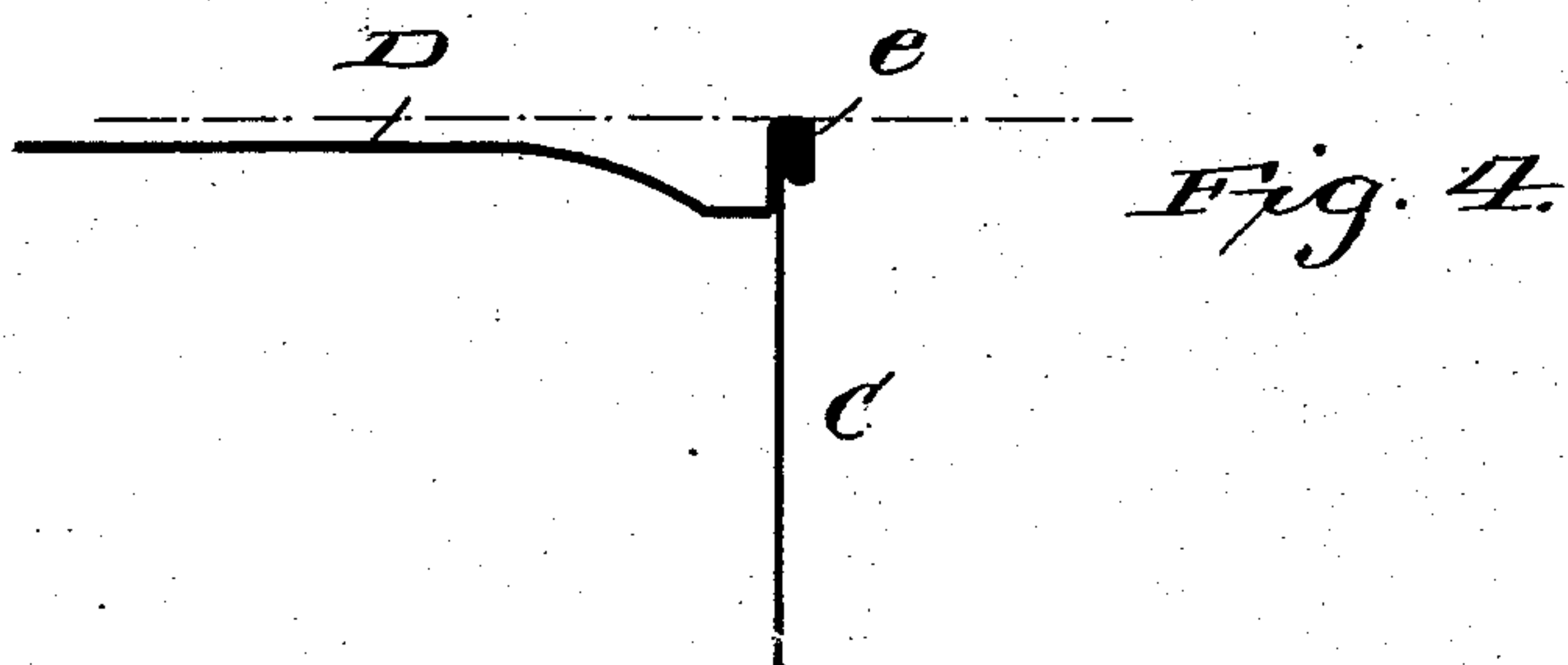
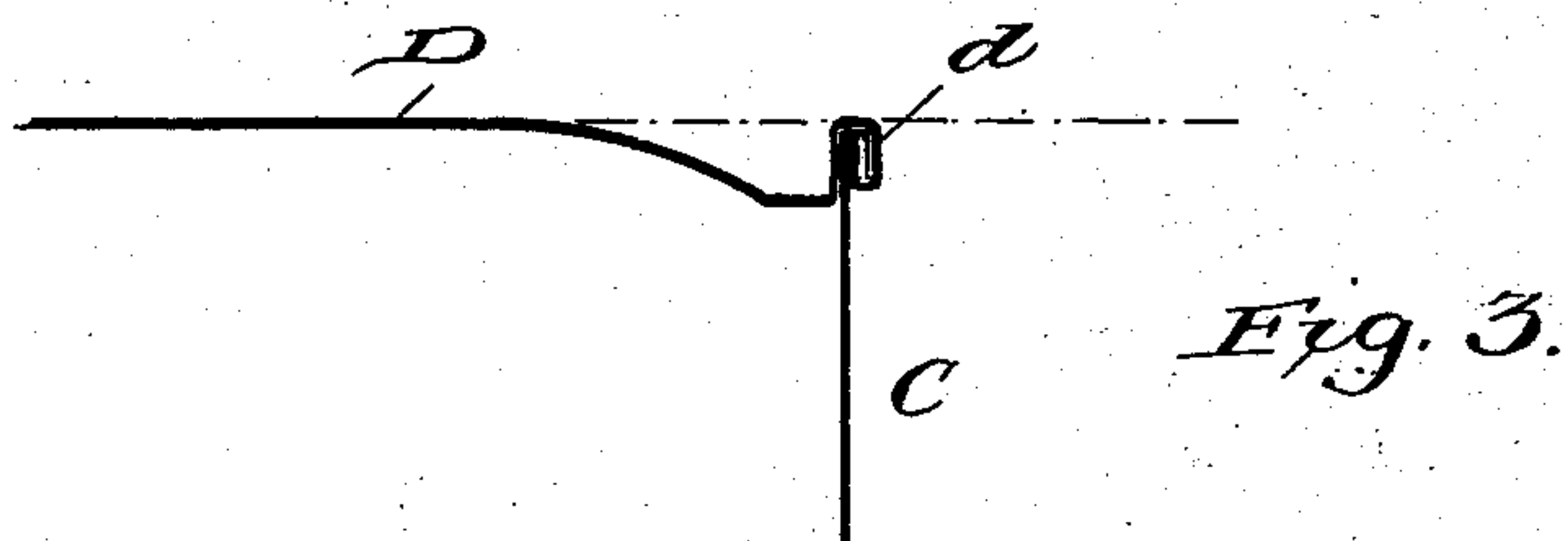
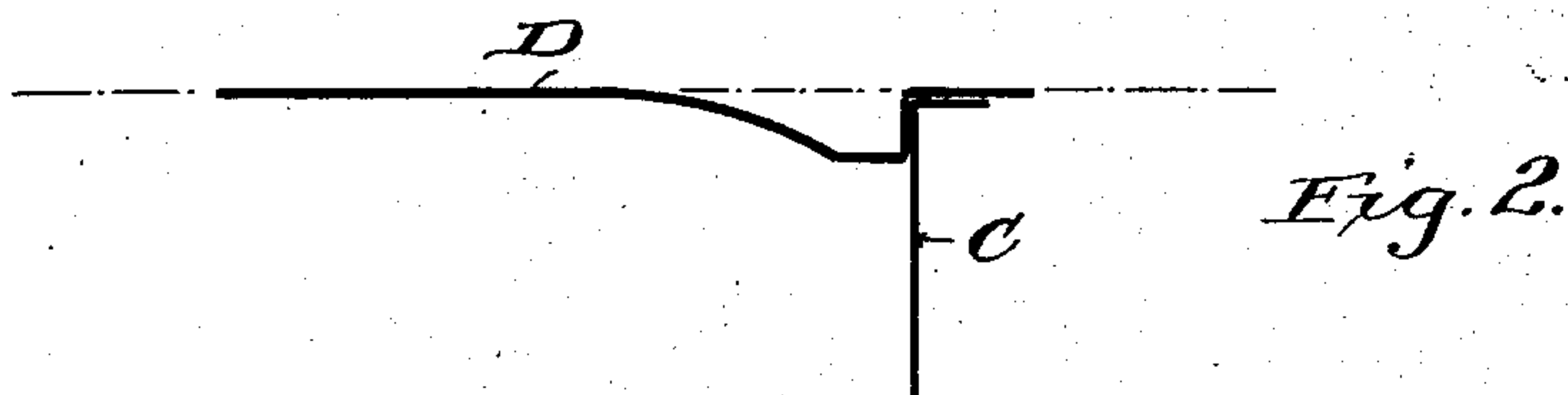
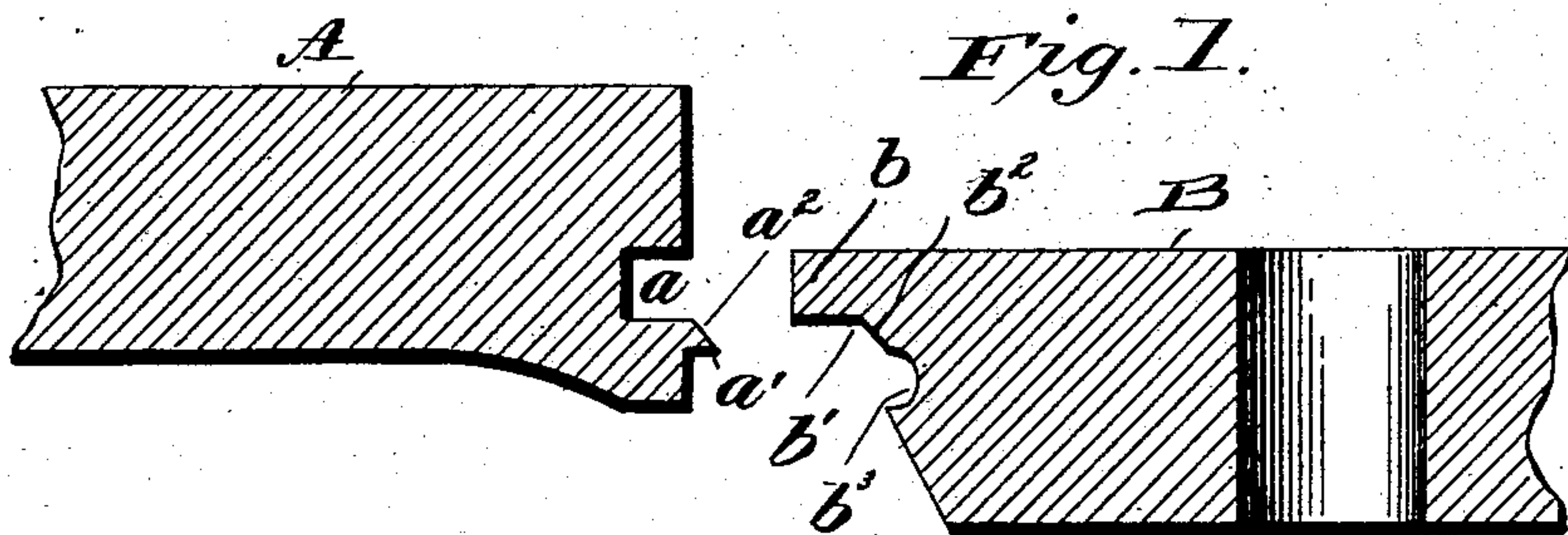


(No Model.)

J. A. STEWARD.  
CAN SEAMING MECHANISM.

No. 568,885.

Patented Oct. 6, 1896.



Witnesses:  
L. C. Mills.  
E. A. Bond

Inventor:  
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By E. B. Stocking  
Atty.



# UNITED STATES PATENT OFFICE.

JOHN A. STEWARD, OF CLARENDON, VERMONT.

## CAN-SEAMING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 568,885, dated October 6, 1896.

Application filed December 3, 1895. Serial No. 570,940. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. STEWARD, a citizen of the United States, residing at East Clarendon, in the county of Rutland, State of Vermont, have invented certain new and useful Improvements in Can-Seaming Mechanism, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in devices for double-seaming sheet metal, and pertains more particularly to the seaming-disk employed for double-seaming the ends of tin cans. With the ordinary style of seaming-disk now employed the power is so provided that either the can revolves or stands still while being operated upon. In either case the can-bottom on being curled and flattened by the disk and roll has a tendency to work up at the edge on the disk, and consequently the entire bottom, except the edge, goes down more or less, and very often the seam on the side of the body helps to crowd up the bottom seam, so that when the last roll finishes the work it grinds off more or less of the seam, and as a natural consequence the cans will leak at these points if not soldered. Sometimes the bottom is thrown up over the disk, so that it will not come off with the can, but stays on the disk. In fact, it is often curled on the disk by the first roll. This drawing up of the edge of the bottom or end of the can draws downward upon the center sufficiently to force it considerably below the top edge of the can, so that cans when filled, as with paint, for instance, cannot be made to stand one upon another without danger of tipping or falling off.

The present invention has for its objects to remedy the above-mentioned defects. I construct the disk with a depression to receive a flange on the roll and with a projection beneath said recess which performs an important function in the operation of the machine and tends to accomplish the above ends.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the let-

ters of reference marked thereon, form a part of this specification, and in which—

Figure 1 represents in sectional detail a portion of the roll and of the seaming-disk. Fig. 2 is a detail representing the can body and bottom before being double-seamed, the center of the bottom being flush with the edge of the seam, as indicated by dotted lines. Fig. 3 is a detail representing the can with the bottom double-seamed, the center of the bottom being flush with the edge of the seam, as indicated by dotted lines. Fig. 4 represents in detail the can with the bottom double-seamed on in the old way, the center of the bottom being drawn down considerably below the edge of the seam.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A represents the improved disk having the peripheral groove or recess  $a$ , and beneath the same and extending beyond the periphery of the disk is the projection  $a'$ , the upper face of which is preferably inclined or beveled, as seen at  $a^2$ .

B is the roll formed with the flange  $b$  to engage the recess  $a$  in the disk, thus keeping the roll in proper adjustment up or down, thus forming a shoulder  $b'$ , from which extends the downwardly and inwardly inclined wall  $b^2$ , beneath which is the recess  $b^3$ . The shoulder  $b'$  is adapted to coincide with the lower wall of the recess  $a$  in the disk and the incline  $b^2$  of the roll conforming to the inclined upper wall  $a^2$  of the projection  $a'$  on the disk, the recess  $b^3$  being provided to receive the metal of the seam as the latter is formed. This projection  $a'$ , with its inclined wall and the cooperating part of the roll, prevents the metal of the can body and bottom being thrown up over the disk, and thus prevents the drawing up of the edge of the bottom and thus keeping the center of the bottom on a line with said edge.

In Figs. 2, 3, and 4, C represents a portion of the can-body, and D the bottom. In Fig. 2 the parts are shown in the position they assume before being operated upon to form the double seam. In Fig. 3 the same have been double-seamed by my improved disk and roll, the seam being represented by  $d$ . Fig. 4 shows the double seam  $e$ , formed by



the old method, in which the edge is drawn up over the disk and the center of the bottom consequently thrown down below the top edge of the seam.

5 Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

10 1. A can-seaming disk having a peripheral recess and a projection extending beyond the same and beyond the outer edge of the disk beneath said recess; substantially as described.

15 2. A can-seaming disk having a peripheral recess and a projection extending beyond the same and beyond the outer edge of the disk, beneath said recess, and provided with an inclined face; substantially as described.

20 3. A can-seaming disk having a peripheral recess and a projection beneath the same, said projection having an inclined upper face and extended beyond the edge of the disk between the recess and the lower face of the said disk; substantially as described.

4. The combination with a can-seaming 25 disk having a peripheral recess and a projection beneath the same extended beyond the outer edge of the disk beneath the recess and provided with an inclined upper face, and vertical walls beneath said projection of a 30 roll having a flange and an inwardly and downwardly extending inclined wall beneath said flange, substantially as specified.

5. The combination with a can-seaming 35 disk having a peripheral recess and a projection beneath the same extended beyond the outer edge of the disk beneath the recess and provided with an inclined upper face, of a roll having a flange and an inwardly and 40 downwardly extending inclined wall beneath said flange and a peripheral recess beneath said inclined wall, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN A. STEWARD.

Witnesses:

THOS. C. ROBBINS,  
WAYNE BAILEY.