

(No Model.)

G. PENDLETON, Jr.
BOBBIN OR SPOOL.

No. 426,644.

Patented Apr. 29, 1890.

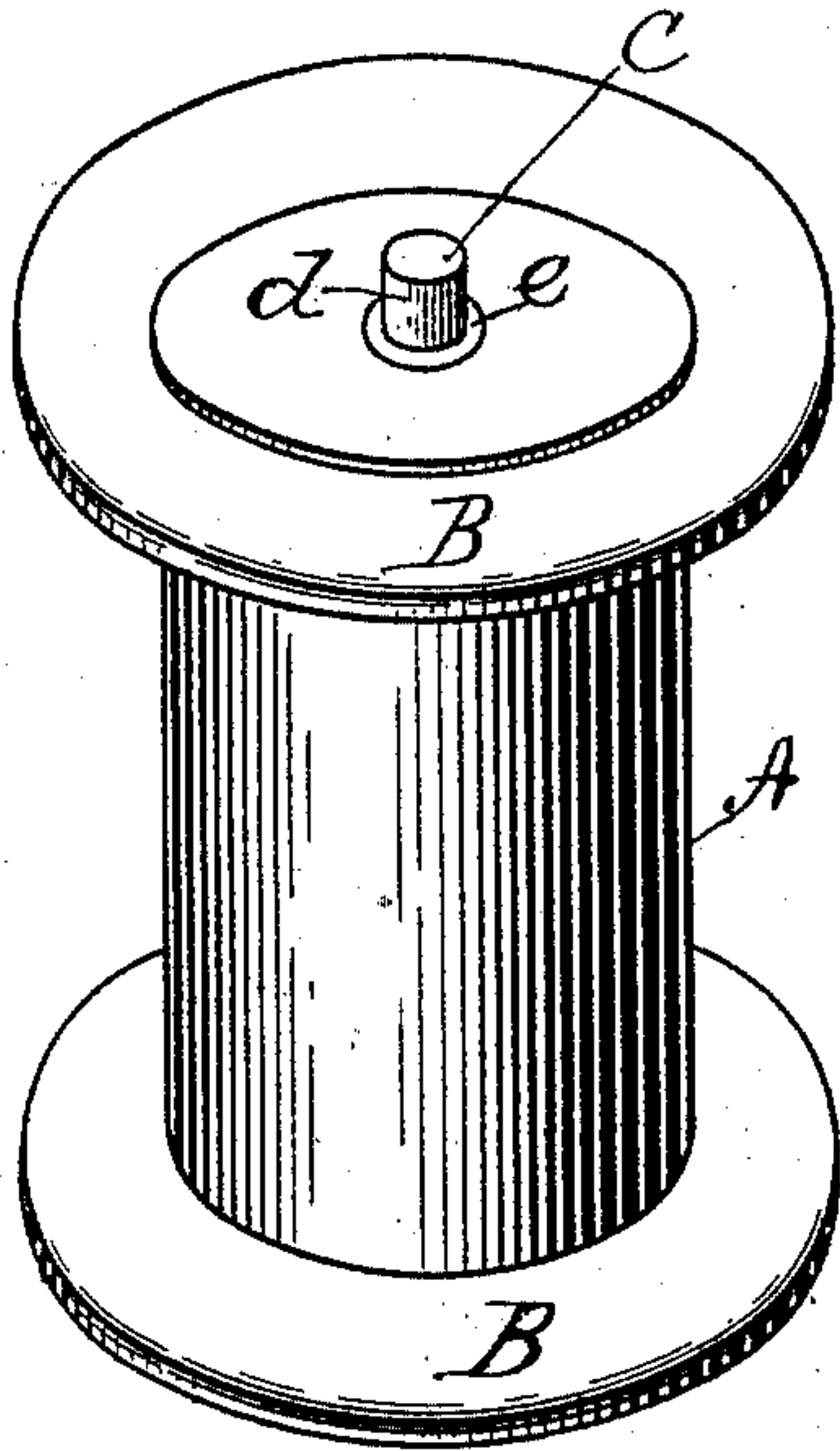


Fig. 1.

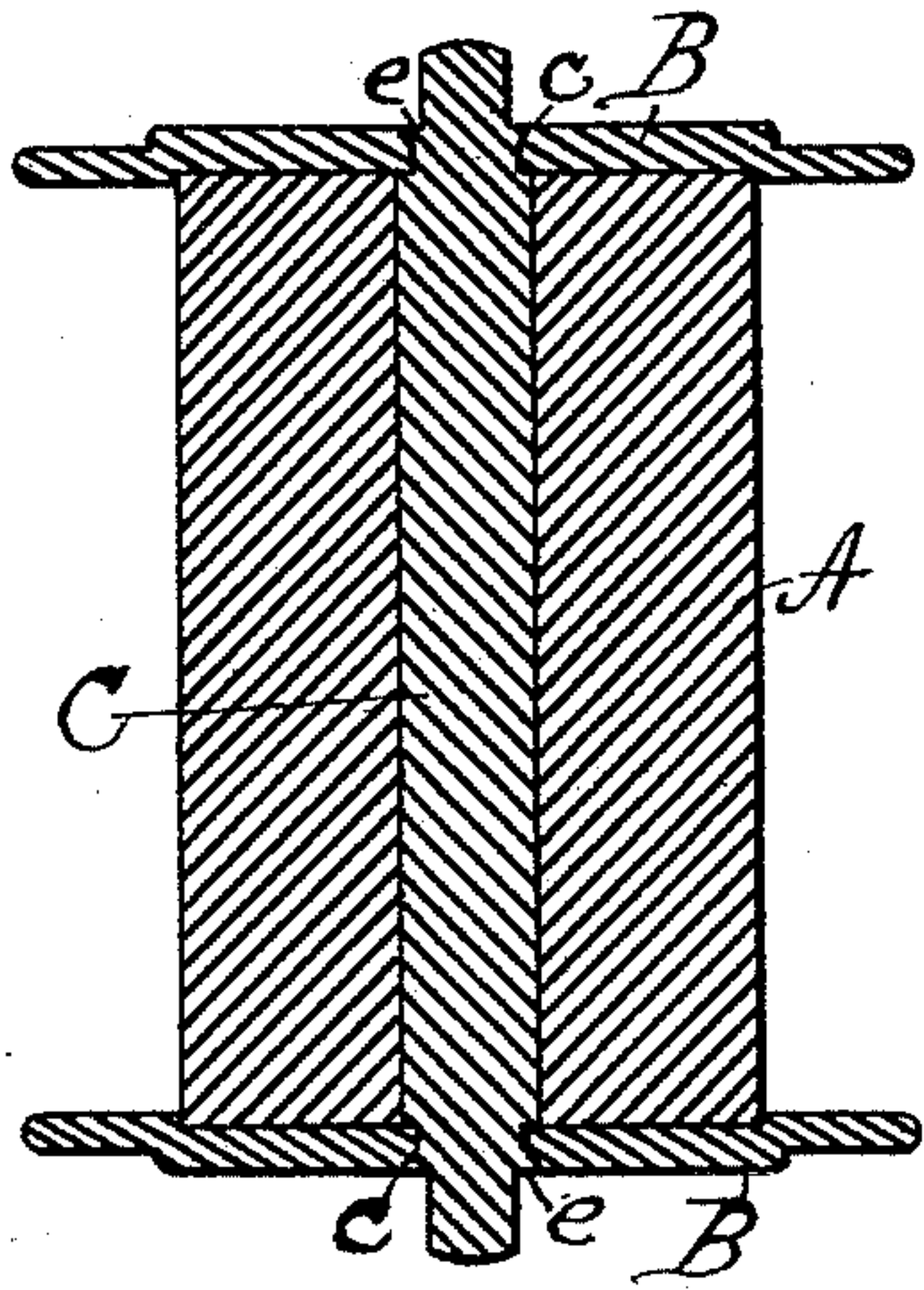


Fig. 2.

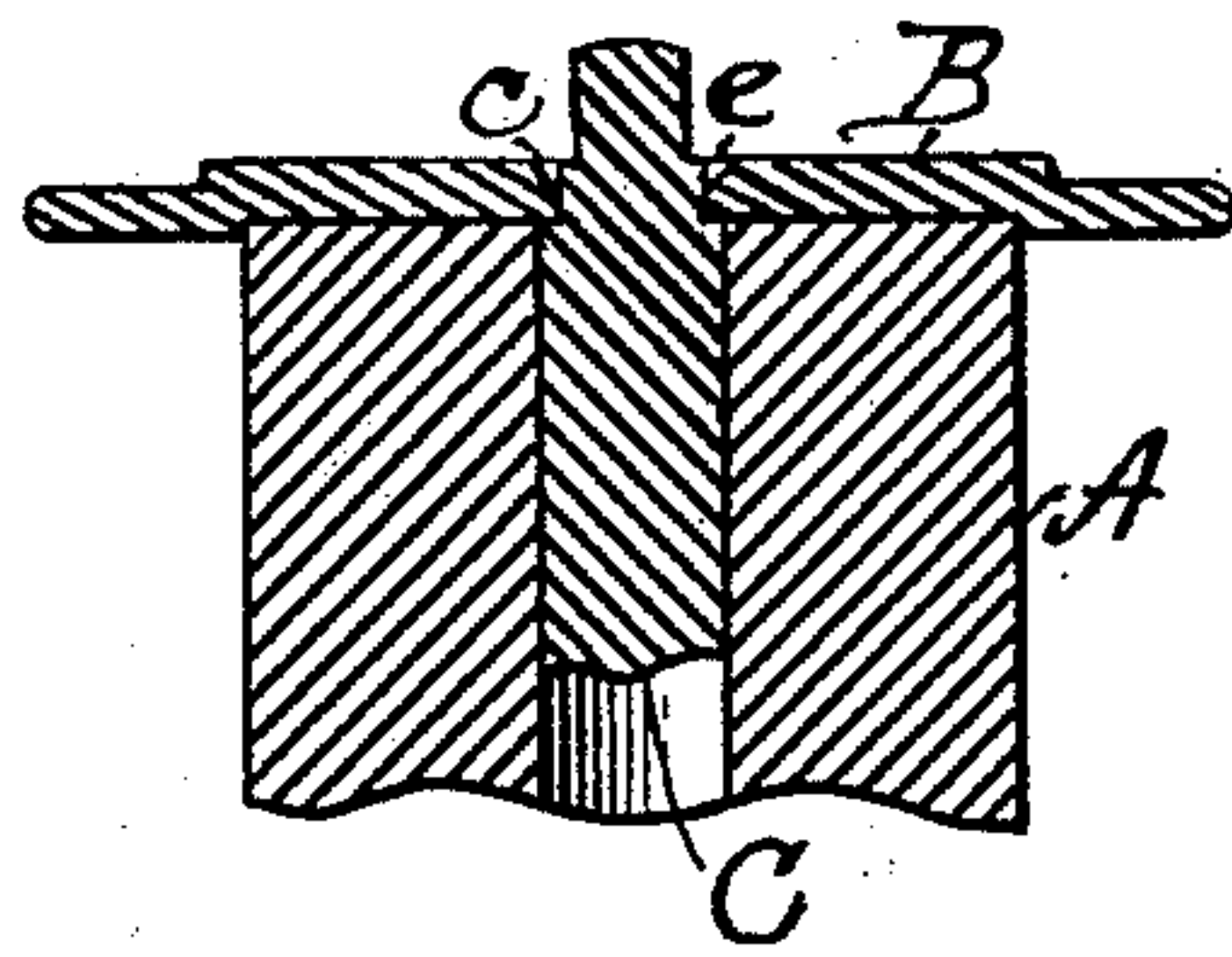


Fig. 3.

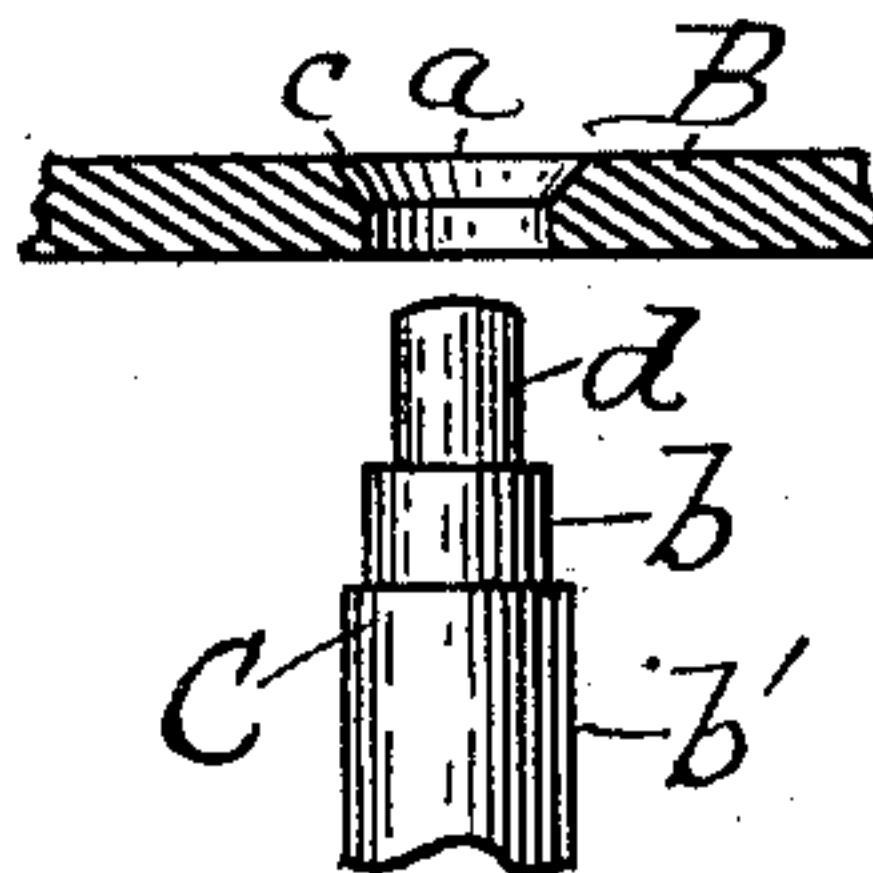


Fig. 4.

WITNESSES.

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BOBBIN OR SPOOL.

SPECIFICATION forming part of Letters Patent No. 426,644, dated April 29, 1890.

Application filed December 13, 1889. Serial No. 333,634. (No model.)

To all whom it may concern:

Be it known that I, GURDON PENDLETON, Jr., of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Bobbins or Spools; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to spools or bobbins, and more particularly to that class of bobbins which are used in the spinning of silk.

It is the principal object of my invention to provide such a spool or bobbin in which the heads or disks of the same and the central spindle can all be secured upon the bobbin by one operation, as well as providing a much stronger and more durable bobbin than heretofore.

For the attaining of the above-named objects my invention consists, generally, in making the central hole in each disk, through which the end of the spindle passes, with an outwardly-extending or obliquely-chamfered outer portion, then passing said shank through the central cylindrical body of the bobbin, then through the opening in the heads, and by one operation pressing outward toward the periphery of the heads the portions of the spindle in said chamfered opening of the heads, thus riveting at one operation the spindle to both heads.

In the accompanying drawings, Figure 1 illustrates a perspective view of a bobbin or spool made in accordance with my invention. Fig. 2 is a longitudinal central section of the same. Fig. 3 is a similar section of one end of the bobbin before the spindle has been secured to the head. Fig. 4 is a detail showing one end of the spindle and one head detached and prior to their being secured together.

Similar letters represent like parts in all the figures.

A is the ordinary cylindrical body of the bobbin or spool, which is usually made of wood.

B B are the two metal heads or disks of the bobbin, with their edges extending beyond the

periphery of the body A, and to which body they are adapted to be secured.

C is a spindle, which passes longitudinally through the body A and the disks or heads B B, with its ends extending beyond said heads, so as to form journal-bearings for the bobbin or spool.

Each head or disk B B has a central opening or hole, in which the portion of the spindle C near each end is adapted to be inclosed. This hole is made a little smaller than the diameter of the central portion of the spindle C, and the part *b* of the spindle or shaft C, which enters said hole, is also smaller than the central portion *b'* of the spindle and of a proper diameter to fit snugly in the hole *a*, the end of the larger or central portion *b* of the spindle forming a stop upon which the head B rests. The outer portion *c* of the hole *a* is chamfered or obliquely widened outward, and the part *d* of the spindle C, beyond the part B and beyond the opening *c* of the head B, is of smaller diameter than said part *b*, with said part forming an annular flange below the part *d*. Sufficient pressure is then brought to bear on the outer end of both parts *b*, outside of the heads B B and below the parts *d* of the spindle, to upset said ends of *b* and spread them out to fill up the chamfered part *c* of the hole *a*. (See Figs. 1, 2, and 3.) The two heads B B will thus be riveted together and to the body A by means of the spindle C, with the upset flange *e* of said spindle at the outer portions of the same holding said heads and the body A firmly together.

It has been the custom heretofore to connect the two heads of the bobbin or spool by two or more rivets independently of the spindle, passing longitudinally through the body A. This construction necessitates the use of more parts than are used in my invention, as in the latter case the two extra rivets are not needed. The use of the two rivets also requires that there should be two extra holes drilled in each head or disk and in the spindle, requiring unnecessary labor in the construction of the bobbin and weakening the same. Moreover, by my improved construction only one operation is required to secure the heads and the spindle to the bobbin, while in the old method the spindle was secured to

the bobbin by one operation and the heads were secured by different and independent operations.

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

The improved bobbin or spool consisting of the central body A and the heads or disks B B, having the central holes *a*, with the chamfered outer portion *c*, in combination

with the central longitudinal spindle C, having the reduced portions *d*, and the outwardly-upset flanges *e*, filling up the parts *c* of the holes *a*, all substantially as and for purposes set forth.

GURDON PENDLETON, JR.

Witnesses:

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