

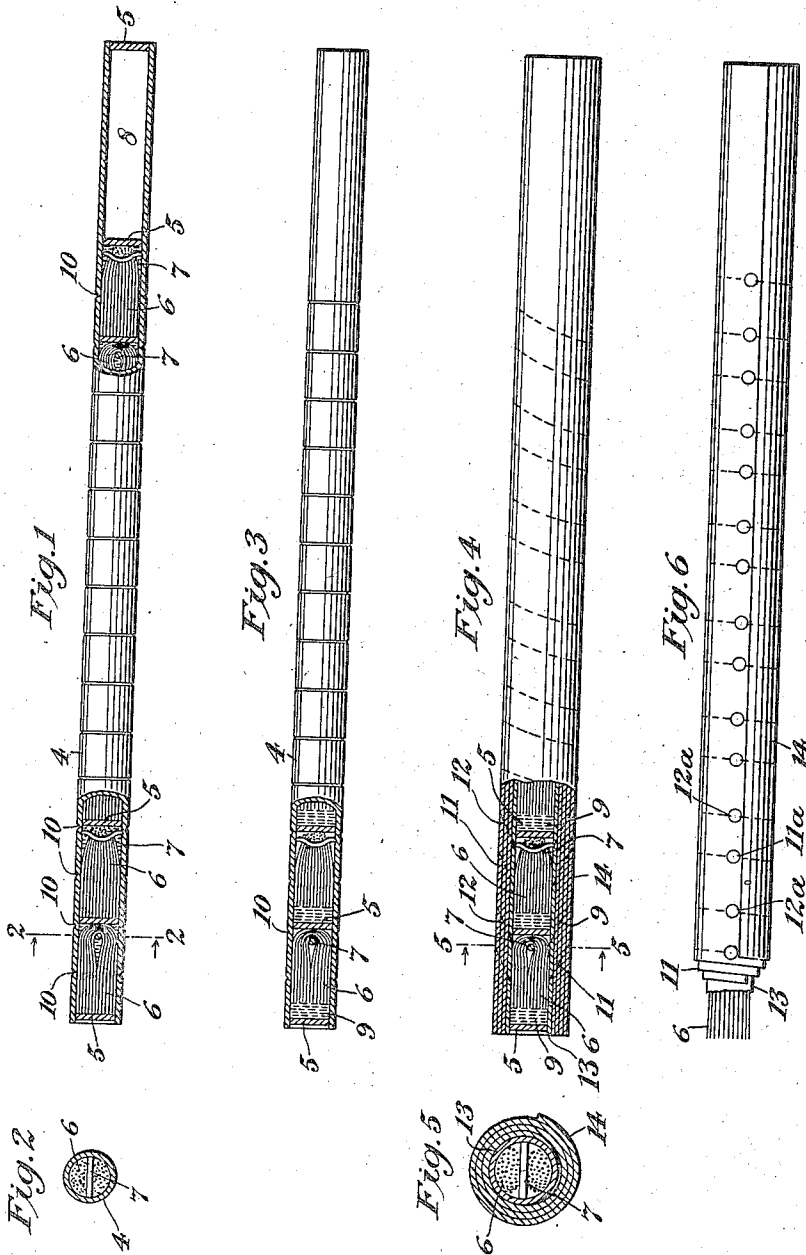
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S. B. HUSCH ET AL

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TOOTHBRUSH

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UNITED STATES PATENT OFFICE.

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TOOTHBRUSH.

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To all whom it may concern:

Be it known that we, SYLVESTER B. HUSCH and GEORGE S. HUSCH, citizens of the United States, residing, respectively, at the borough of Manhattan, in the county of New York and State of New York, borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Toothbrushes, of which the following is a specification, reference being had therein to the accompanying drawings, forming part thereof.

This invention consists in improvements in brushes of the general character exemplified in our prior Patents Numbers 1,080,633, 1,080,634 and 1,103,515. One object of the invention is to provide a cheap and sanitary tooth-brush.

The invention is illustrated in the accompanying drawings in which;

Figure 1 is a longitudinal view partly in mid-section, showing one form of the invention;

Figure 2 is a transverse section of the device of Figure 1, taken on the plane 2—2 of Figure 1;

Figure 3 is a longitudinal view partly in mid-section, showing another embodiment of the invention.

Figure 4 is a longitudinal view partly in mid-section, showing still another construction of the invention;

Figure 5 is a transverse section of the device of Figure 4, taken on the plane 5—5 of Figure 4; and

Figure 6 is a longitudinal outside view of the device of Figure 4, showing the first brush section exposed for use.

In the device of Figures 1 and 2, a paper tube 4 is circumferentially scored or otherwise weakened at successive points 10, so that it may readily be severed by hand at these places.

Paper diaphragms or partitions 5 are inserted in the tube to seal its ends and divide it into sections containing the brushes or brush sections 6 compressed tightly in the tube and retained if necessary by wires such as 7 which may be bow-shaped and sprung into diametric position across the tube with the brush bristles bent around them. In Figure 1 these retaining wires for the successive brushes are shown disposed alternately in the plane of the bend for each section and transverse to it. The brush sections may

be impregnated with a suitable dentifrice.

Figure 1 shows the device as it may be finished and sold. When it is to be used the tube will be severed on its circumferential line 10 nearest the left end as shown in Figure 1, and the short cap or tube section thus detached will be pulled off to expose the service end of the first brush section for use. When this has been used, the tube will be again severed on the next line 10 just to the left of the second diaphragm 5, so that the used brush section may be discarded leaving the tube sealed by said second diaphragm, and ready for a second use in the same manner. Thus all the brush sections may be used consecutively until the last one is used with the long empty tube section and serving as its handle.

The device of Figure 3 is the same as that of Figures 1 and 2, excepting that an extra space 9 is provided in each tube section to be filled with the dentifrice which may also fill the interstices between the brush bristles.

Each brush section will be exposed for use by pulling off the short tube section or cap which covers its service end and contains the extra dentifrice, and this cap may then be torn open to spread its contents on the brush.

The device of Figures 4, 5 and 6 is the same as that of Figure 3, excepting that the tube immediately surrounding the brushes is thinner than the tube 4 of the preceding figures, and is reinforced with a Blaisdel wrapping 14, familiar in pencils, and scored so as to sever the tube on the conical lines 11 and 12 respectively located to expose the brush section for use and to discard it. The usual perforations 11^a and 12^a may be provided in the last turn of the wrapping, to assist in starting the tearing operation.

The invention may be embodied in other constructions within the meaning and principles of the following claims:

1. The combination with a tube divided into sections longitudinally by scoring, of a plurality of brush sections arranged within the tube, one behind the other, with their bristles substantially parallel with the tube, and partitions in said tube disposed between the brush sections.

2. A sectional brush comprising a tube weakened at successive points to facilitate severance of successive tube sections, brush sections contained in the tube in positions to be successively exposed for use as the

successive tube sections are severed, and partitions between the successive brush sections, said partitions covering the ends of the bristles and when exposed being separately
5 removable from the enclosed bristles.

3. A sectional brush comprising a tube and brush sections and dentrifice arranged in alternate succession therein.

4. A sectional brush comprising a tube
10 and brush sections fixed therein with intervening spaces, partitions in said tube, one in each space adjacent to the rear end of one brush section but spaced from the service end of the opposite brush section.

15 5. The combination with a tube, of a plurality of brush bristles bent double within said tube, a retaining means passed across the inside of the tube, the bristles being bent over said retaining means and a partition
20 within said tube against which the bent over portion of the bristles are retained, whereby the partition and the retaining means cooperate to prevent longitudinal movement of the bristles in either direction.

25 6. A sectional brush comprising a rolled tube adapted to be severed at successive points by tearing to leave a conical end on the tube at each point of severance, brush sections held in the tube in positions to have
30 their service ends successively exposed for use as the tube is thus torn at its said successive points of severance, and partitions between the brush sections and each disposed in position to be removed as a portion of the
35 tube is thus severed.

7. The combination with a tube divided into sections by scoring, of a plurality of brushes longitudinally disposed within said tube, and partitions separating said brushes,
40 each disposed adjacent the lower edge of the tube section to protect the brush on one side thereof, when the brush on its other side has been removed.

8. A sectional brush comprising: a rolled tube adapted to be severed by sections at
45 successive points by tearing to leave a conical end on the tube at each point of severance; brush sections held in the tube and having such lengths and disposition that the alternate successive points of tube severance will occur respectively between the ends of a
50 given brush section and between said section and the next section, whereby the severance of successive tube sections will alternately expose the end of a brush section gripped in the tube and then remove said brush section; and partitions in the tube between the
55 brush sections and each disposed so as to be retained when the brush section in advance is removed with the tube section which holds it.

9. A sectional brush comprising: a rolled tube adapted to be severed by sections at
60 successive points by tearing to leave a conical end on the tube at each point of severance; brush sections held in the tube and having such lengths and disposition that the alternate successive points of tube severance will occur respectively between the ends of a
65 given brush section and between said section and the next section, whereby the severance of successive tube sections will alternately expose the end of a brush section gripped in the tube and then remove said brush section; partitions in the tube between the
70 brush sections and each disposed so as to be retained when the brush section in advance is removed with the tube section which holds it; and said partitions being adapted to hold
75 a portion of dentrifice behind each partition in contact with the brush section next in order.

In testimony whereof we have affixed our signatures.

SYLVESTER B. HUSCH.
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