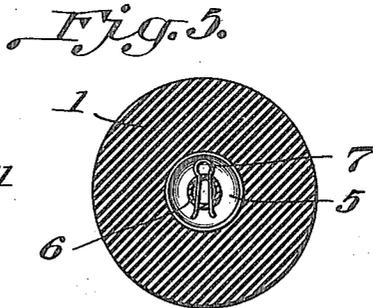
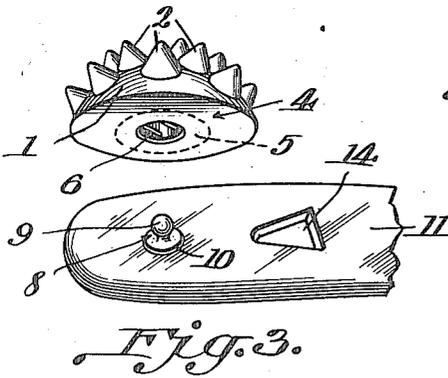
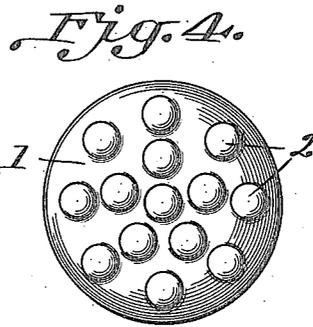
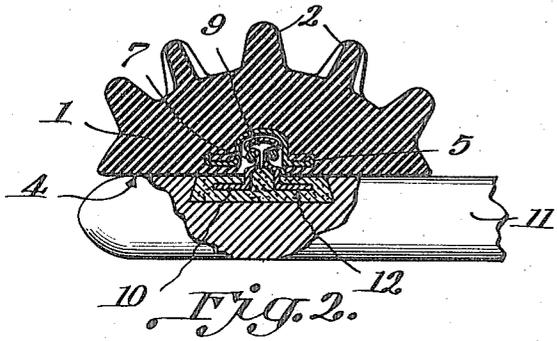
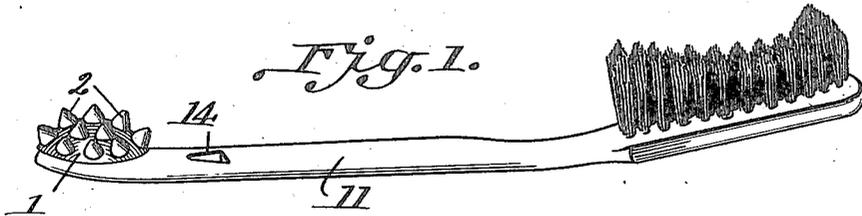


I. R. WHEELER.  
MASSAGING DEVICE.  
APPLICATION FILED JUNE 14, 1915.

1,153,409.

Patented Sept. 14, 1915.



*Inventor:*

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# UNITED STATES PATENT OFFICE.

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## MASSAGING DEVICE.

1,153,409.

Specification of Letters Patent. Patented Sept. 14, 1915.

Application filed June 14, 1915. Serial No. 34,066.

*To all whom it may concern:*

Be it known that I, IRA ROLLINS WHEELER, a citizen of the United States, and a resident of the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Massaging Devices, of which the following is a specification.

This device relates broadly to dental implements and more especially to a device for massaging gums, etc.

The principal object of this invention is to provide a device of the character specified wherein the operative portion or wear surface is readily removable for cleaning and replacing when desired.

A further object of this invention, is the provision of a device for the purpose specified wherein the massaging implement is mounted upon a suitable handle, preferably a tooth brush handle, in such manner as to be capable of rotary movement.

A still further object of this invention is the production of a device of the character specified wherein the operative tool comprises a semi-spherical member, of rubber, gutta-percha, or other resilient material, detachably mounted to rotate on a pivot at substantially right angles to the longitudinal axis of a tooth brush or other suitable handle.

Another and important object of the present invention is the construction of a device for the purpose specified comprising a semi-spherical member of resilient material covered with small conical projections, the axes of the cones being substantially coincident with the radii of said semi-spherical surface, the whole being mounted to rotate, but there being sufficient friction between the operative member and the handle to provide the necessary resistance to rotation to enable a proper massaging action to be obtained.

Other and further objects of this invention will in part be obvious and will in part be pointed out hereinafter in the specification following by reference to the accompanying drawings forming a part of the said specification.

Like characters are used to represent like parts throughout the various figures of the drawings and the descriptive matter hereinafter following.

Figure 1 is a view illustrating the device as applied to a tooth brush handle. Fig. 2

is an enlarged detail view showing a portion of the device in section and disclosing the construction of the pivot on which the device is mounted. Fig. 3 is a detail view showing the device as detached from the pivot or stud on which it is adapted to be retained. Fig. 4 is a plan view looking directly at the top of the device. Fig. 5 is a section taken directly through the detachable button or stud to illustrate the construction thereof.

The massaging of the gums and various portions of the mouth cavity, including the roof of the mouth, is of particular importance in the treatment of certain ailments, and is desirable and exhilarating even under normal and healthy conditions, and various types of devices or implements have been designed to accomplish this work. In devices adapted for use in the mouth it is extremely desirable that extraordinary attention be paid to the feature of cleanliness. Where rubber or gutta-percha members are secured to the handle it is difficult to properly sterilize the construction since it is very difficult to secure gutta-percha or rubber to a handle without leaving an opening or seam which will form a lodgment place for germs. Also in connection with devices of this character it is desirable that a uniform wear surface be provided and it is particularly essential that the construction be such as to facilitate the use of the implement.

The device which will hereinafter be described by reference to the drawings, is intended especially to provide a sanitary construction wherein the operative implement may be separated from the handle whereby the cleaning of the parts is greatly facilitated. Furthermore, the device is so constructed as to compensate for wear on any particular portion thus increasing the effective life of the implement. Furthermore, the construction comprises the mounting of the operative implement to permit rotation thereof when a predetermined resistance has been overcome, so that the danger of injury to the gums due to the use of the device is substantially overcome.

Referring now to the drawings, the preferred form of my device comprises a massaging head or bulb 1 of a general contour that is substantially semi-spherical, the said semi-spherical bulb being constructed on the curved surface thereof with a plurality

of conical projections 2 which are arranged so that the axes of the cones are substantially coincident with the radii of the semi-spherical member or bulb. While the conical members 2 may be arranged in various manners over the surface of the body member, I prefer that they be arranged in substantially concentric circles. The back surface 4 of the bulb or body member 1 is substantially flat and in my preferred form the button portion 5 of a snap fastener is embedded adjacent or immediately beneath said rear surface 4 so that the opening 6 on the button is substantially coincident with the center of the body member. This button portion 5 of the fastener may be of the usual construction including the retaining wires 7 which are constructed to cooperate with the groove 8 formed beneath the head 9 of the pin or stud 10 which is embedded in a suitable handle 11. Where the handle 11 is of bone or of material that cannot be easily reduced to plastic condition, the stud may be secured by cement 12, as for example, as illustrated in Fig. 2. Where the handle 11 is of composition as is usual in tooth brush handles, the stud 10 is preferably mounted in the handle during the construction of the handle.

Various types of fasteners may be utilized to rotatably secure the gutta-percha or rubber massaging member 1 to a suitable handle and various sorts of handles may be used, but I prefer that the device be mounted upon the inner side of a tooth brush handle 10, as I have illustrated in Fig. 1. In this construction a suitable opening 14 is provided to permit the implement to be hung upon a hook as is common practice with tooth brushes. The mounting of the device 1 upon the inner side of a tooth brush

handle enables the operator to take advantage of the curve of the handle which facilitates manipulation of the device and where the tooth brush handle is flexible as is common in the art, the flexibility thereof aids in the manipulation and use of the massaging member.

Having thus described my invention what I claim is:—

1. In a device of the class described in combination, a substantially semi-spherical gutta-percha body member, a plurality of projections formed upon and integral with said body member, a relatively flat handle, a stud mounted on said handle adjacent one end thereof, a detachable member carried by said body member and constructed to cooperate with said stud to form a detachable connection between said handle and said body member.

2. A dental implement comprising a body portion formed of resilient material, a plurality of protuberances extending from and integral with said body portion, the back of said body portion being substantially flat and of a circular contour, a handle, and a snap button fastener for securing said body portion to said handle.

3. In a dental implement, a resilient body portion, a relatively flat handle, a detachable snap fastener having one element secured to the side of said handle and the other element secured to said body portion, said snap fastener comprising a detachable connection for securing said resilient body portion to said handle to facilitate removal of said body portion from said handle and to permit said body portion to rotate relative to said handle.

IRA ROLLINS WHEELER.