No. 671,744. Patented Apr. 9, 1901.

J. E. BACON.

BOBBIN HOLDER.

(Application filed Aug. 17, 1900.)

(No Model.)

Fig. 1.

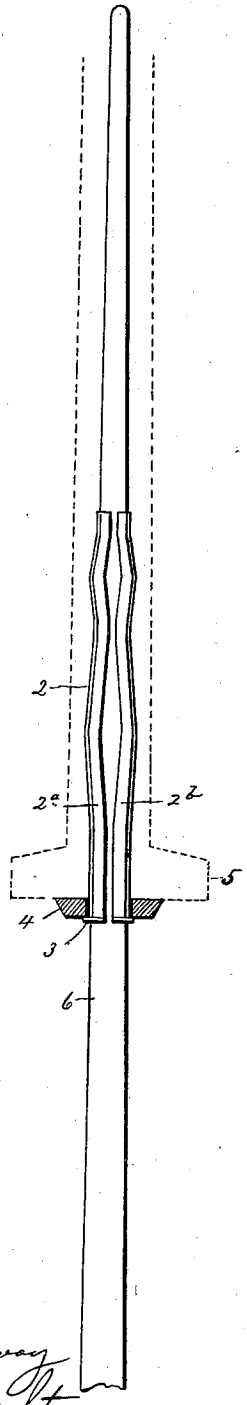


Fig. 2.



Fig. 3.

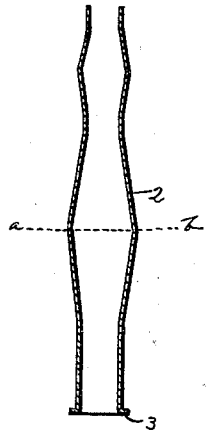


Fig. 4.



Witnesses
J. H. Shumway
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UNITED STATES PATENT OFFICE.

JOHN E. BACON, OF CLINTON, CONNECTICUT.

BOBBIN-HOLDER.

SPECIFICATION forming part of Letters Patent No. 671,744, dated April 9, 1901.

Application filed August 17, 1900. Serial No. 27,209. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. BACON, of Clinton, in the county of Middlesex and State of Connecticut, have invented a new Improvement in Bobbin-Holders; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view, partly in elevation and partly in section, of a bobbin-holder constructed in accordance with my invention; Fig. 2, a detached view of the bobbin-holder in transverse section on the line *a b* of Fig. 3; Fig. 3, a detached view of the bobbin-holder in vertical section; Fig. 4, a perspective view of the washer.

My invention relates to an improvement in bobbin-holders, the object being to produce at a low cost for manufacture a simple, convenient, and effective holder.

With these ends in view my invention consists in a holder having certain details of construction, as will be hereinafter described, and pointed out in the claim.

In carrying out my invention as herein shown I form the lower end of the yielding cage-like sheet-metal bobbin-holder 2 with an integral outwardly-turned flange 3, which prevents the heavy washer 4, upon which the bobbin 5 rests, from being pushed over the lower end of the holder when the same is being shoved down upon the spindle 6. The said bobbin-holder 2 is produced by bending a suitable sheet-metal blank into what may be termed a "tubular" form, but the edges of the metal are not joined or in any way secured together, so that the holder is free to be enlarged in diameter by the separation of the said edges or reduced in diameter by bringing the said edges together, according to the size and taper of the spindle. The said heavy washer 4, which supports the bobbin, has its central opening formed with reference to the size and taper of the spindle and with reference to the thickness of the sheet metal entering into the construction of the holder, so that when the holder and washer are applied to the spindle they will come to a stop at a predetermined point thereupon, for it is necessary that the bobbins should always be supported at a certain height with respect to the spindle. Although the washers must be constructed with reference to the size and taper of the spindles, the same holder may be used, owing to its capacity for diametric contraction and expansion, with washers adapted to fit different spindles, whereby economy is secured, as it reduces the number of sizes in which the holders must be made.

Preparatory to the application of the holder to a spindle the washer is passed over the holder until it engages with the flange thereof, which prevents it from being slipped over the holder and which locates it in right position thereon for binding the holder to the spindle when the washer comes to rest upon the spindle by the crowding of the holder thereupon. Perhaps the easiest way to apply the holder and washer is to take hold of the washer and crowd it over the holder and, still holding the washer, crowd the same down over the spindle. In doing this the holder, so to speak, will be dragged after the washer through the medium of the flange 3. The flange 3 is not relied upon strictly as a supporting-flange, but may be, perhaps, considered an assembling-flange, as well as a stop for preventing the washer from riding over the lower end of the holder in applying the two parts to the spindle.

I am aware that, broadly speaking, sheet-metal cage-like bobbin-holders are old, and also that it is old to employ collars for supporting bobbins upon spindles. I do not therefore claim either of those constructions broadly; but,

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

The combination with a longitudinally-split tubular sheet-metal bobbin-holder, adapted to be set over a spindle, and formed at its lower end with an integral flange, of a bobbin-supporting washer adapted to pass over the said bobbin-holder with the flange

of which it engages, whereby the washer is prevented from passing over the lower end of the holder which it solidly clamps upon the spindle, the size of which, as well as the opening of the washer, determine the point where the washer and holder will be brought to a stop upon the spindle.

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

JOHN E. BACON.

Witnesses:
JOHN M. MEIGS,
JAS. W. TABB.