

(No Model.)

W. F. FULLER.

BOBBIN HOLDER FOR SPINNING SPINDLES, &c.

No. 376,982.

Patented Jan. 24, 1888.

Fig. 1.

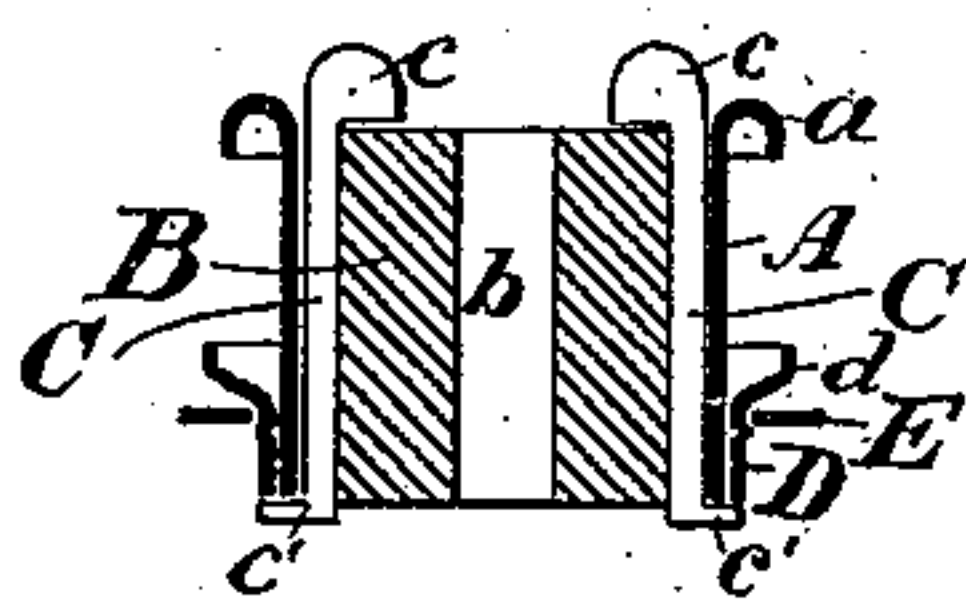


Fig. 2.

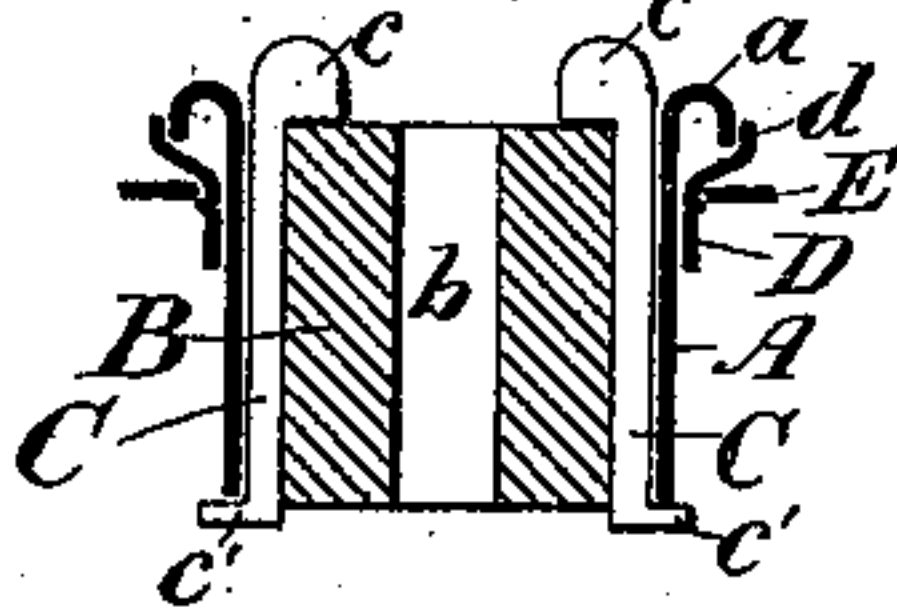


Fig. 3.

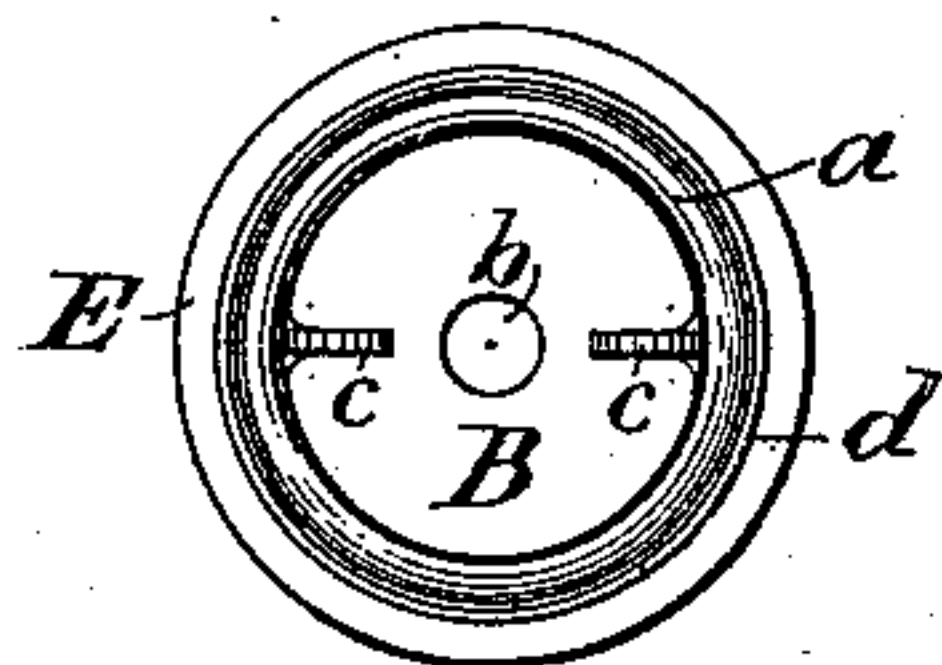
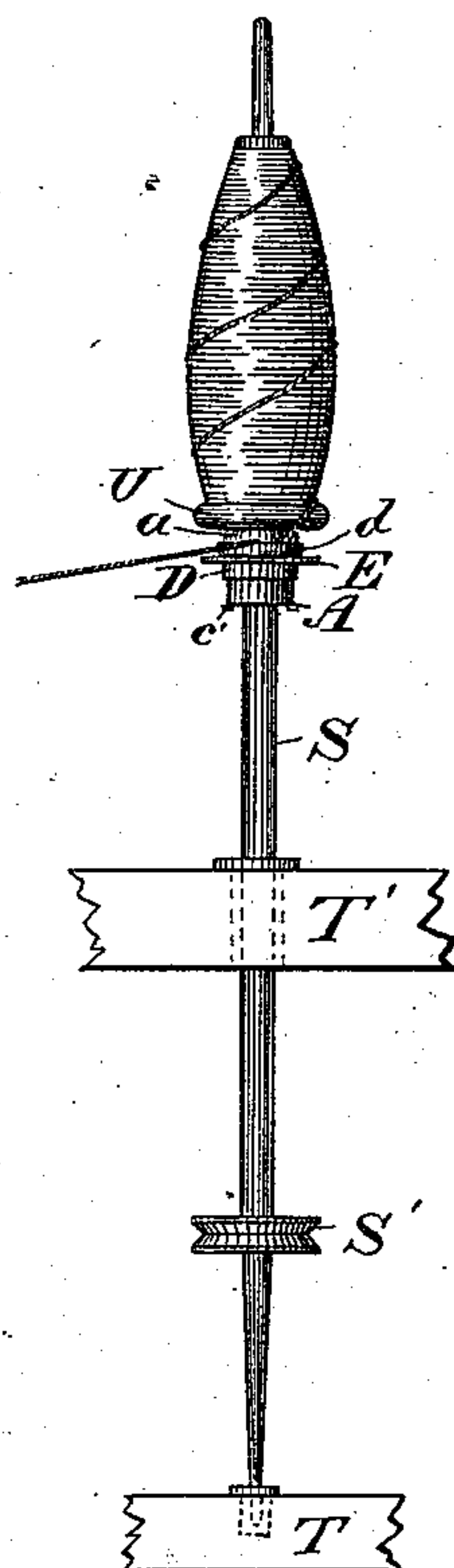


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM F. FULLER, OF PORT ELMSLEY, ONTARIO, CANADA, ASSIGNOR OF
ONE-HALF TO BENSON SMITH SNYDER, OF SAME PLACE.

BOBBIN-HOLDER FOR SPINNING-SPINDLES, &c.

SPECIFICATION forming part of Letters Patent No. 376,982, dated January 24, 1888.

Application filed June 1, 1887. Serial No. 239,938. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. FULLER, of Port Elmsley, in the Province of Ontario, Canada, have invented new and useful Improvements in Bobbin-Holders for Spinning-Spindles, &c., of which the following is a specification, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to textile machinery, and especially to machinery for spinning wool.

The object of my invention is to prevent the waste of yarn that is now being made every time a bobbin is doffed, and to provide a device by which the bobbin may be adjusted at any height upon the spindle.

In spinning wool the bobbin is placed sometimes higher or lower upon the spindle. A seat for the bobbin at the desired position upon the spindle is formed by winding upon the spindle a few coils of yarn, forming a shoulder and cone for the bobbin to rest upon and secure its being rotated with it. Then when the bobbin is full, and prior to its being doffed, the yarn is allowed to run over the head of the bobbin and coil upon the spindle, so as to secure the end of the yarn passing from the roller from being lost, and secure its being kept ready to place upon the fresh bobbin.

My invention consists of a device that can be placed upon the spindle at any desired height to carry and rotate the bobbin with the spindle, and is provided with means of holding the end of the yarn prior to the doffing of the bobbin without coiling a quantity of yarn upon the spindle or other part, and which becomes waste.

Figure 1 is a vertical section of my improved bobbin-holder, showing the thread-clamp down. Fig. 2 is a similar section showing the thread-clamp up. Fig. 3 is a top view of the same, and Fig. 4 is an elevation showing a spindle in position carrying the holder and full bobbin with the yarn end clamped.

A is a metallic cylindrical-shell or thimble, having its upper edge, *a*, turned or curved over outwardly and downwardly, resembling a bead. This thimble is fitted with an elastic core or india-rubber block, B, provided with an eye, *b*.

C C are two narrow strips, placed opposite each other within the thimble and edgewise between its interior face and the exterior of the elastic block B, into which they are sunk. The lower end, *c'*, of each is turned outwardly over the edge of the thimble, and the upper end, *c*, projecting above the top of the thimble, is made broad into lugs and rests with a square shoulder upon the block, thus preventing its slipping upward and holding the block while being forced on the spindle.

D is the thread-clamp, consisting of a narrow collar fitting snugly and movably upon the thimble A. Its upper edge, *d*, is turned outwardly and upwardly, so that it forms a short cylindrical body or collar of sufficient diameter to pass freely over the turned-down edge or bead *a*. It is provided with a flat collar or flange, E, abutting on the neck of the edge *d*. Said collar may be secured in place by a couple of punch blows in the clamp-body D, just below the seat of the flange E. This collar merely serves for a convenient finger-hold in moving the collar D up or down, or for a hold or projection for the application of mechanical means adapted to perform that operation.

In Fig. 4, S is a spindle provided with a wharve, S', footed in the rail, T, and held in the collar-rail T', U being the bobbin supported upon my improved holder.

The device operates as follows: An eye, *b*, being provided in an elastic core for the reception of the tapering spindle, the improved holder may be placed upon it tightly at any desired height, as the core B will yield and the eye adapt itself to the diameter. The lugs *c* engage corresponding notches in the head of the bobbin, to insure the latter being turned with the spindle and the holder. The collar D being placed low, as in Fig. 1, the hooked ends *c'* preventing its slipping off, when the bobbin U is full and ready to be doffed, the yarn is drawn down in the space between the bead *a* and the collar-edge *d*, and then the collar D pushed up, as in Fig. 2, thereby pinching or clamping the thread between the bead *a* and the upward-projecting collar-edge *d*. The bobbin may now be removed and the yarn between the bobbin and the collar broken. A new bobbin being placed in position, the

yarn will at once wind upon it, no waste whatever being thus made.

I claim as my invention—

1. A shell or thimble, A, provided with an elastic core having an eye for the reception of a spindle, said shell provided with an enlarged upper edge or bead, strips C, having the lugs *c*, adapted to engage a bobbin and holding the elastic core in the shell, a sliding collar, D, upon said shell A, having its upper edge enlarged and adapted to pass freely over the enlarged upper edge or bead of the shell and clamp a thread, substantially as set forth.

2. The combination of the shell A, having the bead *a*, elastic core B, strips C, having the lugs *c*, and sliding collar D, having the enlarged edge *d*, substantially as set forth.

3. The combination of the shell A, having the bead *a*, elastic core B, having the eye *b*, strips C, having the lugs *c* and hooked ends *c'*, sliding collar D, having the enlarged edge *d*, and fast collar or flange E, substantially as set forth.

4. The combination of the shell A, elastic core B, having an eye, *b*, and strips C, having lugs *c* and hooked ends *c'*, substantially as set forth.

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Witnesses:

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