

UNITED STATES PATENT OFFICE.

CHARLES W. FARCIOT, OF KELLEY'S ISLAND, OHIO.

IMPROVEMENT IN BOTTLE - WASHING MACHINES.

Specification forming part of Letters Patent No. **146,327**, dated January 13, 1874; application filed July 14, 1873.

To all whom it may concern:

Be it known that I, CHARLES W. FARCIOT, of Kelley's Island, in the county of Erie and State of Ohio, have invented an Improved Bottle-Washing Machine, of which the following is a specification:

The nature of this invention relates to an improvement in machines for washing wine and other bottles, by means of which bottles may be rapidly cleansed externally and internally; and it consists in the novel and peculiar construction of the machine, and the arrangement of its various parts, as more fully hereinafter set forth.

Figure 1 is a perspective view. Fig. 2 is a cross-section at *x x*. Fig. 3 is a similar section at *y y*.

Like letters refer to like parts in the several figures.

In the drawing, A represents a rectangular frame, mounted on suitable supports, and formed with a pair of ways, A', extending across the middle and projecting from the rear side, in which is journaled the driving-shaft B carrying a grooved pulley, C. D is a shaft journaled through boxes *d*, in the ways within the main frame, in such a manner that it may play longitudinally in its bearings. On it is keyed a grooved pulley, E, around which and the pulley C an endless cord, F, passes to rotate the said shaft D. G is a drunken or skew-wheel or disk secured to the shaft D, its edge rotating in a slot in a plate, H, secured to one of the ways, the effect of which is to cause the shaft D to play longitudinally in its bearings as it rotates. D' is a second shaft journaled in bearings *d'*, carrying a grooved pulley, E', from which a cord, F', passes the pulley E, which gives it motion. A drunken wheel, G', is secured to the shaft D' and plays in a slotted plate, H', which, being secured to one of the ways, imparts to the second shaft a longitudinal play like the first. On each end of each shaft D D' is screwed a chuck, *b*, adapted to receive the base of a bottle. At each side of

the chuck a guide-rod, *c*, extends from the way to the outer side of the frame, and from them is suspended a yoke, *d*, to which is secured a brush, *e*, which impinges upon and cleanses the exterior of the bottle. *f* is a block sliding on each guide-rod *c*, the two having pivoted between them a trunnion, *f'*, having a socket to receive the mouth of the bottle, with which socket a curved metallic pouch, *g*, containing shot, communicates. The blocks *f* and their trunnion are pushed toward the bottle by a spring, *h*, spirally coiled on each rod *c*.

To cleanse a bottle, it, with some water in it, is held in one hand by the operator, who, with the other, retracts the trunnion and its blocks. Introducing the base of the bottle in the chuck, he lets the trunnion come against the end of the bottle, turning up the trunnion to receive the neck, when the shot run out of the pouch into the bottle, which is reciprocated longitudinally and axially rotated by the chuck. The shot cleans the interior of the bottle while the brush polishes the exterior in a very short time. When the bottle is withdrawn, its base being turned up, the shot run back into the pouch, which turns the trunnion so that the former hangs below it, the water escaping through small holes perforated in the end thereof. The frame may be fitted with any desired number of shafts and bottle-cleaners.

What I claim as my invention, and desire to secure by Letters Patent, is—

The frame and ways A A', driving-shaft B, pulley C, shaft D, having an end-play through the bearings *d*, the grooved pulley E, cord F, drunken wheel G, slotted plate H, the chucks *b*, guide-rods *c c*, yoke *d*, brush *e*, blocks *f f*, trunnion *f'*, pouch *g*, and springs *h h*, constructed, arranged, and operating substantially as and for the purpose set forth.

CHARLES W. FARCIOT.

Witnesses:

H. F. EBERTS,

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