H. MORAN.

MAGAZINE TOOTH BRUSH.

APPLICATION FILED JULY 23, 1910.

995,626. Patented June 20, 1911.

Fig. 1.

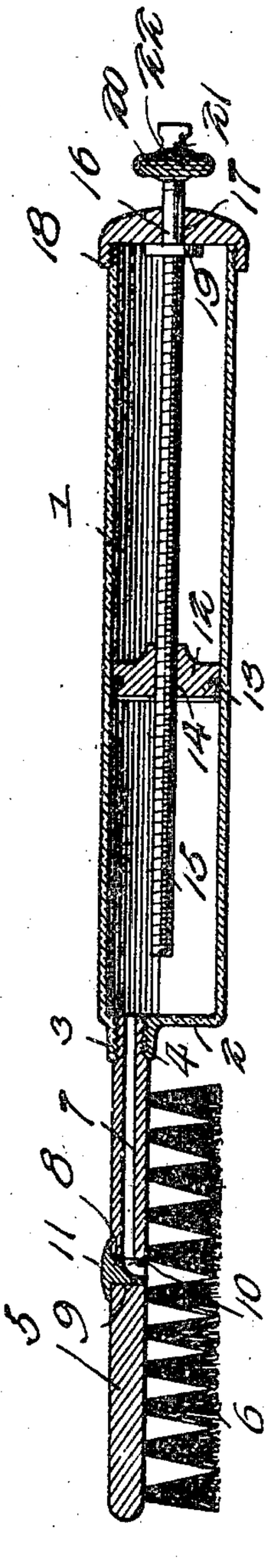


Fig. 3.

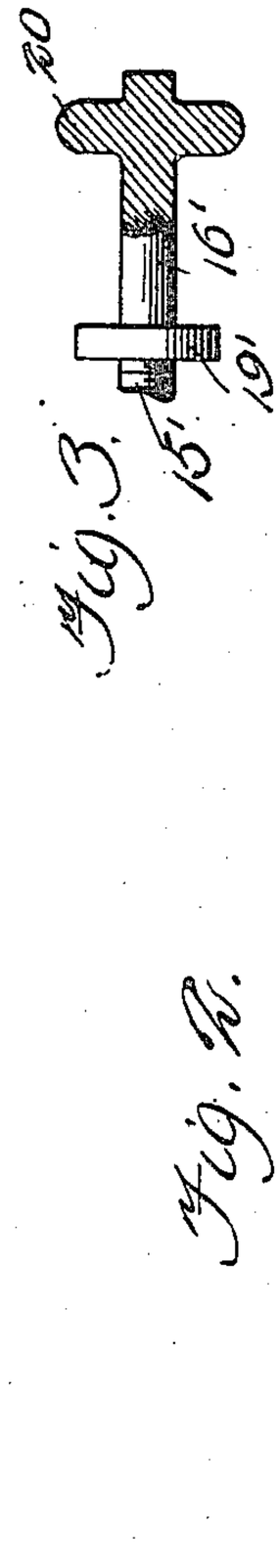
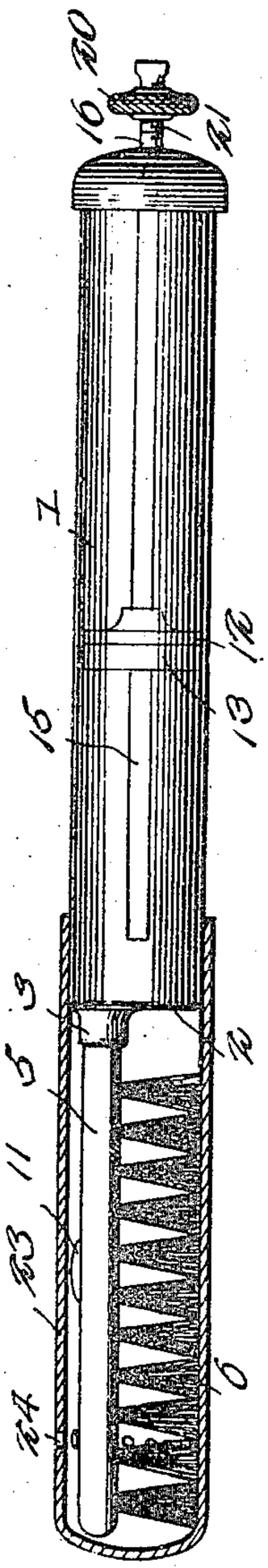


Fig. 2.



Witnesses

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MAGAZINE TOOTH-BRUSH.

995,626. Specification of Letters Patent. Patented June 20, 1911.

Application filed July 23, 1910. Serial No. 573,389.

To all whom it may concern:

Be it known that I, HILARION MORAN, a citizen of the United States of America, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Magazine Tooth-Brushes, of which the following is a specification.

This invention relates to magazine tooth brushes, and the object of the invention is to provide a handle of reservoir form and a follower operating in the reservoir and constructed to eject the paste in predetermined quantities.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a longitudinal section through my improved brush. Fig. 2 is a side elevation of the brush showing the closure in its applied position. Fig. 3 is a detail sectional elevation of a slightly modified form of screw.

The brush comprises a reservoir 1 which is of hollow cylindrical form. At one end the reservoir is provided with a head 2 which is formed with an interiorly threaded boss 3 to receive the correspondingly threaded stem 4 of the brush-head 5. The brush-head has secured thereto the bristles 6, and as illustrated, the said head is formed to provide a feed passage 7 which opens at one end directly into the forward end of the reservoir 1. At the opposite end the passage opens onto a revolubly mounted valve 8 which is mounted in the passage 9 in the head. The valve is in form of a hollow tubular-like member having an opening 10 therein at one side. The valve is provided with a manipulating knob 11 which may be operated manually to cause the opening 10 to aline with the feed passage so as to open communication between the bristles of the brush-head and the reservoir.

The reservoir 1 may be made of glass or transparent material so that the operator or user of the article can readily learn the correct position of the follower 12. The follower 12 is of disk-form preferably, to conform to the transverse curvature of the reservoir and its peripheral edge is provided with a checking ring 13 to insure discharge of the paste. The follower is provided with a longitudinally extending threaded bore 14 through which a feed screw 15 extends. The feed screw has its outer end formed to provide an unthreaded portion 16 which extends through the opening 17 in the removable closure 18. The portion 16 is of a length sufficient to permit slight sliding movement of the screw and the follower. The screw is provided with an inner stop 19 and an outer stop 20, the latter being designed to engage the closure 18 to limit the inward sliding movement of the screw. The stop 19 is designed to engage the closure to limit the outward sliding movement of the stem.

From the construction of the device described it will be seen that the operator can revolve the screw 15 to cause the follower to move directly against the paste or cleaning material and considering the stop 19 to be positioned against the closure 18 it will be seen that when pressure is exerted against the stop 20 to move the same against the closure 18 a predetermined charge of paste will be discharged from the reservoir. For the purpose of regulating the amount of paste to be discharged the outer extremity of the portion 16 is threaded, as shown at 21 and the stop 20 is formed to provide an interiorly threaded bore 22.

A closure 23 is designed to fit over the brush and to be engaged with the reservoir 1 as clearly shown in Fig. 2 of the drawing. This closure has formed therein a series of perforations 24 so as to provide ventilation to the brush and to allow the evaporation of the substance which may remain moist on the bristles.

In the modified form of my invention shown in Fig. 3, the screw 15′ is provided with the inner stop 19′ and an outer stop 20′. The stop 20′ is somewhat similar to the stop 20 in the preferred form of the invention, the difference being in that it is integrally formed with the screw. The device in the modified form is substantially the same with other respects as that described in the preferred form. The screw is provided with the unthreaded portion 16′ which is located between the stop.

I claim:—

1. A brush comprising a reservoir, a brush head detachably connected therewith, a revolubly and slidably mounted feed screw in the reservoir, a follower movable longitudinally in the reservoir and operatively connected with the feed screw, a stop formed on the feed screw and engaging the reservoir to limit the sliding movement of the screw in

one direction, the said screw having a threaded portion extending outwardly through one end of the reservoir, and an adjustable stop mounted on the said outwardly extending threaded portion of the screw and operating to engage the reservoir to limit the sliding movement of the screw in an opposite direction.

2. A brush comprising a reservoir, a brush-head detachably connected with the reservoir, a revolubly and slidably mounted feed screw, a follower operating in the reservoir and operatively connected with the feed screw, and relatively adjustable stops on the feed screw for engaging the reservoir to limit the sliding movement of the screw.

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

HILARION MORAN.

Witnesses:

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