

No. 844,181.

PATENTED FEB. 12, 1907.

C. M. OVERBAUGH.
DENTAL FLOSS HOLDER.
APPLICATION FILED OCT. 26, 1906.

Fig. 1.

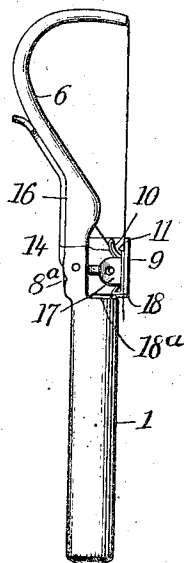


Fig. 2.

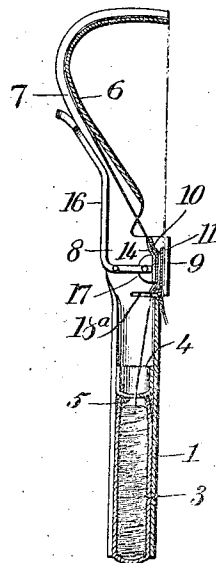


Fig. 3.

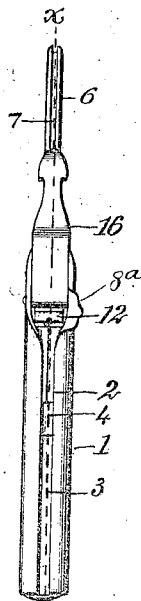
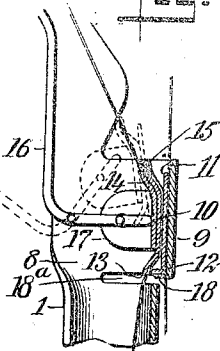


Fig. 4.



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DENTAL FLOSS-HOLDER.

No. 844,181.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed October 26, 1906. Serial No. 340,675.

To all whom it may concern:

Be it known that I, CHARLES M. OVERBAUGH, a citizen of the United States, and a resident of Clarion, in the county of Wright and State of Iowa, have invented a new and Improved Dental Floss-Holder, of which the following is a full, clear, and exact description.

This invention relates to improvements in holders for floss employed in dentistry for cleaning between the teeth, the object being to provide a device of this character that will be simple in construction in which new lengths of floss may be quickly adjusted when required and tightly clamped.

I will describe a dental floss-holder embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of a dental floss-holder embodying my invention. Fig. 2 is a section on the line $x-x$ of Fig. 3. Fig. 3 is a back view, and Fig. 4 is a section of a portion of the device drawn on an enlarged scale and clearly illustrating the clamping means.

Referring to the drawings, 1 designates the metal handle of the device, which is open longitudinally at one side, as indicated at 2, so that the handle may yield to frictionally hold the floss-cartridge 3. Also frictionally held in the handle is a cap 4, used to hold the floss in the floss-cartridge. This cap is slitted on one side, the said slit terminating in a centrally-located perforation 5, through which the floss passes. By placing the cap so that the slit in said cap is in the center of the longitudinal opening in the handle of the device the floss may be passed through the perforation 5 on the insertion of a new cartridge without removing the cap from its place in the handle. At one end of the handle and integral therewith is a curved head 6, the free end of which terminates practically in a straight line, or rather in the same plane, with a clamping device to be hereinafter described. This curved portion on the rear side is channeled, as indicated at 7, and through this channel the floss passes. At the juncture of the curved portion and the handle the material is widened to form cheek-pieces 8, one of which, as clearly indicated in Fig. 1, is somewhat wider than the other, and

the wider cheek-piece has at its end a laterally-extended member 9, which forms one jaw of the clamping device.

The outward edge of the lesser cheek-piece at the juncture of said cheek-piece and the handle terminates in a knife-edge 8^a, on which a used length of floss may be severed when fresh floss is in position for use.

The movable part of the clamping device consists of a spring-yielding plate bent to form jaw members 10 11, which coact one with the other, and the jaw 11 coacts with the stationary jaw 9. At the lower portion the jaws 10 and 11 are joined by a substantially triangular bend 12, provided with a perforation 13, through which the floss passes, and at the upper end the jaw 10 is connected to an inwardly-extended plate 14. The space between the members 10 and 14 is designed to hold packing to compensate for wear and to regulate the pressure of the clamping-jaws. The packing is held firmly in place by the inwardly-turned upper portion of the plate and the lugs 17. At the juncture of the jaw and the plate is a perforation 15, through which the floss may pass. The perforations 13 and 15 serve as guides to hold the floss in the center of jaws 10 and 11.

Pivoted between the cheek-pieces is an angle-lever 16, a portion of which extends upward at the rear side of the device, and a transversely-disposed portion has pivotal connection with lugs 17, formed on jaw 10 of the clamping device. At the edge of the clamping member 9 adjacent to the handle is an inwardly-extending finger 18, which is used as a guide for the floss while clamping the same. When the floss is pressed against the finger, the floss is brought into the center of the jaws 10 11 and under the center of the end of the clamping-lever.

The operation of the device is quite obvious from the drawings—that is, the floss is drawn from the cartridge, passes through the opening in the cover 4, then through the opening in the part 12 and between the movable jaws 10 and 11, then through the perforation 15, through the channel 7, and then is carried down between the jaws 9 and 11, the fresh floss being separated from the used length by jaw 11, after which the lever 16 is to be swung into the position indicated in the drawings to tightly clamp the floss. By longitudinally slitting the handle it not only serves the purpose before mentioned, but the slit permits a suitable instrument to be in-

serted to remove the floss-cartridge when a new cartridge is to be inserted or to remove the cap.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A dental floss-holder comprising a tubular handle adapted to receive a floss-cartridge, a curved portion extended from the handle, cheek-pieces at the junction of the curved portion and the handle, one of said cheek-pieces having a fixed jaw member, an angle-lever pivoted between the cheek-pieces, and a jaw member operated by said lever.

2. A dental floss-holder comprising a tubular resilient handle, the said handle being longitudinally slitted at one side, a floss-cartridge adapted to engage in the handle, a cap frictionally held in the handle having a perforation through which the floss may pass, a curved portion at one end of the handle, and a clamping device at the junction of the curved portion and the handle.

3. A dental floss-holder comprising a tubular handle, a curved portion at one end of the handle, cheek-pieces at the junction of the curved portion and the handle, one of the said cheek-pieces having a laterally-extended portion forming a fixed jaw member, a cutting device in said cheek-pieces, an angle-lever pivoted between the cheek-pieces, a pair of jaws carried by the angle-lever, the said jaws being spring-yielding and having a substantially triangular connection at one end, the said connection being perforated, and a plate-like member connected to the inner one of the said last-named jaws, there being a perforation at the junction of the said plate and jaw.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES M. OVERBAUGH.

Witnesses:

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N. O. PETERSON.