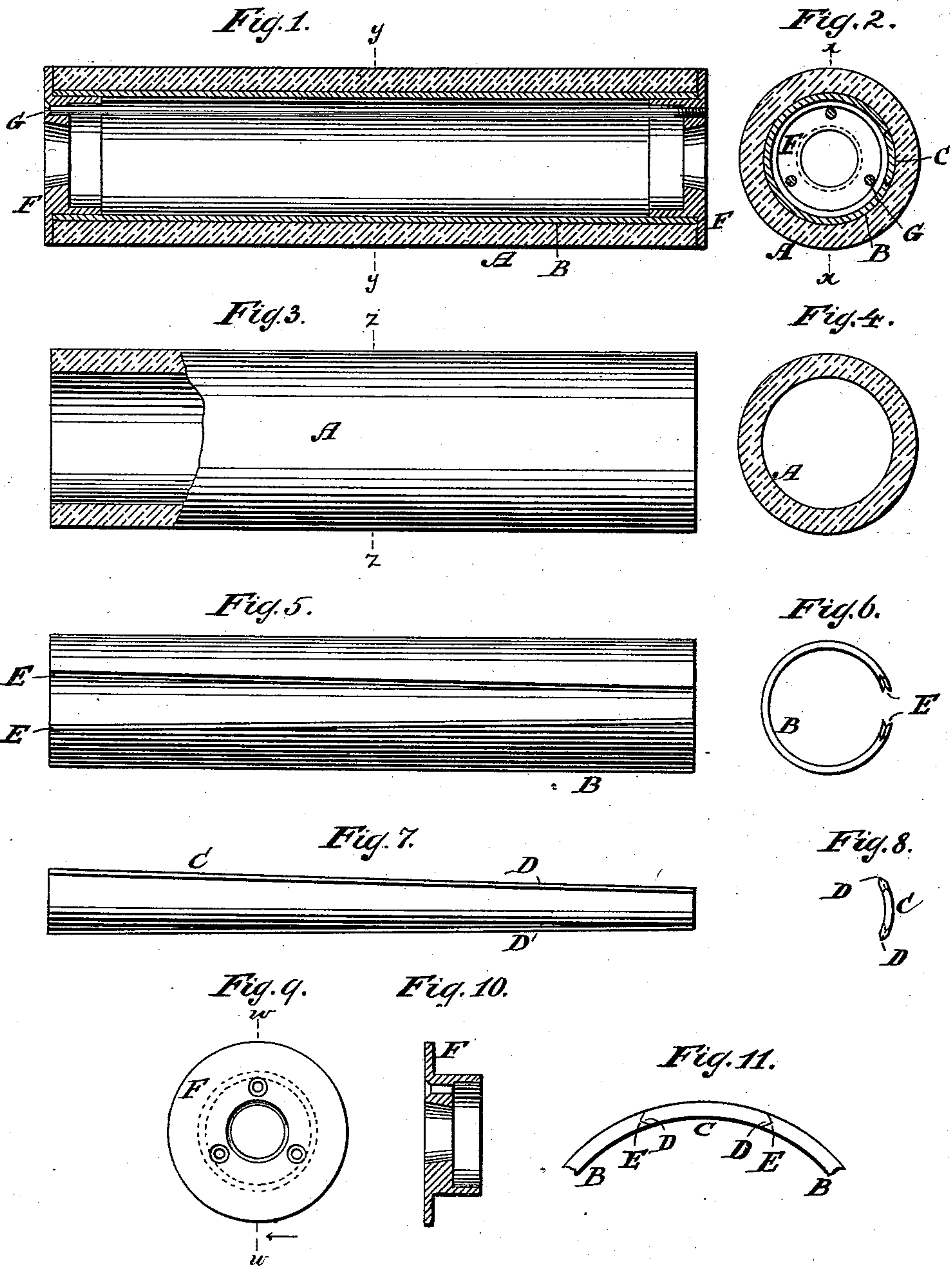


(No Model.)

J. W. MILLET.  
FELT ROLLER.

No. 472,899.

Patented Apr. 12, 1892.



WITNESSES:

Edward Wolff.  
William Miller.

INVENTOR:

John W. Millet.

BY

Vandewater & Hauff  
his ATTORNEYS

# UNITED STATES PATENT OFFICE.

JOHN W. MILLET, OF DOLGEVILLE, ASSIGNOR TO ALFRED DOLGE, OF NEW YORK, N. Y.

## FELT ROLLER.

SPECIFICATION forming part of Letters Patent No. 472,899, dated April 12, 1892.

Application filed September 12, 1891. Serial No. 405,529. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. MILLET, a citizen of the United States, residing at Dolgeville, in the county of Herkimer and State of New York, have invented new and useful Improvements in Felt Rollers, of which the following is a specification.

This invention relates to an improvement in felt rollers; and the object of the invention is to obtain a seamless felt roller, as set forth in the following specification and claims, and illustrated in the annexed drawings, in which—

Figure 1 is a longitudinal section of the roller along  $x x$ , Fig. 2. Fig. 2 is a section along  $y y$ , Fig. 1. Fig. 3 is a detail view of the felt cover. Fig. 4 is a section along  $z z$ , Fig. 3. Fig. 5 is a detail view of the base or core. Fig. 6 is an end view of Fig. 5. Fig. 7 is a detail view of a wedge. Fig. 8 is an end view of Fig. 7. Fig. 9 is a face view of a head or end for the roller. Fig. 10 is a section along  $w w$ , Fig. 9. Fig. 11 is an enlarged end view of the wedge in place.

The felt tube or covering A is made unbroken or in form of a seamless hollow cylinder, said covering being made of any desired consistency. The base or core B is hollow and is made of any suitable resilient material. I prefer brass for the material of the core B; but of course other substances—such, for example, as steel, celluloid, hard rubber; and the like—might be made to answer the purpose.

The core or base B has a cut or opening for the insertion of a wedge or expander C. When the wedge is withdrawn, the core B can be compressed, so that the covering A is readily slipped upon said core. When the cover is in place, the wedge C is forced into place, whereby the core B is expanded and the cover A is stretched, so as to sit tight and smooth on the core.

The wedge or expander and the edge of the cut or opening in core B have suitable tongues D and grooves E, so that the wedge is accu-

ately guided during its insertion and held in place when inserted.

The heads F, of brass or other suitable material, are secured to the ends of the roller. These heads have suitable eyes for the passage of screws or bolts G, extending through the interior of the roller from one head to the other to secure said heads in place.

When the wedge C is introduced in the longitudinal cut or opening of the core B, the outer surface of such wedge constitutes a continuation of the outer surface of the core, so that the continuity of the surface of the core is substantially unbroken and the felt covering is supported at all points.

The felt roller is particularly designed for use in printing-presses, and is specially useful for printing wall-paper.

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

1. A seamless felt roller consisting of a metallic or resilient hollow base or core and an unbroken felt cylinder or cover, said core having a cut or opening and a wedge or expander for said opening, said wedge being made to rest in said opening, with its outer face in continuity with the surface of the core, substantially as described.

2. A seamless felt roller consisting of a metallic or resilient hollow base or core and an unbroken felt cylinder or cover, said core having a cut or opening and a wedge or expander for said opening, said wedge or expander and the edge of said cut or opening being suitably tongued and grooved for supporting the wedge, with its outer face in continuity with the surface of the core, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN W. MILLET.

Witnesses:

WYMAN EATON,  
CHAS. H. CRAMER.