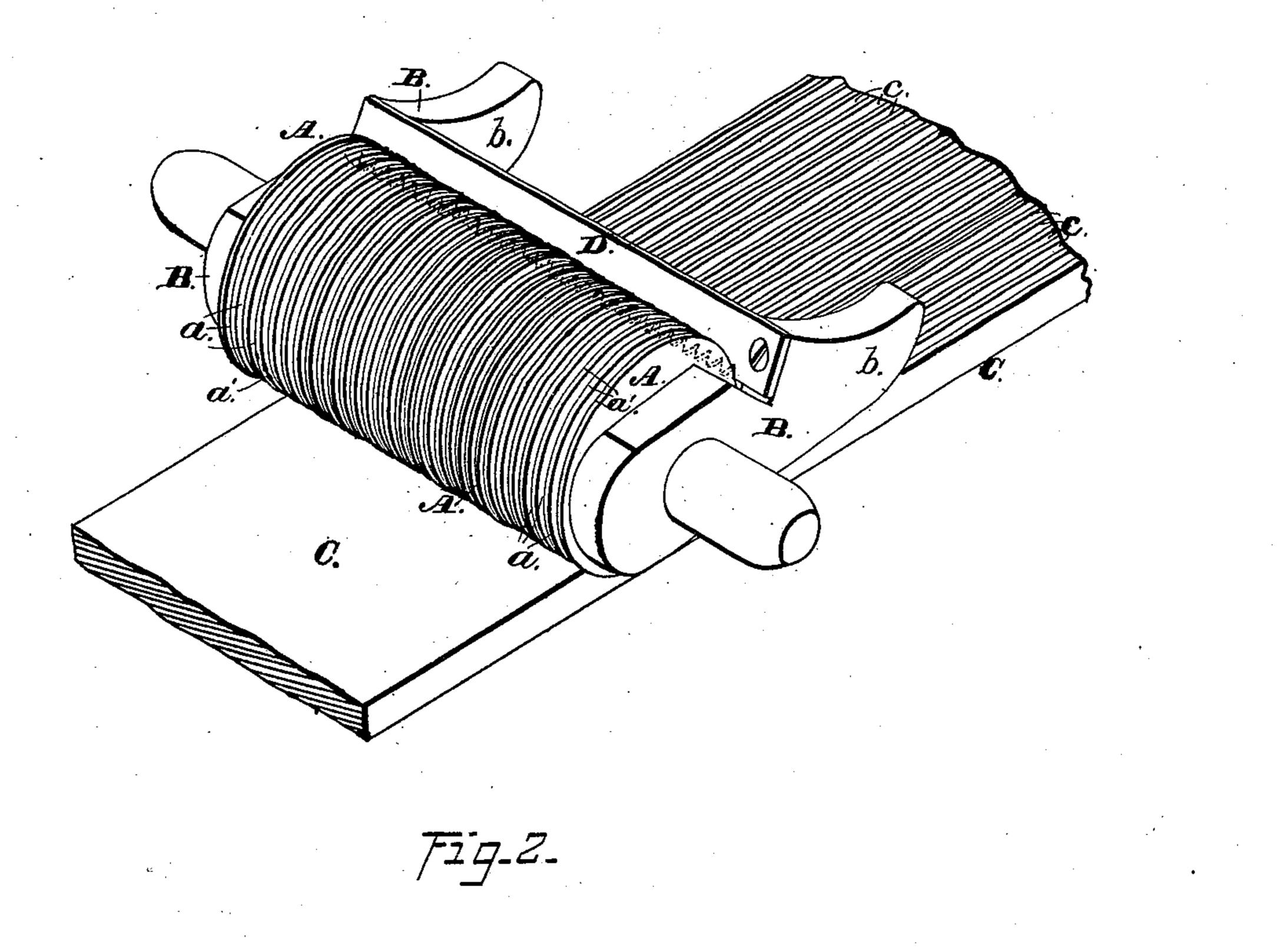
(Model.)

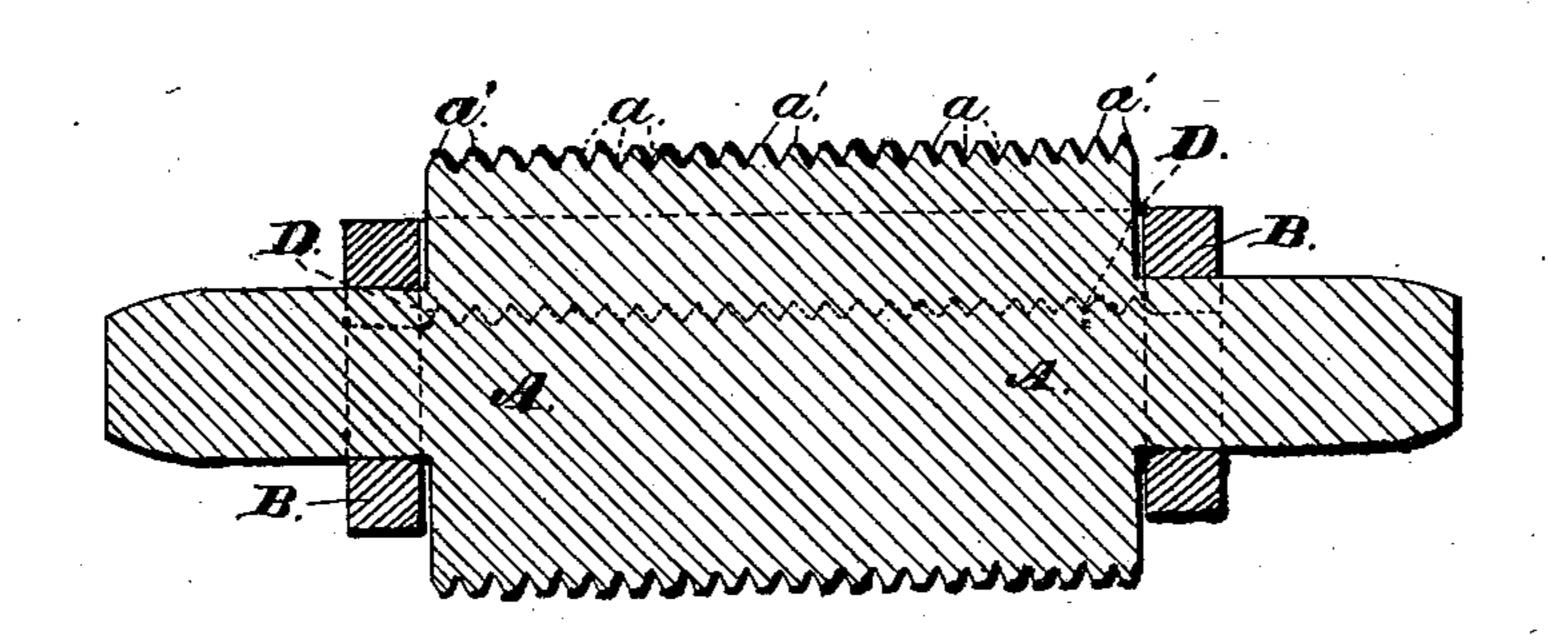
## P. L. SYLVESTER.

Manufacture of Buttons from Plastic Material.

No. 230,082.

Patented July 13, 1880.





MITNESSES= Jas. E. Horitchinson. Many b. Hazard.

## United States Patent Office.

PHILIP L. SYLVESTER, OF AUBURN, NEW YORK, ASSIGNOR TO WOODRUFF BROS., OF SAME PLACE.

## MANUFACTURE OF BUTTONS FROM PLASTIC MATERIAL.

SPECIFICATION forming part of Letters Patent No. 230,082, dated July 13, 1880.

Application filed May 18, 1880. (Model.)

To all whom it may concern:

Be it known that I, Philip L. Sylvester, of Auburn, in the county of Cayuga, and in the State of New York, have invented certain new and useful Improvements in the Manufacture of Buttons from Plastic Material, (Case F;) and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my ornamenting-roller, and Fig. 2 is a vertical section of the same.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to produce upon the surface of buttons lines of color; and it consists in the method employed, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represents a roller having a length slightly greater than the width of the sheets of material to be operated upon, and provided within its periphery with parallel circumferential grooves a, which have a V shape in cross-section and leave a series of  $\Lambda$ -shaped ribs, a'.

The roller A is journaled axially within a frame, B, that is provided with one or more handles, b, whereby said roller may be moved over the surface of the material to be operated upon. The surface of the roller A is now coated with thin coloring material, and said 35 roller then rolled over the surface of a slightly-

softened sheet, C, of plastic material, when the projections or ribs a' will cut into the surface of said sheet and leave within the grooves thus produced the said coloring material, said grooves or lines c being parallel.

If desired, the sheet C is cross-rolled to give to its surface a checkered appearance. The plastic sheet C is now passed through dies or molds in any usual way, and the buttons produced will be found to have surfaces ornamented by lines of color.

In order that the grooves a of the roller A may not become clogged with the coloring material, I secure to or upon the frame Ba scraper, D, which at its inner edge is serrated to correspond with and fit into the grooved periphery of said roller, by which means all surplus coloring-matter is removed and said grooves kept clear.

Having thus fully set forth the nature and 55 merits of my invention, what I claim as new is—

The hereinbefore-described method of ornamenting the surface of a button, by passing over the surface of plastic material, before the 60 same is passed through the dies, a grooved roller coated with thin coloring-matter, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of 65 May, 1880.

P. L. SYLVESTER.

Witnesses:

P. C. WOODRUFF, H. WOODRUFF.