Aug. 23, 1927.

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J. B. BUTLER

TOOTHBRUSH

Filed Feb. 19, 1926

Fig. 1.

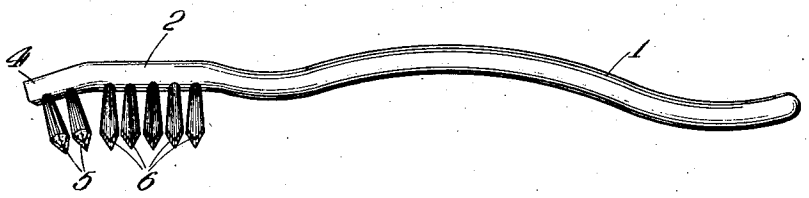


Fig. 2.

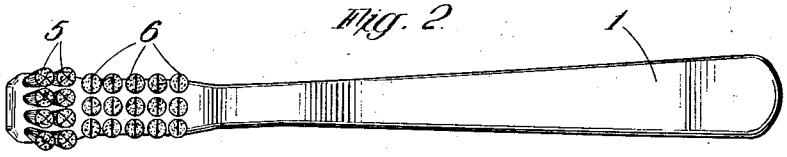


Fig. 3.

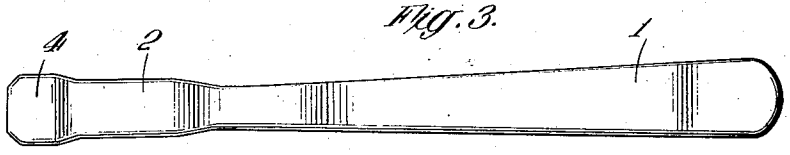
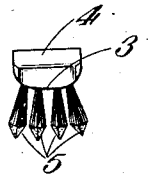


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH BERNARD BUTLER, OF WHITEHALL, LONDON, ENGLAND.

TOOTHBRUSH.

Application filed February 19, 1926, Serial No. 89,501, and in Great Britain February 20, 1925.

This invention relates to tooth brushes and has for its object to facilitate more thorough cleaning of the teeth at all places within the mouth.

The improved tooth brush according to the invention comprises a convex back, one or more front rows of bristles—this word is used throughout the specification to denote the bundles of hairs—conically pointed and backwardly inclined and a plurality of back rows of chisel-pointed bristles. The front rows of bristles come into play particularly when cleaning the backs of the teeth with a longitudinal movement of the brush and when cleaning round the back teeth, such operations being facilitated by the inclination of the bristles in these rows. The chisel-pointed back rows of bristles ensure proper cleaning of the recesses between teeth when the brush is worked laterally.

The invention is illustrated by way of example in the accompanying drawings:—

Figure 1 being a side elevation of the brush;

Figure 2 an inverted plan;

Figure 3 a plan; and

Figure 4 an end elevation.

Referring to the drawings, 1 is the handle of the brush and is shaped as shown in order to provide a convenient and comfortable grip for the fingers and thumb. The back 2 has a convex surface 3 into which the bristles are inserted, the front end 4 being bent downwardly. The front two rows of bristles 5 are conically pointed and inclined backwardly towards the back rows of bristles 6 which are chisel-pointed as illustrated.

The convexity of the brush back gives the bristles in the front rows—and to a certain extent the back rows, also—a splayed formation as will be seen clearly in Figure 4.

In some cases the front rows of bristles, instead of containing four bristles in each, may be provided with three or five as desired. Likewise, the number of bristles in the back rows may be varied. A feature of the improved brush is that ample space is provided between the roots of the bristles so that they can be properly cleansed after use. All the bristles are of the same length so as to facilitate manufacture.

The preferred material for the handle and back is bone, but other materials commonly used in the manufacture of tooth brushes may be employed.

I claim:—

1. A toothbrush comprising a handle provided at one end with an elongated tuft carrying back terminating in an inclined portion, one or more rows of bristle tufts mounted on the inclined portion, the rows being disposed transversely thereof and the tufts being disposed perpendicularly to said portion, the tip of each tuft being conically pointed, and a plurality of rows of tufts mounted on said back inwardly of said inclined portion, each of said last named rows terminating in a chisel pointed working surface.

2. A toothbrush comprising a handle provided at one end with an elongated tuft carrying back terminating in an inclined widened portion, one or more rows of bristle tufts mounted on the inclined portion, the rows being disposed transversely thereof and the tufts being disposed perpendicularly to said inclined widened portion, the tip of each tuft being conically pointed, and a plurality of rows of bristle tufts mounted on said back inwardly of inclined portion, each of said last named rows terminating in a chisel pointed working surface, there being more tufts to a row in the first named rows on the inclined portion than in the last named rows.

3. A toothbrush comprising a handle provided at one end with an elongated tuft carrying back terminating in an inclined widened portion, the back having an arcuate face, one or more rows of bristle tufts mounted on the arcuate face of the inclined portion of the back, the rows being disposed transversely thereof and the tufts being disposed perpendicularly to said inclined widened portion, the tip of each tuft being conically pointed, and a plurality of rows of bristle tufts, mounted on the arcuate face of said back inwardly of the inclined portion, each of said last named rows terminating in a chisel pointed working surface, there being more tufts to a row in the first named rows on the inclined portion than in the last named rows.

JOSEPH BERNARD BUTLER.