

W. A. Caswell,

Drawing Roller.

No. 113,140.

Patented Mar. 28. 1871.

Fig. 1.

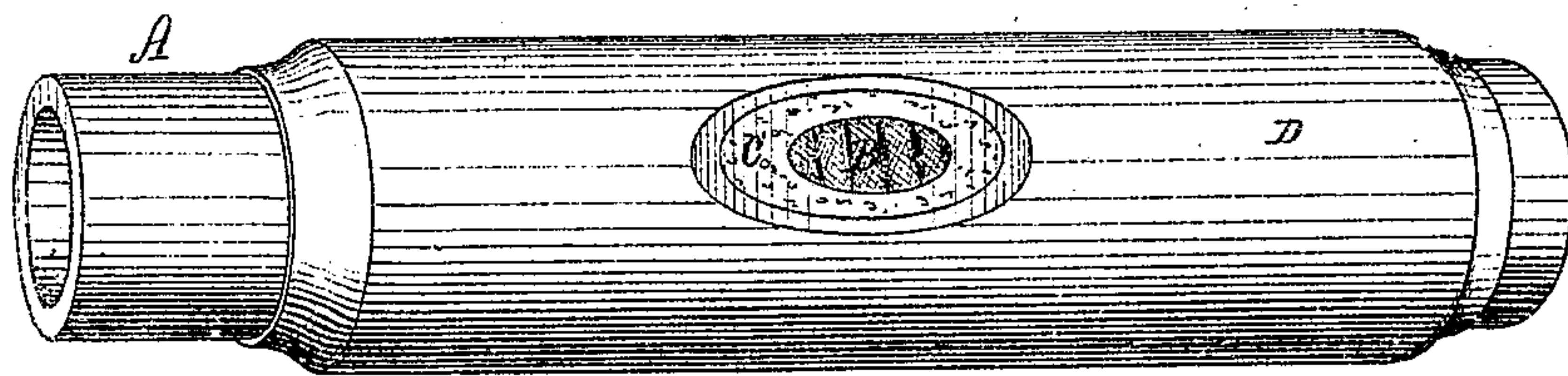


Fig. 2.

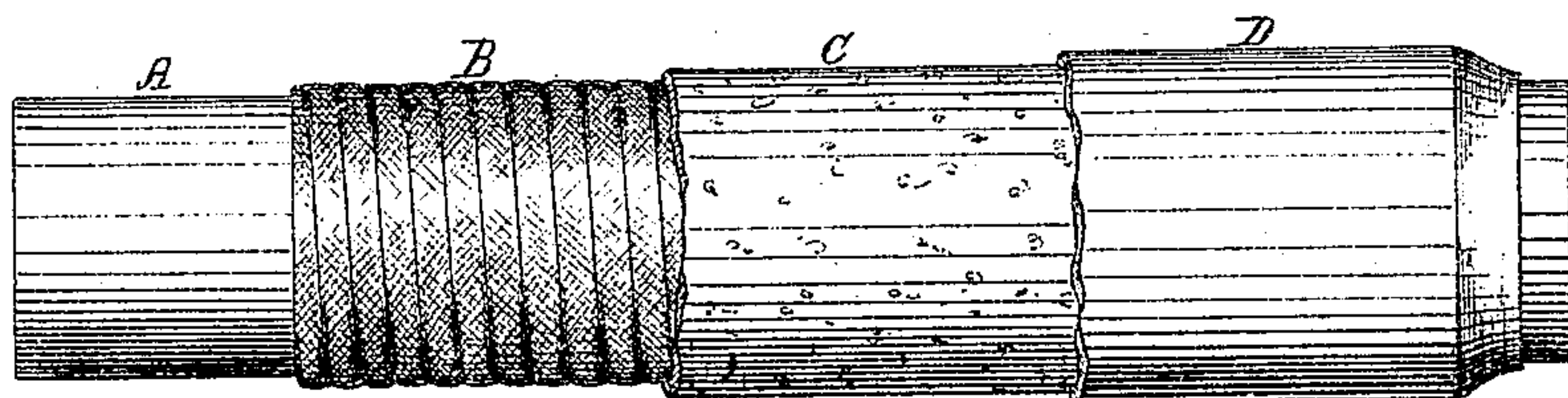
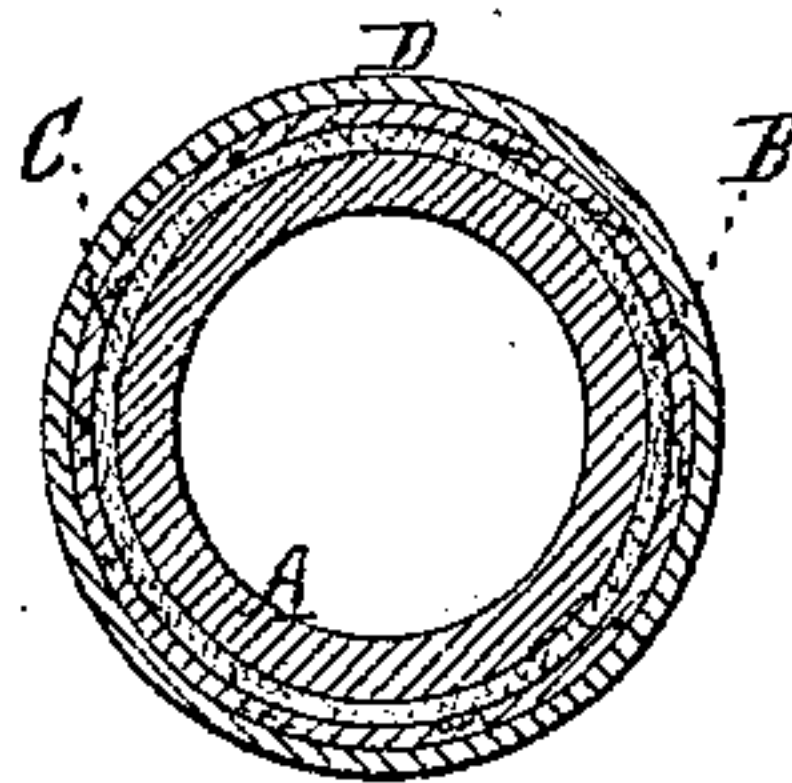


Fig. 3.



Witnesses
Phil. D. Larner,
Frank A. Jackson

Inventor.
Wm. A. Caswell,
By Wm. M. Moore
Attorney.

United States Patent Office.

WILLIAM A. CASWELL, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO HIMSELF,
ALBERT F. ALLEN, AND WILLIAM D. HILTON, OF SAME PLACE.

Letters Patent No. 113,140, dated March 28, 1871.

IMPROVEMENT IN TOP-ROLLS FOR SPINNING, &c.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, WILLIAM A. CASWELL, of the city and county of Providence, in the State of Rhode Island, have invented certain new and useful Improvements in the Construction of Top-Rolls for Spinning.

My invention consists in certain novel combinations of textile fabric, cork, and leather attached to the roll.

And I do hereby declare that the following specification, taken in connection with the drawing furnished and forming a part of the same, is a true, clear, and exact description thereof.

Referring to the drawing—

Figure 1 represents one of my rolls in perspective.

Figure 2 represents the same with portions of the covering removed.

Figure 3 represents the perfect roll in cross vertical section.

A represents the metallic roll.

B is the foundation of textile fabric. It consists, in this instance, of a layer of cotton or other braid wound spirally around the roll from end to end, with the edges of the fabric adjacent to each other, but not too close to prevent the adhesive cement usually employed from entering the intervening spaces.

C is a layer of cork-wood cut in a thin sheet, and

applied after the manner of leather by means of adhesive cement.

D is the exterior or surface clothing, of leather, suitable for the purpose, applied in the usual manner.

A roll thus constructed possesses a peculiarly valuable degree of elasticity, which greatly contributes to its general efficiency and durability.

I am aware that strips of cloth wound spirally have heretofore been employed as foundation for top rolls; and also that it has been proposed to apply cord or twine in that manner.

I am also aware that cork and leather have been proposed and employed for covering top rolls; but I am not aware that a textile fabric, cork, and leather have been used in the combination herein described, before my invention.

I therefore claim as new and desire to secure by Letters Patent—

A top roller, having a metallic interior, a foundation of textile fabric, an intermediate layer of cork, and an exterior covering of leather, substantially as described.

WM. A. CASWELL.

Witnesses:

HENRY MARTIN,

JOHN C. PURKIS.