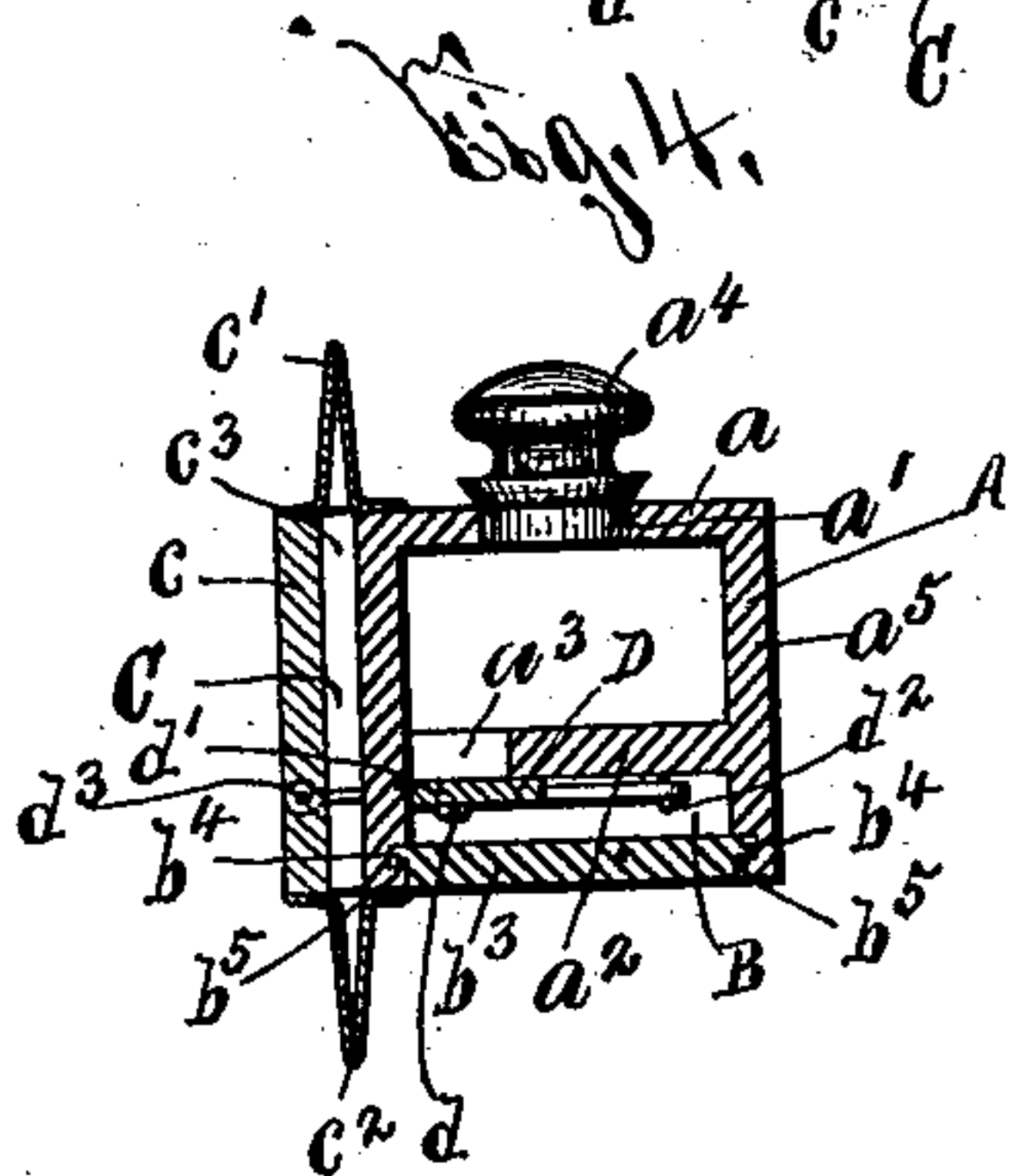
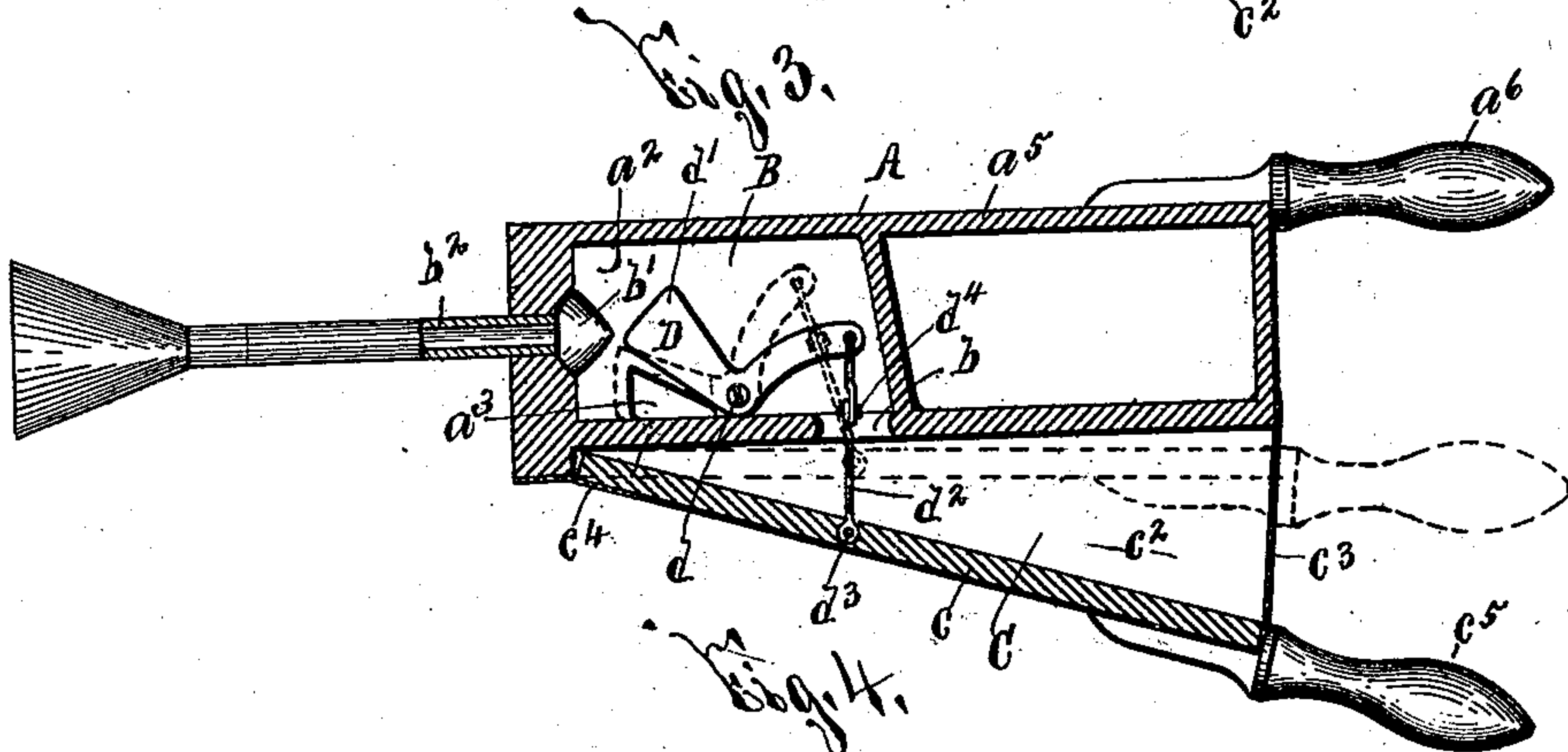
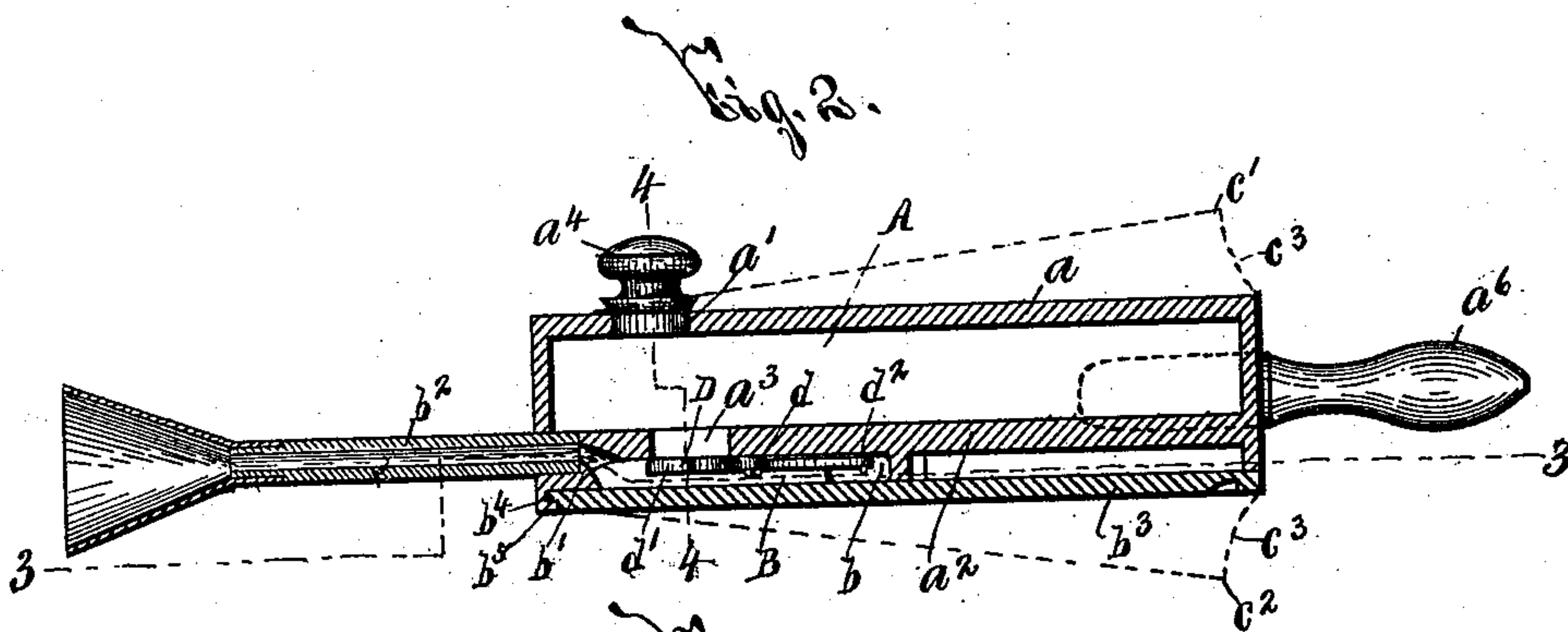
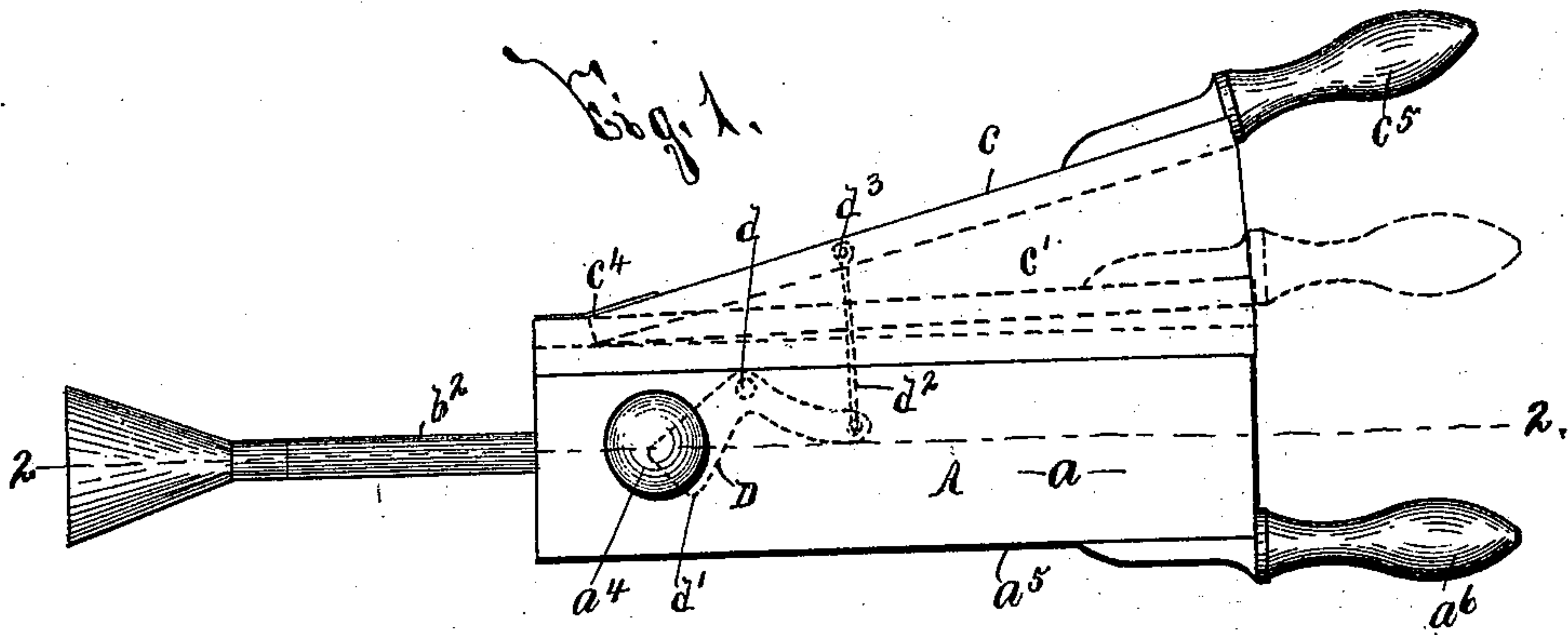


(No Model.)

C. LEROY.  
POWDER DUSTER.

No. 544,735.

Patented Aug. 20. 1895.



WITNESSES:

*H. C. Chase*  
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INVENTOR

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BY

*Key & Parsons*

ATTORNEYS



# UNITED STATES PATENT OFFICE.

CHARLES LEROY, OF DAYSVILLE, NEW YORK, ASSIGNOR OF ONE-HALF TO  
GRANT J. CALKINS, OF SAME PLACE.

## POWDER-DUSTER.

SPECIFICATION forming part of Letters Patent No. 544,735, dated August 20, 1895.

Application filed March 19, 1895. Serial No. 542,355. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES LEROY, of Daysville, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Dusters, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to improvements in dusters particularly applicable for discharging poison upon vegetation, and has for its object the production of a device which is readily manufactured and repaired and is capable of continued practical operation; and to this end it consists, essentially, in the general construction and arrangement of the parts of the duster, all as hereinafter more particularly described, and pointed out in the claims.

In describing this invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

Figure 1 is a top plan of my improved duster, its blower being shown by full lines as expanded and by dotted lines as collapsed. Fig. 2 is a vertical section taken on line 2 2, Fig. 1, the parts being shown in their position assumed when the blower is collapsed. Fig. 3 is a horizontal section taken on line 3 3, Fig. 2, the blower being shown as expanded; and Fig. 4 is a transverse section taken on line 4 4, Fig. 2.

A represents a supply-chamber provided with suitable inclosing-walls, its top wall  $a$  being formed with an inlet-opening  $a'$  and its bottom wall  $a^2$  with an outlet-opening  $a^3$ . The opening  $a'$  is usually arranged in the front extremity of the top wall  $a$ , and is closed by a suitable stopper  $a^4$ , and the opening  $a^3$  is preferably arranged in the front end of the bottom wall  $a^2$ . A receiving-chamber B is arranged beneath the front extremity of the chamber A for receiving the dusting material fed through the opening  $a^3$ , and is preferably formed of less length and size than the chamber A, so as to contain a much smaller amount than the chamber A. The chamber B is provided with an inlet-opening  $b$  in the rear end of its outer side wall and an outlet-opening  $b'$  in its front wall, and a discharge-tube  $b^2$ ,

provided with a flaring outer end, projects from the opening  $b'$ . The bottom wall  $b^3$  of the chamber B is preferably removable for permitting access to said chamber and examination and repair of the cut-off and its operating connection, presently described. To facilitate removal of the wall  $b^3$  its longitudinal edges are provided with shoulders  $b^4$ , engaged with corresponding shoulders  $b^5$ .

C is a blower arranged at one side of the chambers A B and provided with a movable wall  $c$  and flexible top, bottom, and rear walls  $c'$   $c^2$   $c^3$ . The front end of the movable wall  $c$  is arranged in close proximity to the adjacent side walls of the chambers A B, and is hinged by any suitable device, as a flexible strip  $c^4$ . The rear end of the wall  $c$  is provided with a hand-engaging piece  $c^5$ , and the opposite side wall  $a^5$  of the chamber A is provided with a similar hand-engaging piece  $a^6$ . As the user of my invention forces the hand-piece  $c^5$   $a^6$  together, for collapsing the blower C, its movable wall  $c$  is forced toward the adjacent walls of the chambers A B and its flexible top and bottom walls assume the position indicated by dotted lines at Fig. 2. As the blower C is collapsed the air therein is forced through the opening  $b$  into the rear end of the receiving-chamber B and forcibly ejects the dusting material therein through the outlet-opening  $b'$  and the discharge-tube  $b^2$ .

D is a cut-off for facilitating the operation of my improved duster, and, as best illustrated at Fig. 3, this cut-off is pivoted at  $d$  to the top wall of the chamber B, and is so arranged that one extremity  $d'$  is normally beneath the opening  $a^3$ , as clearly seen at Figs. 2 and 4, for preventing passage of the dusting material from the chamber A through the opening  $a^3$  into the chamber B. The cut-off D is rocked into and out of its normal position by a suitable connection  $d^2$ , having one end hinged to the opposite extremity of said cut-off and its other end hinged at  $d^3$  to the movable wall  $c$ . The connection  $d^2$  preferably consists of opposite sections adjustably secured together in any desired manner, as by a fastening-screw  $d^4$ ; but it may consist of a single piece if no lengthwise adjustment thereof is desired. The movement of the cut-off D from its normal position effected by



the outward movement of the wall c disturbs the dusting material immediately above said cut-off and facilitates the entrance of said material into the chamber B.

5 The operation of my duster will be readily understood upon reference to the foregoing description and the accompanying drawings, and it is obvious that the same is readily manufactured and repaired and is capable of  
10 continued and practical operation.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a duster, the combination of a supply  
15 chamber, a receiving chamber connected to the supply chamber, a cutoff for regulating the passage of the dusting material to the receiving chamber, and a blower for ejecting the dusting material from the receiving cham-  
20 ber having a movable side wall connected to the cutoff, substantially as and for the purpose described.

2. In a duster, the combination of a supply  
25 chamber, a receiving chamber connected to the supply chamber, a cutoff for regulating the passage of the dusting material to the receiving chamber, a blower for ejecting the dusting material from the receiving chamber provided with a movable side wall, and an  
30 adjustable connection between the cutoff and the movable side wall, substantially as and for the purpose set forth.

3. In a duster, the combination of a supply  
chamber provided with a discharge opening  
in the front end of its lower wall, a receiving 35  
chamber arranged beneath the front extremity  
of the supply chamber and provided with a  
removable bottom wall, said receiving cham-  
ber being formed of less length and size than  
the supply chamber and provided with a dis- 40  
charge opening in its front end and an inlet  
opening in the rear end of its side wall, a  
pivoted cutoff supported in the receiving  
chamber and having one extremity arranged  
normally beneath the opening in the lower 45  
wall of the supply chamber for closing the  
same, a blower arranged at one side of the  
former chambers for forcing a discharge cur-  
rent of air through the inlet opening of the  
receiving chamber, and formed with a mov- 50  
able outer side wall and flexible top, bottom  
and rear walls, and a connection between the  
opposite extremity of the cutoff and the mov-  
able side wall, substantially as and for the  
purpose described. 55

In testimony whereof I have hereunto  
signed my name, in the presence of two at-  
testing witnesses, at Pulaski, in the county  
of Oswego, in the State of New York, this  
13th day of March, 1895.

CHARLES LEROY.

Witnesses:

JOHN CALKINS,

GRANT J. CALKINS.