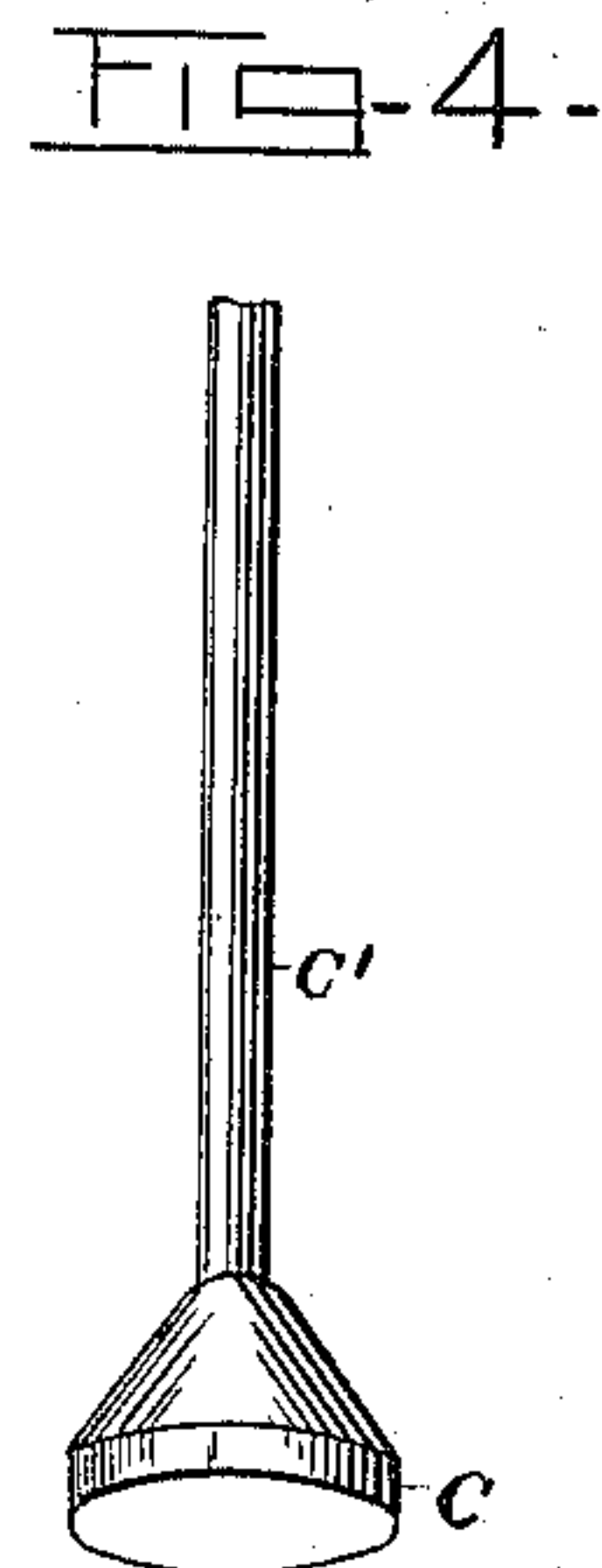
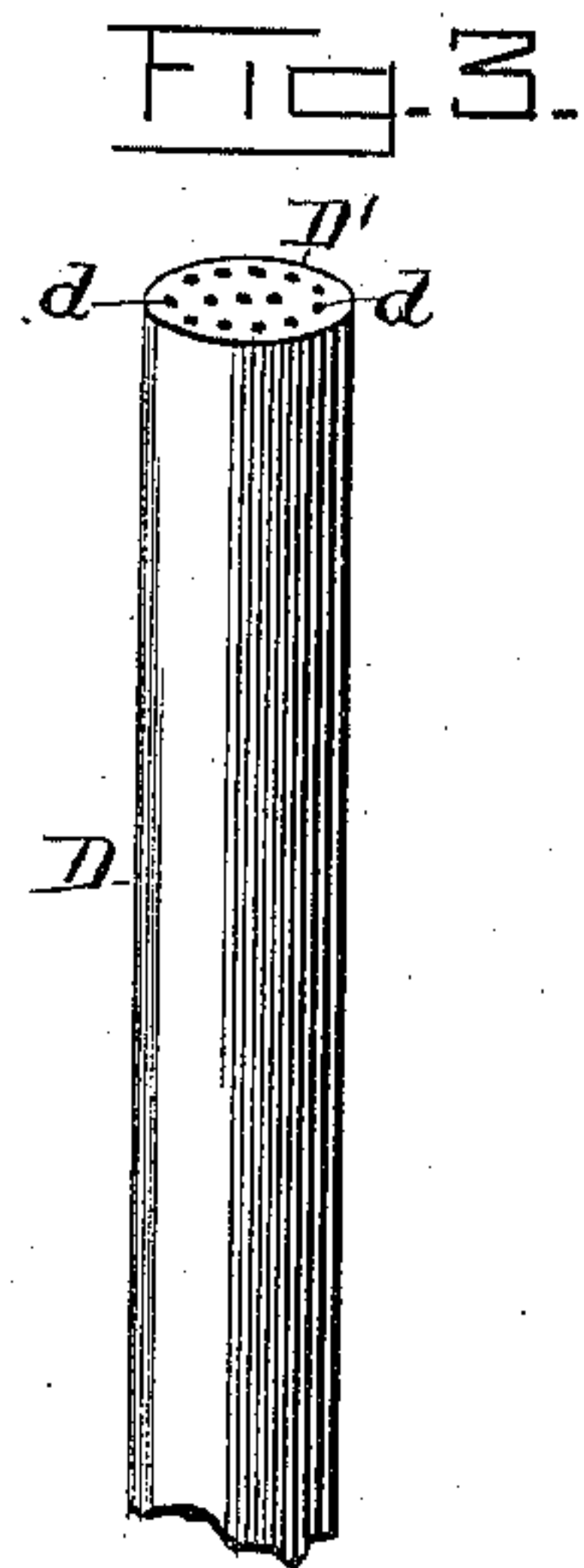
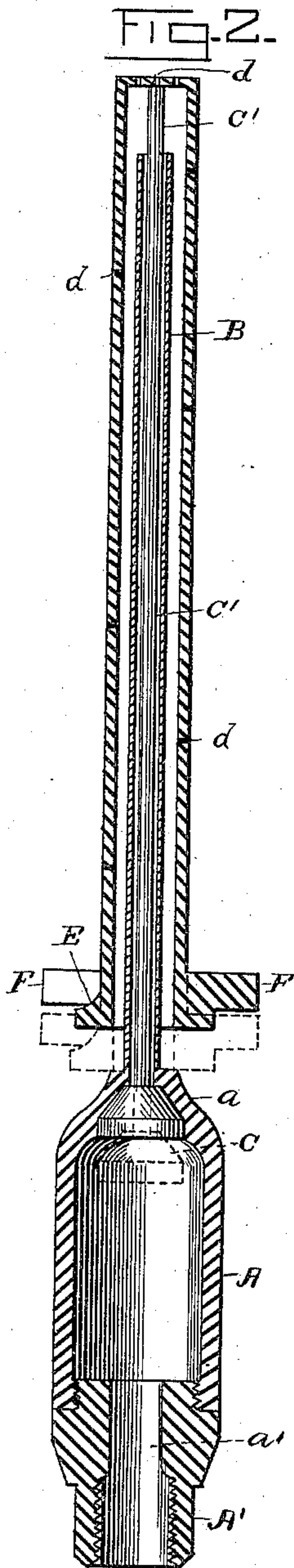
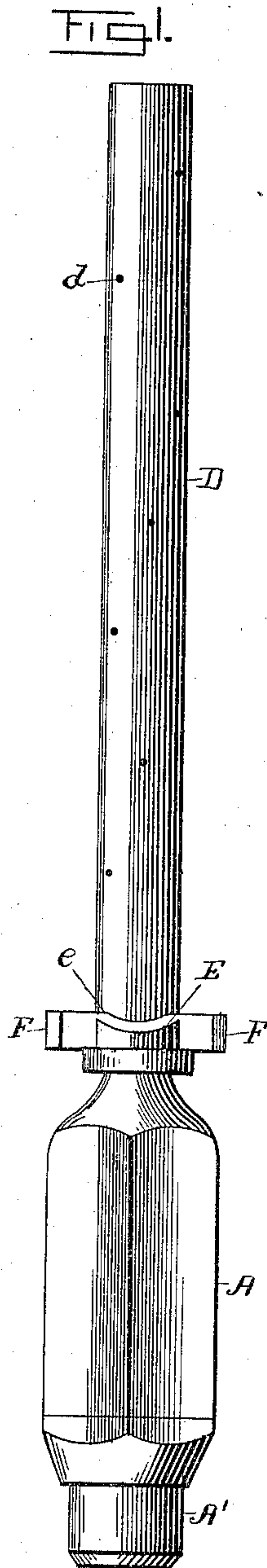


(No Model.)

R. PRESTON.  
BOTTLE RINSER.

No. 334,805.

Patented Jan. 26, 1886.



Witnesses:

Morris A. Clark.  
W. H. McKenna

Inventor :

Richard Preston  
by H. H. Snow & Co  
his Attorneys

# UNITED STATES PATENT OFFICE.

RICHARD PRESTON, OF CHELSEA, MASSACHUSETTS, ASSIGNOR OF ONE-HALF  
TO EWING BROTHERS, OF SAME PLACE.

## BOTTLE-RINSER.

SPECIFICATION forming part of Letters Patent No. 334,805, dated January 26, 1886.

Application filed March 14, 1885. Serial No. 158,825. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD PRESTON, a citizen of the United States, residing at Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Bottle-Rinsers, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to bottle washers or rinsers, and has for its object to provide a simple arrangement of valve and trip devices, whereby the flow of water will be stopped by the force thereof when not in use, and the water will be caused to automatically flow by slight pressure added to the weight of the bottle when the latter is applied.

To such end the invention consists in certain constructions, which I will first describe, and then point out in the claims.

In the drawings, Figure 1 is a side, and Fig. 2 a longitudinal, section of my improved apparatus. Fig. 3 is a detail view of the valve and part of its rod, and Fig. 4 is a detail view of a portion of the trip-tube.

In carrying out my invention I provide a valve chamber or box, A, suitably formed at its lower end, A', to be attached to a common spigot, or otherwise suitably connected with a water-supply pipe. In the use of a spigot it (the spigot) is reversed from its ordinary position, so that its discharge-arm projects upward. Within the upper end of the valve-box I form a valve-seat, *a*. A discharge-tube, B, projects upward from the upper end of the valve-box A, as shown, with the end open. A valve, C, is fitted to seat *a* and provided with a rod, C', which extends upward into and through the discharge-tube, with its extremity beyond the open end of the discharge-tube, as shown in Fig. 2. It will be noticed that the force of the water entering inlet-opening *a'* will act to hold the valve C to its seat *a*. To better secure this result, I contract the said inlet-opening, making it smaller than the transverse area of the valve-box, and arrange it opposite the valve-seat. This arrangement is preferred, because the action of the water is had thereby directly against the

valve. The force of the water will hold the valve normally on its seat.

In use, if a bottle be placed over the discharge-tube so that its bottom will rest on the valve-rod, the weight of the bottle, with slight pressure added, will depress the valve, and the water will flow out of pipe B and against the bottom, and thence down the sides of the bottle. While this construction will give good results, as is manifest, I prefer to use, in conjunction therewith, the trip-tube D. This tube is made of an inner diameter greater than the external diameter of the discharge-tube, and one of its ends is closed by a head-plate, D', having perforations *d*, and its sides are perforated by small openings *d*. The opposite or lower end of the trip-tube is provided with an annular shoulder, E, and lugs F. The shoulder E is provided with recesses *e*, through which water may escape from the bottle when the neck of the latter is smaller than the shoulder E.

In operation the bottle is placed on the apparatus over the trip-tube, with its neck resting on lugs F. The head of the trip-tube engages the valve-rod, and a slight pressure added to the weight of the bottle bears valve C down from its seat, and the water will flow through the discharge-tube and be forced through perforations *d* in fine streams against the bottom and sides of the bottle. By this construction the water is forced in fine streams against the inside of the bottle, and a thorough cleansing thereof is accomplished.

The apparatus is simple, quick, easily operated, and not likely to get out of order.

I claim—

1. The combination, in a bottle washer or rinser, of the valve-seat, the discharge-pipe connected thereto, the valve arranged within the said valve-seat and provided with a rod extending into and slightly beyond the discharge-pipe, and the inclosing perforated sleeve D, inclosing the discharge-pipe, and forming a bearing-surface at its upper end for the end of the valve-rod, substantially as described.

2. The combination, in a bottle washer or



rinser, of the valve-seat, the discharge-pipe  
connected thereto, the valve arranged within  
the said valve-seat and provided with a rod  
extending into and slightly beyond the dis-  
5 charge-pipe, and the inclosing perforated  
sleeve D, having the perforated disk at its  
upper end, against which the valve-rod bears,  
and provided at its lower end with the lugs  
adapted to support the bottles, the said lugs

being situated a sufficient distance apart to 10  
allow the escape of the water, substantially as  
described.

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

RICHARD PRESTON.

Witnesses:

GEORGE ALLEN,  
BENJ. DODGE.