

(No Model.)

J. H. BINGHAM.  
PRINTER'S DAMPING ROLLER.

No. 294,436.

Patented Mar. 4, 1884.

Fig. 1.

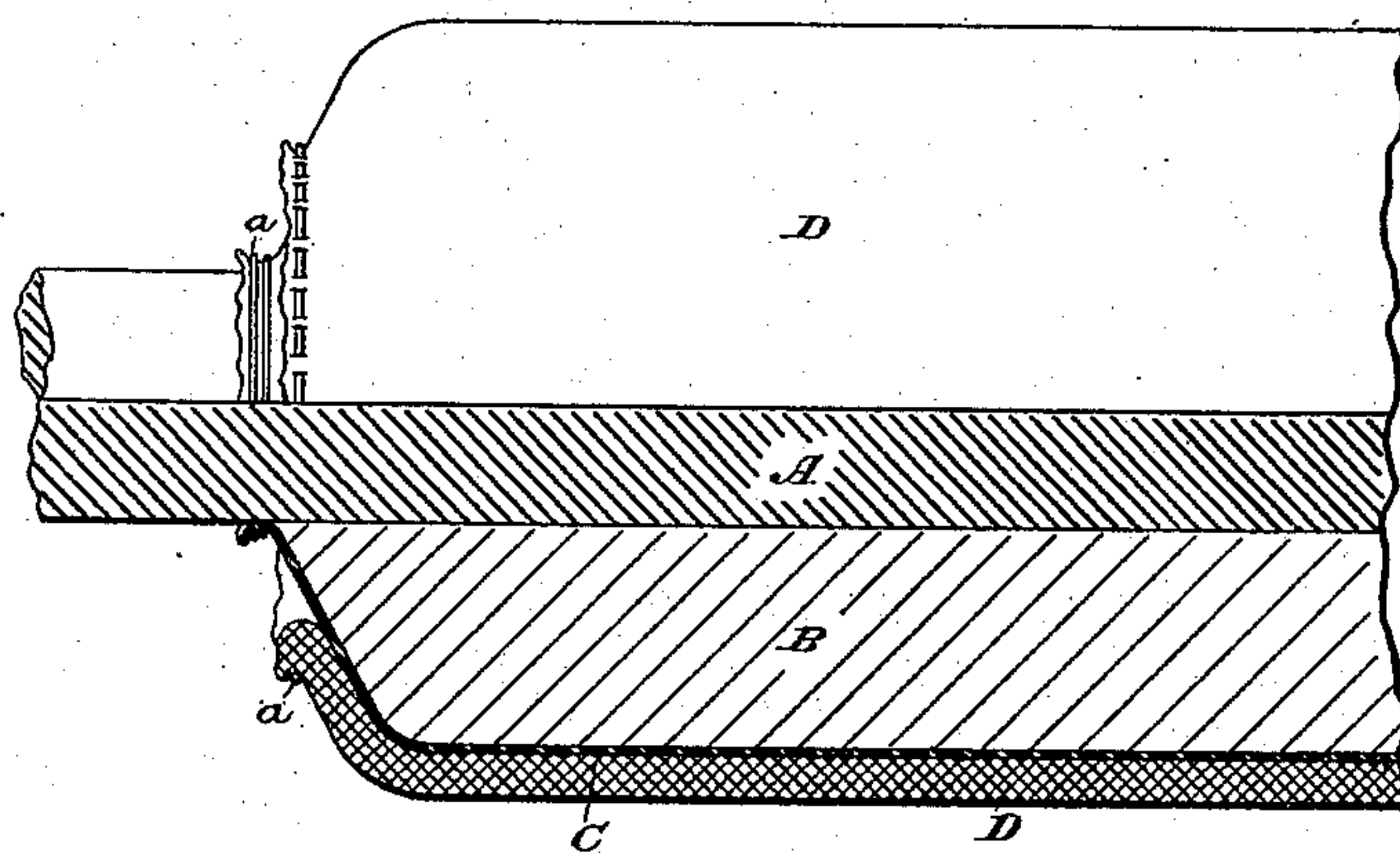
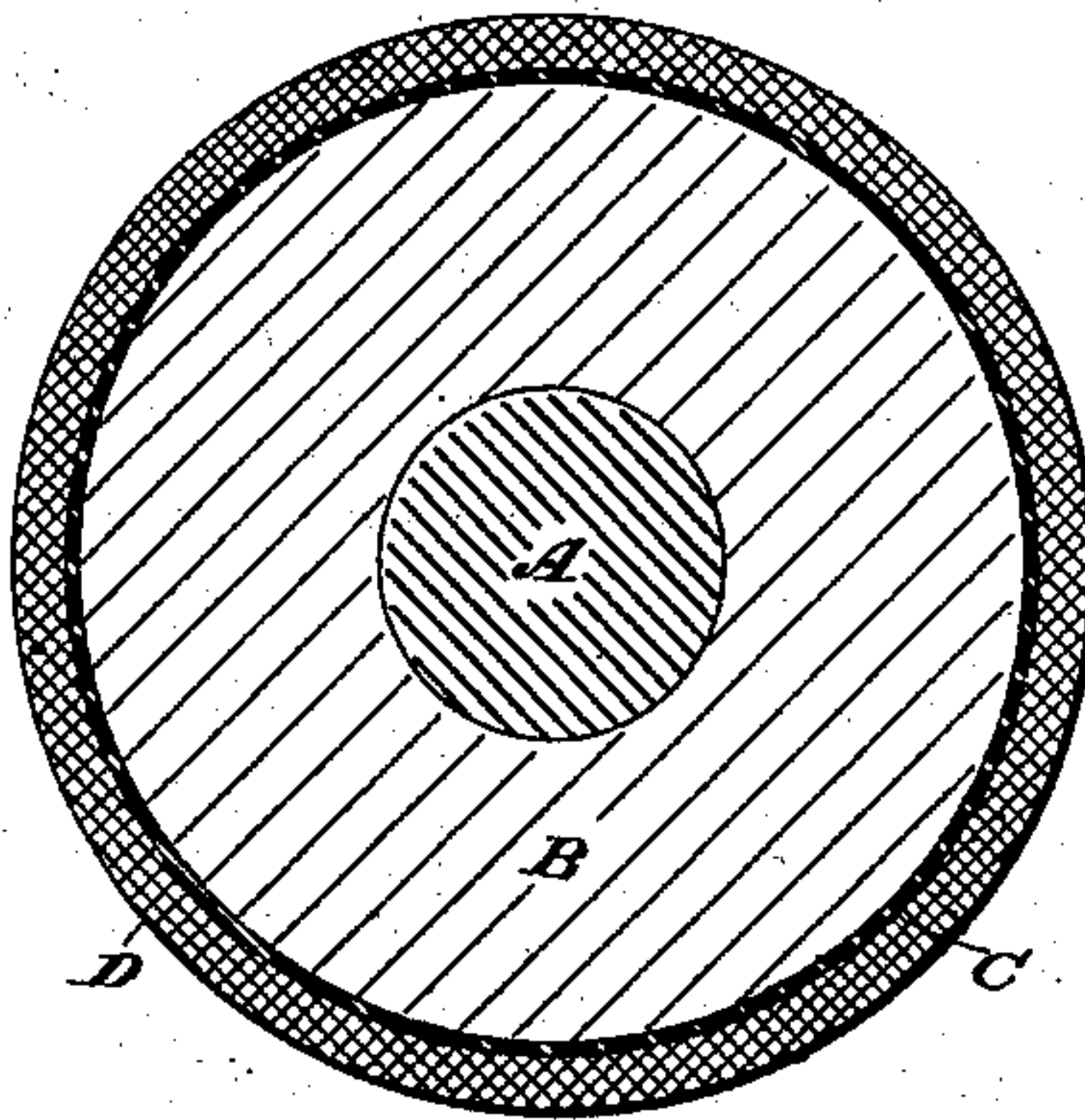


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## PRINTER'S DAMPING-ROLLER.

SPECIFICATION forming part of Letters Patent No. 294,436, dated March 4, 1884.

Application filed July 25, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. BINGHAM, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain Improvements in Printers' Damping-Rollers, of which the following is a specification.

My invention relates to that class of printers' rollers which are employed for wetting the stone in lithographic printing, and for like purposes.

In carrying out my invention I construct on the roller-stock a cushion of the ordinary roller composition—that is to say, a composition of glue or gelatine and some saccharine substance. This forms the ordinary printer's inking-roller. Over this roller I place a thin cover of rubber, preferably rubber vulcanized to about the degree usually seen in the ordinary elastic rubber bands. Over this cover I place an exterior cover of felt to take up and distribute the water. As the roller composition from which the core is made is very quickly destroyed by the constant application of water thereto, I apply the thin covering of vulcanized rubber thereto to protect it from the moisture. In order to further protect the composition from both moisture and air, I prefer to draw the thin rubber covering down over the ends of the composition cushion or core, and to secure it to the stock by a wrapping of thread or wire. This forms a hermetic joint, and maintains the composition core in its normal condition almost indefinitely. If air has access to the composition, it gradually removes the moisture therefrom and causes it to harden and crack, and if continually subjected to the action of moisture the composition is soon disintegrated and destroyed.

In the accompanying drawings, wherein my invention is illustrated, Figure 1 is a sectional elevation of my improved roller—that is to say, the upper half is in elevation and the lower half in section through the axis of the roller. Fig. 2 is a transverse section of the roller.

A represents the roller-stock, usually made from metal; B, the composition cushion or

core; C, the rubber covering for the same, and D the usual exterior covering of felt. When in place over the cushion B, the protecting-cover of rubber is drawn down at the ends and secured to the stock by a wrapping, *a*, of thread or wire. The felt D may be drawn over the end of the roller and secured by a draw-thread, as shown. I have shown but one end of the roller, as both ends are or may be alike. By this construction I am enabled to employ as the body of a wetting-roller the cheap composition ordinarily employed for applying ink, as the rubber C serves to fully protect it from the baleful influences of both air and water.

The rubber covering need not of necessity be very thin; but a thin covering serves my purpose quite as well as a thick one, and is much less expensive. This covering may be made in tubular form, and then drawn over the composition core previously molded on the stock.

Having thus described my invention, I claim—

1. A wetting-roller for printers, comprising a core or cushion of the ordinary roller composition formed or molded on the stock, an exterior felt covering to form the roller-face, and a covering of rubber interposed between said felt and composition to prevent the water from getting at and injuring the composition core, substantially as herein shown and described.

2. A wetting-roller for printers, comprising a stock, a core or cushion of the ordinary roller composition molded or formed on the stock, a protective covering of rubber placed over said composition core and drawn down and secured to the stock, so as to protect the ends of said core, as shown, and an exterior covering of felt, all arranged substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN H. BINGHAM.

Witnesses:

WM. KNOX,  
A. CAMPBELL.