

UNITED STATES PATENT OFFICE.

ERNEST E. BROADHURST, OF BROOKLYN, NEW YORK.

POLISHING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 743,685, dated November 10, 1903.

Application filed March 9, 1903. Serial No. 146,807. (No model.)

To all whom it may concern:

Be it known that I, ERNEST E. BROADHURST, a citizen of the United States of America, residing at Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Finger-Nail Polishers, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to polishing implements, and particularly to that class of polishing implements employed for polishing the finger-nails.

My invention comprises the employment of a flexible resilient polishing member inclosing an air-chamber. The air-chamber may contain a polishing material, and the polishing-surface of the polishing member may be provided with perforations, so that when pressure is applied to the polishing-surface the air compressed within the air-chamber will tend to force the polishing material out through the said perforations. The hollow chamber may be conveniently formed in a single integral portion of molded rubber, which may be attached to a suitable backing and which may have a charging-orifice in its rear wall for the purpose of charging or recharging the hollow chamber.

I will now proceed to describe a polishing implement embodying my invention and will then point out the novel features in claims.

In the drawings, Figure 1 is a view in side elevation of a polishing implement embodying my invention. Fig. 2 is a top view thereof. Fig. 3 is a view in longitudinal elevation of same. Fig. 4 is a similar longitudinal section showing a slightly-modified form.

Referring more particularly at first to Figs. 1 to 3, inclusive, the implement comprises a suitable backing 1 and a flexible resilient polishing member 2, suitably supported therefrom. In the present example of my invention the polishing member 2 comprises one wall of a chamber 3, inclosed by an integral portion whose rear wall 4 is directly supported by the backing 1. In order to secure the parts together, the wall 4 and backing 1 are provided with a dovetailed engagement, as at 5. The rear wall 4 of the chamber 3 is provided with a charging-orifice 6, through which polishing material may be inserted into the in-

terior of the chamber 3 and which may be closed by the backing 1, or, as shown in Fig. 4, the charging-orifice 6 may be in line with a similar orifice 7 in the backing 1, which may be closed by a removable plug or cap 8, so that the chamber 3 may be charged or recharged without removing same from its backing-support. The front wall or polishing member 2 is shown as provided with a number of discharge-perforations 9, through which polishing material contained within the chamber 3 may be discharged. A polishing implement of this description is invariably used in an upright position, in which position it is shown in the drawings. In such position the polishing material within the chamber 3 will tend to close the discharge-orifices 9, (which discharge-orifices are very minute, preferably more so proportionately than is shown in the drawings,) and when pressure is applied to the polishing-surface, air confined in the chamber 3 between the rear of the polishing material and the rear wall of the chamber will tend to force the polishing material through the discharge-orifices in minute quantities as will be required. When the chamber 3 is emptied, it may be rapidly refilled through the charging-orifice 6. The polishing member 2 must be of a material which is flexible and yet resilient in order that it may have a normal tendency to retain its correct shape. I preferably employ rubber or rubber compound for this purpose, vulcanized to a degree sufficient to give it the required flexibility and resilience. In fact, I preferably form the entire portion which incloses the chamber 3 other than the backing portion 1 of rubber or rubber compound so vulcanized. The backing 1 may be of any suitable material, as of wood, as is common to this class of implements.

The flexible resilient polishing member 2 may, if desired, be provided with an outer layer of chamois-skin or other material to constitute the polishing-surface, as illustrated at 10 in Fig. 4, or the flexible resilient material of which the member 2 is itself composed may constitute the polishing-surface.

What I claim is—

1. As an article of manufacture, a finger-nail polisher, comprising an elongated base forming on one side a backing for a polishing member, and provided on the other side with

a handle, and a flexible resilient polishing member inclosing an air-chamber, secured to said base.

2. As an article of manufacture, a finger-nail polisher, comprising an elongated base forming on one side a backing for a polishing member, and provided on the other side with a handle, and a flexible resilient polishing member composed of rubber and inclosing an air-chamber, secured to said base.

3. As an article of manufacture, a finger-nail polisher, comprising an elongated base forming on one side a backing for a polishing member, and provided on the other side with a handle, and a flexible resilient polishing member inclosing an air-chamber, secured to said base, said air-chamber adapted to receive and hold a polishing material, and said polishing member provided with discharge-perforations therefor in its polishing-surface.

4. As an article of manufacture, a finger-nail polisher, comprising an elongated base forming on one side a backing for a polishing member, and provided on the other side with a handle, and a flexible resilient polishing member inclosing an air-chamber, secured to said base, said implement provided with a charging-opening connecting with the interior

of the said chamber, and closed during the operation of the device, and with discharge-perforations through its polishing-surface.

5. In a finger-nail polisher, the combination with an elongated base forming on one side a backing for a polishing member, and provided on the other side with a handle, of a flexible resilient polishing member inclosing an air-chamber, secured to said base, said polishing member having discharge-perforations through its polishing-surface, and polishing material loosely contained within said air-chamber.

6. In a finger-nail polisher, the combination with an elongated base forming on one side a backing for a polishing member, and provided on the other side with a handle, of a flexible resilient polishing member inclosing an air-chamber, secured to said base, said polishing member having discharge-perforations through its polishing-surface, and provided with a charging-opening closed during the operation of the device, and polishing material loosely contained within said air-chamber.

ERNEST E. BROADHURST.

Witnesses:

D. HOWARD HAYWOOD,
GEO. K. WALLACE.