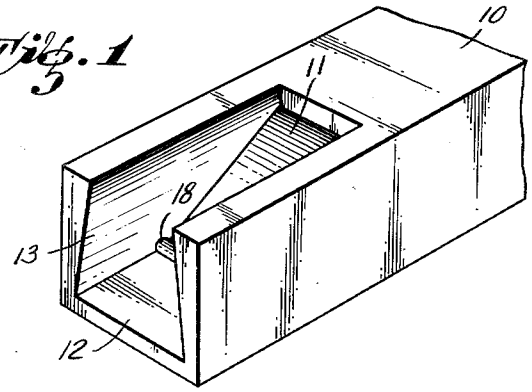
Dec. 4, 1956 N. A. BRUNDA 2,772,433

ECONOMY TOOTHBRUSH

Filed April 27, 1951

Fig. 1



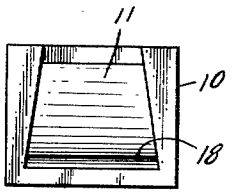


Fig. 3

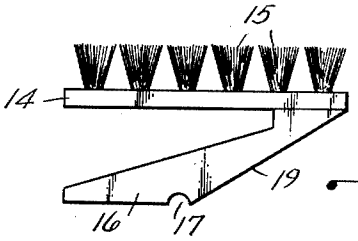
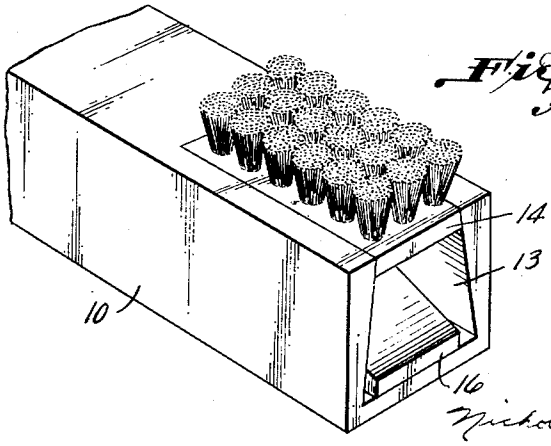


Fig. 2

Fig. 4



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United States Patent Office

2,772,433

Patented Dec. 4, 1956

2,772,433

ECONOMY TOOTHBRUSH

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Application April 27, 1951, Serial No. 223,285

1 Claim. (Cl. 15—176)

The present invention relates to an economy tooth brush and it consists in the combinations and constructions and arrangements of parts herein described and claimed.

Generally there is provided a tooth brush wherein the brush part is formed separately from the handle and the handle may be used continuously and the brush part replaced whenever necessary. Novel means is provided for attaching the brush portion to the handle.

It is accordingly an object of the invention to provide a novel tooth brush having a removably mounted brush portion.

Another object of the invention is to provide a device of the character set forth which is simple in construction, inexpensive to manufacture and yet effective and efficient in use.

Still another object of the invention is the provision of novel latching means forming a part of the invention.

Other and further objects of the invention will become apparent from a reading of the following specification taken in conjunction with the drawing, in which:

Figure 1 is a fragmentary perspective view of a handle forming a part of the invention.

Figure 2 is a side elevational view of a brush portion forming a part of the invention,

Figure 3 is an end elevational view of the device shown in Figure 1, and

Figure 4 is a fragmentary perspective view of the invention in assembled condition.

Referring more particularly to the drawing, there is shown therein a tooth brush handle **10** having a recess generally indicated at **11** in one end thereof. The recess **11** is provided with substantially U-shaped walls with the bight portion thereof, indicated at **12**, forming the bottom and wherein the legs **13** or side walls extend upwardly and inwardly toward each other.

In Figure 2 there is illustrated a brush portion having a body **14** wherein is embedded a plurality of tufts **15** of bristles and which body is provided with an integrally formed downwardly and angularly extending leg **16** which is provided with a transversely extending notch **17** in its underside. The notch **17** is preferably rounded. Transversely extending across the bottom of the recess **11** is a rounded detent **18** and the bottom wall **12** tapers inwardly

and upwardly into the body of the handle **10** to complement a cut away portion **19** on the underside of the leg **16**. It will be also apparent that the width of the leg **16** is such that the leg **16** may be accommodated in the lower portion of the recess while the body **14** is sufficiently narrow to be accommodated in the upper portion of the recess **11**. The recess **11** as viewed in Fig. 2 is keystone in cross section. The leg **16** is sufficiently narrow to allow the notch to be sprung from the detent **18**.

In operation, it will be apparent that in order to insert the brush portion into the handle, it is only necessary to press the body **14** and the leg **16** toward each other with the finger and to thereafter insert the brush portion into the slot **11** until the cut away portion **19** bears fully against the bottom **12** whereupon the leg **16** may be allowed to expand by releasing the same to thus allow the detent **18** to be engaged in the notch **17**. The brush portion will now be substantially fixed with the handle **10** and may be utilized in the manner of an ordinary tooth brush until it is desired to replace the brush portion whereupon the leg **16** and body **14** may again be forced toward each other to thus disengage the detent **18** from the notch **17** and thereafter the brush portion may be withdrawn by the same fingers utilized to force the body **14** and the legs **16** together. Thus it is only necessary to discard the brush portion and the handle **10** may be utilized over and over again.

While but one form of the invention has been shown and described herein, it will be readily apparent to those skilled in the art that many minor modifications may be made without departing from the spirit of the invention or the scope of the appended claim.

What is claimed is:

In a toothbrush, a handle having a recess with an inclined bottom portion and inwardly directed side walls, a transversely extending rib on the bottom of the recess, and a body of resilient material having a plurality of bristles to provide a brush portion, said body having an integrally formed downwardly and angularly extending leg provided with a transversely extending notch on its under side arranged to engage the rib on the handle, the body having a slot between the leg and the brush portion to allow the leg to be sprung towards the brush portion to release the notch from the rib, said notch and rib being rounded, the sides of the body at the brush portion being inclined to tightly engage the inwardly directed walls.

References Cited in the file of this patent

UNITED STATES PATENTS

1,407,214	Osborn	Feb. 21, 1922
1,750,500	Weisz	Mar. 11, 1930
1,908,511	Dodson	May 9, 1933
1,944,797	McElwain	Jan. 23, 1934
2,426,418	Seaver	Aug. 26, 1947
2,668,973	Glaza et al.	Feb. 16, 1954