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DENTAL PLATE BRUSH

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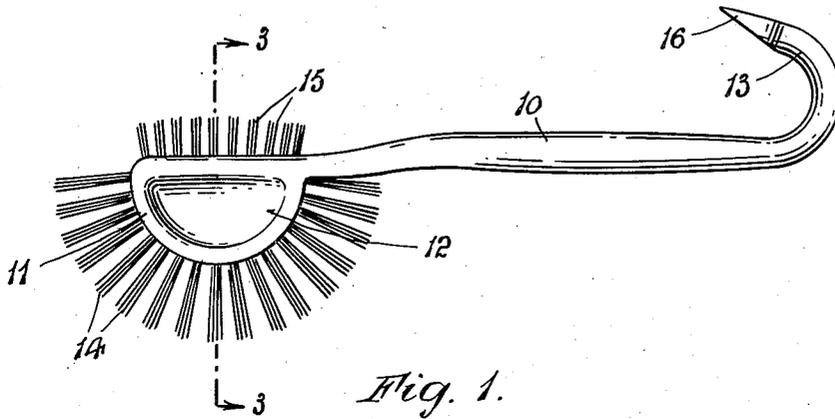


Fig. 1.

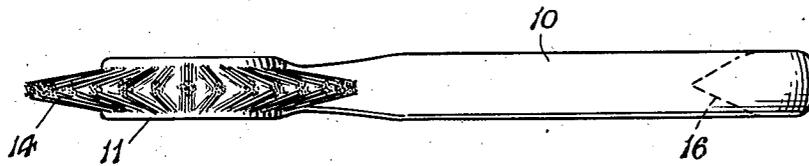


Fig. 2.

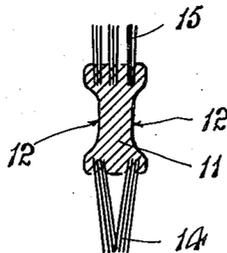


Fig. 3.

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DENTAL PLATE BRUSH

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2 Claims. (Cl. 15-167)

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This invention relates to a brush for the cleaning of dental plates and has for its object to provide such a device capable of easy manipulation in a natural manner by the user, more particularly with regard to the brushing of the inner concave surfaces of dental plates which are more or less difficult to reach with brushes as ordinarily constructed for that purpose, especially in view of the manner in which such brushes are usually required to be held.

The present invention contemplates a brush of a semi-circular character capable of being so held that the fingers of the operator will grasp in a natural manner a handle extending radially from the brush, while the thumb of the operator will be accommodated at or near the axis of the semi-circular brush to act as a pivot about which the said handle is moved to provide for the oscillation of the brush about such pivotal point and the cleaning of the inner surfaces of a dental plate thereby facilitated with firm and untiring control of the movements of the brush.

Still further, the said invention provides for hooked or looped means at the extremity of the handle for engaging the outer edge of the hand of the operator whereby leverage of the hand in oscillating the brush about the pivotal point is effectively applied in both directions of rotation of the brush and with a minimum of effort on the part of the user, the said hook or loop further serving to prevent tilting of the brush about the longitudinal axis of the handle from its desired plane of operation.

Still further objects or advantages additional or subsidiary to the aforesaid objects, or resulting from the construction or operation of the invention as it may be carried into effect, will become apparent as the said invention is hereinafter further disclosed.

In carrying the said invention into effect, I may provide a handle with a semi-circular portion extending downwardly from one end thereof and equipped with radially disposed bristles forming a brush, said semi-circular portion having a depression in its face for the accommodation of the ball of the thumb of the user, and a looped or hooked portion at the opposite end of the handle to receive the outer edge of the hand of the user grasping the said handle. All of which is more particularly described and ascertained hereinafter, by way of example, having reference to the accompanying drawing, wherein:

Figure 1 is an elevation of a dental plate brush embodying the said invention;

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Figure 2 is a plan of under side of the same; and

Figure 3 is a cross section taken on a plane indicated by the line 3-3 in Figure 1.

Similar characters of reference indicate several parts in the several figures of the drawing.

An elongated handle 10 is shown terminating at one end in a downwardly projecting semi-circular thumb piece 11 which I prefer to recess, as at 12, for the easy resting of the ball of a user's thumb therein. Accordingly the thumb of a user grasping the handle 10 of the device would rest in the proximity of the center of the said semi-circular thumb piece 11.

At the other end of the said handle 10 an upwardly bent hooked portion 13 is shown which, it will be obvious, may receive and form a rest for the outer edge of the hand grasping the said handle, operate to prevent the turning of the handle in the hand, and also operate to facilitate movement of the handle by the hand about the pivotal point of the thumb resting on the said thumb piece 11.

Attached in any suitable manner to the arcuate periphery of the said thumb piece 11 are bristles 14 forming a semi-circular brush, well adapted to the cleaning of the inner surfaces of a dental plate by the oscillation of such brush within the plate and about the focal point of the said bristles. While such arcuate brushes have long been utilized for similar cleaning purposes, the method of holding and operating them has been awkward and more or less inefficient, thus placing an unnatural strain on the muscles of the hand and fingers of the operator and also in many cases having a tendency to tilt the brush one way or the other from the desired plane of oscillation.

Such undesirable features are entirely avoided with a brush embodying the invention of applicant, wherein the engagement of the thumb of the user with the thumb piece at a point proximate to the focal point of the bristles permits the said brush to be readily operated about the ball of the thumb as a pivot by the hand grasping the handle 10. Firm control of this operation is insured by the engagement of the outer edge of the hand in the loop 13 of the handle, resulting in effective leverage being applied in both directions of movement of the hand in oscillating the brush as desired; and, as this engagement of the loop 13 with the hand also prevents any tendency of a handle to twist within the hand, the grasp of the fingers on the handle need be

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quite light and therefore much less tiresome than would otherwise be the case.

It will be readily recognized that by suitably forming the surfaces of the thumb piece 11 as by providing thumb recesses 12 on both sides thereof the device will be equally applicable for use by both right-handed and left-handed persons with equal efficiency.

15 15 illustrates bristles forming a substantially straight brush on the upper side of that end of the handle provided with the thumb piece 11, the provision of this brush being for use in cleaning the outer portions of the plate and simply constitutes a refinement and is not an essential part of the present invention; and 16 indicates 20 a pointed portion formed on the end of the looped portion 13 of the handle, which pointed portion may be used for the purpose of dislodging stubborn foreign material from the crevices between the teeth when this is considered necessary or desirable.

This invention may be developed within the scope of the following claims without departing from the essential features of the said invention, and it is desired that the specification and drawing be read as being merely illustrative of a practical embodiment of the said invention and not in a strictly limiting sense.

What I claim is:

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1. In a device of the class described, an elongated handle to be grasped solely by the fingers of the user, a thumb rest at one end of said handle, a bent over portion at the other end of said handle to receive and embrace the outer edge of the hand of a user, and bristles extending radially from said thumb rest to form an arcuate brush, as and for the purposes specified.

2. In a device of the class described, an elongated handle to be grasped solely by the fingers of the user, a semi-circular thumb piece extending laterally from one end of said handle to provide a fulcrum point for the thumb, bristles extending from the periphery of said thumb piece to form an arcuate brush, the other end of said handle being bent in an opposite direction to said thumb piece to receive and embrace the outer edge of the hand of a user, as and for the purposes specified.

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The following references are of record in the file of this patent:

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