(No Model.)

# C. B. BROWN.

## THIMBLE SKEIN.

No. 279,909. Patented June 26, 1883.

Fig. 1.

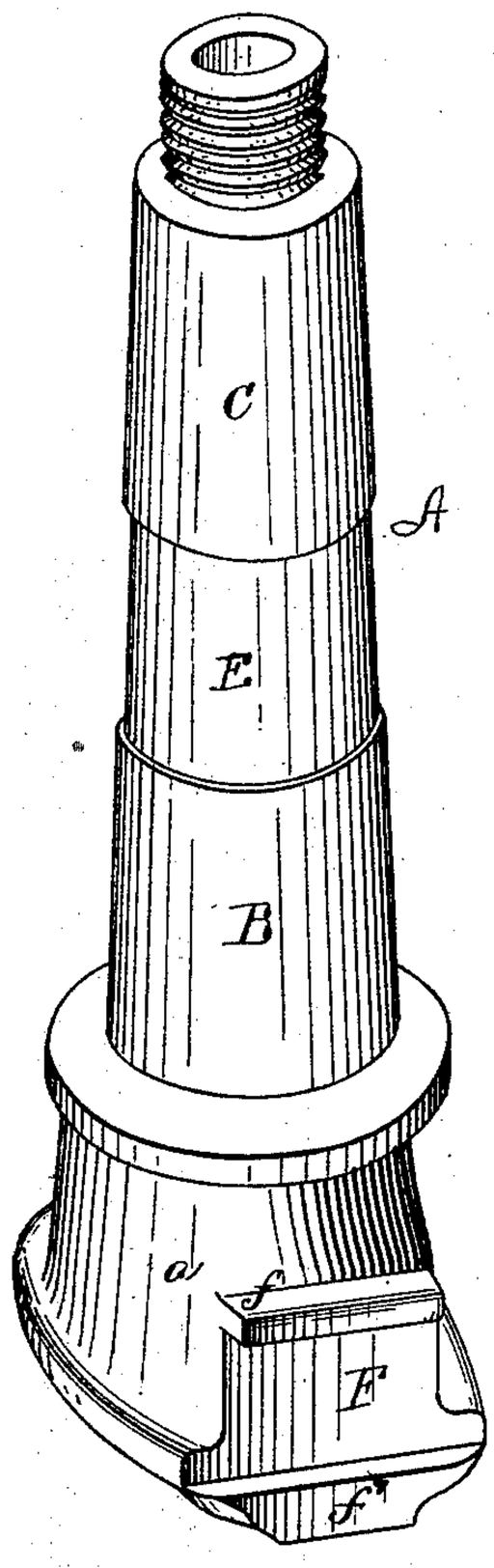
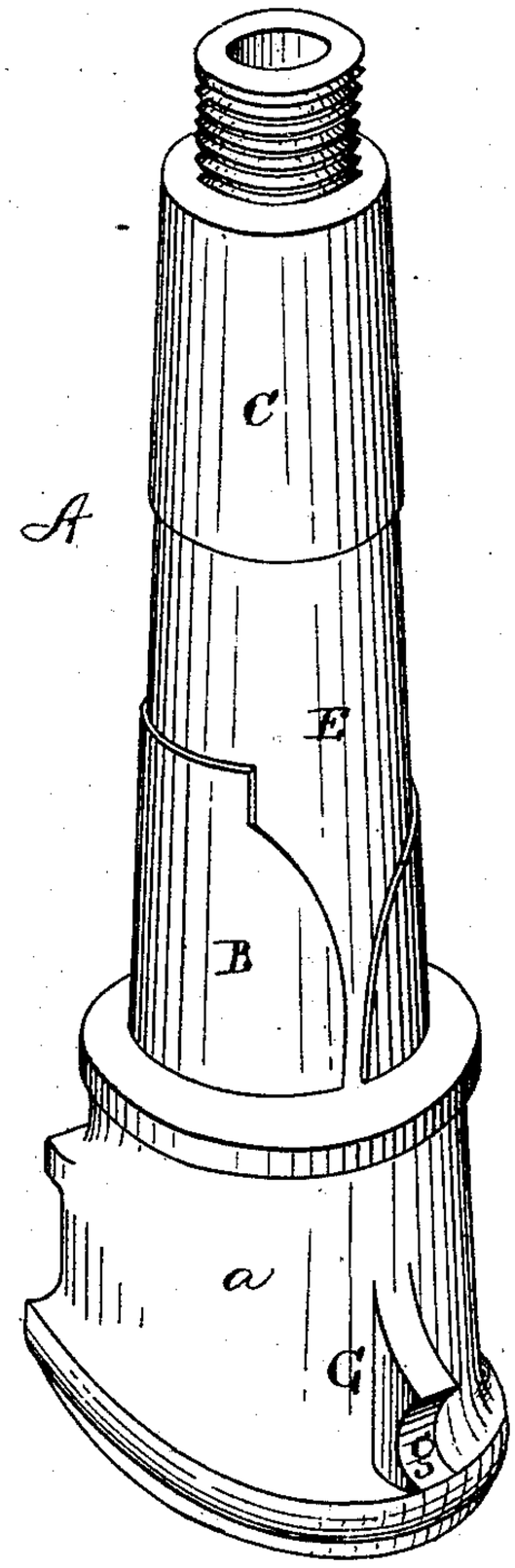



Fig. 2.

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# UNITED STATES PATENT OFFICE.

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## THIMBLE-SKEIN.

SPECIFICATION forming part of Letters Patent No. 279,909, dated June 26, 1883.

Application filed February 8, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES B. BROWN, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Seamless Axle-Skeins, of which the following, in connection with the accompanying drawings, is a specification.

Figure 1 is a perspective view of the skein from the bottom. Fig. 2 is a similar view from the top.

This invention relates to improvements in axle-skeins. In the case is described and claimed the skein itself as a new article, the method by which it is made being fully set forth in another case filed May 21, 1883, Serial No. 95,658, to which latter case reference is made for full particulars of the way in which the present article is made.

The main object of this invention is the obtaining of an axle-skein which shall be seamless, and at the same time be provided with upper and lower bearings and an intermediate lubricant-recess. Skeins provided with these features have been made before this; but such skeins have been made with what is known as "seams"—that is, they have been made in a two-part flask, and where the meeting edges of the latter come together a seam is found, as is well known to all persons acquainted with casting. Such a seamed skein, when pressure is applied to force it on the stock, is very liable to crack along the seam, and many skeins are ruined in this way. When the skein is seamless one part is as strong as another, and all resist the strain alike.

The invention therefore primarily consists in a seamless axle-skein provided with upper and lower bearings and an intermediate lubricant-recess; and it also consists in a seamless axle-skein having other peculiarities.

In the annexed drawings, the letter A indicates the axle-skein, which is to be made seamless in a way fully set forth in the twin case already referred to. This skein has the upper bearing, B, lower bearing, C, and intermediate lubricant-recess, E, all arranged as shown.

On the underneath side of the butt *a* of the skein the latter is provided with a transverse flat portion or bearing, F, having the ribs *f f'* on each side, as shown. The way in which a seamless skein can be provided with this feature is also set forth in the twin case referred to. On the upper side of this butt *a* the skein is provided with a rib, G, which has a transverse notch, *g*, as shown. In the twin case referred to is also set forth the manner in which a seamless skein can be made with this feature.

The groove *g* and bearing F are intended for the clip and its plate, which are used at this point in making a vehicle.

I am aware that a seamless axle-skein in itself is not new; but I am the first to produce a seamless skein having the features set forth, and, as far as I know, such a skein could not be made by any of the methods now known.

Having described my invention, what I claim is—

1. A seamless axle-skein provided with upper and lower bearings and the intermediate lubricant-recess, as set forth.

2. A seamless axle-skein provided on the under side, at its butt, with the transverse flat bearing F, having the ribs *f f'* on its sides, as set forth.

3. A seamless axle-skein provided on the top, at its butt, with the rib G, having the transverse groove *g*, as set forth.

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