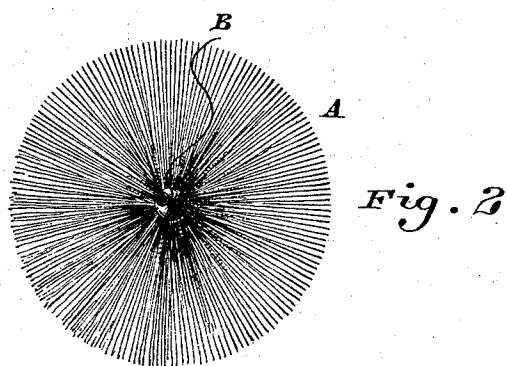
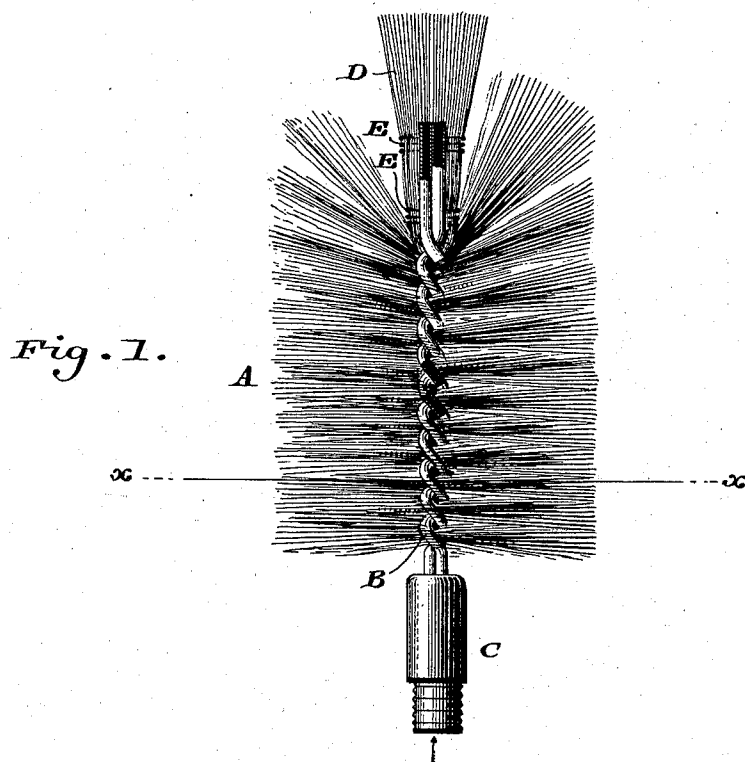


(No Model.)

J. BABIS.  
BOTTLE WASHING BRUSH.

No. 474,625.

Patented May 10, 1892.



WITNESSES:

P. H. Hagler.  
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# UNITED STATES PATENT OFFICE.

JOHN BABIS, OF PHILADELPHIA, PENNSYLVANIA.

## BOTTLE-WASHING BRUSH.

SPECIFICATION forming part of Letters Patent No. 474,625, dated May 10, 1892.

Application filed December 26, 1891. Serial No. 416,124. (No model.)

*To all whom it may concern.*

Be it known that I, JOHN BABIS, a subject of the Emperor of Austria-Hungary, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Bottle-Washing Brushes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a bottle-washing brush in which the bristles are held by twisted material or metal and which is hollow, so as to form a conveyer for water through the brush.

Figure 1 represents a side elevation, partly in section, of a bottle-washing brush embodying my invention. Fig. 2 represents a section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

Referring to the drawings, A designates the bristles, wires, &c., of a bottle-washing brush, the same being held by the twisted tubes B B, the latter being connected with the collar C, which is adapted to be connected with means for rotating the same, as usual in bottle-washing devices, and also adapted to direct water into said tubes. The end bristles D are

doubled or bent around the free ends of the tubes B and secured by wires E, thus holding the same in position. It will be seen that when water is admitted into the collar C it enters the tubes B and discharges at the free ends thereof, thus supplying the bottle and brush with water and effecting superior results, it being evident that the tubes serve the double purpose of holding the bristles of the brush and forming conveyers for water through the same.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bottle-washing brush consisting of twisted tubes, bristles secured to one end of said tubes by wires, other bristles held by said tubes, and a collar connecting the other end of said tubes, said parts being combined substantially as described.

2. In a bottle-washing brush, twisted tubes holding the bristles thereof and forming a conveyer for water, substantially as described.

JOHN BABIS.

Witnesses:

JOHN A. WIEDERSHEIM,  
L. JENNINGS.