Aug. 27, 1929. R. SOUKUP 1,726,197

TOOTHBRUSH

Filed Feb. 4, 1928

Fig.2.

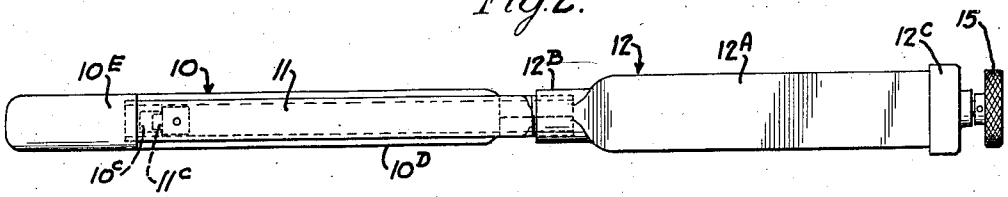


Fig.1.

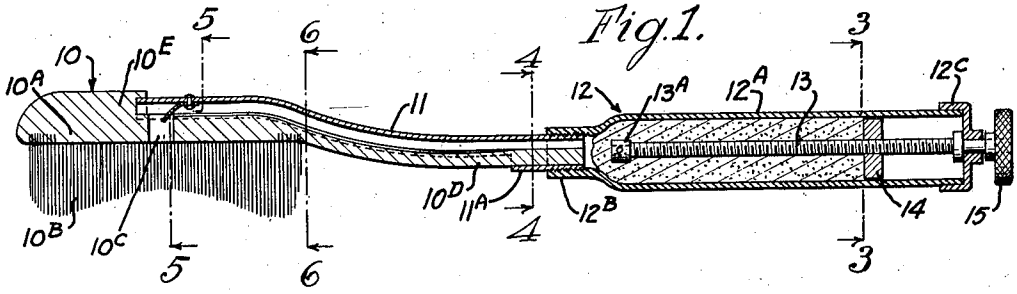


Fig.3

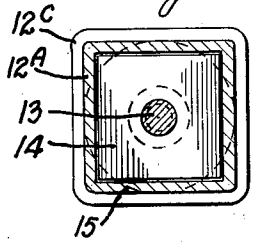


Fig.5

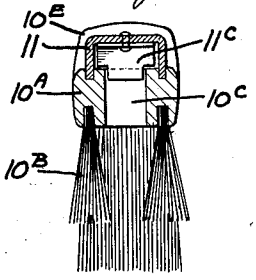


Fig.6

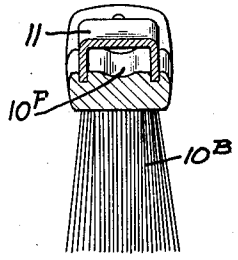
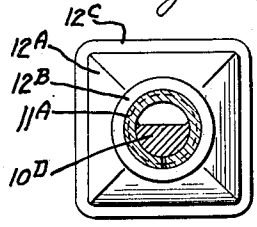


Fig.4



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UNITED STATES PATENT OFFICE.

ROBERT SOUKUP, OF CHICAGO, ILLINOIS.

TOOTHBRUSH.

Application filed February 4, 1928. Serial No. 251,820.

This invention relates to new and useful improvements in tooth brushes, and the like, and has among its objects to provide a tooth brush having a handle forming a container for tooth paste and means in the handle for feeding the tooth paste from the handle container, through the body of the brush in between the bristles thereof.

Another object of my invention is to provide a tooth brush with a channel in the top thereof and a suitable attachable dentifrice container for manually feeding the dentifrice through the channel into the brush.

A further object of the invention is to provide a tooth brush body having a removable portion therein forming a channel for feeding tooth paste or the like.

A still further object of my invention resides in the provision of a resilient valve for the tooth paste channel which will automatically seal the channel above the opening into the bristle portion to prevent the drying of the paste in the brush portion.

Another object of my invention is to provide a tooth paste container adapted to connection to a brush portion and having a rectangular plunger movable by a screw to compress the paste in the container and thus forcibly feed same into the brush portion.

With these and other objects in view my invention consists in the novel combination, construction and arrangement of the parts and members shown in the preferred embodiment in the attached drawings, described in the following specifications and particularly pointed out in the appended claim.

Referring to the attached drawings:—

Fig. 1, is a longitudinal section through a tooth brush embodying my invention.

Fig. 2, is a plan view of Fig. 1. Fig. 3 is a cross section taken on line 3—3 of Fig. 1, showing the traveling plunger or nut. Fig. 4, is a cross section taken on line 4—4 of Fig. 1. Fig. 5, is a cross section taken on line 5—5 of Fig. 1, and Fig. 6, is a cross section taken on line 6—6 of Fig. 1, showing the channel for the tooth paste.

In the illustrations, 10 generally indicates the complete tooth brush which comprises a brush body 10^A having suitably arranged bristles 10^B. The brush body portion 10^A is provided with an opening or passage 10^C located about in the center thereof. The brush portion 10^A is also formed with an integral portion of decreased cross section extending toward the rear end thereof to form a short handle portion 10^D.

An elongated cover 11 is provided which is formed of an inverted U cross section. The cover 11 may be of any suitable material or may be of metal and silver or nickel-plated or may be made of aluminum.

The cover 11 forms a channel for the passage of the tooth paste into the brush portion 10^A and extends from the end of the short handle portion 10^D and into groove of the enlarged end 10^E of the portion 10^A. A portion of the sides of the cover 11 at the end of the handle portion 10^D is extended to substantially form a tubular end 11^A into which the end of the handle portion 10^D is tightly fitted and the outside of the end 11^A is threaded for screw connection into the end of the paste container 12. The edges of the inverted U portion fitting into the grooves along the edge of the portion 10^A and the extension 10^D.

The tooth paste container 12 comprises a body 12^A of rectangular cross section having a restricted discharge end 12^B of circular cross section and a tight-fitting cap 12^C. A screw 13 is mounted for rotation in the cap 12^C. A square plunger or nut 14 is mounted on the screw 13. The inner end of the screw is provided with a collar 13^A to form a stop for the plunger 14. The portion of the screw near the inner face of the cap 12^C is enlarged to prevent its outward movement. A knurled nut 15 is fixed to the outer end of the screw 13 whereby the screw may be rotated to cause an inward travel of the plunger 14 to thereby compress the tooth paste within the rectangular chamber of the handle to cause its passage through the channel underneath the cover 11 into the opening 10^C of the tooth brush.

If desirable, the upper face of the brush body 10^A may be channeled as at 10^F to provide slightly more room for the passage of the tooth paste. Also the cover 11 may be provided with a leaf spring valve 11^C which will permit the forcibly pressed paste into the brush through the opening 10^C but which will close the end of the channel under the cover when the pressure on the paste body is released.

I claim:—

The combination in a brush comprising a body, bristles on one side of said body, said body having a passage extending from the

outer side thereof to the bristle side thereof, and an integral rearward extension, the end portion of said body extending forwardly from said passage being enlarged on the outer side thereof, said extension having a pair of grooves on the outer side of said body extending along the sides thereof and interconnected with a U-shaped groove in the rear end of said enlarged end portion, a cover for said body and its integral rearward extension extending from the rear end of said integral extension to said enlarged end, said cover being formed in a substantially inverted U-shaped cross section with its longitudinally extending edges fitting into said grooves and the forward end thereof fitting into said interconnecting groove, and the other end thereof having a tubular integral portion embracing the rearward end of said body extension, said cover forming an enclosed channel from the rear end of said body extension to said passage in said body, a handle adapted for screw connection over the rear end of said cover, said handle having a chamber therein of rectangular cross section with an outlet at its forward end communicating with said channel, a cap for the handle at the other end thereof, a screw mounted for rotation in said cap, and a traveling nut of rectangular formation mounted to travel on said screw during its rotation.

In witness whereof I affix my signature.

ROBERT SOUKUP.