A. FRESCHL.

DENTAL FLOSS HOLDING DEVICE.

APPLICATION FILED JULY 16, 1915.

1,220,409. Patented Mar. 27, 1917.

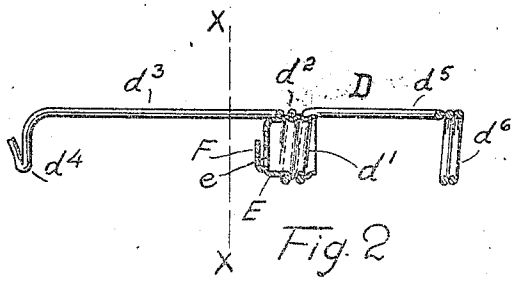


Fig. 2

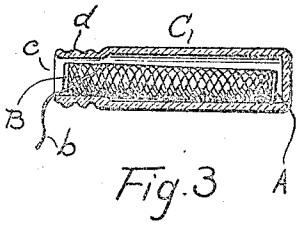


Fig. 3

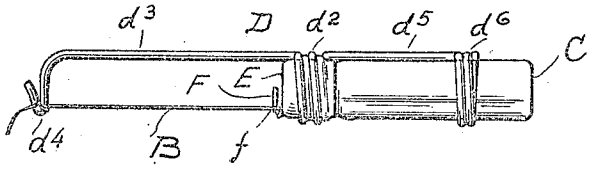


Fig. 1

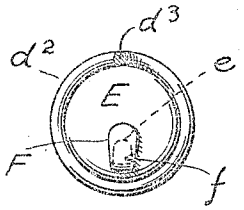


Fig. 4

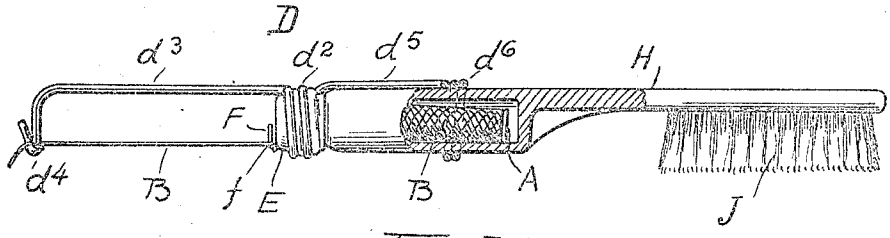


Fig. 5

Witness

Robert W. Van Bolden

INVENTOR

Alfred Freschl

BY

Raymond A. Parker

ATTORNEY

UNITED STATES PATENT OFFICE.

ALFRED FRESCHL, OF DETROIT, MICHIGAN.

DENTAL-FLOSS-HOLDING DEVICE.

1,220,409. Specification of Letters Patent. Patented Mar. 27, 1917.

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To all whom it may concern:

Be it known that I, ALFRED FRESCHL, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Dental-Floss-Holding Devices, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to devices for using dental floss or like material in the care and preservation of the teeth, and consists in the construction, arrangement, and combinations hereinafter described and specified in the claims.

In the drawings,—

Figure 1, is an elevation of one form of the device.

Fig. 2, is a longitudinal section of the device of Fig. 1 with he floss-holding case (preferably of glass) removed.

Fig. 3, is a longitudinal section of the floss-holding case and floss therein.

Fig. 4, is a cross-section on line X—X of Fig. 2.

Fig. 5, is a view of a modified form, partially in section, the modification consisting in the association of the device with a tooth brush as one article.

Similar letters refer to similar parts.

In the drawings, A represents a spool on which is wound the floss B. This spool is inserted in a small glass receptacle C. This glass receptacle C takes the form of a tube or bottle having a screw-threaded mouth *c*.

A frame D is provided, which comprises a wire having an acute hook d^4 at one end, a bow portion d^3, and a spiral d^2 adapted to engage about the threaded cap E of the glass tube C. This cap E is non-rotatably held in place by the spiral or bearing d^2, preferably being soldered thereto. The wire after completing the spiral d^2 has an arm d^5 extending away from the spiral d^2 and forming a second spiral or bearing d^6 adapted to form two widely spaced bearings for the frame and bow with respect to the glass tube. This affords the bow when subjected to a bending stress in usage, a very secure mounting on the glass tube which would not be the case if the attachment were only on the cap.

It will be noted that the cap E has a perforation *e* with a lip F. When a new spool of floss is to be inserted in the holder, the spool is dropped into the glass receptacle, the strand *b* threaded through the opening *e*, and it can then be wound once or twice around the lip F, and if need be, in the notch *f*, then drawn up over the acute hook d^4 once or twice, thereby forming a connection with the frame-work, the bow having a string which may be drawn through the teeth to disengage foreign particles.

It will be noted that the cap for the bottle really forms part of the frame-work and that the bottle may be very easily removed to have access to the spool or change the spool by simply unscrewing it.

In Fig. 5, I have shown this device in connection with the handle of the tooth-brush. The handle may be hollowed and slipped inside of the coils d^6, the hollow part containing the floss-carrying spool A. In fact, instead of using the receptacle C for the floss-carrier A, the handle H of the tooth-brush J, when so hollowed, may be formed at the end with a rough screw-thread which will engage with the cap E in the same manner as the receptacle C.

What I desire to claim is:

1. In a dental floss-holding device, the combination of a frame having a bow portion, a bearing portion, a screw-threaded cap non-rotatably secured in said bearing portion, a second bearing portion spaced from the first-mentioned bearing portion, said cap being provided with an aperture and a lip, and a receptacle provided with a screw-threaded mouth adapted to be passed through the second bearing portion and screwed into the cap of the first bearing portion.

2. In a dental floss-holding device, the combination of a frame comprising a bow portion having an acute hook at its outer end, a bearing portion, an arm extending from the bearing portion to a spaced point, a second bearing portion located on the end of said arm, a threaded cap non-rotatably held in the first bearing portion and provided with an aperture and a hook member intergrally secured thereto, and a floss-hold-

ing receptacle adapted to be passed through the second bearing portion and screwed into the cap.

3. In a dental floss-holding device, the combination of a frame-work comprising a bow portion having at its outer end an acute hook, a bearing portion, a screw-threaded cap non-rotatably held in said bearing portion and provided with an integral hook-like member and an aperture, and a floss-holding receptacle adapted to be screwed into said cap.

In testimony whereof I sign this specification.

ALFRED FRESCHL.