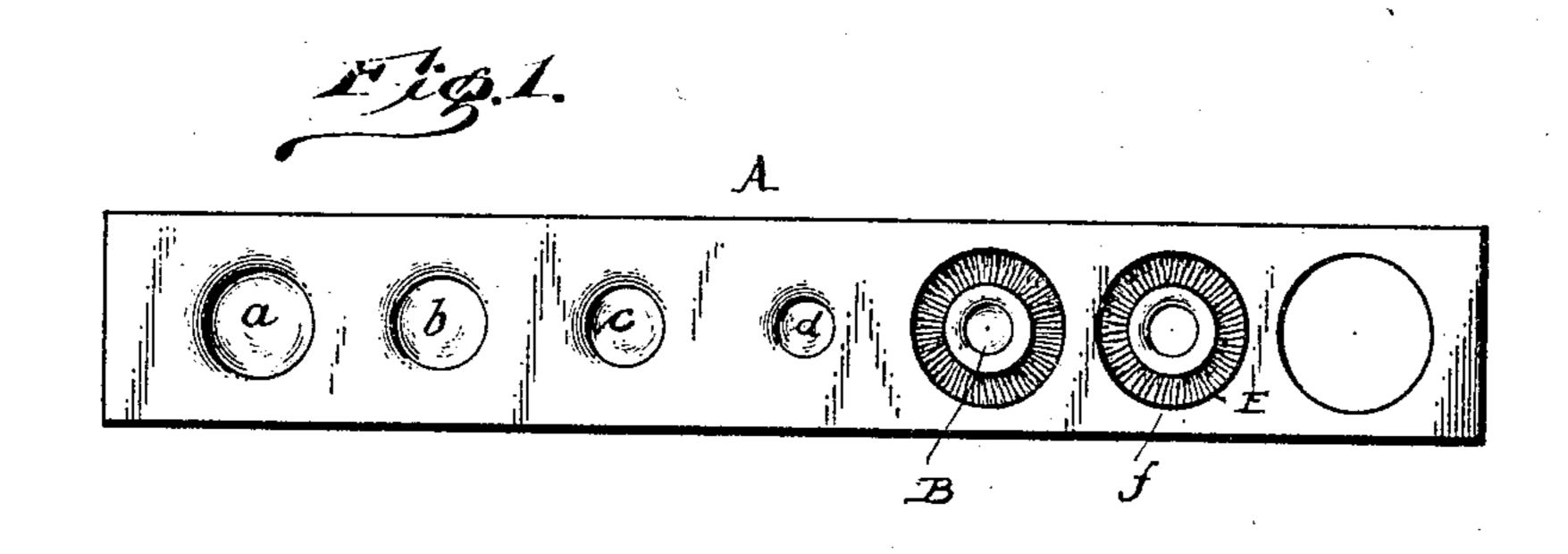
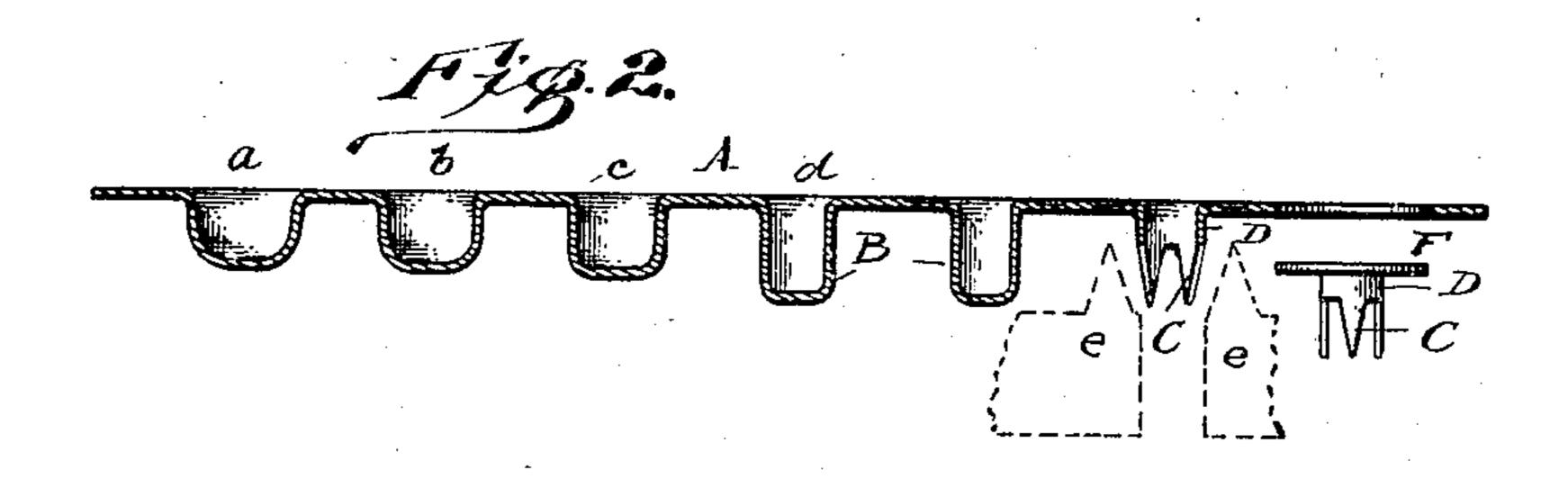
J. D. LORD & P. P. COOKE.

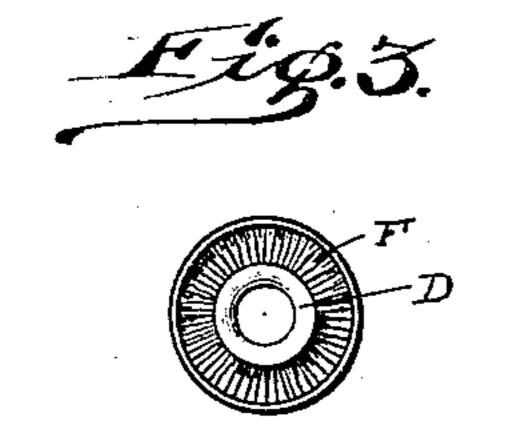
MAKING METAL BUTTONS.

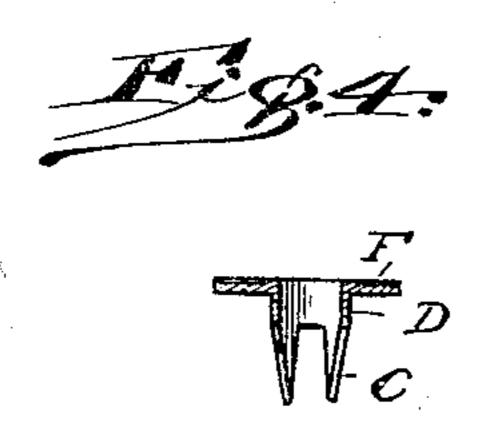
APPLICATION FILED APR. 4, 1904.

NO MODEL.









S. M. Baider.

J. D. Lord & P. P. Cooke Juventors

By Men attorney Olean June.

## United States Patent Office.

JOHN D. LORD AND PHILIP P. COOKE, OF JERSEY CITY, NEW JERSEY.

## MAKING METAL BUTTONS.

SPECIFICATION forming part of Letters Patent No. 773,658, dated November 1, 1904.

Application filed April 4, 1904. Serial No. 201,380. (No model.)

To all whom it may concern:

Be it known that we, John D. Lord and Philip P. Cooke, citizens of the United States, residing at Jersey City, in the county of Hudson, State of New Jersey, have invented certain new and useful Improvements in Making Metal Buttons, of which the following is a specification.

This invention relates to improvements in making metal buttons, especially metal buttons composed of a single piece of sheet metal.

The object of our invention is to provide a new and improved method of making such buttons rapidly and economically by successive operations on a strip of metal and without detaching the button from the piece of sheet metal from which it is made until such button has been completed.

In the accompanying drawings, illustrating our newand improved method of making sheetmetal buttons, Figure 1 is a plan view of a strip of sheet metal, showing the drawing and stamping operations in their successive steps. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a top view of the button. Fig. 4 is a vertical transverse sectional

view of the same.

Like letters of reference indicate like parts

in all the figures.

3° By means of a suitable draw-press of any well-known construction a piece of sheet metal A is pressed to have a cup-shaped depression, as at a, and by three or more successive similar drawings this cup-shaped depression a is converted into a thimble-shaped projection B, as shown at b, c, and d, respectively, the bottom or closed end of this thimble B being substantially at right angles to the longitudinal axis of the thimble.

By means of a suitable tool—for example, laterally - movable punches, as indicated by dotted lines at e—approximately rectangular pieces are cut out of the sides of the thimble B, the sides of the pieces cut out being slightly divergent, so that they meet at the closed bottom of the thimble, leaving pointed prongs C

integral with the sheet-metal plate A and also leaving an integral neck D at the upper ends of the prongs and under side of the plate A, which neck forms the shank of the completed 50 button. By this punching the bottom of the thimble is detached. By means of a suitable punch a circular piece E, concentric with the thimble B, which piece forms the head F of the button, is punched or cut out of the sheet 55 metal A, and by punching out this piece the completed button is detached from the sheet-metal plate A.

In case the upper surface of the button is to be ornamented a suitable ornament—for 60 example, radial lines—can be pressed into the upper surface of the sheet-metal plate around the upper open end of the thimble B, as shown at f, and if a band is to be formed around this ornamentation the radial lines are made 65 shorter than the distance to the outer diameter of the head, so that when the head is punched out an annular band of plain metal surrounds the outer ends of the radial lines—that is, the diameter of the punch for punch-70 ing out the head is made slightly greater than the outer diameter of the stamped ornamentation.

It will be observed that the button is made in successive steps while still attached to the 75 sheet-metal plate and requires no handling of the button *per se* in the course of manufacture.

Having described our invention, what we claim as our invention and claim as new is— 80

1. The method of making sheet-metal buttons, consisting in successively drawing a thimble on a piece of sheet metal, cutting out parts of the sides of said thimble, to form prongs projecting from the sheet-metal thimble and then 85 cutting out a circular piece of the sheet-metal plate around and concentric with said pronged thimble, substantially as set forth.

2. The method of making sheet-metal buttons, consisting in drawing a thimble on a 90 piece of sheet metal, stamping an ornament on the face of the sheet metal around the up-

per open end of said thimble, cutting out parts of the sides of said thimble to form prongs on said thimble, and then cutting out a circular piece of sheet metal around said stamped ornamentation, and concentric with the thimble, substantially as set forth.

In testimony whereof we have signed our names to this specification, in the presence of

two subscribing witnesses, this 20th day of January, 1904.

JOHN D. LORD. PHILIP P. COOKE.

Witnesses:
OSCAR F. GUNZ,
MAX RUBIN.