

### Patented June 15, 1937

## 2,083,595

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# UNITED STATES PATENT OFFICE

#### 2,083,595

#### **MASSAGING DEVICE FOR GUMS**

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Application January 15, 1937, Serial No. 120,675

4 Claims. (Cl. 128-62)

This invention relates to a massaging device which is intended for use with a tooth brush whereby said device may be adapted to be slipped onto the handle of a tooth brush and held in 5 place thereon.

It has heretofore been proposed to form tooth brushes having rubber members therein and in one such structure, the tooth brush proper was composed of a series of cup-like members of

- 10 rubber or the like and the tooth paste was intended to be held within the said cups and to be thereby distributed on the teeth during the brushing operation. The purpose of this was to more efficiently utilize the paste in order to
- 15 polish the tooth enamel. In another prior art structure, the tooth brush proper was formed of a combination of bristles and of cup-shaped rubber members, the purpose being to provide means for massaging the gums as well as cleaning
- 20 the teeth. However, such a combination is not entirely suitable either for brushing the teeth or for massaging the gums, as there was not a sufficient amount of bristle to efficiently brush the teeth and in an attempt to massage the gums
- 25 with this combination, the bristles interfered with the operation of the cup-shaped members. In all of the structures of the prior art where

a gum massaging device was provided, this was a permanent part of the tooth brush proper and

- 30 it required a complete structure in order to provide for such a massaging device. The present invention is intended and adapted to avoid the necessity of a complete massaging device, it being among the objects of the present invention
- 35 to provide a structure which comprises a device capable of being held onto a tooth brush but not a part thereof, and to be readily removed therefrom when use thereof is not desired or left in place. By such a structure I am enabled to uti-
- 40 lize the standard tooth brush on the market and to merely provide a small attachment which is intended to fit on the end of the tooth brush handle.

My invention consists essentially of a sleeve 45 of elastic material such as rubber, said sleeve being relatively thin and being capable of stretching to a substantial degree. Usually the form of the sleeve is rectangular and a series comprising one or more cup-shaped members integrally

50 formed therewith are provided on one of the longer faces of the sleeve. The cup-shaped members have projections extending from the central portion of said cups for a substantial distance beyond the upper rim of said cups. These

55 projections are of such heights as to conform,

to the shape of the gums, and to allow said projections to massage interproximately between the teeth as the free ends of the cups massage the surrounding area of the gum. Preferably, one end of the sleeve is closed in order to prevent the same from slipping too far onto the tooth brush handle. A mirror may be embedded in the opposite face of the sleeve to allow inspection of the teeth while massaging the gums.

In the accompanying drawing constituting a 10 part hereof, and in which like reference charac-

ters indicate like parts, Fig. 1 is a side elevational view of a tooth brush showing the device of the present invention in place thereon;

Fig. 2 is a fragmentary plan view of the free end of the tooth brush handle showing the device in place;

Fig. 3 is an enlarged view taken along the line 3-3 of Fig. 2, some parts being shown in section 20 and some parts being shown in elevation; and

Fig. 4 is an end view of the device of the present invention.

Fig. 5 is a plan view showing the face of the mirror.

The tooth brush comprises the ordinary handle 1 having at one end thereof a set of bristles 2 fixed therein. The free end 3 of the handle has an opening 4 therein as is usually provided in tooth brushes, and the extreme tip 5 thereof 30 is rounded as shown in Fig. 2.

My new attachment comprises a sleeve 6 having relatively thin walls 7 of elastic rubber or the like, one end 8 of said sleeve being open and the opposite end 9 being closed. A series of extensions 10 and 11 provide cup-shaped members 13 at the upper ends thereof and projections 14 extending from the central portion of said cups to a substantial distance above the rim 15 thereof. A mirror 16 may be secured to the face 17 of 40 sleeve 6 in order to allow inspection of the gums and teeth while using the device by holding a second mirror in front of the mouth.

The internal diameter of the sleeve and the shape thereof is such that it may be readily 45 slipped over the free end of the tooth brush handle. Since tooth brush handles are made in various sizes, it is usual to make the inside dimensions of the sleeve such as to fit snugly over the smallest of the standard sizes of handles. Be- 50 cause of the rounded character of the end of the handle and the thinness of the wall 7 of the sleeve, when the larger sizes of handles are used, it is a simple matter to slip the open end 8 of the sleeve over the rounded end 5 of the handle and 55 by slight pressure force the device 6 firmly onto the end of said handle.

In use, the cup-shaped members have an important function in the massaging of the gums. They tend to bring the circulation of blood to the surface of the gums and the projections 14 extending beyond the rims of the cups enter between the teeth and assist in massaging the gums at normally inaccessible places.

Although I have described my invention set-10 ting forth a single embodiment thereof, it is quite apparent that the invention is susceptible of many changes within the spirit of the invention. For instance, in place of two cup-shaped 15 members, only one may be used and more than two are normally applied to the device. It might even be advisable in certain instances to have a

- considerable number of cup-shaped members fitted along a substantial portion of the length 20 of the handle. The exact form, size and shape of the various parts of the device may be changed to suit the conditions. The end 9 of the sleeve may be open, but I usually prefer to have it
- closed as it fixes the position of the device on 25 the handle. The sleeve 6 is shown as having the shape of a rectangle, but this may be changed to any other suitable form, as it is quite obvious that other forms will also fit over the end of a tooth brush handle. The sleeve may be split or 30 may have open portions along its length and the
- material thereof may be changed at will.

In place of a sleeve for holding the device on the tooth brush, I may provide an integral rubber plug adapted to fit into the hole 4 and also 35 provide a metal or other clip at one or both

ends of the device, said clip being adapted to clamp around the tooth brush handle. The massaging elements II need not be of the same height and I may make the outer element higher than 40 the rest to facilitate massaging of a small area without interference by other elements. The mirror may be held in place by suitable means and there may be molded on the sleeve a frame for the mirror which has re-entrant angles so

that the mirror may be slipped into place and held by said frame.

These and other variations in the details of my invention will be apparent to those skilled in the art, and the invention is to be broadly con-5 strued and to be limited only by the character of the claims appended hereto.

What I claim is:

1. A dental massaging device comprising a sleeve of elastic material, and a plurality of mas- 10 saging elements projecting from a face of said sleeve, each of said elements comprising a cupshaped member and a projection extending from the bottom of said cup and a substantial distance beyond the rim thereof. 15

2. A dental massaging device comprising a sleeve of elastic material, massaging elements projecting from a face of said sleeve, said sleeve being adapted to fit onto the free end of a handle, each of said elements comprising a cup- 20 shaped member and a projection extending from the bottom of said cup and a substantial distance beyond the rim thereof, said projections being of different lengths.

3. A dental massaging device comprising a 25 sleeve of elastic material, a massaging-element projecting from said sleeve, said sleeve being adapted to fit onto the free end of a holding means, said element comprising a cup-shaped member and a projection extending longitudinal- 30 ly from the bottom of said cup and a substantial distance beyond the rim thereof.

4. A dental massaging device comprising a sleeve of elastic material closed at one end, a plurality of massaging elements projecting lat- 35 erally from one face thereof, the opposite face being substantially smooth, said sleeve being adapted to it onto the free end of a holding means, said elements comprising a cup-shaped member and a projection extending longitudinal- 40 ly from the center of the bottom of said cup, and a substantial distance beyond the rim thereof.

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