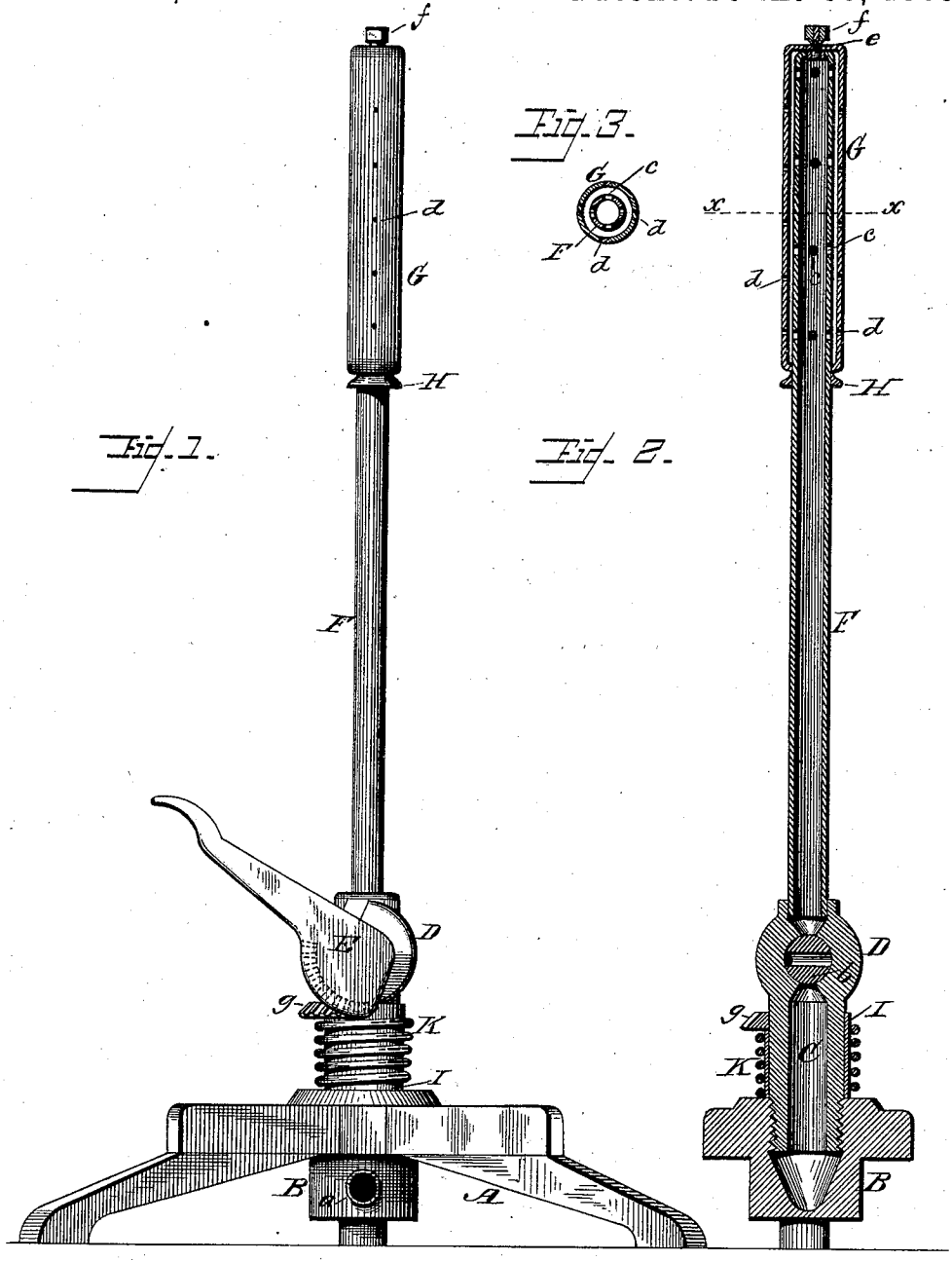
(No Model.)

H. P. MERRIAM.

BOTTLE WASHER.

No. 321,128. Patented June 30, 1885.



WITNESSES
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UNITED STATES PATENT OFFICE.

HENRY P. MERRIAM, OF LAWRENCE, MASSACHUSETTS.

BOTTLE-WASHER.

SPECIFICATION forming part of Letters Patent No. 321,128, dated June 30, 1885.

Application filed October 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY P. MERRIAM, a citizen of the United States, residing at Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Bottle-Washers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side elevation of my invention; Fig. 2 a sectional elevation thereof, and Fig. 3 a horizontal section taken on line *x x* of Fig. 2.

The present invention has certain new and useful improvements in devices for washing bottles and other vessels, but especially designed for apothecaries' use; and it consists in the details of construction substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents a suitable base or stand provided with a receiving-chamber, B, into which the water passes through a rubber or other pipe connecting therewith at *a* and to the source of supply.

The chamber B is provided with interior screw-threads for connecting thereto the lower or screw-threaded end of a short pipe, C, the upper end thereof terminating in a suitable faucet, D, the plug *b* thereof having at one end an operating-lever, E. The faucet may be of any of the usual forms, as I do not desire to limit myself to the construction shown.

The pipe C, at a point above the faucet D, has connected to it an upright tube, F, the upper portion thereof being perforated, as shown at *c*.

Over the perforated end of the tube F is placed a cylindrical cap, G, provided with oblique perforations, *d*, so that the discharge of the water will cause the cap to revolve very rapidly, thereby throwing the water against the entire surface of the interior of the bottle.

The cap G is connected to the tube F by a pivot, *e*, preferably of steel, the lower end thereof being enlarged by connecting thereto a screw-threaded nut which engages with a screw-threaded hole in the top of the tube. The pivot *e* extends up through a hole in the top of the cap G and has a head, *f*, formed with a conical base to lessen the frictional surface coming in contact with the end of the cap, thereby rendering the cap more easily acted upon by the water escaping from the oblique openings or perforations *d*, and requiring less force to revolve it. The cap can readily be removed for cleaning by unscrewing the pivot from the tube F.

The tube F, at a point immediately below the lower end of the cap G, is provided with a circumferential deflecting-flange, H, which has the effect of throwing the water escaping through the space between the cap and tube against the sides of the bottle which is being washed.

The lever E, upon its inner side, is provided with a ratchet, as shown in dotted lines, which meshes with the teeth of a similar ratchet, *g*, upon a sleeve, I, encircling the pipe C. The two ratchets or segmental and beveled gears give to the lever an even force and steady it in its movement.

A spiral spring, K, extends around the sleeve I, one end of the spring being fastened to the base or stand A and the opposite end to the ratchet *g* or sleeve I, as found preferable.

When pressure is brought down on the lever E, the teeth upon the same will engage with the gear or ratchet *g* and cause the sleeve I to turn, which will contract the spring K. The faucet is now open and the water enters the tube F, passes up said tube and out through the perforations *c* between it and the cap G, and escaping obliquely through the perforations *d* against the sides of the bottle, the cap, as before stated, having a rotary motion imparted by the force of the escaping water, this continuing as long as pressure remains on the lever. When the bottle has been sufficiently washed, the pressure on the lever E is removed, and the expansive tendency of the spring K will cause the spring I to return to its normal position, and in so doing the segmental gear or ratchets on the sleeve and lever will bring the latter to its former position, which closes the faucet.

Having now fully described my invention,

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

1. In a device for washing bottles or other vessels, the combination, with a vertical or upright perforated tube, a faucet for controlling the supply of water thereto, and a deflecting circumferential flange projecting from the exterior of said tube, of an obliquely-perforated cylindrical cap placed over the end of the tube and detachably connected thereto, substantially as and for the purpose specified.

2. In a device for washing bottles or other vessels, an upright perforated tube and a revolving cylindrical perforated cap, in combination with means for detachably connecting the cap to the tube, consisting of a pivot provided at its lower end with a screw-nut to engage with a screw-threaded hole in the end of the tube, and at its upper end with a head having a conical bearing or base, substantially as and for the purpose specified.

3. In a device for washing bottles or other vessels, an upright perforated tube provided at its upper end with a revolving perforated cylindrical cap, in combination with means for controlling the discharge of water to the tube, consisting of a suitable faucet, a sleeve, a spring coiled around it, and ratchets or segmental gears upon both sleeve and lever, and operating substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY P. MERRIAM.

Witnesses:

CHARLES U. BELL,

JAMES B. CROSEBY.