(No Model.)

L. J. WIDNESS.

CLEANER.

No. 602,592. Patented Apr. 19, 1898.

FIG. 1.

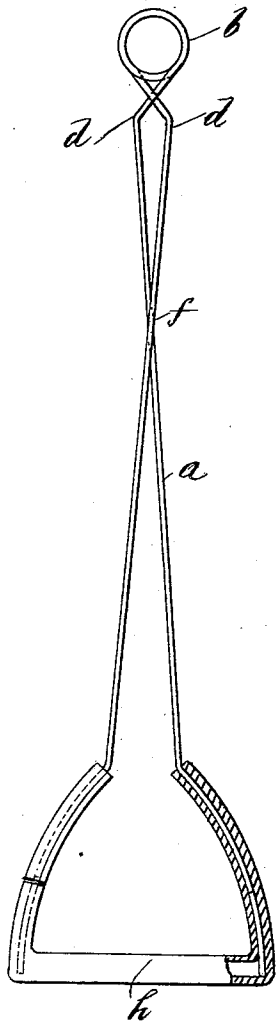
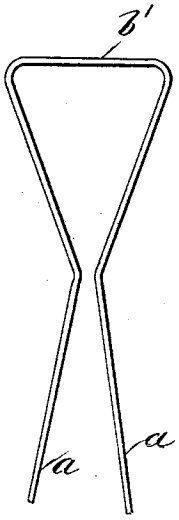


FIG. 2.



FIG. 3.



WITNESSES:

John Buckler,
C. Gerst

INVENTOR

Lawrence J. Widness.

BY

Edgar Tate & Co.

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LAWRENCE J. WIDNESS, OF BROOKLYN, NEW YORK.

CLEANER.

SPECIFICATION forming part of Letters Patent No. 602,592, dated April 19, 1898.

Application filed August 23, 1897. Serial No. 649,232. (No model.)

To all whom it may concern:

Be it known that I, LAWRENCE J. WIDNESS, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Lamp-Chimney or Bottle Cleaners, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to lamp-chimney or bottle cleaners, and has for its object the production of an implement of the above-described class which can be readily inserted in the small neck-aperture of the lamp-chimney or bottle and which when within the same will automatically extend itself so as to come into intimate contact with the interior thereof, a further object being to provide an implement, as above, which can be equipped with suitable material to clean and polish the bottle or lamp.

The invention consists in the novel features of construction hereinafter set forth and described, and more particularly pointed out in the claim hereto appended.

Referring to the drawings, Figure 1 is a view of my improved cleaner, partly in section; Fig. 2, a side view of the lower part thereof, and Fig. 3 is a modification of its upper portion.

Like letters of reference designate like parts throughout the several views.

In the drawings, the letter *a* represents the shank of the cleaner, preferably made of spring-steel or other suitable material, which is twisted at its central point into a spring, as *b*, and then angled, as at *d*, to an extent which will readily admit of its being inserted in the neck of an ordinary bottle. The free ends of the shank *a* are extended and crossed, as at *f*, so that the tendency of the lower extremities thereof will be to separate. These lower extremities are shaped, preferably, so as to come in contact with the nether portion of the bottle and are looped at their lower extremities, as shown in Fig. 2 at *g*, so as not to tear or entangle the material used in cleaning the bottle, which is attached to the lower extremities of said shank. This swab is preferably composed of a tubular ribbon *h*, which is susceptible of receiving the free ends of said shank and which has a tendency to cling thereto, although it is preferable to attach the same by means of a string drawn tightly above the looped end *g* of the shank *a*.

In operation my improved cleaner is used as follows: The extreme ends of the shank *a* are brought together sufficiently to enable them to be inserted within the neck of the bottle or other article, the lower portion of the ribbon *h* forming a loop to facilitate said entrance.

When the implement is within the bottle, the spring *b* extends the lower ends of the shank *a* till they come in contact with the interior thereof, and the bottle may be readily cleaned, including the bottom thereof, by merely twisting the cleaner and drawing it gradually out of the same.

The modification shown in Fig. 3 shows a modification in the formation of the spring *b'*, which is more simple in construction and quite as efficient in operation.

The operation of a device equipped with the spring is identiacl to that hereinbefore described.

It is to be observed that there are many minor details of construction which come within the scope of my invention and which it is not my intention to exclude therefrom.

Having fully described my invention, what I claim, and desire to have protected by Letters Patent, is—

In a bottle-cleaner, the combination with a shank formed centrally into a ring and angled so as to cross between said ring and the ends of the shank, of a tubular swab removably attached to the ends of said shank, said shank being outwardly curved whereby the swab will be brought into intimate contact with every portion of the bottle, and each end of the shank being doubled upon itself whereby said swab is securely retained in position, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 21st day of August, 1897.

LAWRENCE J. WIDNESS.

Witnesses:
C. GERST,
M. A. KNOWLES.