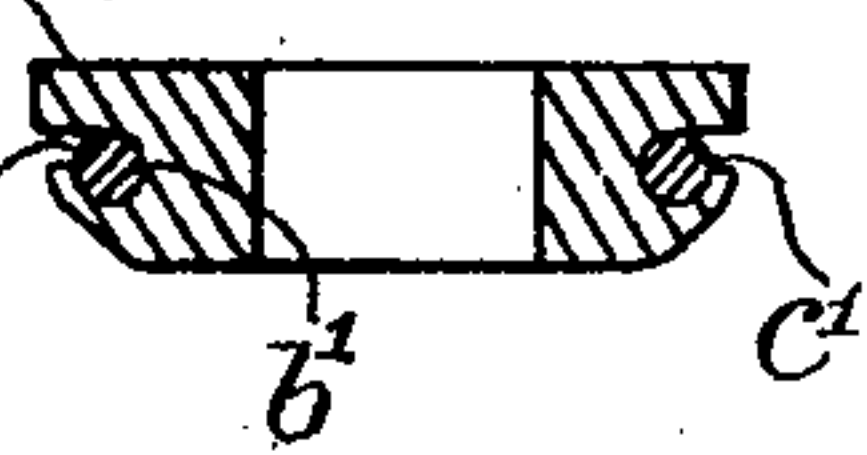


FIG. 7.



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UNITED STATES PATENT OFFICE.

WILLIAM E. BASS AND AUGUSTUS C. CHASE, OF LAWRENCE,
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BOBBIN-HOLDER FOR SPINDLES.

SPECIFICATION forming part of Letters Patent No. 694,604, dated March 4, 1902.

Application filed November 29, 1901. Serial No. 84,077. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM E. BASS and AUGUSTUS C. CHASE, of Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Bobbin-Holders for Spindles, of which the following is a specification.

This invention has for its object to provide a simple, inexpensive, and efficient device for yieldingly securing a bobbin to a spinning-machine spindle; and it consists in the improvements which we will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of a portion of a spinning-machine spindle provided with our improved bobbin-securing device. Fig. 2 represents a side elevation of the same, showing the base of the bobbin engaged with the securing device. Fig. 3 represents a section on line 3 3 of Fig. 2. Figs. 4 and 5 represent perspective views of parts of the device. Figs. 6 and 7 represent sectional views of the collar portion of the holder, Fig. 6 showing the collar before and Fig. 7 after the operation of securing the wire members.

The same reference characters indicate the same parts in all the figures.

In the drawings, *a* represents a spindle of the usual or any suitable form, the same being provided with a shoulder *a'*.

d represents the bobbin, which is of the ordinary construction.

Our improved holder for securing the bobbin to the spindle comprises a collar *b*, adapted to be driven onto the tapering lower portion of the spindle and to be held thereon by a tight friction fit and provided in its periphery with a groove *b'*. Said holder also comprises a plurality of wire members, preferably two, each of the form shown in Fig. 5—that is to say, each wire member comprises a curved central portion *c'*, formed to enter the groove *b'* in the collar *b*, two flexible end portions *c c*, formed to bear yieldingly on the base of the bobbin *d*, and two coiled portions or arms *c² c²*, connecting the outer portions or arms *c* with the central portions *c'*. The central portions *c'* are inserted in the groove *b'* and are affixed to the collar *b* preferably

by pressing together the sides of said groove, or, in other words, bending inwardly the flange forming the lower side of the groove, as shown in Fig. 7, thus causing said sides to firmly clamp the portions *c'*. The form of the said wire members is such that when the portions *c'* thereof are secured, as described, to the collar *b* the outer portions or arms *c* will be arranged around the spindle at about equal distances apart. The resilience of the wire and the coiled portions *c²* enable the arms *c* to bear yieldingly upon the base of the bobbin with sufficient force to hold the bobbin firmly in place and prevent it from being moved upwardly on the spindle by any action due to the rotation of the spindle and bobbin. At the same time the hold of the arms *c* on the base of the bobbin is sufficiently yielding to allow the bobbin to be readily doffed or raised by hand from the spindle.

It will be seen that the described construction is extremely simple, but three parts being required—namely, the collar *b* and the two wire members engaged therewith. The curved collar enables the wire members to be readily and firmly secured by the simple operation of pressing together the sides of those portions of the groove in which the curved portions *c'* of the wire members are inserted.

The coiled portions *c²* are adapted to serve as clamps to secure the end of a thread and hold the same in convenient position with relation to the bobbin.

The flange of the collar *b* forming the lower side of the groove *b'* is preferably made somewhat thinner than the other flange, as shown in Figs. 6 and 7, so that said flange can be readily bent inwardly, as shown in Fig. 7. The curvature of the portions *c'* and the pressure of the lower flange of collar against them prevents the portions *c'* from turning in the groove. Hence the arms *c* are firmly supported.

We claim—

1. A bobbin-holder for spindles, comprising a collar adapted to engage a spindle, and spring-wire arms affixed to said collar, each arm having an inner portion projecting from the collar, an outer portion formed to bear yieldingly on the base of a bobbin, and an intermediate coiled portion which serves not

only as a spring for said outer portion but also as a clamp adapted to hold the end of the thread.

2. A bobbin-holder for spindles, comprising
5 a collar adapted to engage a spindle and having a peripheral groove, and a plurality of wire members each having a curved central portion formed to enter the said groove and two end portions formed to bear yieldingly
10 on the base of a bobbin, said central portions being inserted and secured in said grooves.

3. A bobbin-holder for spindles, comprising a collar adapted to engage a spindle and having a peripheral groove, and a plurality of

wire members each having a curved central 15 portion formed to enter the said groove, two end portions formed to bear yieldingly on the base of a bobbin and coiled portions interposed between the central and end portions, said central portions being inserted and se- 20 cured in said grooves.

In testimony whereof we have affixed our signatures in presence of two witnesses.

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AUGUSTUS C. CHASE.

Witnesses:

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DUNCAN WOOD.