W. W. HAGGARD.

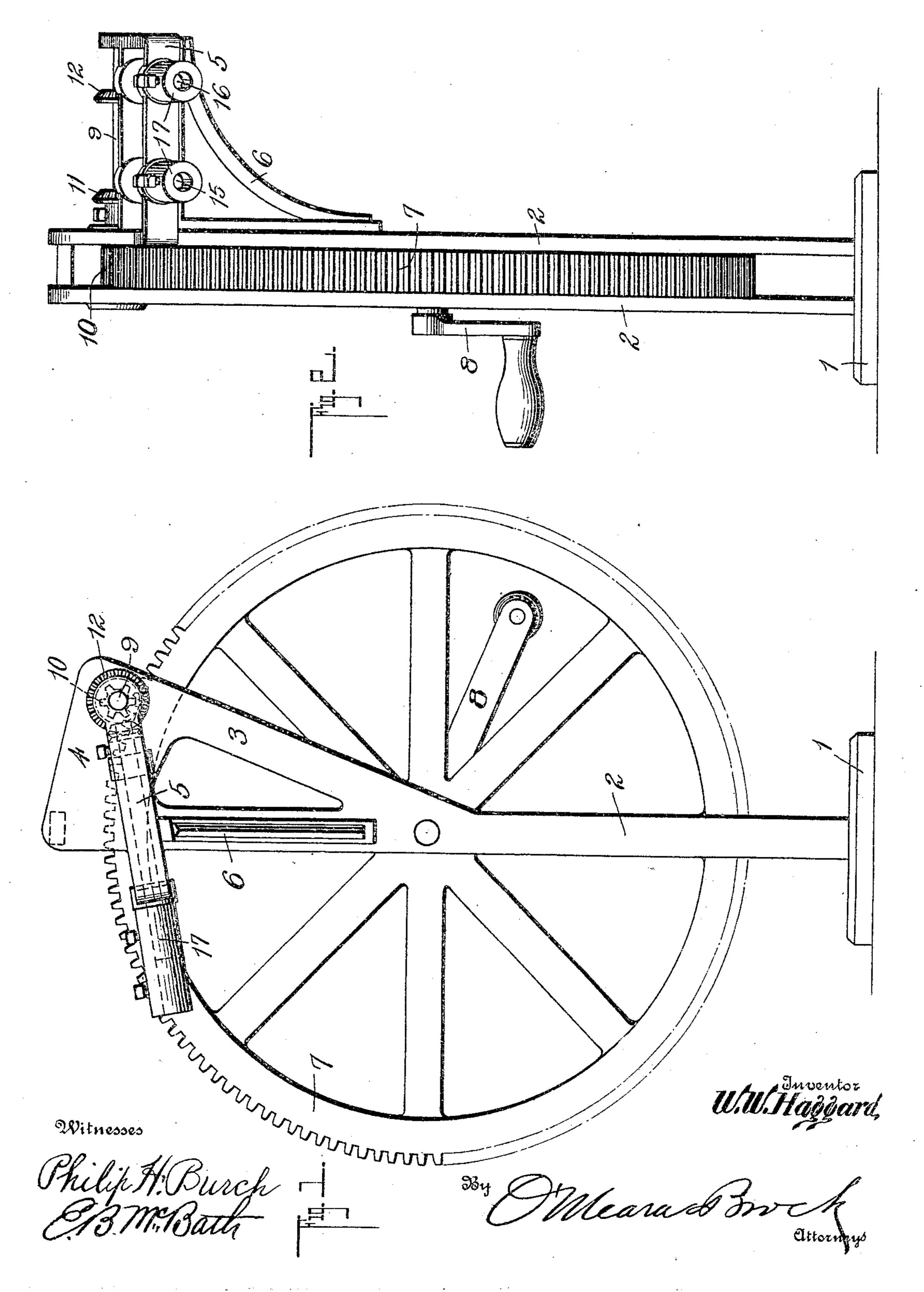
MILK BOTTLE WASHER.

APPLICATION FILED FEB. 17, 1909.

940,011.

Patented Nov. 16, 1909.

2 SHEETS-SHEET 1.



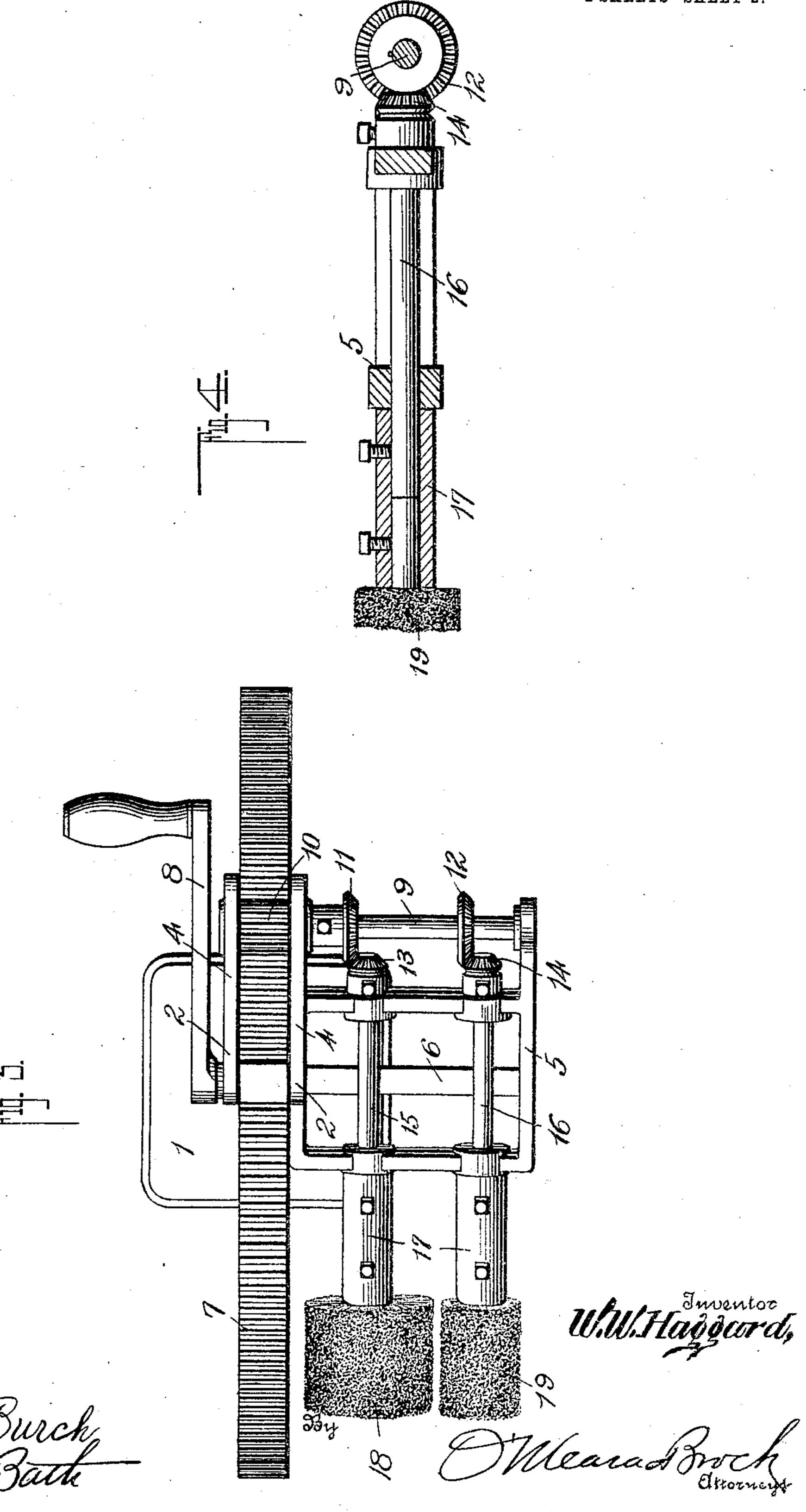
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UNITED STATES PATENT OFFICE.

WILLIAM W. HAGGARD, OF WINCHESTER, KENTUCKY.

MILK-BOTTLE WASHER.

940,011.

Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed February 17, 1909. Serial No. 478,469.

To all whom it may concern:

Be it known that I, William W. Haggard, a citizen of the United States, residing at Winchester, in the county of Clark and State of Kentucky, have invented a new and useful Improvement in Milk-Bottle Washers, of which the following is a specification.

This invention relates to a device for washing milk bottles, and the object of the invention is to thoroughly cleanse at one operation both the interior and exterior of the bottle, and also to provide for this purpose a device which will be inexpensive and which can be easily operated by hand power.

The invention consists of the novel features of construction hereinafter described, pointed out in the claim and shown in the accompanying drawings, in which,

Figure 1 is a side elevation. Fig. 2 is a front elevation. Fig. 3 is a top plan view. Fig. 4 is an enlarged detail sectional view of a brush holder and parts connected thereto, a brush being broken away.

In constructing the device I employ a base 25 1 which may be clamped or otherwise secured to a suitable table and from which rises parallel standards 2, said standards carrying adjacent their upper ends a rearwardly inclined arm 3 connected at the top 30 by a web 4 to the standard. One of these standards carries a laterally arranged frame 5 supported from the standard and from the web 4 and braced by a curved bracket arm 6 springing out from the side of the 35 standard. Between the two standards is mounted a gear drive wheel 7 provided with an operating crank handle 8. A shaft 9 journaled in the web 4 and the frame 5 carries a pinion 10 which meshes with the gear wheel 7, and also carries bevel gear wheels 11 and 12 which mesh respectively

with bevel gears 13 and 14 carried by downwardly inclined shafts 15 and 16, the two latter shafts being at right angles to the shaft 9. Sleeves 17 fit over the forward ends 45 of the shafts 15 and 16, respectively, and are clamped thereto by means of set screws and brushes 18 and 19 have their spindles removably inserted in the sleeve 17, said spindles being clamped also by set screws. 50 Preferably the brush 18 is of larger diameter than the brush 19 and is rotated from the shaft 15, and the brush 19 is rotated from the shaft 16. In operation the bottle is slipped over the brush 19 which will cleanse 55 the interior of the bottle while the brush 18 cleans the exterior.

It will be understood of course that the brushes are not a part of the invention, but are shown and described for the purpose of 60 making the operation of the device clear, and it is not material what kind of brushes are employed, and they may be as shown or may have any other desired shape or size. The brushes can also be changed to accom- 65 modate bottles of various sizes and design.

What I claim is:—

A device of the kind described comprising parallel upright standards, a gear wheel mounted vertically between said standards, a 70 frame carried at the side of one standard, a shaft journaled in said frame, a pinion carried by said shaft and meshing with the gear wheel, downwardly inclined shafts carried by the frame, means carried by the first 75 mentioned shaft for driving the downwardly inclined shafts, and means carried by said shafts for holding brushes.

WILLIAM W. HAGGARD.

Witnesses:

C. C. PAGE, L. J. PHELPS.