March 7, 1939. J. KILBURG 2,149,890

TOOTH BRUSH

Filed Oct. 3, 1936

Fig. 2

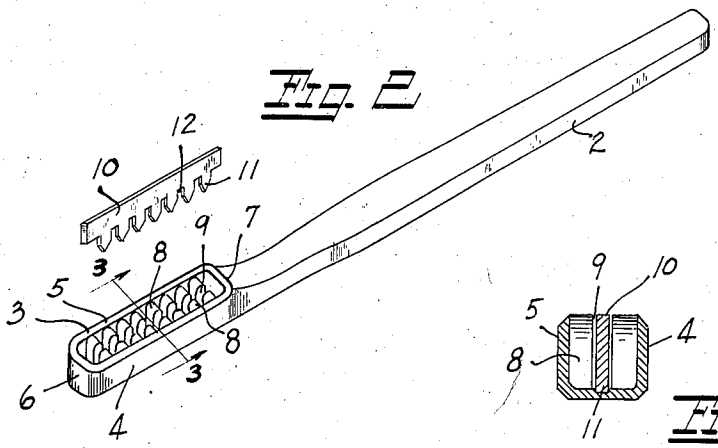


Fig. 3

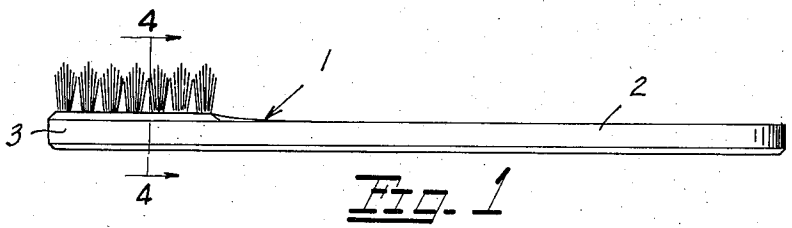


Fig. 1

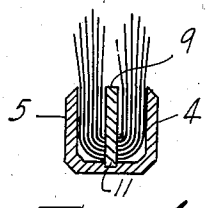


Fig. 4

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Patented Mar. 7, 1939 2,149,890

UNITED STATES PATENT OFFICE

2,149,890

TOOTH BRUSH

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Application October 3, 1936, Serial No. 103,854

2 Claims. (Cl. 15—205)

This invention relates to improvements in a toothbrush and a method of making the same.

The primary object of the present invention is to provide a toothbrush of simple, efficient, durable and inexpensive construction; and wherein the several parts may be renewed if desired.

A further object of the invention is the provision of means for automatically dividing a group of bristles into individual tufts of equal size; and, for securing said tufts to the head of the brush.

These and other objects will appear as the invention is more fully hereinafter described in the following specification, illustrated in the accompanying drawing, and finally pointed out in the appended claims.

In the drawing:

Fig. 1 is a side elevation of my new and improved form of toothbrush.

Fig. 2 is a perspective view of the head and handle and a wedge-plate in position to be inserted into engagement with the head portion.

Fig. 3 is an enlarged sectional view taken on the line 3—3 of Figure 2.

Fig. 4 is an enlarged sectional view taken on the line 4—4 of Figure 1.

Referring now more particularly to the drawing:

Reference numeral 1 indicates generally a toothbrush having a handle 2 and a head portion 3. The head is of hollow formation, as shown, and is formed with side-walls 4 and 5 and end-walls 6 and 7. Within the head portion and extending throughout its length, at spaced intervals, are a plurality of oppositely disposed partition walls 8. The distance between each partition wall, in the direction of the length of the head, is sufficient to receive a sufficient number of bristles to form a tuft of adequate size.

The space 9 between the opposed partitions is of sufficient width to receive a wedge-plate 10 shaped as shown in Fig. 2 and provided with pointed projections 11 which are spaced from each other at intervals equal to the spacing of the partition walls, as aforesaid. The space 12 between each projection is substantially equal to the space between each of the partitions.

In assembling the brush, a plurality of bristles are spread transversely across the head portion over its entire length. The wedge-plate 10 is then advanced through the bristles and pressed into position between the two rows of partitions 8. As the wedge-plate passes through the bristles the projections 11 divide them into tufts of uniform size, and each tuft is then lodged between the partitions 8. Further downward pressure on the wedge-plate will bring the tufts into an upright position as shown in Fig. 4. By applying sufficient pressure to the wedge-plate the projections 11 will become embedded in the bottom wall of the hollow head portion and this serves to secure the bristles in place. Moreover the wedge-plate may be subsequently removed if it is desired to remove the bristles or to disassemble the brush for any other reason.

The wedge-plate may be made of metal if desired, but I prefer to make it of fibre of sufficient strength to withstand the pressure in the assemblying operation. Moreover, fibre, being lighter than metal, is more practical to use and is less expensive.

While I have shown a particular form of embodiment of the invention I am aware that many minor changes therein will readily suggest themselves to others skilled in the art without departing from the spirit and scope of the invention.

Having thus described the invention, what I claim as new and desire to protect by Letters Patent is:

1. A toothbrush comprising a handle and an elongated hollow head formed integral therewith, a plurality of spaced slotted walls arranged transversely of the head to form a plurality of compartments therein, a plurality of interconnected bristles disposed within each compartment, a wedge-plate positioned lengthwise of the head within the slots of said walls to divide said bristles into tufts, and the lower edge of the wedge-plate engaging the connecting portions of said bristles and being formed with projections embedded in the bottom wall of the hollow head.

2. A toothbrush comprising a handle and an elongated hollow head formed integral therewith, a plurality of slotted walls arranged transversely of the head, a wedge-plate positioned lengthwise of the head within the slots of said walls to divide the head in two parallel rows of compartments lengthwise of the head, a plurality of interconnected bristles disposed within each transverse pair of compartments and extending outwardly therefrom, the lower edge of the wedge-plate engaging the connecting portions of said bristles and having a number of projections equal to the number of walls in the head and spaced equally therewith, whereby insertion of the wedge-plate will divide the bristles into tufts of dimensions equal to those of the compartments.

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