E. JOHNSON.

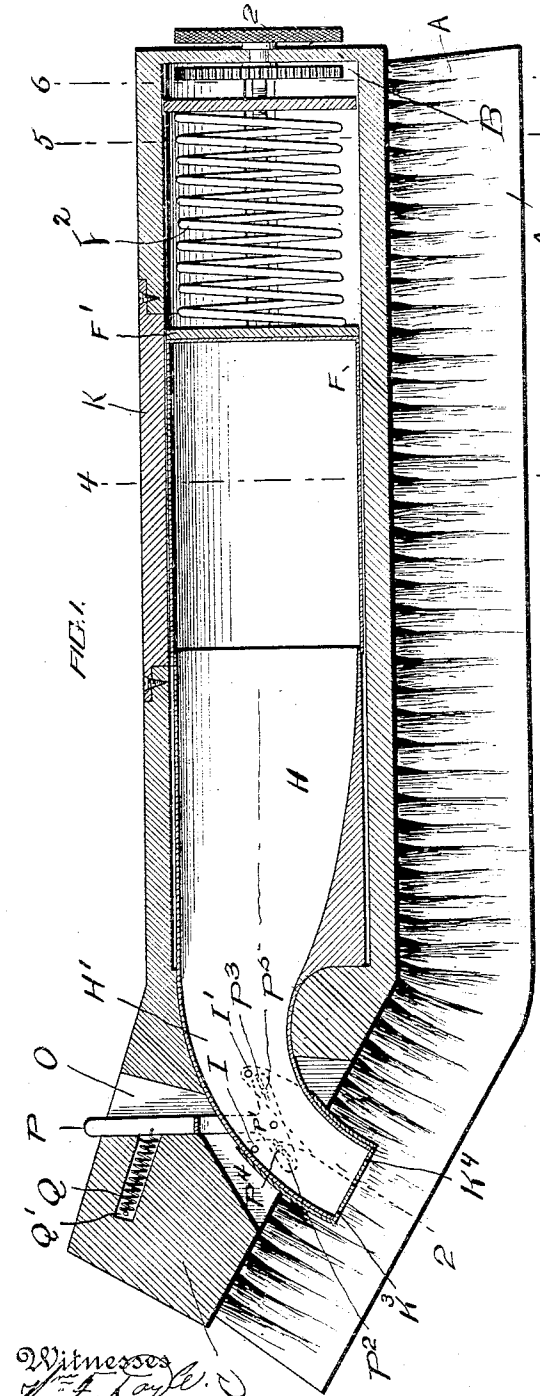
COMBINED BRUSH AND POLISH FEEDING DEVICE.

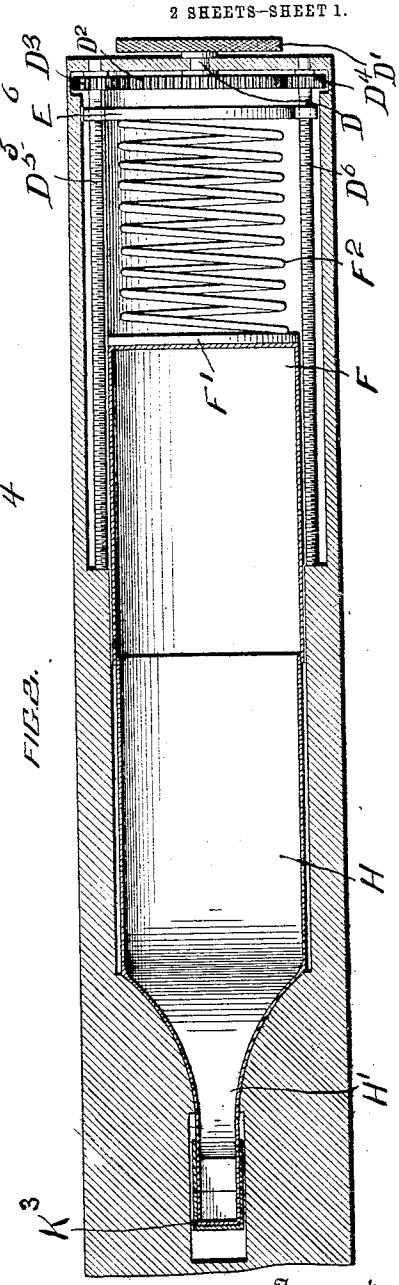
APPLICATION FILED SEPT. 28, 1912.

1,067,924.

Patented July 22, 1913.

2 SHEETS—SHEET 1.





Witnesses

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2 SHEETS—SHEET 2.

FIG. 6.

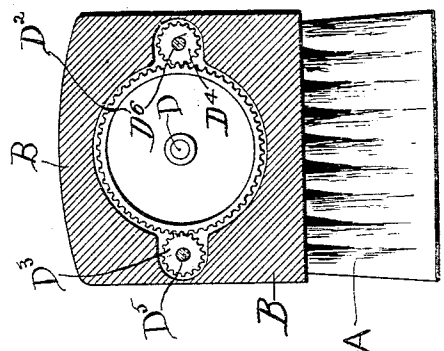


FIG. 5.

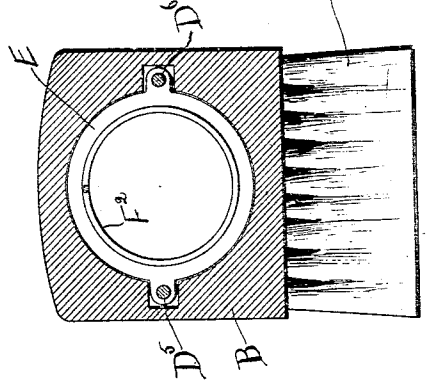
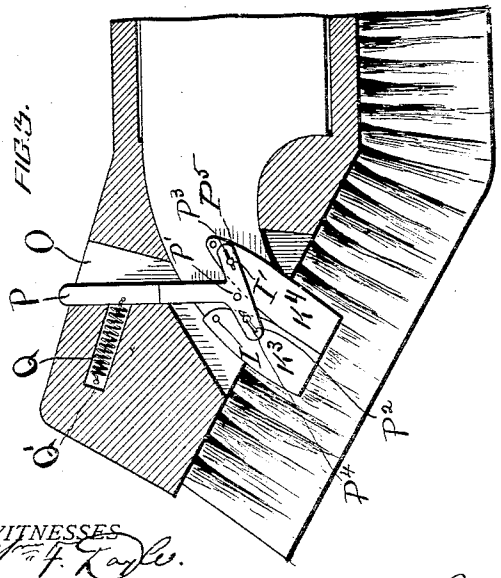


FIG. 3.



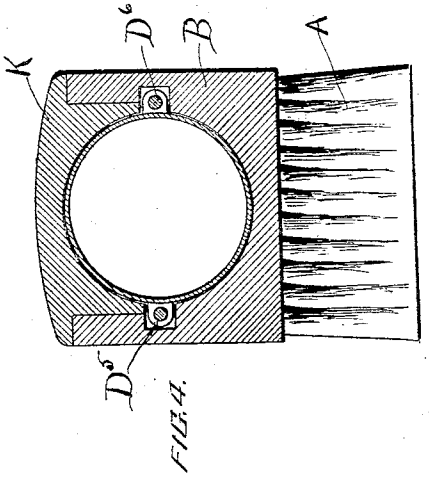


FIG. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

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COMBINED BRUSH AND POLISH-FEEDING DEVICE.

1,067,924. Specification of Letters Patent. Patented July 22, 1913.

Application filed September 28, 1912. Serial No. 722,913.

To all whom it may concern:

Be it known that I, EPHRAIM JOHNSON, a citizen of the United States, residing at Eveleth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Combined Brushes and Polish-Feeding Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in combined brushes and polish feeding devices and comprises a simple and efficient device of this nature having various details of construction and combinations and arrangements of parts which will be hereinafter fully described, shown in the accompanying drawings and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which;—

Figure 1 is a central longitudinal vertical sectional view through a device embodying the features of my invention. Fig. 2 is a sectional view on line 2—2 of Fig. 1. Fig. 3 is a sectional view through the dauber end of the brush showing the tube and shutters in elevation. Fig. 4 is a sectional view on line 4—4 of Fig. 1. Fig. 5 is a sectional view on line 5—5 of Fig. 1, and Fig. 6 is a sectional view on line 6—6 of Fig. 1.

Reference now being had to the details of the drawings by letter, A designates the brush having a hollow frame B with a dauber end C. Mounted within the rear end of the hollow frame is a stub shaft D having a circumferentially milled hand wheel D′ fixed thereto, and D^2 designates a gear wheel fixed to the inner end of the stub shaft and which is in mesh with the two pinions D^3 and D^4 fixed respectively to the two threaded shafts D^5 and D^6. The end of each threaded shaft is journaled in the end of the frame, as shown clearly in Fig. 2 of the drawings. A yoke E is provided with two threaded apertures for the reception of the two threaded shafts D^5 and D^6, and F designates a hollow shell or box and against which a follower F′ contacts. A coiled spring F^2 is interposed intermediate said yoke and the follower and adapted to hold the latter yieldingly against the shell F. A polish dispensing tube, designated by letter H, telescopes within the shell and is adapted to be held stationary and is provided with a curved nozzle H′, shown clearly in Figs. 1 and 3 of the drawings. A flanged closure, designated by letter K, is fitted over an opening formed in the frame and through which opening access may be had to the interior of the same when it is desired to place a box of polish within the shell F.

The forward portion of the frame of the brush, which is upwardly inclined, is provided with a vertical slot O and pivotally mounted upon the pins I and I′ are the two shutters K^3 and K^4, the angled ends of which serve to form closures for the nozzle end of the tube, as shown clearly in Figs. 1 and 3 of the drawings. A shutter operating lever P is pivotally mounted upon a pin P′ and said lever has lateral projections at its lower end, one of which is provided with an elongated slot P^2 and the other with a slot P^3. A pin P^4 engages the slot P^2 while a similar pin P^5 engages the slot P^3. A spring Q is seated in a recess Q′ formed in the frame of the brush and has one end fastened therein and its other end to the handle of said lever and normally holds the latter in the position shown in Fig. 1 of the drawings, in which position the shutters are in closed relation with reference to the nozzle end of the tube. By throwing the handle P to its limit in the opposite direction under the tension of the spring Q, said shutters are adapted to be thrown from each other or in open relation, as will be readily understood.

The operation of my invention will be readily understood and is as follows:—The polish in any convenient form may be placed within the shell F and, when it is desired to dispense the polish from the nozzle end of the tube, the shutters may be thrown open by the manipulation of the lever P and, by turning the hand wheel D′, the plunger and shell may be forced forward, the shank portion of the nozzle telescoping within the latter and the polish forced out the nozzle end upon the dauber end of the brush. When a sufficient quantity of the polish has been fed forward, the lever may be released and the spring will cause the shutters to close the end of the nozzle. In the event of the polish being of a suitable consistency and the coiled springs of sufficient strength, the tension of the spring may

be utilized for the purpose of feeding the shell forward, independent of the hand wheel and the threaded shafts.

What I claim to be new is:—

1. A combined brush and polish feeding device comprising a brush frame having a hollow handle with dauber end, a tube mounted within the frame and provided with a nozzle end extending through the dauber, an open-ended box telescoping over the shank portion of the tube, screw threaded shafts journaled in the frame, a yoke with threaded apertures mounted upon said shafts, gear mechanism for rotating the shafts, and a spring interposed between the box and yoke, as set forth.

2. A combined brush and polish feeding device comprising a brush frame having a hollow handle with dauber end, a tube mounted within the frame and provided with a nozzle end extending through the dauber, shutter mechanism for closing the nozzle end of the tube, an open-ended box telescoping over the shank portion of the tube, screw threaded shafts journaled in the frame, a yoke with threaded apertures mounted upon said shafts, gear mechanism for rotating the shafts, and a spring interposed between the box and yoke, as set forth.

3. A combined brush and polish feeding device comprising a brush frame having a hollow handle with dauber end, a tube mounted within the frame and provided with a nozzle end extending through the dauber, pivotal shutters adapted to close over the end of the nozzle, a pivotal lever mounted in the slotted portion of the frame and having slotted connections with said shutters, an open-ended box telescoping over the shank portion of the tube, screw threaded shafts journaled in the frame, a yoke with threaded apertures mounted upon said shafts, gear mechanism for rotating the shafts, and a spring interposed between the box and yoke, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

EPHRAIM JOHNSON.

Witnesses:
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N. C. KLEUTUNBERG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."