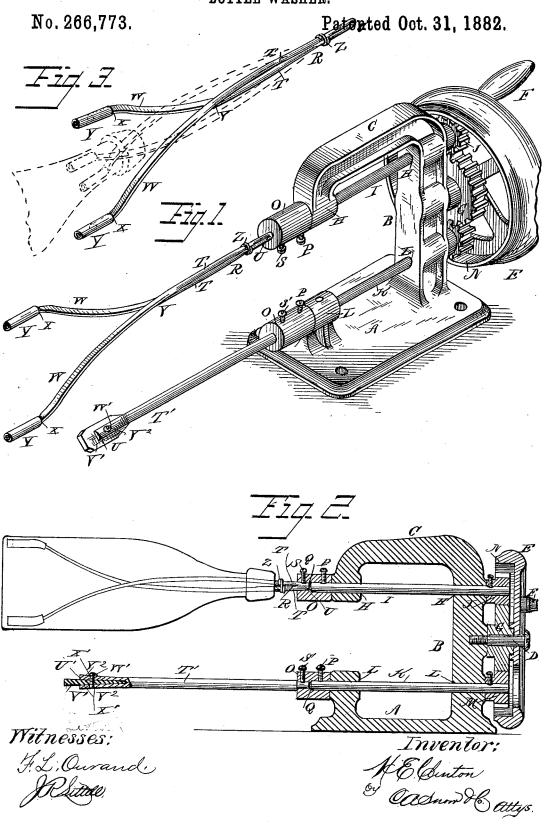
H. E. CLINTON. BOTTLE WASHER.



United States Patent Office.

HENRY E. CLINTON, OF AUGUSTA, GEORGIA.

BOTTLE-WASHER.

SPECIFICATION forming part of Letters Patent No. 266,773, dated October 31, 1882. Application filed August 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. CLINTON, of Augusta, in the county of Richmond and State of Georgia, have invented certain new and use-5 ful Improvements in Bottle-Washers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, refer-10 ence being had to the accompanying drawings, which form a part of this specification.

This invention relates to bottle-washers, and has for its object to provide a simple, inexpensive, and efficient device for readily and 15 quickly cleaning the inside of bottles and the like.

In the drawings, Figure 1 is a perspective view of the washer. Fig. 2 is a vertical longitudinal sectional view thereof. Fig. 3 is a de-20 tail perspective view of the upper spring arm washer detached.

Referring to the drawings, A designates the base-plate, which may be secured to a table or stand, and has an upright standard, B, formed 25 with an arch, C, at its top. About the center of standard B are formed bearings by a stubshaft, D, for a drive-wheel, E, having an operating-handle, F, and operating a drive gearwheel, G. At the top of the standard are pro-30 vided bearings H H for a shaft, I, carrying a pinion, J, which meshes with gear-wheel G. At the bottom is arranged a similar shaft, K, in bearings L L, also carrying a pinion, M, meshing with gear-wheel G. Gear mechanism 35 G J M is inclosed and protected by a circumferential lateral flange, N, on balance-wheel E. By operating the latter a rotary motion is imparted to shafts IK. On the free ends of each of these shafts is arranged a collar, O, by means 40 of a set-screw, P, the collars being provided with an interior annular shoulder, Q, against which the ends of the shafts abut. In top collar O is secured the end of a spring-arm cleaner,

R, by a set-screw, S. Spring-cleaner R com-45 prises two elastic wire arms, T T, secured together at their rear ends, U, from which they extend and cross each other at V, whence they

are flattened and branch outwardly in opposite directions, as at W W. From flat branches W W extend straight and rounded points X X, 50 which receive any suitable washers, such as cloth, leather, &c., but preferably small rubber tubing Y. Over the ends U is slipped a spring-coil, Z, which forms a collar for regulating the lateral tension and expansion of arms 55 TT. The points of these arms are pressed together, as shown in dotted lines, Fig. 3, so as to enter the neck of the bottle, when they expand inside the latter. Then by holding the bottle stationary the tubing Y Y thoroughly 60 cleans the sides of the bottle by the rotary motion of the cleaner R. When the operation is completed the bottle is simply drawn off the arms, the flat portions WW greatly facilitating

In the bottom collar O is secured by a setscrew, S', a rod, T', having a bifurcated front end, U', between which is secured a wedge-shaped leather piece, V'. The latter is held in position by the pressure of the ends V2 V2, 70 and by a transverse screw, W', which passes through screw-threaded perforations X' X' in ends $\overset{\circ}{\mathrm{V}}{}^{2}$ $\overset{\circ}{\mathrm{V}}{}^{2}$. The bottle is passed over rod T' until the leather piece V' abuts against the bottom, when it will readily clean the same by its 75 rotary motion, the bottle being held stationary.

From the foregoing the operation and advantages of my invention will be readily understood. The device is very simple, efficient, and convenient.

I claim as new-

The combination, with the standard and operating mechanism having rotary shafts I K, of the upper spring-arms, TT, for cleaning the sides of the bottle, and lower rod, T', having 85 piece V' for cleaning the bottom, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HENRY E. CLINTON.

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Witnesses:

B. Dule, J. W. LYETH.