

May 29, 1923.

1,456,535

M. H. CARTWRIGHT

TOOTHBRUSH

Original Filed May 7, 1919

FIG. 1.

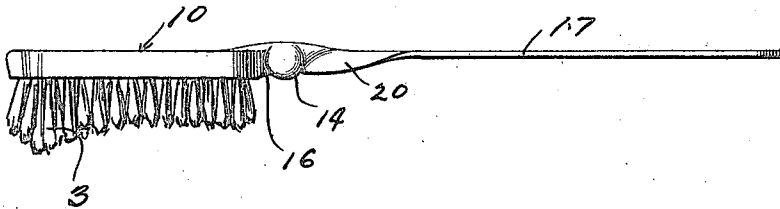


FIG. 2.

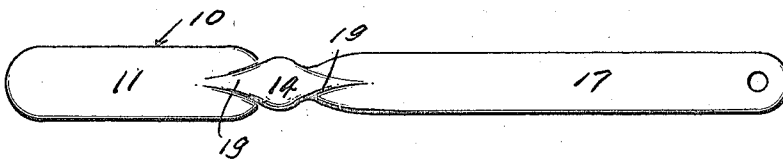


FIG. 3.

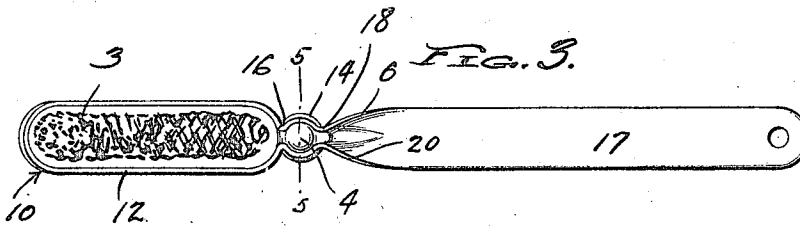


FIG. 4.

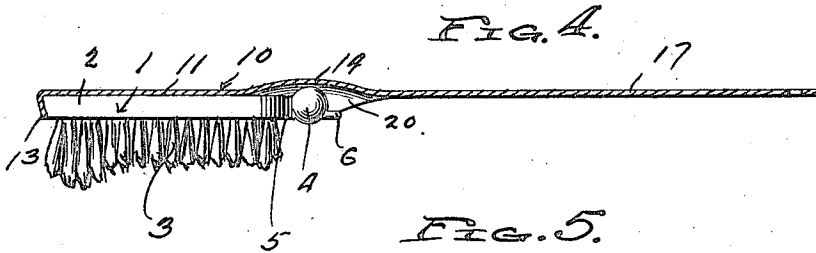
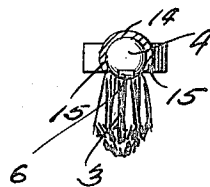


FIG. 5.



Witness  
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## UNITED STATES PATENT OFFICE.

MYLES H. CARTWRIGHT, OF TOLEDO, OHIO, ASSIGNOR TO THE CARTWRIGHT MANUFACTURING COMPANY, OF TOLEDO, OHIO, A CORPORATION OF OHIO.

## TOOTHBRUSH.

Application filed May 7, 1919, Serial No. 295,390. Renewed February 24, 1923.

*To all whom it may concern:*

Be it known that I, MYLES H. CARTWRIGHT, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Toothbrushes, of which the following is a specification.

This invention relates to toilet articles, and more particularly to tooth brushes.

The object of the invention is to provide a simply constructed brush of this character which may be sterilized to render it entirely sanitary.

Another object is to provide a tooth brush, the head of which is separable from the handle to permit a new head to be substituted when the old one becomes worn so that one handle may be used indefinitely.

Another object is to construct both the head and handle of material capable of being sterilized without injury.

Another object is to provide a separable head and handle having friction means for holding them securely in operative connected relation and yet permit them to be easily separated when desired.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 represents a side elevation of a tooth brush constructed in accordance with this invention,

Fig. 2 is a rear elevation thereof,

Fig. 3 is a front elevation,

Fig. 4 is a longitudinal section, and

Fig. 5 is a transverse section taken on the line 5—5 of Fig. 3.

In the embodiment illustrated, a head 1 and handle 10 are shown separably connected. The head 1 comprises a block or backing 2 made of aluminum or other suitable metal and having the usual bristles 3 mounted therein by any suitable means which will hold them securely engaged with the block when subjected to sterilization. The rear end of block 2 has a bulbular element 4 connected therewith by a neck 5, a finger 6 ex-

tending longitudinally from the member 4 and out-turned to form a finger grip for a purpose presently to be described.

The handle 10 comprises a casing or shell 11 composed of sheet aluminum or other suitable metal and shaped to conform to the head 1 which it is designed to receive. This shell 11 has a flange 12 extending there-around, said flange being inclined inwardly as shown at 13 in Fig. 4, which is designed to fit over the edge of the head 1 to assist in retaining it in operative relation relative to the handle.

The ends of the flange 12 extend a substantial distance rearwardly of the casing 11 and merge into the longitudinal edges of the handle portion 17. The ends of the flange in rear of the casing are each contracted or pressed inwardly of each other at two spaced points 16 and 18 which pairs of points are disposed oppositely of each other in order to provide a socket 14. Obviously, neck portions are provided for the socket at the points 16 and 18. The socket is made globular in shape to surround the major portion of the element 4 when the latter is received in the socket, the edges 15 of the socket being spaced apart to permit of the engagement or insertion of the element 4 thereinto.

From the above description it will be obvious that the head 1 is inserted in the casing 11 by engaging the front end of the block 2 under the inclined flange 13 at the front end of the casing and then forcing the head into said casing and the ball 4 into the cup-shaped socket 14. When so arranged the parts will assume the position shown in Figures 1, 3, 4 and 5 of the drawings.

When it is desired to remove the head 1 for sterilization, renewal or other purposes, the finger may be passed under the finger 6, and the head forced out of the casing 11. A new head may then be substituted or the old one sterilized and returned to the handle.

By constructing the handle member 10 of sheet aluminum, a light device is formed, and one which is rust-proof.

Longitudinal strengthening ribs 19 are provided at the juncture of the casing 11 and hand grip member 17 with the socket 14 by the particular formation of the handle member, and the ends of the flange 12 merge into the side edges of the hand grip 17 at its junction with the member 14, and diverge

inwardly of the hand grip whereby the finger 6 may be engaged to lift the ball element 4 from the socket 14.

From the foregoing description, taken in  
5 connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains and while I have  
10 described the principle of operation of the invention together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and  
15 that such changes may be made as are within the scope of the claimed invention.

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

20 1. A tooth brush comprising a handle having one end equipped with head retaining means, side flanges on the edges of the handle in the rear of the head retaining means,  
25 said flanges being bent to provide a socket, a bristle carrying head removably engaged by said retaining means, and an extension at one end of said head for detachable engagement with said socket.

30 2. A tooth brush comprising a handle having one end equipped with a surrounding flange to provide a head receiving casing, the ends of said flange merging into the edges of the handle, said ends of the flange  
35 at two points to provide a globular socket, a bristle carrying head removably engaged by

said casing, and a globular extension at one end of said head for detachable engagement in said socket.

40 3. A tooth brush comprising a handle member having a casing at one end shaped to receive a head in connection with which it is to be used, and a hand grip at its other end,  
45 a cup-shaped socket connecting said hand grip and casing, with reduced portions on opposite sides thereof forming necks, a head to be mounted in said casing, a globular connecting element projecting rearwardly from one end of said head and connected thereto  
50 by a neck, and a finger extending from the rear of said globular connector, the finger and neck of the connector being designed to lie in the necks of the handle member.

55 4. A tooth brush comprising a handle having one end equipped with head retaining means, side flanges on the edges of said handle in the rear of the head retaining means,  
60 said flanges being bent to provide a socket and extended rearwardly of the socket in diverging relationship, a bristle carrying head removably engaged by said retaining means,  
65 a globular extension at one end of said head for detachable engagement with said socket, and a finger carried by said globular extension and adapted to be received between the diverging ends of said flanges.

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

MYLES H. CARTWRIGHT.

Witnesses:

ELLERY G. BEAN,  
P. F. THOMAS.