

(No Model.)

P. L. SYLVESTER.

Manufacture of Buttons from Plastic Material.

No. 231,372.

Patented Aug. 17, 1880.

Fig-1.

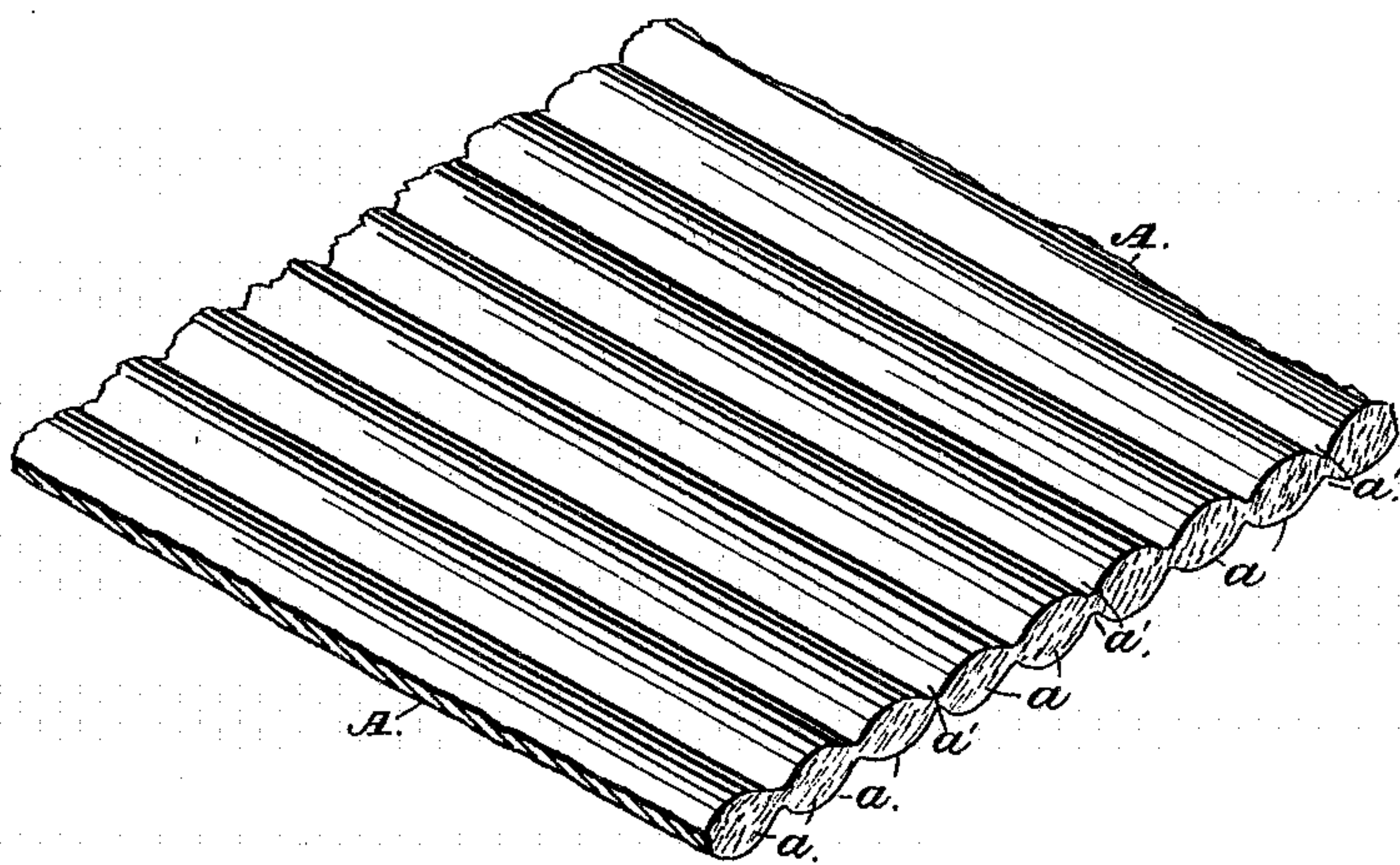


Fig-2.

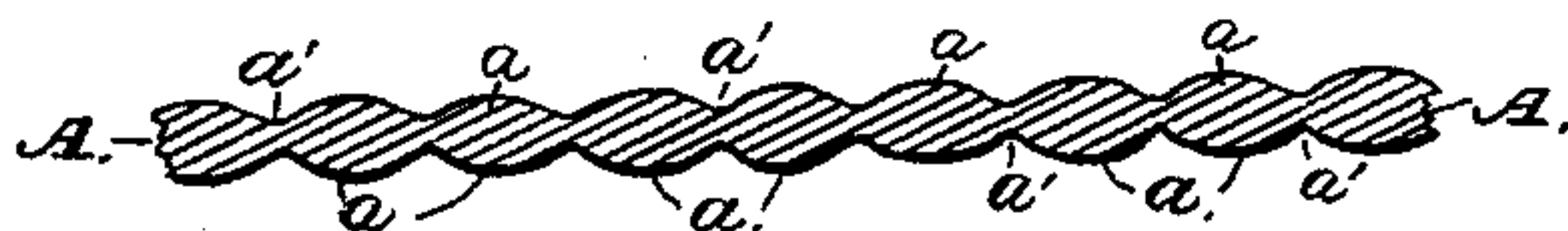


Fig-3.



WITNESSES=

Jas. E. Hutchinson.  
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 Geo. S. Prindle, his Atty

# UNITED STATES PATENT OFFICE.

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

## MANUFACTURE OF BUTTONS FROM PLASTIC MATERIALS.

SPECIFICATION forming part of Letters Patent No. 231,372, dated August 17, 1880.

Application filed July 21, 1880. (No 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; 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 a sheet of plastic material prepared for application to the dies. Fig. 2 is a cross-section of the same, and Fig. 3 is a like view of a sheet having a slightly different arrangement of the corrugations.

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

In the manufacture of buttons from plastic material it has heretofore been customary to apply such material to the dies in the form of balls containing each sufficient material for one button, and applied separately to each die, or by cutting said material into strips and placing one of the same upon each row of dies of a plate, either of which methods of filling the dies consumed considerable time.

The design of my invention is to enable all of the dies of a plate to be simultaneously filled; and to this end it consists, as an improvement in the manufacture of buttons from plastic material, in a sheet of such material provided upon and within one face or both of its faces with alternate ribs and grooves, substantially as and for the purpose hereinafter specified.

In the use of my invention the plastic material is cut into sheets A, that correspond in size and shape horizontally to the like features of the plates of dies upon which they are to be used, and have such thickness as may be nec-

essary for the production of the buttons for which said dies are designed.

During the operation of rolling the material into sheets or at any subsequent time I give to one face or both faces of each sheet A the form shown in Fig. 1, the same being alternating ribs *a* and grooves *a'*, that correspond, respectively, in transverse position to the rows of dies and the spaces between the same of a die plate or mold. The sheet A is now softened in the usual manner, and placed upon the face of a lower die-plate with the ribs *a* over the rows of dies and the grooves *a'* over the spaces between such rows, after which the upper die is placed in position and pressure applied, when it is found that after filling said dies so little stock remains that the said grooves or sprues between said rows of dies will easily contain the same and permit the plates to close together and to produce perfect buttons.

It is not essential that both faces of the sheet A should be grooved, as the result will be the same when but one side is grooved, the essential feature being the removal of surplus stock from that portion of the sheet over the sprues.

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

As an improvement in the manufacture of buttons from plastic material, a sheet of such material provided upon and within one face or both of its faces with alternate ribs and grooves, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of July, 1880.

Witnesses: PHILIP L. SYLVESTER.  
GEO. S. PRINDLE,  
E. D. WOODRUFF.