J. MAWSON.

BOBBINS.

No. 189,243. Patented April 3, 1877.

Fig. 1

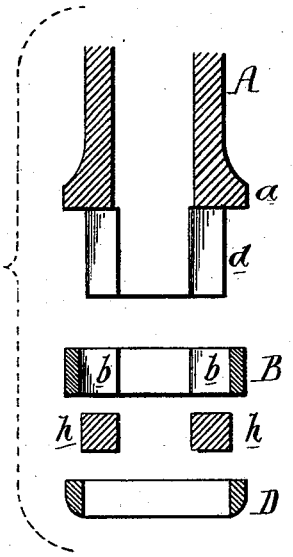


Fig. 2

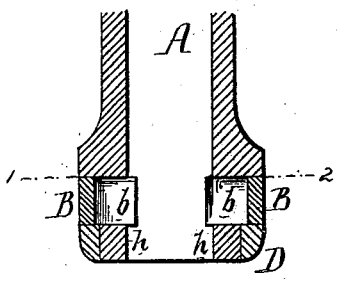


Fig. 3

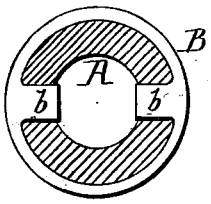
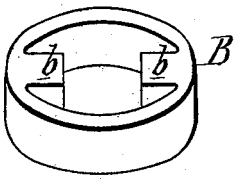


Fig. 4.



Witnesses
Richard L. Gardiner
Harry Smith

John Mawson
by his Attorneys,
Howson & Sons

UNITED STATES PATENT OFFICE.

JOHN MAWSON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BOBBINS.

Specification forming part of Letters Patent No. **189,243**, dated April 3, 1877; application filed January 24, 1877.

To all whom it may concern:

Be it known that I, JOHN MAWSON, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Bobbins for Spinning, of which the following is a specification:

My invention relates to spinning-machine bobbins the lower ends of which are adapted to flattened portions of the spindles; and the object of my invention is to provide a bobbin of this class with extended metallic surfaces for bearing against the spindle, and to so arm the bobbin externally with metal that it will be more lasting than ordinary bobbins.

In the accompanying drawing, Figure 1 represents a vertical section, drawn to an enlarged scale, of the lower portion of the wooden body of the bobbin, with detached parts relating to my improvement; Fig. 2, a vertical section, showing the said parts fitted to the bobbin; Fig. 3, a sectional plan on the line 1 2, Fig. 2; and Fig. 4, a perspective view of the metal ring which is fitted to the base of the bobbin.

The bobbin A is, as usual, made of wood, with an annular enlargement or flange, *a*, near the base. B is a metal ring, of the same diameter externally as the flange *a*, and having opposite internal projections *b b*, the distance between the latter being equal to the thickness of the usual flattened portions of the spindle to which bobbins of this class are adapted.

The lower portion *d* of the bobbin is turned to fit snugly in the interior of the ring B, and is slotted to receive the projections *b b*.

After the ring has been tightly driven onto the bobbin and against the flange *a*, a wooden retaining-ring, D, is fitted and glued to the bobbin, as shown in Fig. 2, after which a proper external finish is imparted to the bobbin when the latter is complete and ready for use.

Prior to fitting the retaining-ring in its place, the vacant spaces within the slots may be filled with packing-pieces *h h*.

In some cases, however, the retaining-ring and filling-pieces may be dispensed with.

Two advantages are due to my invention: First, the ends of the projections *b b* afford much more extended bearings for the opposite flattened sides of the spindle than the metal pins which are usually driven transversely through the lower portion of the bobbin; and, second, the metal ring prevents the rapid wearing away of the exterior of the lower portion of the bobbin.

I claim as my invention—

The combination of the metal ring B, having internal projections *b b*, with the lower slotted portion *d* of the body A of the bobbin, all substantially as set forth.

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

JOHN MAWSON.

Witnesses:
HERMANN MOESSNER,
HARRY SMITH.