

(No Model.)

G. R. HOLT.

BOBBIN FOR SPINNING MACHINES.

No. 369,942.

Patented Sept. 13, 1887.

Fig. 1.

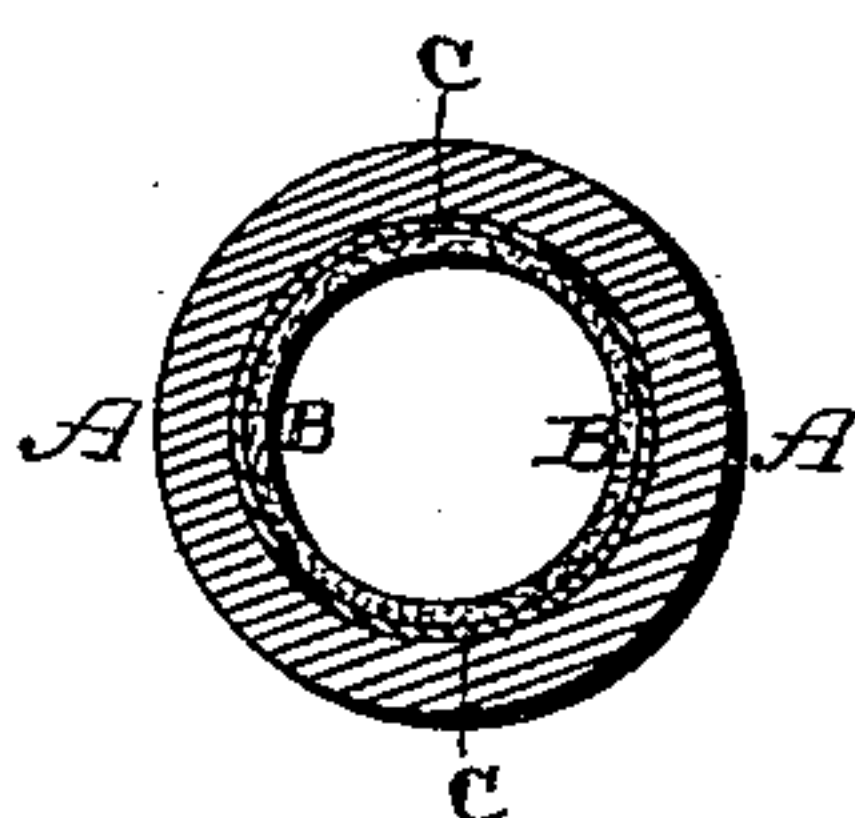
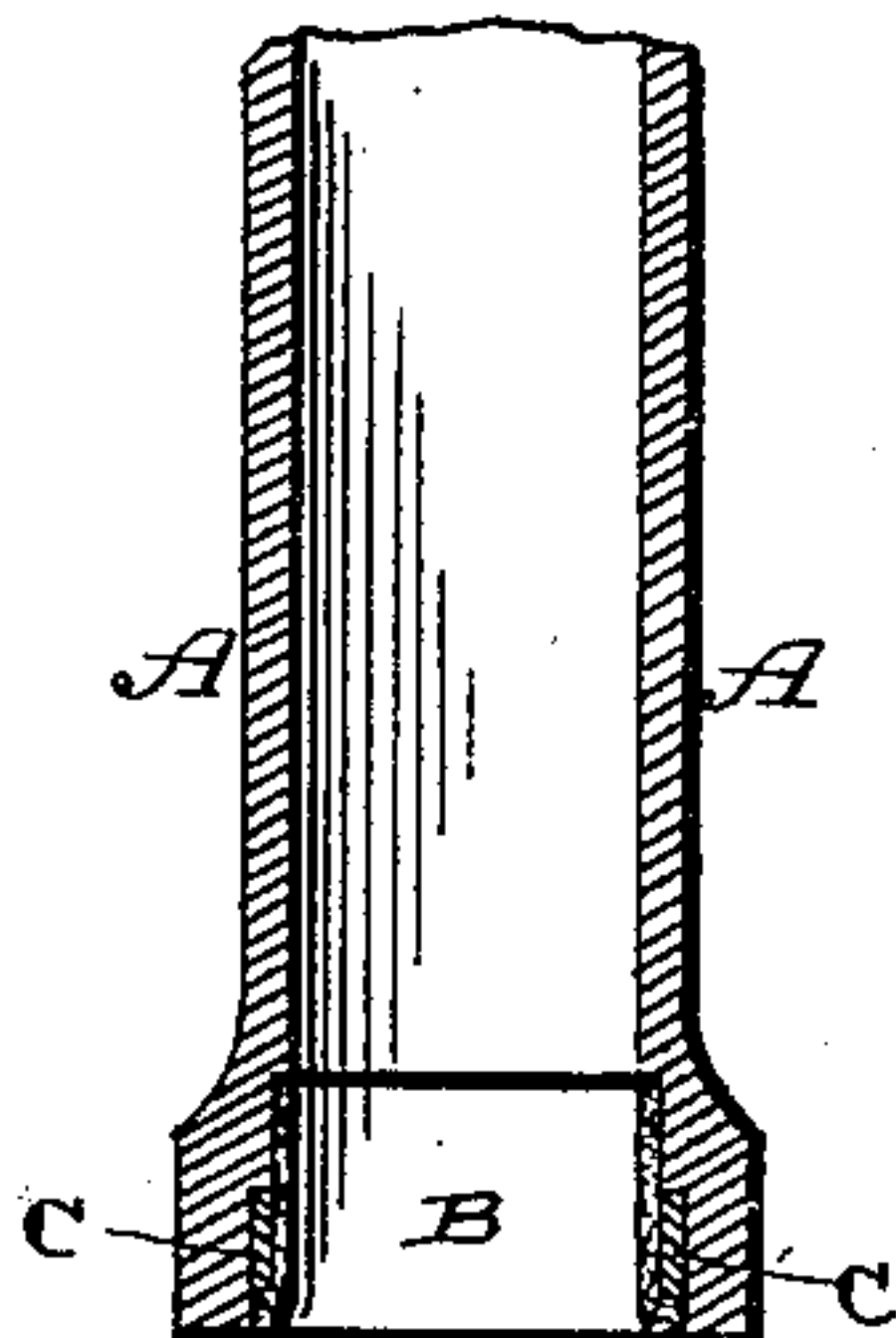


Fig. 2.



Witnesses.
R. F. Gardner
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UNITED STATES PATENT OFFICE.

GEORGE R. HOLT, OF BURLINGTON, VERMONT.

BOBBIN FOR SPINNING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 369,942, dated September 13, 1887.

Application filed February 21, 1887. Serial No. 223,393. (No model.)

To all whom it may concern:

Be it known that I, GEORGE R. HOLT, a citizen of the United States, residing at Burlington, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Bobbins for Spinning-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in spinning bobbins or quills; and it consists in the combination of a quill with a bushing and a strengthening-band, which is applied around the bushing, as will be more fully described hereinafter.

The object of my invention is to protect and strengthen that portion of the quill which requires it most, and to do it in such a manner as not to interfere with the interior of the quill.

Figure 1 is a horizontal section taken through the lower end of the quill. Fig. 2 is a vertical section taken through its lower end.

A represents the quill, which is bored out at its lower end, so as to receive the bushing

B. This bushing is strengthened by a metallic band, C, which is applied to its outer surface. This band is considerably narrower than the bushing, so as to leave a surface both above and below the band, to which the glue can be

applied for the purpose of holding the bushing in place. This metallic band is driven tightly up to a shoulder formed in the exterior of the bushing. By having a glued surface upon each side of the band, the bushing serves to retain the band better in place and enables it to be adjusted as near the outer end of the quill as possible. In this way the quill is especially protected and strengthened in that portion which requires it most, and this object is accomplished in a manner which does not interfere in the least with the interior. The quill can be bored perfectly true and the bushing can be readily and cheaply made and put in place, where it is rigidly held by the glued surfaces on each side of the band.

Having thus described my invention, I claim—

The combination of the quill, the bushing, and the metallic band, which is applied around the bushing, the lower end of the quill being bored out to receive the bushing and band, substantially as shown and described.

In testimony whereof I do affix my signature in presence of two witnesses.

GEORGE R. HOLT.

Witnesses:

A. V. SPALDING,
CHARLES E. ALLEN.