No. 874,958. PATENTED DEC. 31, 1907.

G. W. GOEHNS.

BOTTLE WASHING MACHINE.

APPLICATION FILED JAN. 27, 1906.

Fig. 1.

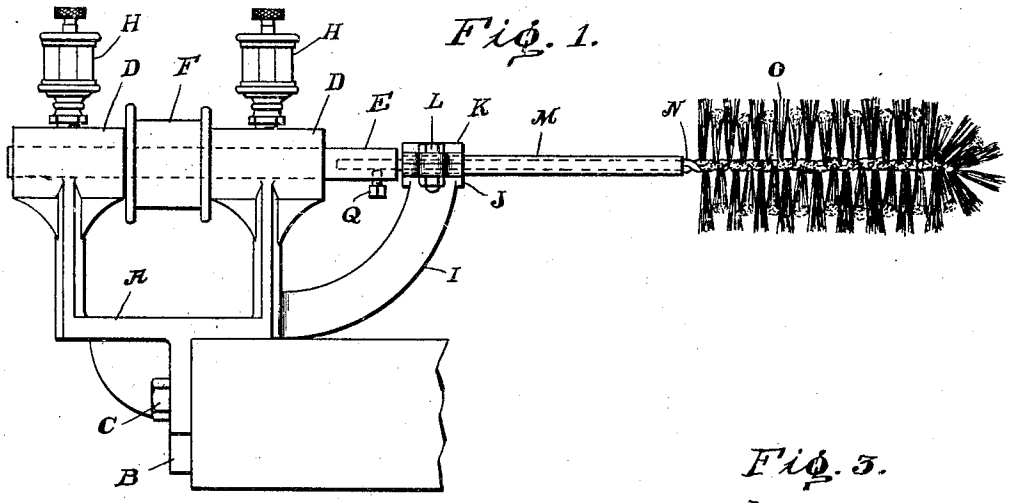


Fig. 3.

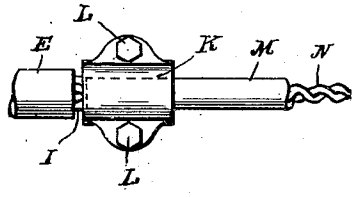
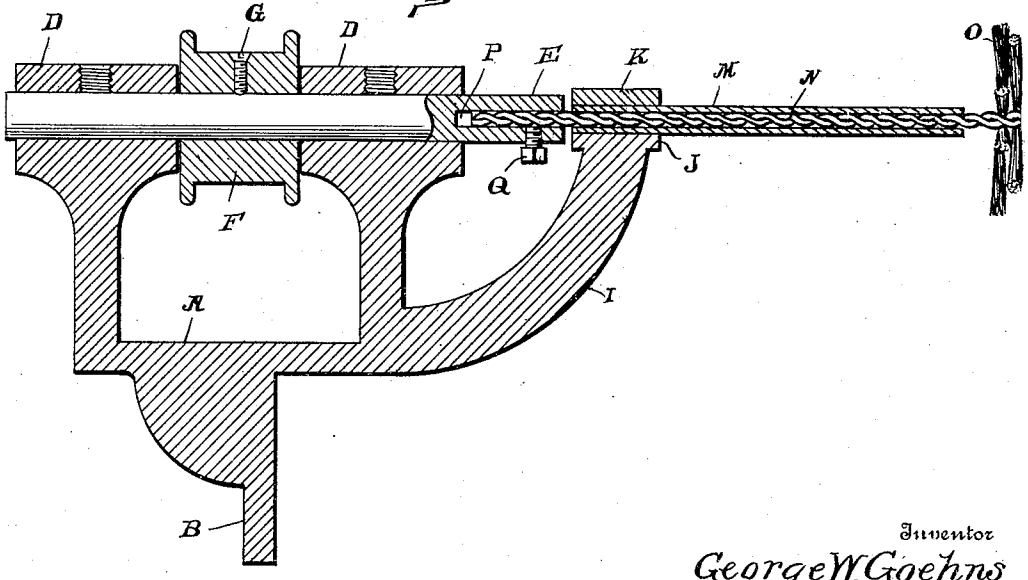


Fig. 2.



Witnesses
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GEORGE W. GOEHNS, OF PHILADELPHIA, PENNSYLVANIA.

BOTTLE-WASHING MACHINE.

No. 874,958. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed January 27, 1906. Serial No. 298,103.

To all whom it may concern:

Be it known that I, GEORGE W. GOEHNS, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Bottle-Washing Machines, of which the following is a specification.

My invention relates to a new and useful improvement in bottle washing machines, and has for its object to so construct such a machine as to provide a stationary recess or mandrel for insertion within the neck of a bottle and by which the bottle may be supported while the brush is revolved therein.

With these and other ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an elevation of a machine made in accordance with my improvement showing the brush secured therein. Fig. 2, a central section of the machine illustrating the manner of securing the brush in the spindle. Fig. 3, a detail view of a portion of the spindle, mandrel and the clamp for holding the mandrel in place.

Referring to these drawings A represents the frame of the machine which consists of a foot B, adapted to be secured to a bench or other suitable object by means of the screw C, but one of which is here shown, and with this frame is cast the bearings D having journaled therein the spindle E.

F represents the drive pulley which is secured upon the spindle by means of the set screw G, and this pulley when set upon the spindle serves to hold the latter in place, as will be readily understood.

H are suitable oil cups secured in each of the bearings for lubricating the same.

I represents a bracket cast or secured to the frame and terminating in a socket J, upon which is fitted a clamp K, held in place by the bolts L, and this arrangement is for clamping the mandrel M to the bracket in alinement with the spindle. This mandrel is hollow so as to permit the passage of the stem N of the brush O therethrough, the inner end of said stem passing into a suitable hole P formed in the spindle in order that it may be there secured by the set screw Q.

From this description it will be seen that when the brush is in place it will revolve with the spindle, while the mandrel will remain stationary, and when it is desired to wash a bottle the latter is forced over the brush O, the bristles of which will be deflected until passing into the body of the bottle, when they will spring outward to their normal position, the neck of the bottle passing on to the mandrel which will then serve as a rest relieving the brush and its stem from any strain during the washing operation.

Heretofore considerable time has been lost in the washing of bottles by machines, and many bottles broken at the mouth on account of the vibrations of the stem of the brush, but by my improvement these difficulties are entirely overcome and any sidewise strain comes upon the brush or the shank thereof, and the shank is compelled to run true at all times as it is housed and guided within the mandrel.

The clamp K permits of the ready removal of the mandrel for adjustment or the substitution of another when one becomes worn.

Having thus fully described my invention what I claim as new and useful is,—

A bottle washing machine consisting of a frame formed with a horizontal base, a foot depending therefrom at an intermediate point and disposed at right angles thereto, a pair of spaced parallel uprights integral with said base, said uprights each terminating in integral enlarged bearings which project beyond the sides of said uprights, a curved arm formed integral with said base and with the inner of said uprights at the juncture of the latter with said base, said arm terminating in an enlarged seat alining with said first named bearings and spaced from said bearing of the inner upright, a mandrel in said seat, a plate-like clamp engaging said mandrel, bolts secured to said clamp for securing said man-

drel, a spindle in said bearings having an opening in one end, a brush having a shank extending through said mandrel and into said opening and a set screw extending through the spindle to engage the brush shank.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

GEORGE W. GOEHNS.

Witnesses:
MARY E. HAMER,
S. M. GALLAGHER.