

Aug. 5, 1924.

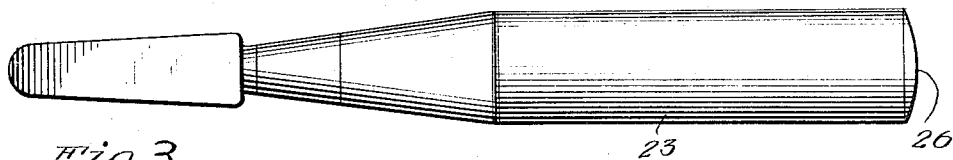
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W. E. ROBERTS

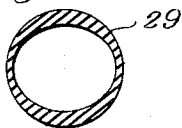
TOOTHBRUSH

Filed April 7, 1922

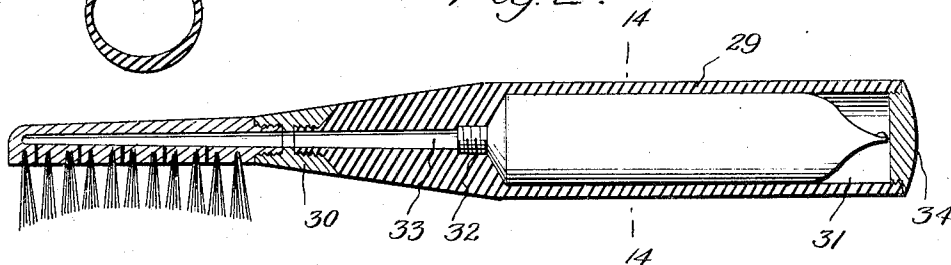
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



INVENTOR.

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## UNITED STATES PATENT OFFICE.

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## TOOTHBRUSH.

Application filed April 7, 1922. Serial No. 550,337.

*To all whom it may concern:*

Be it known that I, WILLIAM ELLSWORTH ROBERTS, a citizen of the United States, residing at Kenosha, in the county of Kenosha and State of Wisconsin, have invented new and useful Improvements in Toothbrushes, of which the following is a specification.

This invention relates to a tooth brush and has for its primary object the combining of a tooth brush and paste tube in a single article.

An object of the invention is to construct a tooth brush having means for feeding paste to the bristles of the brush.

Another object of the invention is to provide a fountain tooth brush of simple, inexpensive construction which is accurate in its operation.

A feature of my invention is the novel manner of connecting an ordinary paste tube to a brush so that paste may be readily fed to the brush head and the latter properly supported during the brushing operation.

With these and other objects in view the invention will be better understood from the following detailed description taken in connection with the accompanying drawings wherein:

Fig. 1 is a top plan view.

Fig. 2 is a longitudinal sectional view.

Fig. 3 is a cross sectional view.

Referring to the drawing illustrating one of the many constructions of my invention the numeral 29 designates a barrel constructed from resilient material such as rubber so that same may be compressed and this barrel may be directly connected to the head or connected to the head through the use of a coupling 30. The interior chamber 31 of the barrel is of a size to snugly

receive therein a collapsible tube 31<sup>b</sup> of tooth paste which has its nozzle 32 screw threaded in place to communicate with the passage 33 which extends into and communicates with the outlets 33<sup>b</sup> for directing paste to the brush bristles 33<sup>c</sup>. The barrel is open at one end to allow insertion of the tube but this end is normally closed by a cap 34.

From the foregoing description it will be seen that by subjecting the barrel to a compressing action this compressing action will be transmitted to the tube for partially collapsing same to force paste along the passage and through the outlets to the bristles of the brush head.

Although I have illustrated numerous forms of my invention it is of course to be understood other forms may be constructed and the parts may be arranged in other relations and, therefore, I do not desire to be limited in any manner except as set forth in the claims hereunto appended.

Having thus described my invention what I claim is:

1. A tooth brush comprising a brush head having paste outlets, a resilient barrel attached to said head, and a collapsible tube of paste wholly supported within the barrel and collapsed by the compressing of the resilient barrel.

2. A tooth brush comprising a brush head having paste outlets, a resilient barrel attached to said head, a collapsible tube of paste wholly supported within the barrel and collapsed by the compressing of the resilient barrel, said resilient barrel being open at one end, and a cap for closing said open end of the barrel.

In testimony whereof I affix my signature.  
WILLIAM ELLSWORTH ROBERTS.