

D. BASS, Jr.

Quill-Bobbins for Spinning-Machines.

No. 139,652.

Patented June 10, 1873.

Fig. 1.

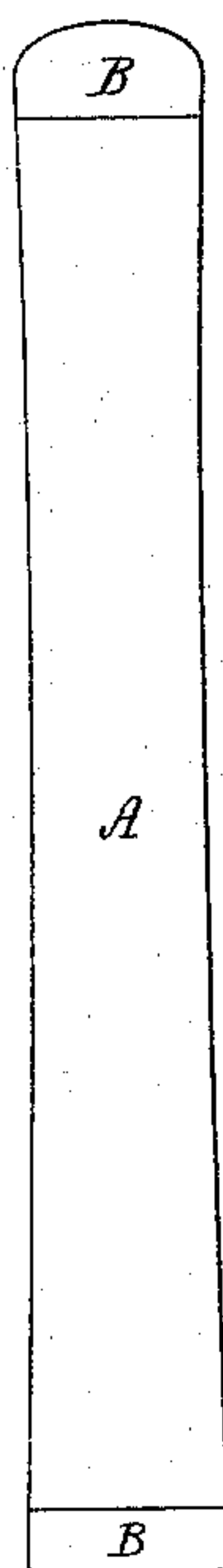
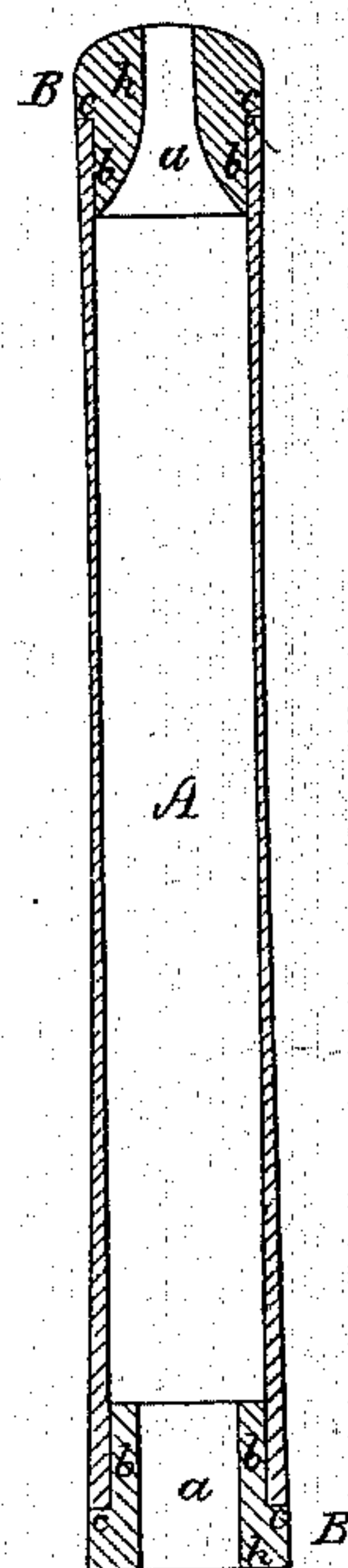


Fig. 2.



Witnesses

S. W. Piper
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UNITED STATES PATENT OFFICE.

DAVID BASS, JR., OF WOONSOCKET, RHODE ISLAND.

IMPROVEMENT IN QUILL-BOBBINS FOR SPINNING-MACHINES.

Specification forming part of Letters Patent No. 139,652, dated June 10, 1873; application filed May 16, 1873.

To all whom it may concern:

Be it known that I, DAVID BASS, Jr., of Woonsocket, of the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Quill-Bobbins for Spinning-Frames; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is an elevation or outer-side view, and Fig. 2 a longitudinal section, of a bobbin constructed in accordance with my invention.

Quill-bobbins, as ordinarily made, consist of a thin tube of wood, sometimes bushed at either or each end, though as often without any bushing. Such bobbins while in use, in consequence of the ends of the wood being uncovered, soon become indented, battered, nicked, or split at one or both ends.

Furthermore, with the common quill-bobbins whose bushings or upper ends are of wood easily indented, the bore of the end or bushing is liable to be injured, grooved, creased, or split by the end of the spindle during the process of applying the bobbin to the spindle, in which case the bobbin is liable to become eccentric to the spindle, or work loose upon it, to the detriment of the spinning. These injuries not only affect the proper operation of the bobbin, but soon render it unfit for use.

It is very important to have a bobbin as light, or of as little weight, and as durable, as possible. I have discovered a mode of constructing a quill-bobbin by which I am not only able to employ a very light material, such as poplar wood, for its body, and to have such body very thin, but to completely protect the ends of the body and head or heads of the bobbin from becoming split or nicked when the bobbin is thrown upon the floor or upon others or any article.

In carrying out my invention I apply to either or each end of, or combine with, the

bobbin-body A, made tubular, or with a bore extending through from one to the other end of it, a cap or crown, B, which I usually make of horn, rawhide, or some other like material sufficiently hard to withstand the blows to which it is liable while in use. This cap or crown unites the qualities of a bushing to receive the spindle and support the bobbin thereon with those of a cap to extend over and cover the end of the bobbin, so as to protect it from being split or injured. To this end the crown is formed in transverse section in the manner represented in Fig. 2, viz., with a head, *h*, and neck *b*, its bore *a* being trumpet-shaped or otherwise, as shown. The neck *b* is cylindrical, and extends into the body the requisite distance until the end of the body abuts closely against the shoulder *c* of the head, and is covered thereby, the surfaces in contact being glued or cemented together.

I do not confine my invention to horn or rawhide for the crown of the end of the body or quill of the bobbin, although such material answers the purpose, but I intend to use any other substance having the required qualities.

I am aware that it is not new to protect the head of a double-headed or thimble bobbin by a layer of rawhide or horn fixed upon the outer surface of such head; I therefore make no claim thereto.

I claim as a new or improved manufacture—

A quill-bobbin provided with a thin tubular body, and at either or each end thereof with a protection crown-bushing, of horn or other proper hard material, so applied to the body as to extend into it and project over and upon and cover the end thereof, all substantially as described and represented.

DAVID BASS, JR.

Witnesses:

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J. R. SNOW.