

M. Bliss

Imp^t in Self-Packing Bobbins

PATENTED MAY 17 1870

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Fig. 1

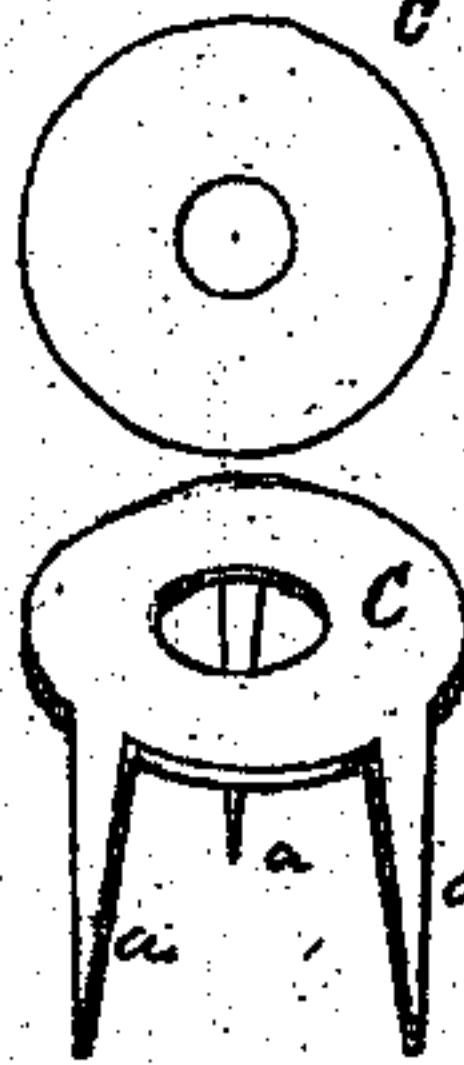
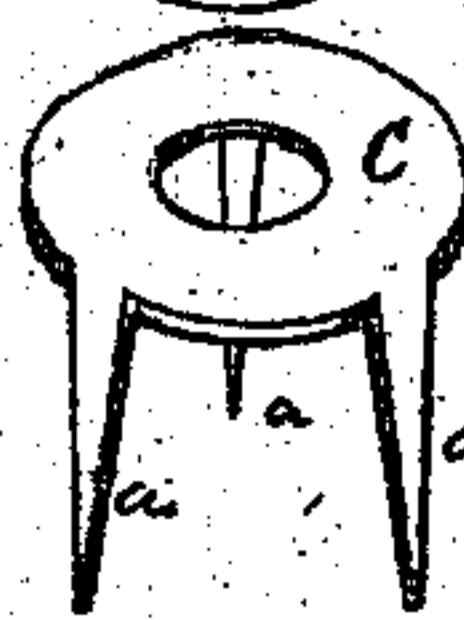


Fig. 2

Fig. 3



Witnesses
V. D. Stockbridge.
A. N. Marr.

Inventor
M. Bliss.
per Alexander Thomson
attys.

United States Patent Office.

MILTON BLISS, OF IONIA, MICHIGAN, ASSIGNOR TO A. M. BLISS.

Letters Patent No. 103,009, dated May 17, 1870.

IMPROVEMENT IN BOBBINS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, MILTON BLISS, of Ionia, in the county of Ionia and in the State of Michigan, have invented certain new and useful Improvements in Bobbins; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

In the annexed drawings making part of this specification—

A represents a bobbin, which is constructed, generally, similar to those in ordinary use.

In the butt end of this bobbin and around the hole which receives the spindle, I form an annular recess, of any desirable or suitable depth, and in this recess I insert a disk, made of rubber, leather, cork, or any other suitable material, with a hole through its center to receive the spindle.

The hole through this disk is made a little smaller than that through the bobbin, so that when the spindle is inserted, the rubber, leather, or other packing will fit snugly around the spindle to retain the bobbin upon it.

To keep this disk B in its place, I use a metallic plate, C, which fits over it in the mouth of the re-

cess, and which is provided with teeth *a a*, which pass into the butt of the bobbin, are clinched, and hold the packing in place.

The packing B can be renewed at any time by removing the plate C.

It is evident that with this packing a spring upon the spindle, or upon the shuttle, is entirely unnecessary for holding the bobbin, and that this device is simpler, more durable, and cheaper than those now in general use.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The combination with the bobbin A and the packing ring B of the pronged plate C, constructed as described, and confining the India-rubber ring B in an annular recess in the end of the bobbin, the prongs being passed through the bobbin-flange and then clinched, substantially as herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 28th day of March, 1868.

M. BLISS.

Witnesses:

A. N. MARR,

A. A. YEATMAN.