

(No Model.)

AI B. SHAW.
SHADE ROLLER.

No. 308,635.

Patented Dec. 2, 1884.

Fig. 1.

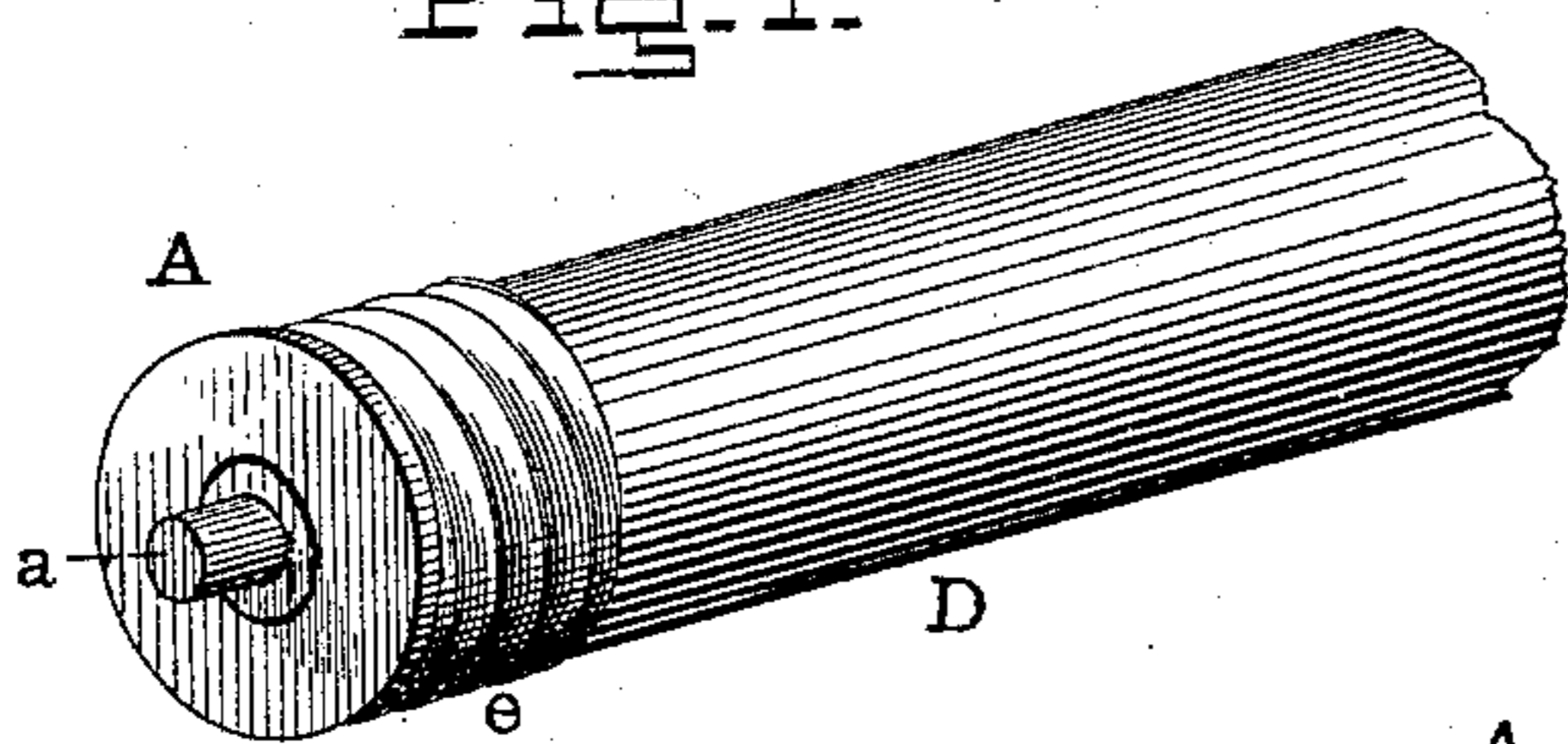


Fig. 2.

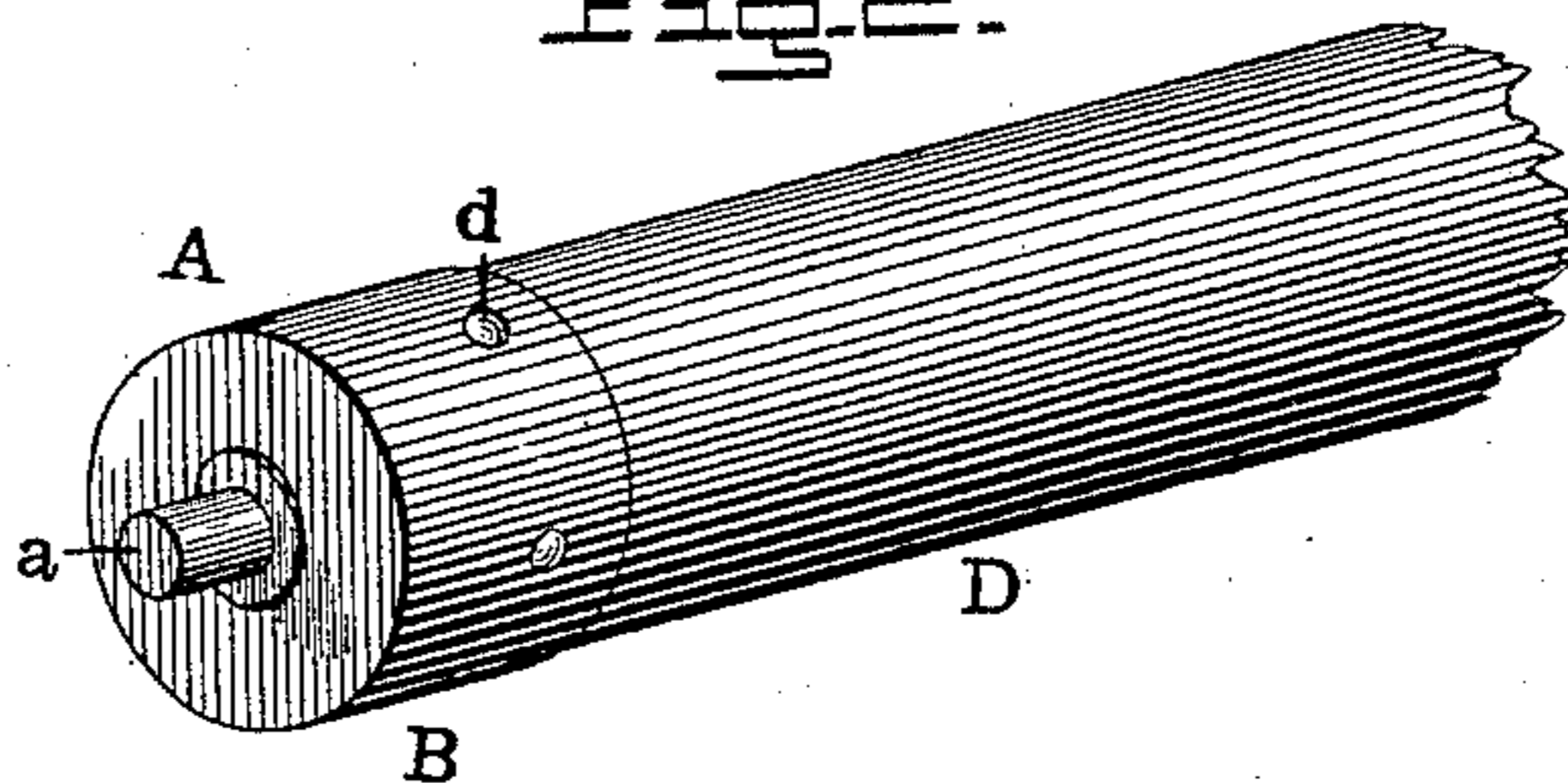


Fig. 3.

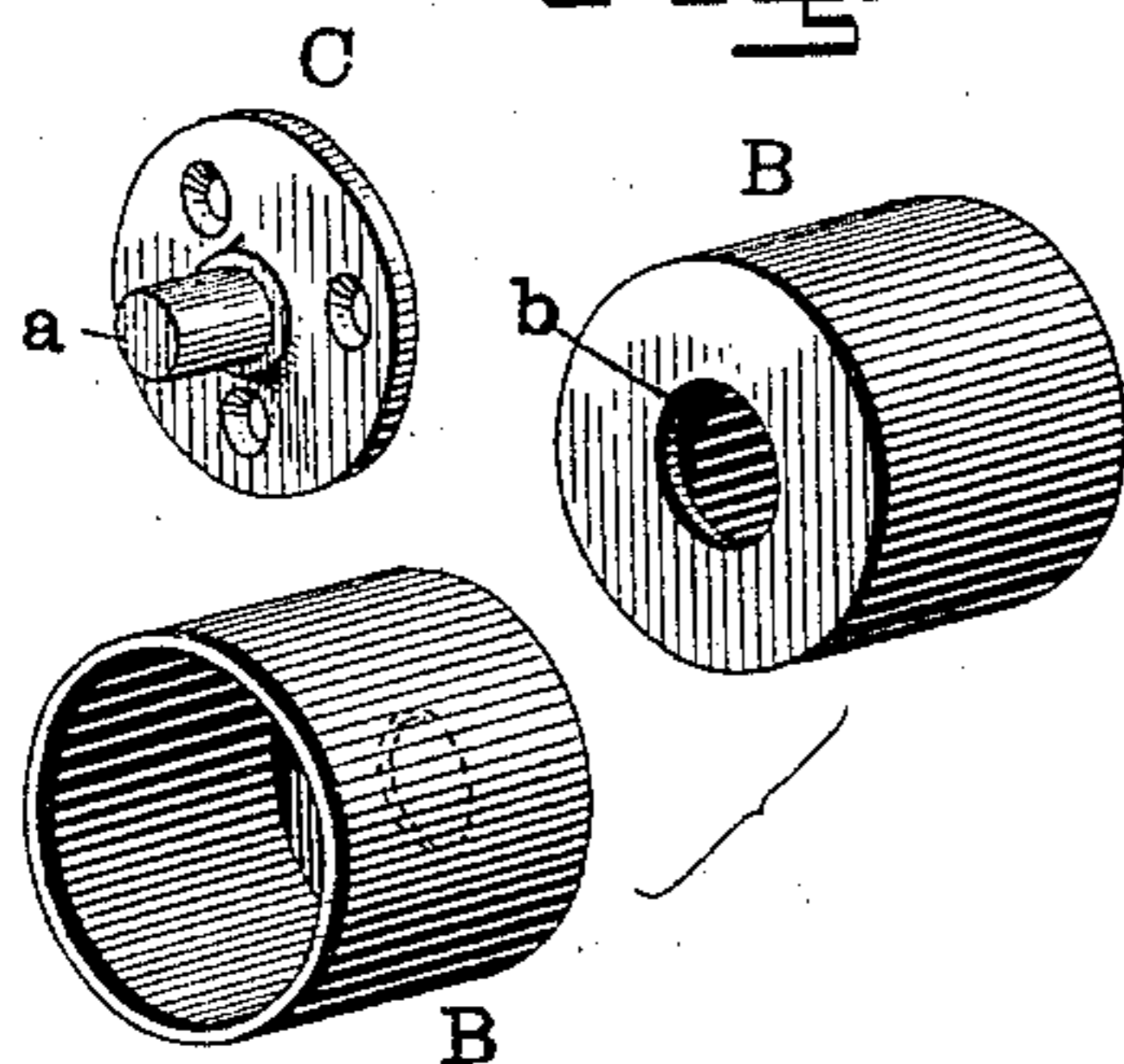


Fig. 4.

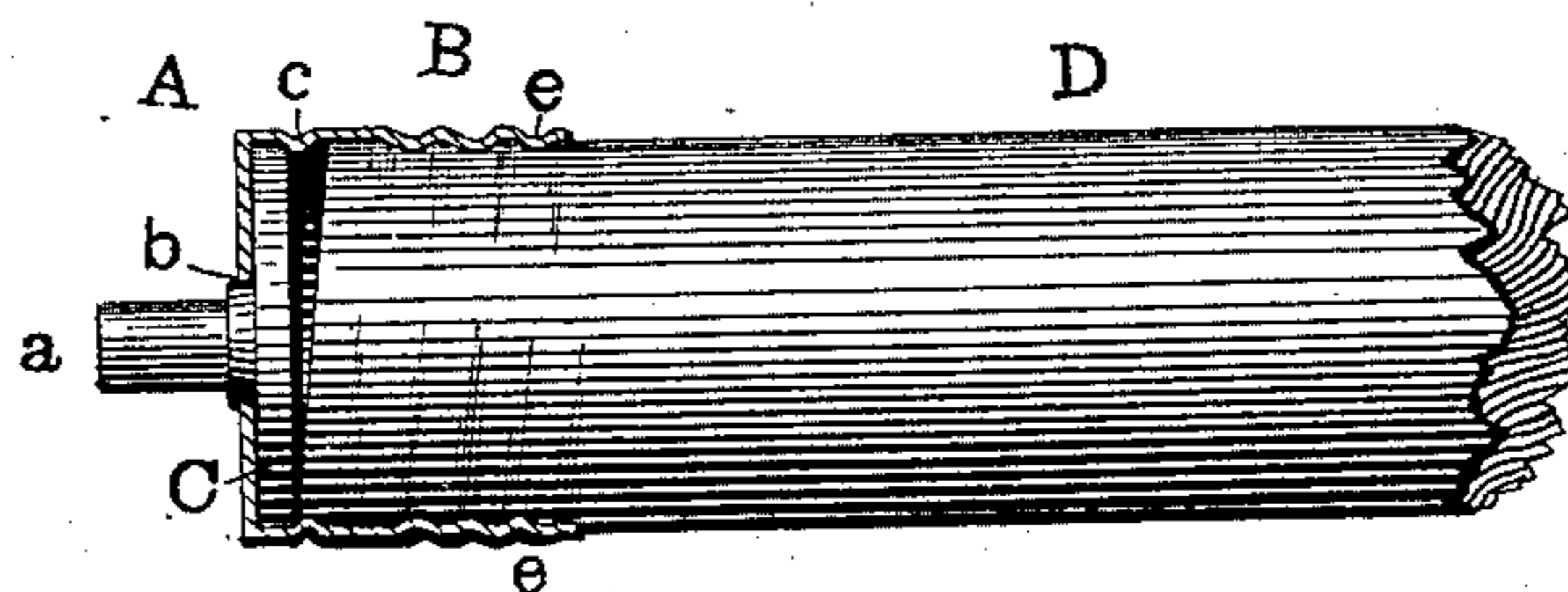
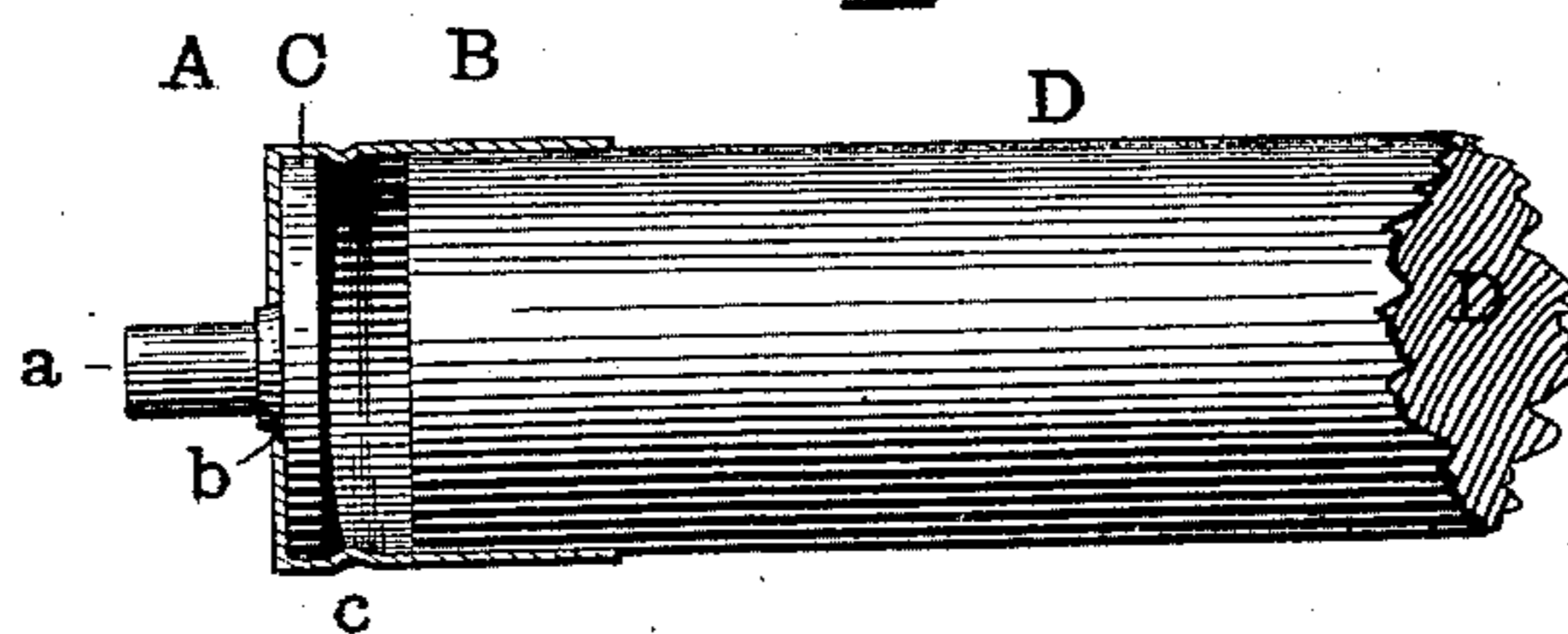


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

AI B. SHAW, OF RACINE, WISCONSIN, ASSIGNOR TO THE RACINE SHADE
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SHADE-ROLLER.

SPECIFICATION forming part of Letters Patent No. 308,635, dated December 2, 1884.

Application filed February 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, AI B. SHAW, of Racine, in the county of Racine and State of Wisconsin, have invented certain Improvements in Shade-Rollers, of which the following is a specification.

My invention consists in a combined journal and ferrule for shade-rollers, composed of a disk formed with a central journal seated within the ferrule and secured therein by indenting the body of the ferrule close to the edge of the disk, the journal projecting through a central hole in the end of the ferrule.

The invention further consists in providing the body of such ferrule with a screw-thread and in combining the device thus formed with a roller of wood or other material capable of being readily indented or cut by the screw-thread.

In the accompanying drawings, Figure 1 represents a perspective view of one end of a shade-roller provided with my improved cap or combined ferrule and journal; Fig. 2, a like view showing the ferrule without a screw-thread; Fig. 3, a perspective view of the parts separated one from the other; Figs. 4 and 5, sectional views showing the device in place upon a roll.

The purpose of my invention is to provide a shade-roller attachment bearing the journal for one end of such roller, and adapted to be readily and accurately applied to a roller, whether such roller be cut of exactly proper length and true or square at the end slightly shorter than it should be or slanting or irregular at the end.

As is well known, great nicety and exactness are required in cutting shade-rollers to secure the precise length necessary to free working and freedom from rattling, and it is likewise well understood that unless the end be cut square and perpendicular to the axis of the roll the journal will stand at an angle to said axis and cause an eccentric and objectionable motion of the roll in rotating. Under the plan more generally adopted a cast-metal disk bearing a central journal is applied to the end of the roll and secured in place by tacks, nails, or screws driven into the end of the roll, but

such fastenings, running with the grain of the wood, soon work loose and interfere with the working of the roll. To overcome these various objections and provide means of compensating for any ordinary inexactness of cutting, I construct a cap, A, as shown in the drawings, said cap constituting a combined ferrule and journal.

A indicates the cap as a whole; B, the ferrule, and C a disk provided with a central journal or stem, *a*, which projects through a hole, *b*, formed centrally in the otherwise closed end of the ferrule. The disk C is essentially the same as that now commonly used upon shade-rollers, but may be made without the holes usually provided for tacks or other fastenings, or it may be made in skeleton form, as desired. This disk is pressed into the ferrule until its outer face—that is to say, the face bearing the journal—comes into contact with the end of the ferrule, the journal *a* projecting through hole *b*, as in Figs. 1, 2, 4, and 5. After the disk is thus inserted, the sides or body of the ferrule B being indented close to the inner face of the disk, as at *c* in said figures, said disk will be firmly secured in place with its faces perpendicular to the sides of the ferrule and with its journal concentric and parallel with the axis of the ferrule. The cap thus formed may be slipped upon the end of a shade-roller, D, and made to fit the same so closely as to retain any position given it, by reason of its friction, or it may be secured by small tacks *d*, passing through the sides of the ferrule and into the roller. The ferrule B is made long enough to permit longitudinal adjustment of the cap upon the roll, sufficient to compensate for any ordinary inaccuracy in cutting, and long enough also to insure the centering of the journal and its firm retention in such central position relatively to the roll.

In order more efficiently to provide for securing the cap in place and for nicely adjusting the same, I prefer to provide the ferrule with a screw-thread, *e*, as in Figs. 1 and 4, so that the cap A may be screwed upon the end of the curtain-roller, its thread cutting or indenting the roll and embedding itself therein. As curtain or shade rolls are generally made

of soft wood, such as white pine and the like, it will be seen that this may readily be done; but for harder woods it may be necessary to form a thread upon the roll by suitable tools or machinery.

I make no claim, broadly, to a roller cup or cap constructed with a central hole in its bottom, combined with a flanged gudgeon secured to said cup through said central hole, as I am not the first inventor thereof, though I believe myself to be the first to secure the gudgeon or pintle in place in the manner shown and described, and also the first to produce a threaded cap adapted to be applied to wooden rollers without previous preparation of the latter to receive it. I therefore do not claim a curtain-roll cap having a headed or flanged pintle passing through a central opening in the end or bottom of the cup and secured by soldering; but,

Having thus described my invention, what I claim is—

1. The herein-described shade-roller cap, consisting of ferrule B and disk C, fitting the interior walls thereof and secured therein by indentations in the ferrule, and provided with journal *a*, substantially as shown and described.

2. The cap A, consisting of disk C, provided with journal *a*, and ferrule B, provided with hole *b*, and indented, as at *c*, to retain said disk in place.

3. The herein-described cap for shade-rollers, consisting of a ferrule provided with a closed end having a central opening, and having its body threaded, and a disk closely fitting the interior of the ferrule, secured therein by indentations in the ferrule and provided with a journal projecting through the hole in the end of the ferrule, all substantially as shown and described.

4. In combination with a shade-roller, D, a cap, A, consisting of ferrule B and disk C, constructed and applied substantially as described and shown.

5. In combination with a shade-roller of wood or equivalent material capable of being readily indented, a screw-threaded cap provided with a central journal, substantially as shown and described.

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Witnesses:

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