

(No Model.)

W. R. EVANS.

TOOTH BRUSH.

No. 323,305.

Patented July 28, 1885.

Fig. 1.

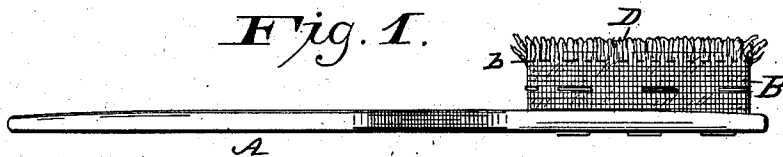


Fig. 2.

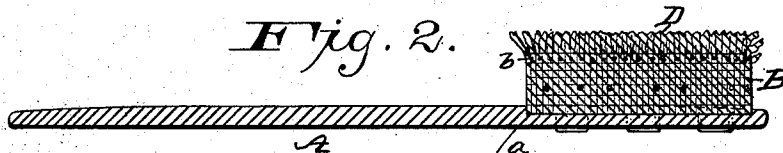
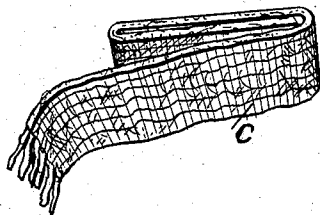


Fig. 3.



Witnesses:

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# UNITED STATES PATENT OFFICE.

WARREN R. EVANS, OF PORTLAND, MAINE.

## TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 323,305, dated July 28, 1885.

Application filed July 16, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WARREN R. EVANS, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Tooth-Brushes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in brushes, and more particularly to the class known as "tooth-brushes."

My invention consists in making a brush the main body of which is composed of woven fabric wound in layers, the layers being sewed together at the lower portion, the brush portion or rubbing-surface being formed by unraveling or fringing the upper unsewed portion of the fabric, so as to form a soft rubbing-surface for cleaning the teeth.

My invention consists, further, in saturating the woven portion of the brush with paraffine or other water-repellent material, so as to prevent the body of the brush from absorbing water.

In the drawings, Figure 1 is a side view of my improved brush. Fig. 2 is a central longitudinal sectional view. Fig. 3 is a detached view of the fabric, showing the manner in which the fabric is wound.

A indicates the handle of the brush, which is by preference recessed, as at *a*, for the body portion of the brush; but the recess may be dispensed with and the brush attached to the plain surface of the handle.

B is the main body of the brush, formed of threads of cotton, linen, silk, or any other suitable material woven together in a compact manner. I prefer, however, to make the brush of woven material, which is cut into strips C of the proper width, and wrapped or rolled in layers to form an elongated body, as shown in Fig. 3.

Other forms of brushes may be made by

wrapping or rolling the material in a different manner; but the form shown is designed for the ordinary tooth-brush. The layers of fabric thus wrapped or rolled are sewed together through and through, as shown, so as to make the lower portion of the brush rigid and solid.

A brush-blank thus formed is sewed or otherwise secured to the brush-handle in a firm and substantial manner. The upper edge of the blank C is now unraveled or fringed out as far down as the upper row of stitches, as shown at *b*, to form the rubbing or brushing surface D.

The woven or solid portion B of the brush is thoroughly saturated with paraffine or any other suitable water-repellent material which will prevent the body of the brush from absorbing water.

It will be noticed that a brush made of the material and in the manner described will present to the teeth and gums a soft rubbing-surface.

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

1. A tooth-brush the main body of which is composed of woven fabric, the rubbing-surface of which is formed of the fringed or unraveled portion of the fabric, as set forth.

2. A tooth-brush formed of a strip of woven fabric rolled and stitched or sewed together, as described, with a fringed or unraveled rubbing-surface, the main body or woven portion being saturated with water-repellent material, as set forth.

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

WARREN R. EVANS.

Witnesses:

ROBERT A. DAVIS,  
HERBERT M. SYLVESTER.