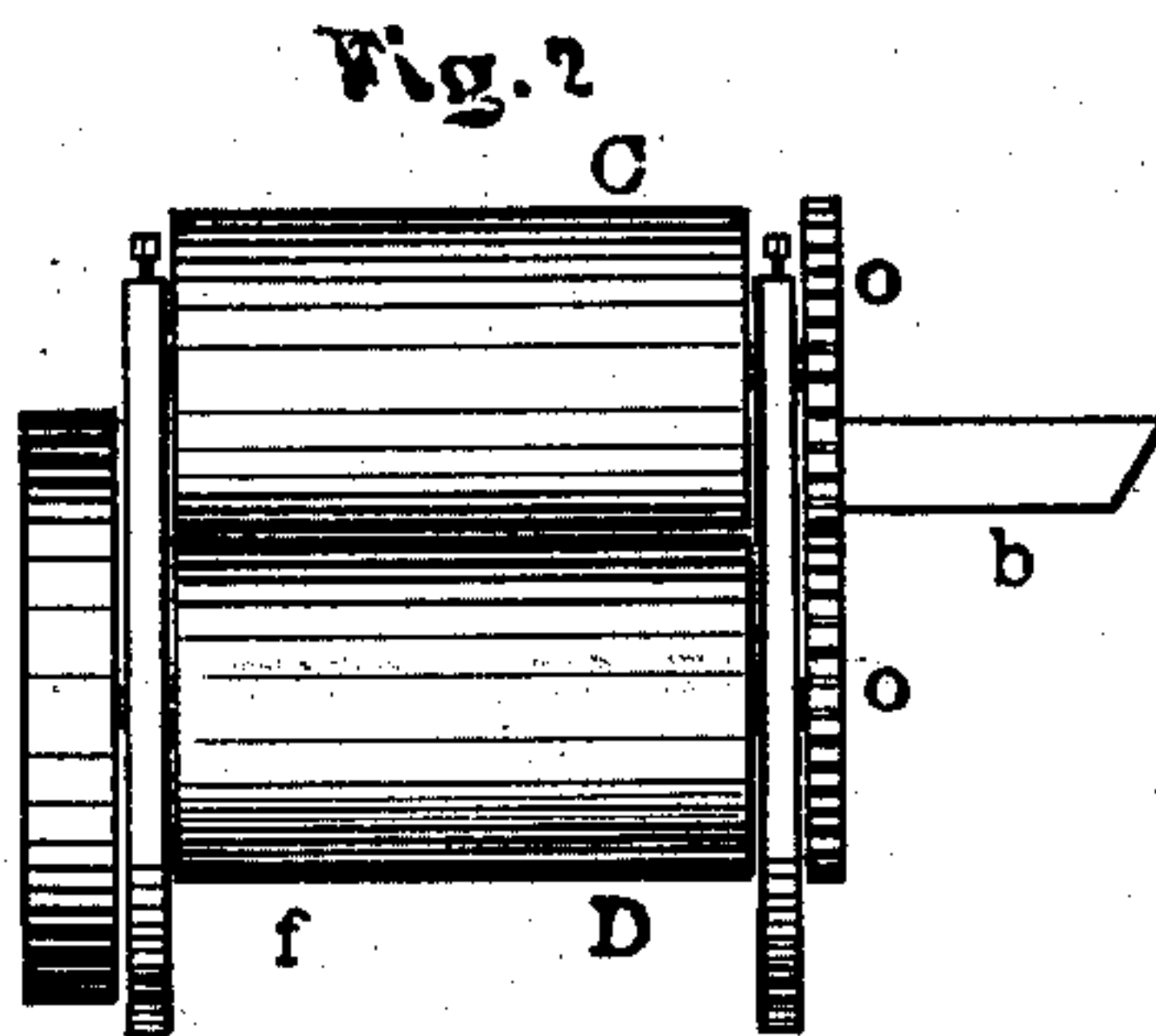
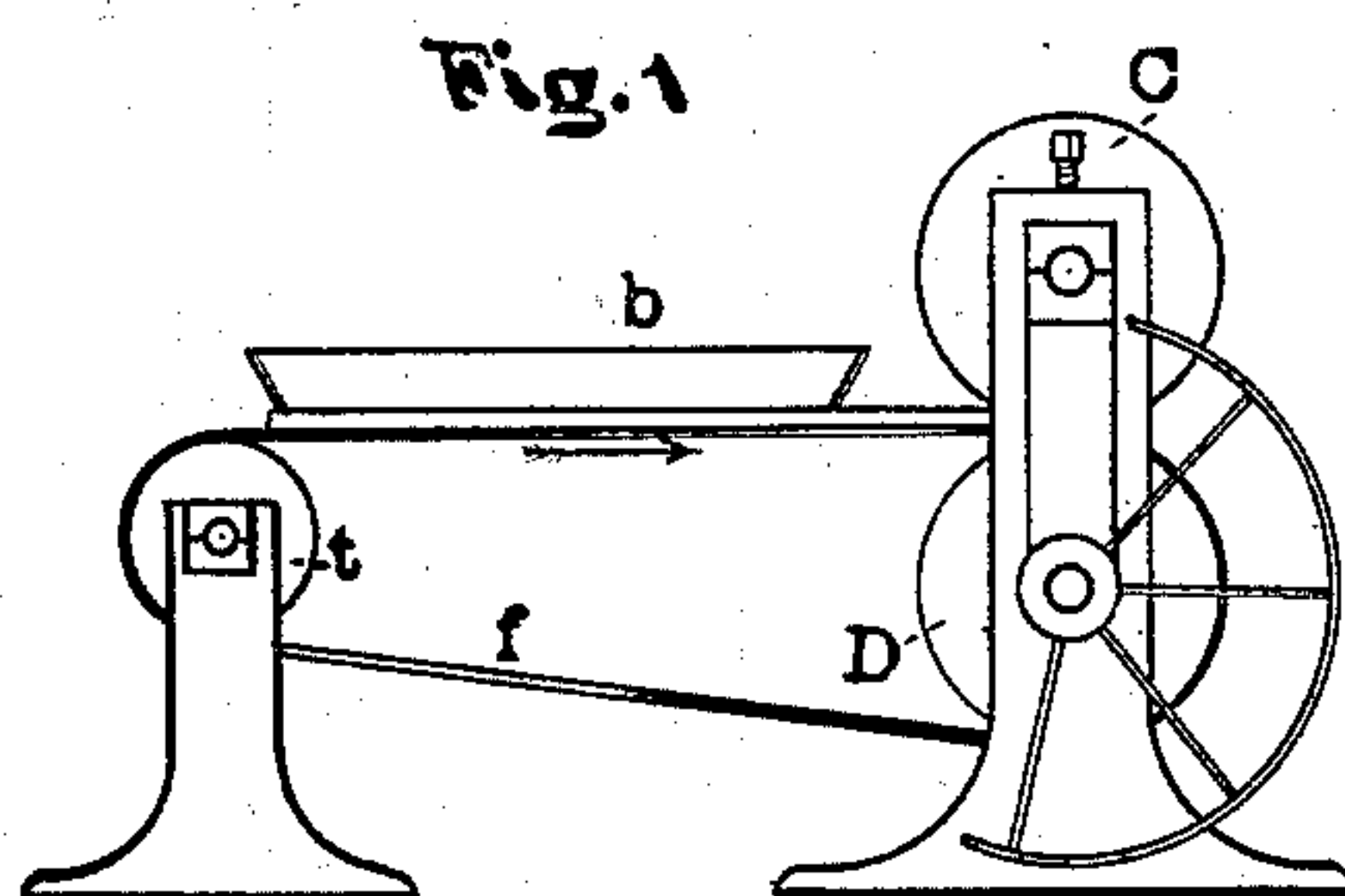


(No Model.)

J. W. WESTERVELT.
Method of, and Machine for, Removing the Burr from
Buttons, &c.

No. 237,221.

Patented Feb. 1, 1881.



Witnesses;

Geo. O. Kingsbury
Anthony Plummer

Inventor

John W. Westervelt
By Allen Webster atty.

UNITED STATES PATENT OFFICE.

JOHN W. WESTERVELT, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR OF
ONE-HALF TO JOHN C. DICKINSON, OF BROOKLYN, NEW YORK.

METHOD OF AND MACHINE FOR REMOVING THE BURR FROM BUTTONS, &c.

SPECIFICATION forming part of Letters Patent No. 237,221, dated February 1, 1881.

Application filed November 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. WESTERVELT, of Springfield, in the county of Hampden and Commonwealth of Massachusetts, have invented new and useful Improvements in the Method of and Machine for Removing the Burr from Buttons Made from Plastic Material, of which the following is a specification.

10 The invention relates to the manufacture of buttons from plastic material.

Heretofore the burr has been removed by hand. This is objectionable on account of the outlay of time and consequent expense.

15 The object of my invention is to provide a speedy means for removing the burr.

The invention consists in subjecting the button with burr attached to pressure from an elastic or yielding surface; in the means for 20 applying this pressure; in the means for feeding, and in the arrangement of elastic-faced rolls; and, finally, it consists in the general construction and arrangement, as hereinafter set forth, whereby these beneficial results are 25 accomplished.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a side view of the working parts of the machine, and Fig. 2 is an end view of 30 the same.

In the process of manufacturing buttons from plastic material a burr is formed upon the outer edge of the button. This has been removed heretofore by holding the button in 35 one hand and breaking the burr from it with the other. I find that if the button with the burr attached as it comes from the die be subjected to pressure from an elastic or yielding surface the burr will be broken from the 40 button.

The best method of applying the pressure is, in my opinion, the one described, and illustrated in the drawings. I arrange two elastic-faced rolls, C D, (rubber being preferred,) 45 in such a manner that the surfaces will revolve in contact or near each other and pass the buttons to be operated upon between them. The feed-belt *f* passes over one of these rolls and over a roll, *t*. A hopper or shelf, *b*, is

arranged in a convenient position, from which 50 the buttons are fed to the feed-belt. This, traveling in the direction of the arrow, carries the buttons between the rolls C D, where the button and burr are separated by the pressure, and fall from the other side to any convenient receptacle. Motion is given the rolls 55 through the belt-pulley, which is attached to the shaft of one of the rolls, and the rolls are connected by gears *o o*, as shown. Suitable guides prevent the buttons falling from the 60 feed-belt.

It will be seen that very many modifications of this machine might be made, and very many devices constructed to apply the pressure of an elastic or yielding surface to 65 accomplish the same result. I do not therefore confine myself to the machine; but, as heretofore stated, I deem the machine shown the best construction for applying the method or process. 70

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

1. The method of removing the burr by subjecting the button with burr attached to pressure from an elastic surface, substantially 75 as shown.

2. The method of removing the burr from buttons by subjecting to pressure from a yielding body, substantially as described.

3. The method of removing the burr by 80 subjecting the button to pressure from an elastic-faced roll, substantially as shown.

4. The feed-belt *f*, in combination with the rolls D and *t* and the roll C, substantially as shown, for the purposes stated. 85

5. The combination of the rolls C and D, arranged in supports, as shown, and having gears *o o*, the feed-belt *f*, roll *t*, and hopper *b*, constructed and arranged substantially as shown, for the purposes stated. 90

In testimony that I claim the foregoing I hereunto set my hand, in the presence of two witnesses, this 11th day of November, 1880.

JOHN W. WESTERVELT.

Witnesses:

ALLEN WEBSTER,
GEO. O. KINGSBURY.