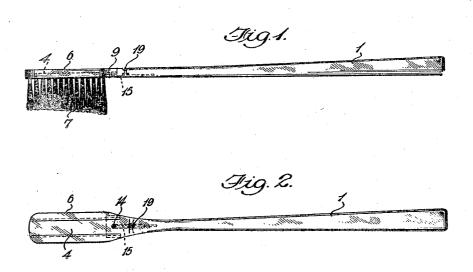
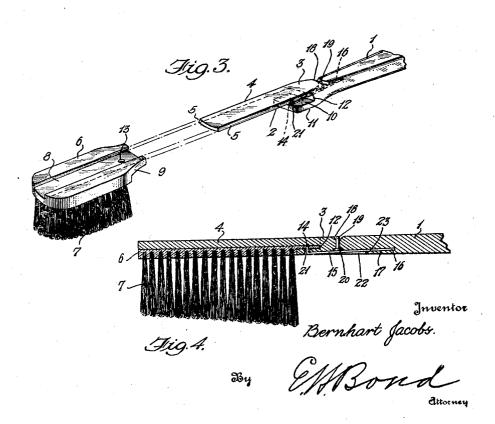
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BRUSH

Filed Jan. 30, 1930





## UNITED STATES PATENT OFFICE

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## BRUSH

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This invention relates to certain new and useful improvements in brushes and more particularly to tooth-brushes, and it has for its object, among others, to provide a brush of this general character in which the brush or bristle portion shall be readily detachable from the handle, so that the handle, which may be of a more or less expensive nature, may be used for an indefinite period with 10 renewable brush ends.

A further object of the invention is to provide a brush of this character which shall be attractive in appearance, and in which the novel features thereof will be hardly dis-15 cernible so as to not detract from the brush

as an entirety.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be pointed out in the 20 appended claim.

Referring to the drawings:

Fig. 1 is a side elevation of a tooth-brush constructed in accordance with the present invention.

Fig. 2 is a bottom plan view of the same.

Fig. 3 is a perspective detail showing the handle and brush element in separate position, but with the parts relatively disposed.

Fig. 4 is a substantially central longitudi-30 nal section of the brush in its complete form. Like numerals of reference represent like parts throughout the several views.

1 designates the handle portion which may be of any well-known or preferred type,

35 shape, etc., except as hereinafter specified. The under side thereof is cut away as shown at 2, (see Fig. 3) this portion of the member being substantially one-half the thickness of the adjacent portion 3 as shown in Figs. 3 and 4. This handle portion may be of any suitable material, configuration and made as costly or inexpensive as may be desired. The portion 4 of this reduced part of the handle is dove-tailed in form, that is, the side edges are beveled as seen at 5 in Fig. 3.

6 designates the body-portion of the brush which may be of any desired shape and matethe one side thereof, while the other side is shown in Fig. 4 that normally the spring rial, carrying the bristles 7 projecting from provided with a longitudinal dove-tailed member 15 tends to keep the portion 19 in

groove or recess 8 shaped to conform to the shape of the member 4, the latter being adapted to be slid into the said recess, as will be apparent from Fig. 3. It is to be noted that the recess and the portion 4 are of such 55 nature that when the two members are assembled the upper edge or face of the member 4 will be flush or substantially so with the upper face of the member 6, and the result is a neat appearing finish.

The member 6 has a reduced projecting portion 9 which is received within the space 10 formed between the portion 3 and the portion 11, abutting against the shoulder 12 as seen clearly in Fig. 4.

The portion 9 has a transverse opening 13 adapted to receive a right-angled member 14 on a member 15, preferably resilient, the other end of which, as seen at 16, is received in the longitudinal recess 17 in the portion 1,

as seen in Fig. 4.

The handle portion 1 has, adjacent the shoulder 12, an opening 18 in which is loosely received a member 19 such as a headed member or its equivalent,—19 above referred to— 75 the head 20 thereof being receivable, preferably, within a depression in the under side of the member 1 as seen in Fig. 4, and in alignment with the member 16 which latter, it is to be remembered, is resilient.

The right-angled portion 14 is passed loosely through an opening 21 in the member 10, as seen clearly in Fig. 4, and thence into the opening 13 in the member 6. This member 15 being resilient, its natural tendency is to project its end 14 through the opening 21 and into opening 13, in the brush head, so that the parts are firmly united yet permitting a ready detachment of the brush head

when desired. The handle member 1 is provided with a transverse depression or the like 18 into which the free end of the outer end of the member 19 projects, this provision being for the purpose of applying pressure to the end of the member 19 when it is desired to disconnect the brush portion from the handle. It will be readily understood from the parts

the opening so that the member 14 will be extended through the openings 13 and 21 so that the brush member is immovably retained upon the handle, but when pressure is applied to the exposed point of the member 19, the portion 14 of the resilient member is forced out of engagement with the openings 13 and 21 so that the brush portion may be readily slid out of engagement with the mem-10 ber 4, as indicated in Fig. 3 for substitution of a new brush portion, or for other purposes.

As shown in Fig. 4, the under side of the handle 1 adjacent the headed member is provided with a longitudinal groove or the like 15 22 to permit necessary movement of the member 15, the shoulder 23 thus formed serving as a fulcrum on which the said member 15 may move.

Modifications in detail may be resorted to 20 without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is:

An improved article of manufacture, a tooth-brush comprising a brush head with 23 a longitudinal recess having marginal grooves in the upper face of its body portion, said head having a reduced projecting portion having an opening therethrough, a handle portion having on one face an extension 30 received in the said groove of the brush head and having a spaced extension upon its opposite face engageable with the projecting portion of the brush head, and resilient means carried by the brush-handle and piercing the 35 overlapped members of the brush head and handle portion to retain them against undue movement.

In testimony whereof I affix my signature. BERNHART JACOBS.

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