

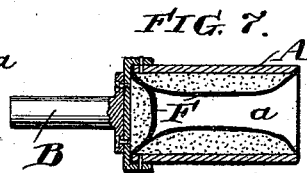
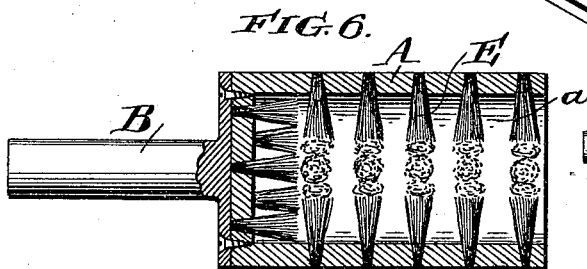
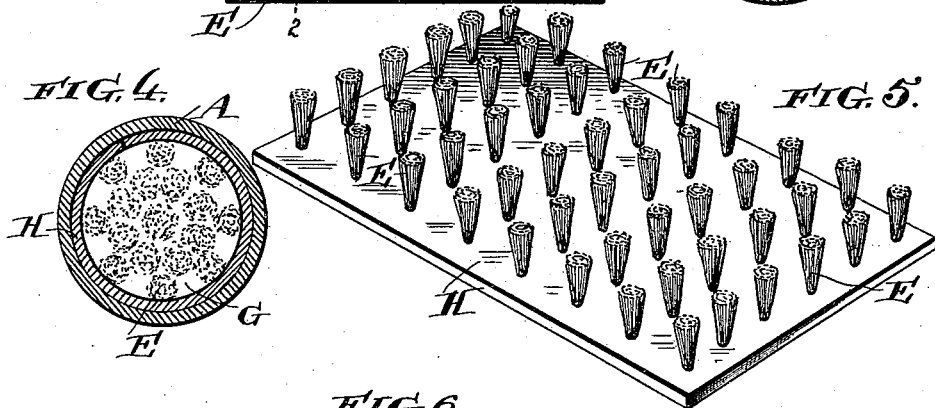
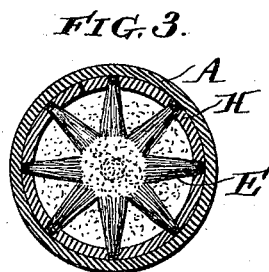
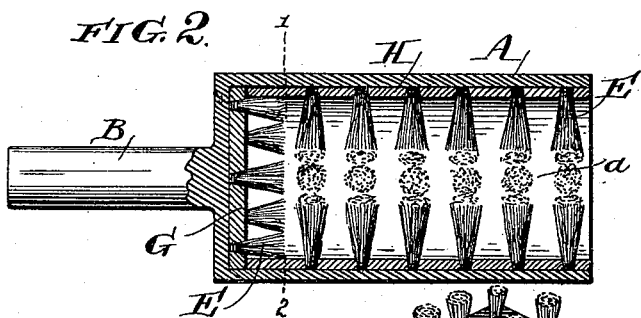
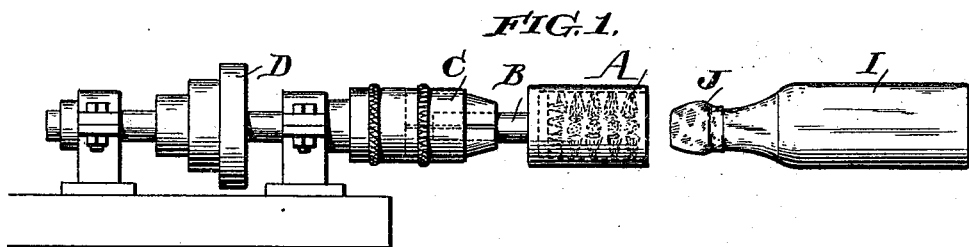
(No Model.)

H. ROEMER.

APPARATUS FOR POLISHING THE CAPS OF BOTTLES, &c.

No. 490,682.

Patented Jan. 31, 1893.



Witnesses:
Henry D. ...
S. J. ...

Inventor:
 Hermann Roemer
 By his atty
[Signature]

UNITED STATES PATENT OFFICE.

HERMANN ROEMER, OF PHILADELPHIA, PENNSYLVANIA.

APPARATUS FOR POLISHING THE CAPS OF BOTTLES, &c.

SPECIFICATION forming part of Letters Patent No. 490,682, dated January 31, 1893.

Application filed January 22, 1892. Serial No. 418,893. (No model.)

To all whom it may concern:

Be it known that I, HERMANN ROEMER, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improvement in Apparatus for Polishing the Caps of Bottles and other Objects, of which the following is a specification.

My invention relates to apparatus for polishing; and consists of certain improvements which are fully set forth in the following specification and are shown in the accompanying drawings which form a part thereof.

My invention is particularly designed for polishing the caps of bottles and in the drawings I have shown it applied to that purpose, but it is equally adapted to the polishing of other objects.

In preparing many bottled articles for commercial purposes it is usual to place a cap of tin foil or other material over the cork and head of the bottle to produce a pleasing effect as well as to aid in excluding the air, and my invention is particularly designed for imparting a highly polished effect to such caps or covers. In carrying out my invention I employ a rapidly rotated recessed polishing head provided internally with suitable brushes or other polishing medium, into which the head of the bottle provided with the cap, or other article to be treated, and the friction of the brushes or polishing medium upon the surface of the article due to the rotation of the polishing head produces a highly polished effect. The apparatus may be used upon any articles, and the shape of the recessed portion of the polishing head may be varied to suit the shape of the article to be acted upon.

In the drawings:—Figure 1 is a side elevation of my improved polishing apparatus showing the same applied to the caps of bottles; Fig. 2 is a longitudinal sectional view through the polishing head; Fig. 3 is a transverse sectional view of the same on the line 1—2 of Fig. 2 looking toward the right; Fig. 4 is a similar view looking toward the left; Fig. 5 is a perspective view of the brush carrying piece removed from the polishing head illustrating one method of fitting the brushes or polishing medium of the polishing head; Fig. 6 is a view similar to Fig. 2 illustrating a modification in the method of fitting the brushes to the head; and Fig. 7 is a similar

view on a smaller scale illustrating another method of applying the polishing medium.

A is the polishing head, which may be any convenient construction, having an internal recessed portion *a* in which the polishing medium is located.

B is a stem of the polishing head adapted for attachment to a chuck C which may be rotated by a lathe D or in any other convenient manner.

The internal or recessed portion of the polishing head A is lined or provided with a polishing medium. Any suitable material may be employed for the polishing medium. I prefer to employ brushes E as shown in Figs. 2 to 6, but hair, wool, flannel, leather, or chamois pads may be employed. In Fig. 7 I have shown the interior of the polishing head lined with pads F.

The polishing medium may be positively connected with the head A or may be connected with removable pieces.

In Figs. 2–5 G is an end piece carrying a series of brushes E, which is adapted to be inserted in the end of the internal or recessed portion of the polishing head and H is a piece adapted to fit in the sides of the recessed portion also provided with the brushes E. These brushes project toward the center so that they will come in contact with the surface of the cap of the bottle or other article inserted within the head A, so as to create a friction thereon when the head is rotated. With the construction shown in Figs. 2 to 5 the brushes may be readily removed when desired for the purpose of cleaning them or replacing them by others. In Fig. 6 the brushes are shown connected directly with the rotating head A.

I is a bottle and J is the cap upon the head which is to be polished. The head of the bottle is inserted in the recess of the polishing head A which is rapidly rotated.

I have shown the polishing head of a cylindrical shape as this shape is particularly suited to the caps upon the heads of bottles. It will be understood, however, as before stated, that this shape may be varied to suit the shape of the objects to be acted upon.

In connection with the polishing medium, whitening, or other polishing powder may be employed to improve the polishing action, although ordinarily that is not required, as the

friction produced by the rapid rotation of the polishing head is sufficient to impart an effective polish to any object treated.

I do not limit myself to the minor details of construction shown which may be varied without departing from the invention; thus any convenient means may be employed for rotating the polishing head.

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

1. A polishing apparatus for polishing the heads of bottles consisting of a rotary cylindrical head open at one end and having the other end closed and provided with a polishing medium on the interior of the closed end.

2. A polishing apparatus for polishing the heads of bottles consisting of a rotary cylindrical head, a removable piece inserted within the interior of the cylindrical head, and a polishing medium carried by said removable piece.

3. A polishing apparatus for polishing the heads of bottles consisting of a rotary cylindrical head open at one end and having the other end closed and provided with a polishing medium on the interior both about the sides and at the closed end.

4. The polishing head A having a recessed portion to receive the object to be treated in combination with a removable piece adapted to be inserted in said recessed portion, and a polishing medium carried by said removable piece.

5. The recessed polishing head A in combination with the removable end piece G and side piece H and the polishing brushes carried by said pieces G and H.

In testimony of which invention I have hereunto set my hand.

HERMANN ROEMER.

Witnesses:

ERNEST HOWARD HUNTER,
S. T. YERKES.