

No. 757,907.

PATENTED APR. 19, 1904.

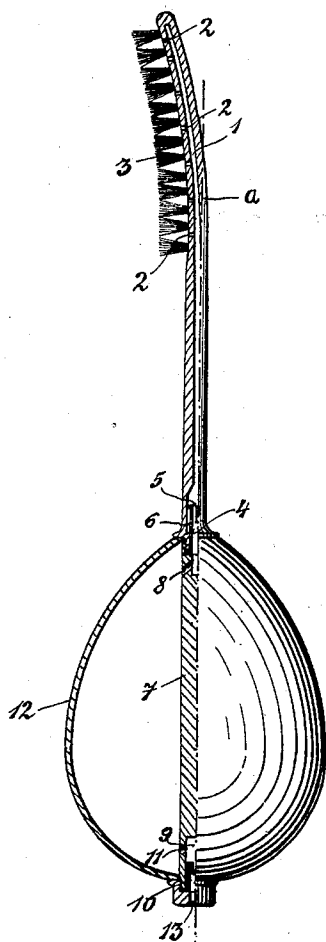
F. FRITZ.
TOOTH BRUSH WITH WASHING DEVICE.

APPLICATION FILED JAN. 26, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

FIG. 1.



WITNESSES.

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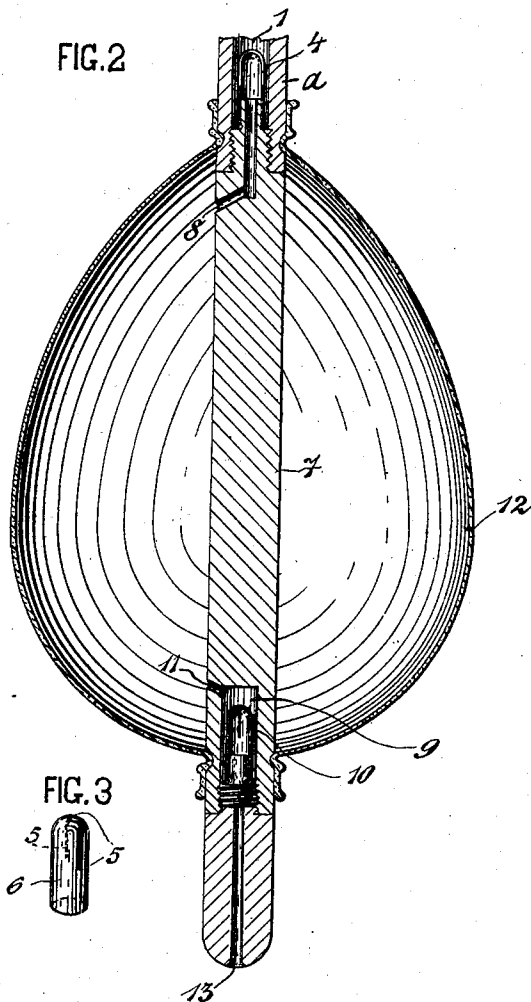
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2 SHEETS—SHEET 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

FRIEDRICH FRITZ, OF TRIESTE, AUSTRIA-HUNGARY.

TOOTH-BRUSH WITH WASHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 757,907, dated April 19, 1904.

Application filed January 26, 1903. Serial No. 140,521. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH FRITZ, engineer, a subject of the Emperor of Austria-Hungary, and a resident of Trieste, in the Province of Küstenland, Empire of Austria-Hungary, have invented certain new and useful Improvements in Tooth-Brushes with Washing Devices, of which the following is a specification.

The present invention has for its object to provide an improved tooth-brush adapted to receive the dentifrice in a receptacle arranged on the brush, from which receptacle it may in using the brush be forced out at will through the bristles, all for the purpose of obviating the deposition of impurities in the brush and the waste of dentifrice that attends the use of the ordinary tooth-brush.

In the accompanying drawings, Figure 1 is a view, partly in section and partly in elevation, of the brush. Fig. 2 is an enlarged sectional view of the handle portion of the brush, a certain bulb and valves controlling the flow of the dentifrice through the brush; and Fig. 3 is a perspective view of one of the valves.

In the handle *a* of the brush is a longitudinal bore 1, from which where the bristles 3 are located extend ports 2. The handle comprises an extension 7, screwed thereto, and this in turn carries a bulb 12, fitted snugly to said extension. The extension 7 is provided with a port 8, opening into bore 1 of the handle at one end and into the bulb at the other end, and it is also provided with another port, 11, which opens into the bulb at one end and terminates in a port 13 at the other end, a portion thereof, 9, which is axially located in the extension 7, being enlarged.

In the bore 1 and in the enlarged portion 9 of the port 11 are located valves 4 and 10, respectively, each consisting of an elastic-rubber tube 6, having a slit 5 formed at one end.

These valves are arranged so that their slitted ends project in the same direction, their other ends being in communication, respectively, with the ports 8 and 13.

In using the brush the free end of the extension 7 is dipped into the dentifrice so that its port 13 is submerged, whereupon the bulb is compressed, thereby forcing the air contained therein out through port 8, bore 1, and ports 2. The bulb is then released, and atmospheric pressure forces the dentifrice up through ports 13 and 11 into the bulb, the return of air by way of the valve 4 being prevented by the collapse of said valve. When the bulb has thus been made to take up the desired quantity of dentifrice and the brush is to be used, bulb 12 is again compressed, the dentifrice now flowing out through port 8, bore 1, and ports 2 into the bristles of the brush, valve 10 collapsing, so as to prevent the dentifrice flowing back.

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

The combination of a bulb, a handle member extending through one side of the bulb and out at the other, a brush arranged at one end of the handle member, said handle member having a bore communicating with the interior of the bulb at one end of said bore and opening into the brush at the other end of said bore and also having a port where it penetrates the bulb at said other side thereof, and check-valves arranged in said bore and port and opening in the direction of the brush end of the handle, substantially as described.

Signed at Vienna, Austria, this 31st day of December, A. D. 1902.

FRIEDRICH FRITZ.

Witnesses:

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