No. 676,845. Patented June 18, 1901.

G. S. LEINER.

CLEANING BRUSH.

(No Model.) (Application filed Nov. 3, 1900.)

Fig: 1.

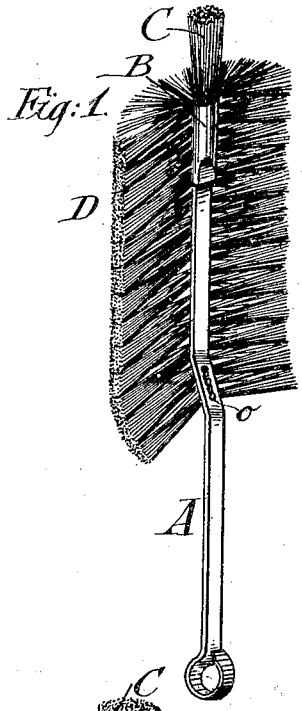


Fig: 2.

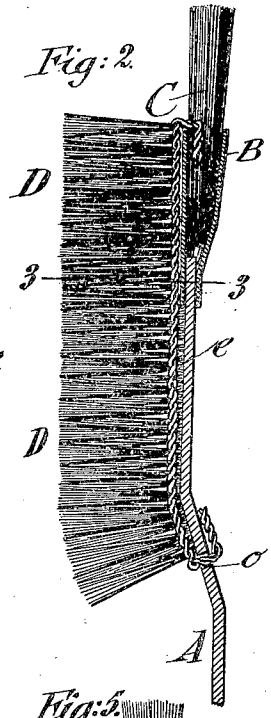


Fig: 3.

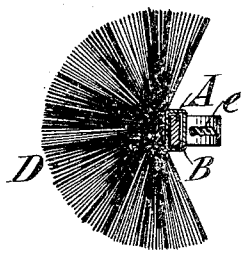


Fig: 4.

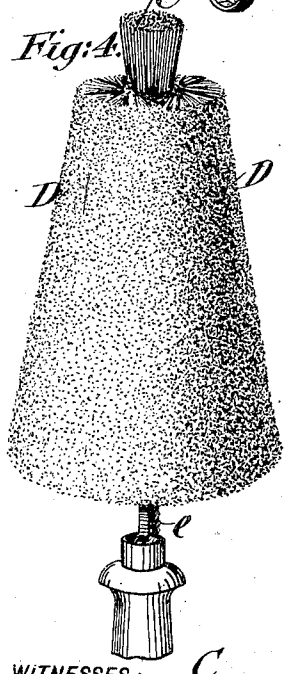


Fig: 6.

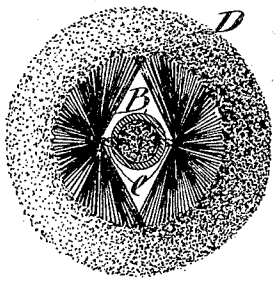


Fig: 5.

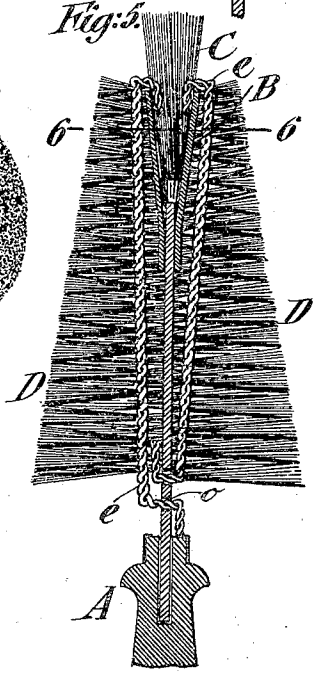
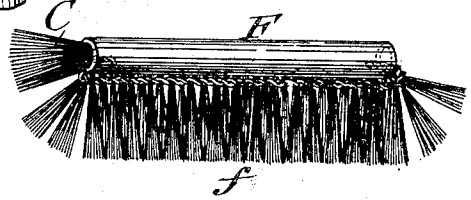


Fig: 7.



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UNITED STATES PATENT OFFICE.

GEORGE S. LEINER, OF NEW YORK, N. Y.

CLEANING-BRUSH.

SPECIFICATION forming part of Letters Patent No. 676,845, dated June 18, 1901.

Application filed November 3, 1900. Serial No. 35,350. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. LEINER, a citizen of the United States, residing in the city of New York, borough of Bronx, and State of New York, have invented certain new and useful Improvements in Cleaning-Brushes, of which the following is a specification.

This invention relates to an improved cleaning-brush which is mainly designed for the cleaning of bottles, tumblers, and similar articles of hollow ware; and the invention consists of a cleaning-brush composed of a handle, an end tuft supported in a socket at the end of the handle, and a brush-section formed of a twisted-wire core and bristles held between said twisted wires, one end of the twisted-wire core being inserted into the socket of the end tuft, while the opposite end is suitably connected with the handle, as will be fully described hereinafter and finally pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of my improved cleaning-brush for hollow ware. Fig. 2 is a longitudinal section of the same. Fig. 3 is a horizontal section of the brush on line 3 3, Fig. 2. Fig. 4 is a perspective view of a modified form of cleaning-brush. Fig. 5 is a longitudinal section thereof. Fig. 6 is a horizontal section on line 6 6, Fig. 5; and Fig. 7 is a perspective view of still another modification.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a handle, which may be of any suitable material, the end of which carries a sheet-metal or other suitable socket B, which serves as a support for a tuft C of bristles. To one or both sides of the handle are applied brush-sections D, which are formed of a twisted-wire or other suitable core *e* and bristles that are placed between the twisted wires of the core, transversely thereto, so as to project at the opposite sides of the same. One end of the twisted-wire core *e* is inserted into the socket of the end tuft C, while the opposite end of the wire core of the brush-section D is passed through a hole *o* in the handle and rigidly attached thereto by being bent up on the same or in any other suitable manner, as shown in Figs. 2 and 5. When two brush-sections D are used and attached to opposite sides of the handle A', a conical, cylindrical, or other brush-body is formed, as shown in Figs. 4 to 6. This round brush is especially adapted for cleaning tumblers or other hollow ware, while the brush having a single section D is adapted for the cleaning of bottles or druggists' glassware or for the cleaning of larger-sized bottles and various other purposes. The end tuft C spreads sufficiently when the cleaning-brush is inserted into the hollow ware so as to clean the bottom of the bottle, tumbler, or other article, while the side brush-sections clean the inner surface of the side walls of the article of hollow ware in a very effective manner. The advantages are that there is no empty space between the tuft and body of the brush, which was unavoidable in the constructions heretofore used, and, besides, that they are inexpensive.

It is obvious that various changes in the construction can be made without departing from the invention. The socket may be attached in any suitable manner, and any of the parts may be made of any desired relative size or shape. Instead of using two separate side brushes a combined socket and handle F, as shown in Fig. 7, provided with a single long brush *f*, may be used, one end of the core being bent over into one end of the handle, which contains the tuft C, and the other end being then inserted into the other end of the handle. Any number of tufts or side sections may be used, as I do not limit myself to the use only of those described.

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

A cleaning-brush, consisting of a handle, a socket at the outer end of the same, a tuft of bristles inserted in said socket, and a brush-section extending along the sides of the socket and handle, and terminating at the outer end of said socket, so that the said tuft projects individually beyond the outer end of said brush-section, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GEO. S. LEINER.

Witnesses:
PAUL GOEPEL,
GEO. L. WHEELOCK.