W. Murdock.

Bobbin.

No. 51,340. Patented Dec. 5, 1865.

Fig: 1.

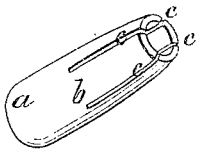


Fig: 2.

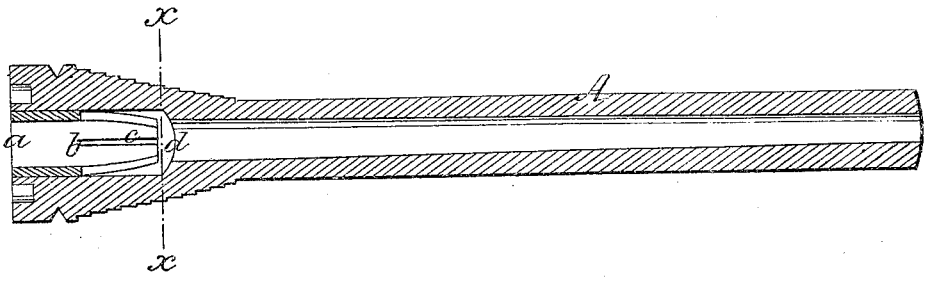
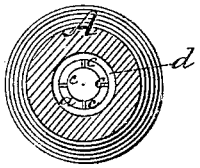


Fig: 3.



Witnesses.
N. W. Stearns
P. B. Teschemacher.

Inventor.
Wm. Murdock

UNITED STATES PATENT OFFICE.

WM. MURDOCK, OF WINCHENDON, MASSACHUSETTS.

IMPROVEMENT IN SPINNING-BOBBINS.

Specification forming part of Letters Patent No. **51,340**, dated December 5, 1865.

To all whom it may concern:

Be it known that I, WILLIAM MURDOCK, of the town of Winchendon, in the county of Worcester, State of Massachusetts, have invented a certain new and useful mode of holding bobbins securely in a proper position on the spindles; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 shows a perspective view of a soft-wood bush so constructed as to form a yielding clamp-socket to embrace all sides and conform to the variations in the size of the spindles. Fig. 2 represents a longitudinal section of a wood bobbin, showing the hole through it for the spindle, the enlarged cavity in its base, with the yielding clamp-socket in its place for embracing the spindle. Fig. 3 shows a cross-section through the bobbin at the inner end of the bush-clamp socket.

The object of my invention is to hold the cops or bobbins to spindles (which may vary a trifle in size) uniformly and evenly in rows on the jenny by the most simple, cheap, efficient, and durable means.

My invention consists in the application and use of tough, springy, soft wood, so constructed as to yield or expand by pressure inside the aperture and embrace a tapering spindle on all of its sides at various distances, so that the bobbins in which they are inserted may be used on spindles which vary in size and taper, and will be held firmly in their places for use when set in rows uniformly of a height.

To enable others skilled in the art to make and use my improved device for holding the bobbins to the spindles, I will describe it more fully, referring to the drawings and to the letters marked thereon.

The bobbins A are made of any fine-grained white wood, bored through longitudinally and turned of any desired size or form, as seen in Fig. 2. In the lower end of the bobbin the orifice is enlarged sufficiently to admit of the insertion of a tough, soft-wood bush or clamp-socket, *a*, which is made to fit the orifice *d* about one-third of its length at the base of the bobbin, the other portion, of about two-thirds, being gradually tapered in a conical form, so as to leave space all around it in the cavity *d*, the hole *b* through the bush or clamp-socket *a* being much more tapering than the long aperture in the bobbin A, so that by cutting slits *c c c c* in the inner end of the clamp-socket *a*, where the hole *b* is the most contracted, it allows the bush or socket *a* to expand and conform to the size of the spindle, while it compresses it on all sides sufficiently to hold the bobbin firmly in its place for use.

The advantages of my invention and improvement for securing the bobbins to spindles, as above described, are well known and appreciated in many of the factories where many other devices have been used for the same purpose, and it is regarded as the most simple, cheap, efficient, and durable device known.

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

1. The wooden tube or clamp-socket *a*, constructed in the manner, and secured to the base of spinning-bobbins, as described, so as to operate as and for the purposes herein set forth.

2. The application and use of wood bushings to embrace the spindle, in combination with spinning-bobbins so constructed as to be susceptible of adjustment uniformly to the spinning-jenny, as described.

WM. MURDOCK.

Witnesses:

P. E. TESCHEMACHER,

N. W. STEARNS.