Dec. 1, 1931. W. W. OZON 1,834,726

SANITARY BRUSH GUARD

Filed Dec. 7, 1929

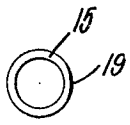


Fig. 2.

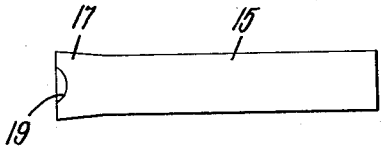


Fig. 1.

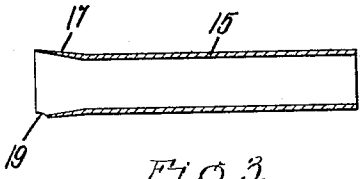


Fig. 3.

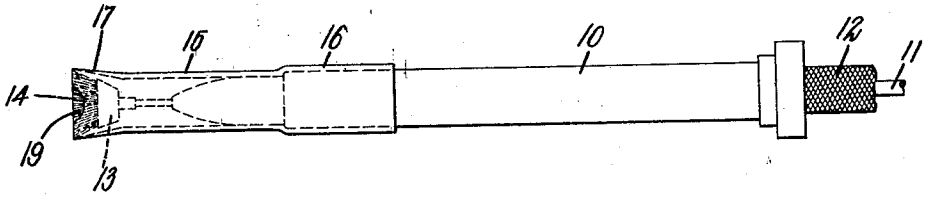


Fig. 4.

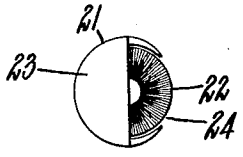


Fig. 6.

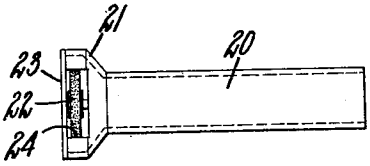


Fig. 5.

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UNITED STATES PATENT OFFICE

WALLACE W. OZON, OF BROOKLINE, MASSACHUSETTS

SANITARY BRUSH GUARD

Application filed December 7, 1929. Serial No. 412,404.

This invention relates to a guard for dental brushes and other forms of rotary abrasive members utilized for cleaning and polishing teeth and fillings therefor.

In the operation of cleaning and polishing teeth and fillings therefor dentists employ power driven rotary brushes to which a suitable dentifrice is applied and also various forms of rotary abrasive members, and in each instance the action of the rapidly rotating cleaning members is to throw and scatter the dentifrice and also particles of decayed matter from the teeth within the mouth of the patient, and it is, furthermore, possible for the abrasive member to also throw these particles outwardly from the mouth of the patient into the face and eyes of the dentist.

The object of this invention is to provide a simple and inexpensive form of sanitary guard which may be attached to the handle of the driving device for the rotary member and surround the abrasive member in such a manner that the particles of material will be prevented from being scattered as mentioned.

The invention consists in a guard for rotary abrasive dental appliances as set forth in the following specification and particularly as pointed out in the claims thereof.

Referring to the drawings:

Figure 1 represents a side elevation of a guard embodying my invention.

Fig. 2 is an end elevation of the guard as viewed from the left of Fig. 1.

Fig. 3 is a central longitudinal section through the guard.

Fig. 4 is a side elevation illustrating the guard attached to the handle portion of a driving member for a rotary dental brush.

Fig. 5 is a side elevation of another form of guard embodying my invention.

Fig. 6 is an end elevation of the guard illustrated in Fig. 5 viewing the same from the left hand end of said figure.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, referring particularly to Figs. 1 to 4 inclusive, 10 represents the handle for a rotary driving member 11 of well known form which is located within a flexible tube 12 which is also attached to the handle 10. 13 represents a cup-shaped form of dental brush which is adapted to be driven in a well known manner by the driving member 11, and 14 represents the bristles of said brush.

A guard 15 constructed of flexible material, preferably transparent rubber, is secured to the outer end portion of the handle 10, preferably by being expanded and applied to said handle in such a manner that it will frictionally engage the same as illustrated at 16. The outer end portion of the guard 15 flares outwardly at 17 and the material, furthermore, of said flared portion tapers in thickness as it approaches the outer extremity of said flared portion, see Fig. 3. The guard 15 is so positioned upon the handle 10 that the rotary brush 13 will be located within the flared portion 17 thereof and a portion of the outer edge is notched at 19 in such a manner that the outer portion of the periphery of the brush will project outwardly through said notch a short distance in order that the bristles 14 may contact with the teeth of the patient when the brush is rotated.

In the operation of cleaning and polishing teeth and fillings therefor a dentifrice is applied to the bristles 14 of the brush 13 and the guard 15 is placed against the teeth with the notched portion of the guard resting against said teeth in such a manner that the bristles 14 will effectively clean the teeth, and during the cleaning operation, the flared portion 17 of the guard 14 will enclose the brush 13 in such a manner that it will prevent particles of the dentifrice or particles of decayed matter from the teeth from being scattered throughout the mouth of the patient, or thrown outwardly from the mouth of the patient into the face and eyes of the dentist.

In Fig. 5 I have illustrated a modified embodiment of my invention in which 20 represents a guard of flexible material, preferably transparent rubber, having an enlarged outer end portion 21 formed integral therewith adapted to receive and partially enclose a disc type form of dental brush 22. In this form of guard a portion of the outer extremity is enclosed at 23 and an aperture 24 is provided in the periphery of the en-

larged end portion 21 of the guard in such a manner that the extremity of the bristles of the brush 22 may project laterally through the aperture.

In this form of guard the material of which the end portion 21 is formed is reduced in thickness as it approaches the aperture 24, see Fig. 6, thereby making it possible for the brush to effectively engage the teeth.

The guard illustrated in Figs. 5 and 6 may be used in exactly the same manner as the guard illustrated in Figs. 1 to 4 inclusive for the purpose of protecting both the patient and the dentist.

It is evident that any of the well known forms of rotary dental cleaning and polishing devices that are either abrasive in character or are adapted to have an abrasive dentifrice applied thereto may be protected by the guard of this invention.

It is furthermore evident that the guard of this invention may be manufactured at such small cost that it may be discarded after it has been exposed to the mouth of a patient although it is evident that it may be sterilized in any well known manner if desired.

I claim:

1. The combination with a rotary abrasive member and handle of a driving device therefor of a tubular expansible guard adapted to frictionally engage said handle and partially surround and enclose said abrasive member, said guard being provided with an aperture therein through which a portion of the periphery of the abrasive member may project.

2. The combination with a rotary abrasive member and handle of a driving device therefor of a tubular expansible guard adapted to frictionally engage said handle and embodying therein a flexible end portion adapted to partially enclose said abrasive member, there being an aperture provided in said end portion through which a portion of the periphery of the abrasive member may project.

3. The combination with a rotary abrasive member and handle of a driving device therefor of a tubular guard adapted to frictionally engage said handle and embodying therein a flexible end portion adapted to partially enclose said abrasive member, there being an aperture provided in said end portion through which a portion of the periphery of the abrasive member may project, and the material of said flexible end portion tapering in thickness toward said aperture.

In testimony whereof I have hereunto set my hand.

WALLACE W. OZON.