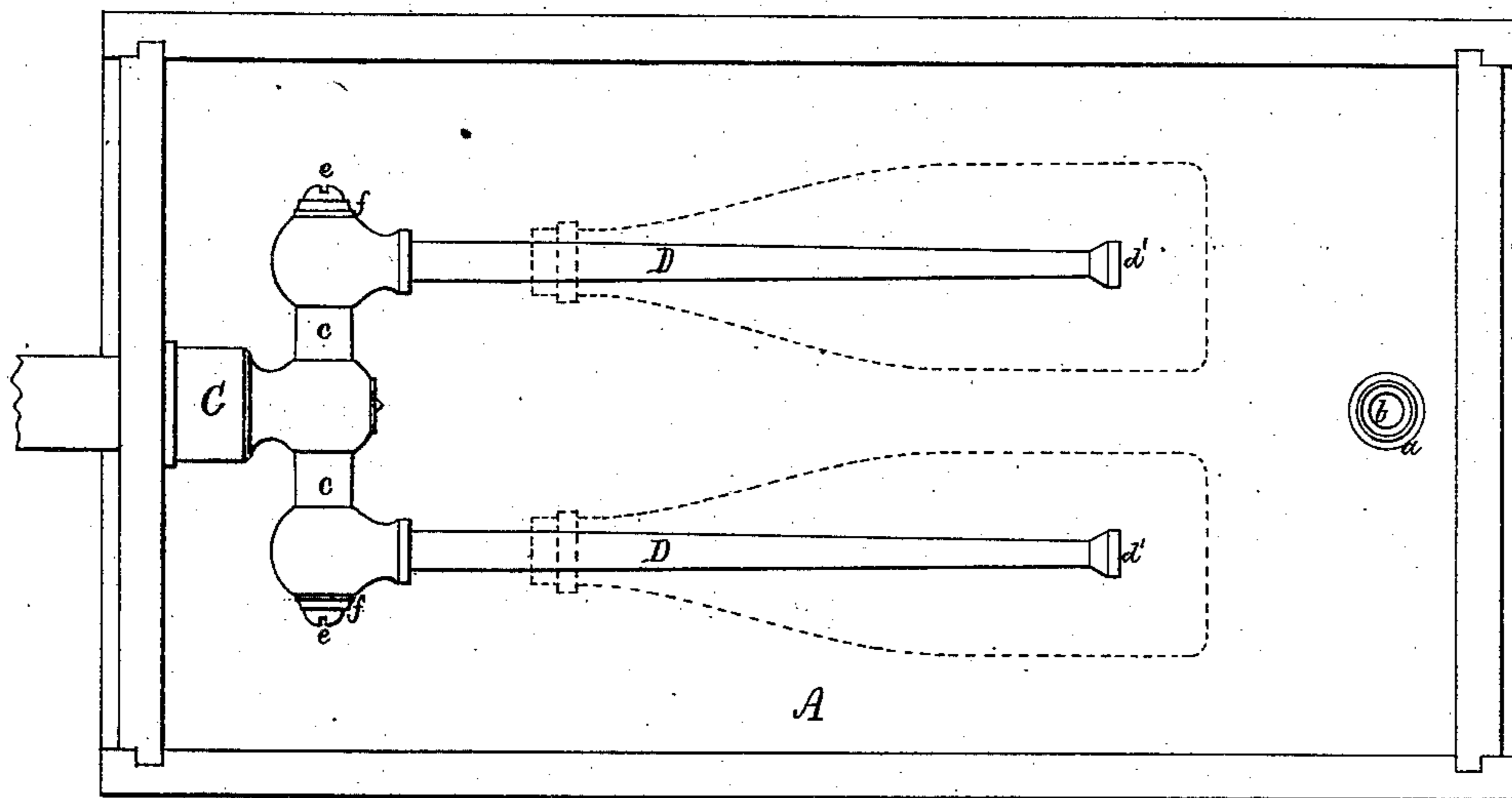
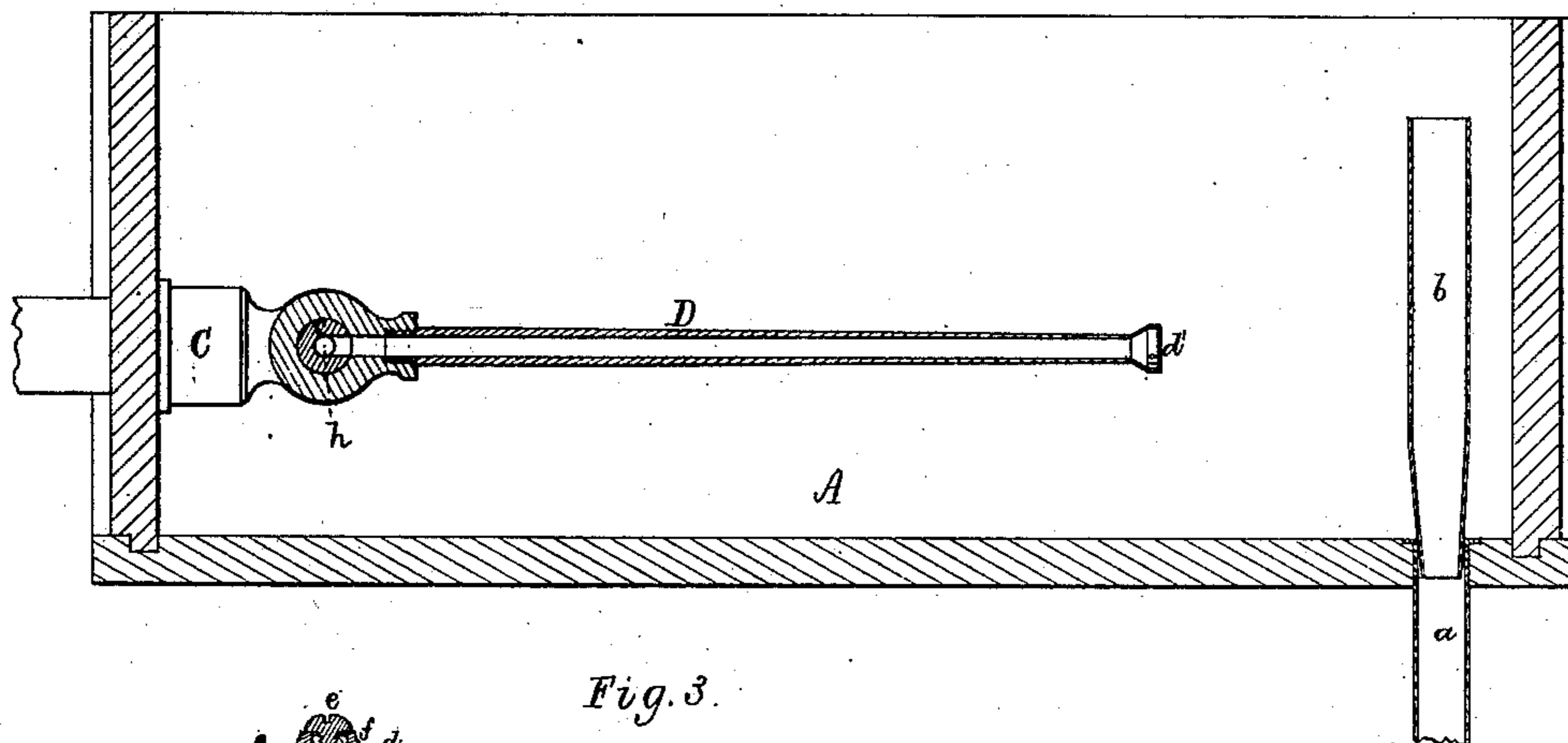


(No Model.)

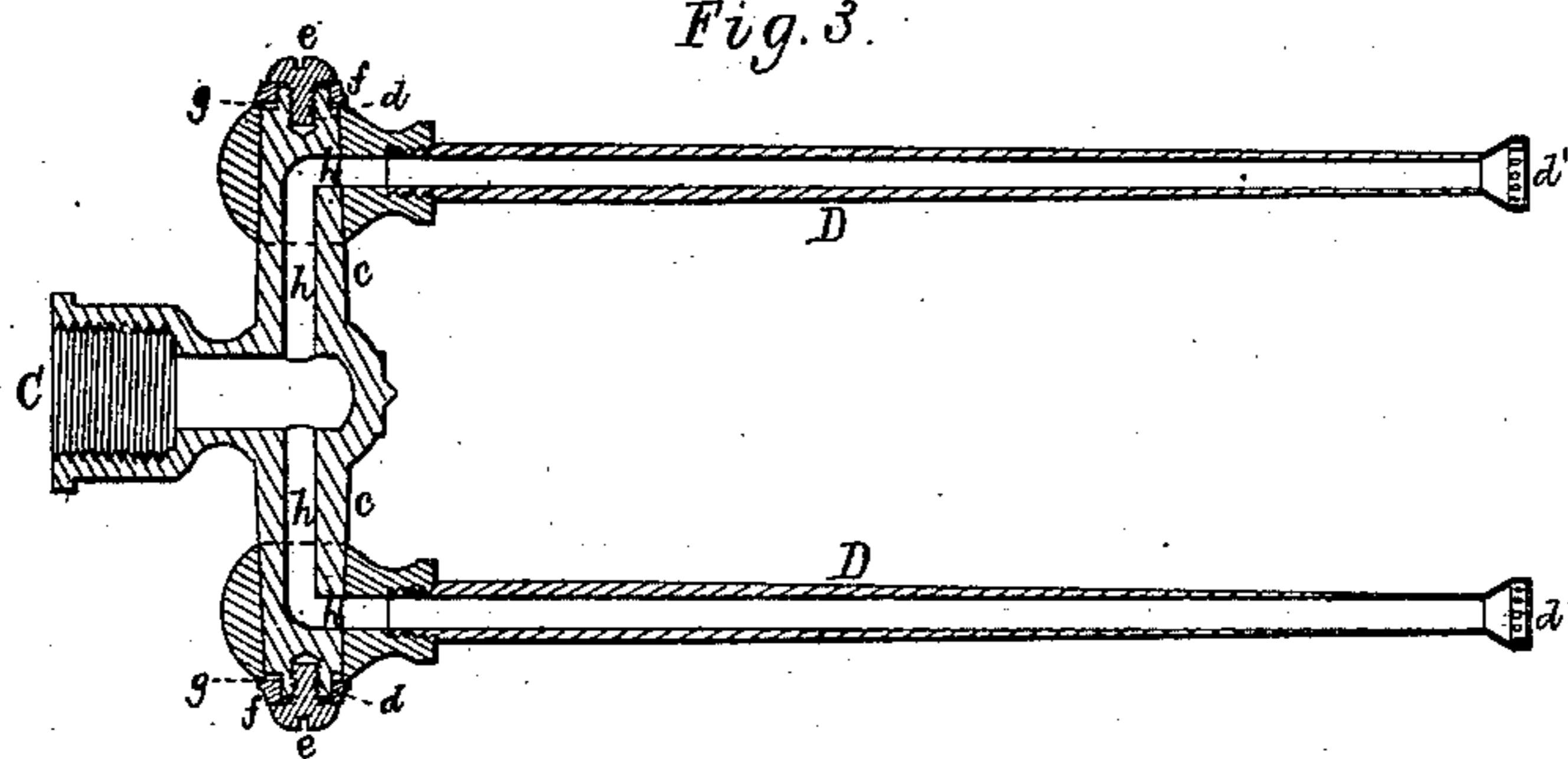
C. CALLAHAN.  
Apparatus for Washing Bottles.  
No. 237,727. *Fig. 1.* Patented Feb. 15, 1881.



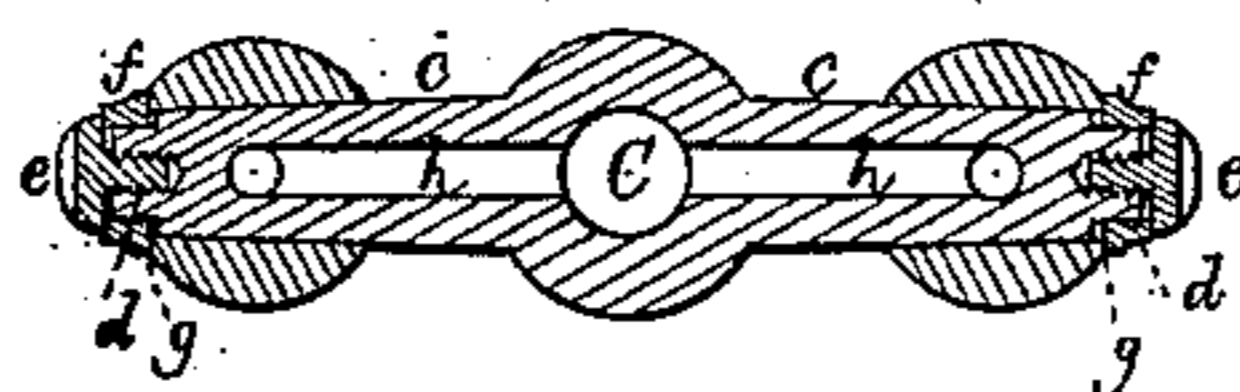
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses*

*S. N. Piper*

*C. M. Pratt*

*Inventor.*

*Charles Callahan.*

*by R. H. Eady atty.*

# UNITED STATES PATENT OFFICE.

CHARLES CALLAHAN, OF LOWELL, MASSACHUSETTS.

## APPARATUS FOR WASHING BOTTLES.

SPECIFICATION forming part of Letters Patent No. 237,727, dated February 15, 1881.

Application filed November 29, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES CALLAHAN, of Lowell, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Apparatus for Washing Bottles; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a longitudinal section, of the apparatus embodying my invention. Fig. 3 is a horizontal section, and Fig. 4 a vertical and transverse section of the duplex induct and its jet-tubes.

The apparatus, as shown, is designed for the cleansing of bottles, more especially those used for holding beer or soda or aerated liquids. By means of it two bottles can be cleansed, both externally and internally, at one and the same time, one of them being held in the left and the other in the right hand of the attendant, who meanwhile keeps them depressed in the water of the tank, and after completion of the operation raises them out of the water, and in so doing raises the jet-tubes at the same time and causes the supply of water to them to be cut off. While the jet-tubes are elevated into position for the removal from or application to them of bottles the water is stopped from flowing into and out of the tubes; but on bottles being applied to them and depressed with the tubes to or about to horizontal positions in the tank the water will be driven from the jet-tubes with great force into the bottles, so as to wash their inner surfaces, the outer surfaces of the bottles being in the meantime washed by the hands of the attendant, who, while doing so, turns the bottles so as to cause the water to strike thoroughly against their inner surfaces.

In the drawings, A denotes a tank, provided near one end with an eduction opening or pipe, *a*, leading out of its bottom. It also has an auxiliary educt or waste-pipe, *b*, which near its lower end is tapering to fit into the mouth of the educt *a*. The pipe *b* extends up nearly to the top of the tank, and while in place is to maintain in the tank water at about the level of the top of the said pipe *b*, and allow of discharge of the surplus water through it, the said pipe, and the main educt *a*. At the opposite end of the tank, and at about one-third

of its height, is an induct, C, which has two frusto-conical branches, *c c*, extending from it in opposite directions within the tank, and in line with each other, each of them being stopped at its outer end, and there provided with a female screw, *d*, to receive a screw, *e*, to bear at its nicked head against a washer, *f*, fitted on the branch *c*, so as not to revolve thereon, but to bear against a shoulder, *g*, made therein, as shown. Leading horizontally out of each branch tube is a passage, *h*, to open into one of two jet-tubes, D D, which are fitted to revolve on the two branches *c c*. Each jet-tube terminates at its outer end in a foraminous rose or head, *d'*, the holes of which I prefer to have arranged so as to discharge downward, rather than upward, one or more of them being also arranged so as to discharge in line with or parallel to the axis of the tube. Each jet-tube is to be long enough to reach into a bottle from its mouth nearly to its bottom.

While the jet-tubes are up in vertical or somewhat inclined positions no water under pressure from the induct will be discharged from them; but on bottles being applied to the tubes, (by the latter being inserted in the bottles,) and the bottles being turned down into the tank, they will carry or force down the jet-tubes with them, and water will be discharged from such tubes with force into the bottles, and will flow out of their mouths into the tank. After the water in the tank may have reached the level of the top of the waste-educt the surplus flowing from the bottles will be discharged by such educt.

Instead of two branches and two jet-tubes, there may be to the induct but one branch and one educt; but it is preferable to have two of said branches and two educts, as with them two bottles can be washed at a time, and as a consequence the work of washing any considerable number of bottles can be accomplished in about half the time that would be the case were but one jet-tube used.

On removing the auxiliary educt from the main educt all of the water and waste matter therein removed from the bottles may be discharged from the tank.

What I claim as my invention is as follows:

1. The combination of the tank with a water-supply induct and one or more jet-tubes

arranged within such tank, and each fitted to  
revolve on a branch, *c*, having an exit-hole ar-  
ranged in it, as described, such being so that  
when either of such jet-tubes may be in a hori-  
5 zontal position, or thereabout, and water may  
be in the induct, such water should be received  
and discharged by it from the induct, and when  
the jet-tube is turned up to a vertical position,  
or thereabout, the supply of water to it from  
10 the induct shall be stopped or cut off, all be-  
ing substantially as and for the purpose set  
forth.

2. The combination of a tank and main and  
auxiliary educts applied thereto, as set forth,  
15 with a water-supply induct and one or more  
jet-tubes arranged within such tank, and each

fitted to revolve on a branch, *c*, having an ex-  
it-hole arranged in it, as described, such being  
so that when either of such jet-tubes may be  
in a horizontal position, or thereabout, and 20  
water may be in the induct, such water shall  
be received and discharged by it from the in-  
duct, and when the jet-tube is turned up to a  
vertical position, or thereabout, the supply of  
water to and through it shall be stopped or 25  
cut off, all being substantially as and for the  
purpose or objects as stated.

CHAS. CALLAHAN.

Witnesses:

NATHAN D. PRATT,

JOHN J. RICHMAN.