Aug. 7, 1923. 1,464,013

F. C. ROBERTS

DENTAL FLOSS HOLDER

Filed Aug. 9, 1922

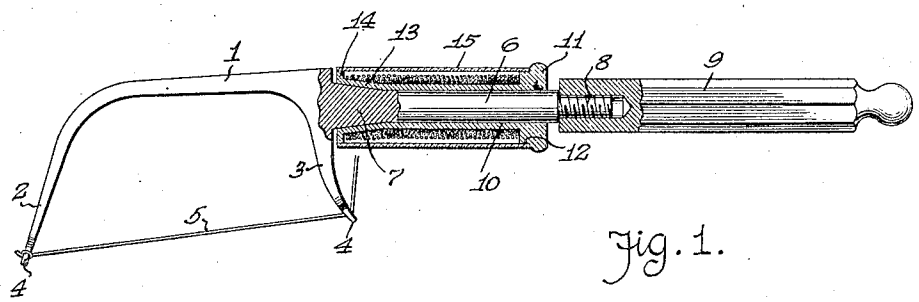


Fig. 1.

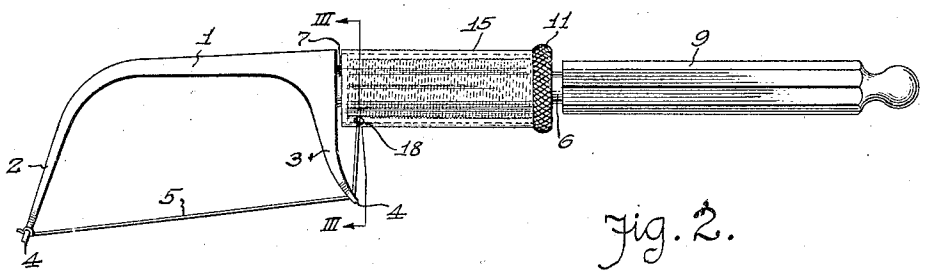


Fig. 2.

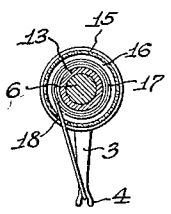


Fig. 3.

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FERDINAND C. ROBERTS, OF DETROIT, MICHIGAN.

DENTAL FLOSS HOLDER.

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To all whom it may concern:

Be it known that I, FERDINAND C. ROBERTS, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Dental Floss Holders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a dental floss holder and the primary object of my invention is to provide a bow holder on which a piece of floss may be stretched and maintained taut so that it may be conveniently used in the mouth for cleaning between teeth. The holder has a floss container that may be easily and quickly adjusted to maintain a piece of floss taut on the holder and permit of a new piece of floss being readily placed in an active position.

Another object of this invention is to furnish a floss holder with a container or spool having a transparent casing or shell that will permit of the floss being observed and the user of the holder or instrument can readily determine when the supply of floss needs replenishing. The container is constructed to be frictionally held in an adjusted position and the user of the holder may easily and quickly adjust the container and anchor it in an adjusted position without the use of screws or any tightening device other than the holder and container.

A further object of this invention is to provide a light and durable dental floss holder that can be maintained in a sanitary condition and conveniently manipulated in the mouth.

The above are a few of the objects attained by the construction to be hereinafter described and reference will now be had to the drawing, wherein—

Figure 1 is a longitudinal sectional view of the greater part of the dental floss holder;

Fig. 2 is a side elevation of the same, and

Fig. 3 is a cross sectional view taken on the line III—III of Fig. 2.

In the drawing, the reference numeral 1 denotes a bow having a long angularly disposed outer arm 2 and a short inner arm 3, said arms having the outer ends thereof bifurcated or forked, as at 4, so that a piece of floss 5 may be trained over the end of the arm 3, and knotted, tied or otherwise held or fastened at the outer end of the arm 2. The piece of floss 5 will then be disposed at an angle to the bow and such configuration permits of the floss being easily used in the mouth.

At the inner end of the bow 1 is a spindle 6 provided with a tapered portion or cone 7 adjoining the bow 1, and the inner end of said spindle terminates in a screw threaded stem 8 on which may be mounted a suitable handle 9.

On the spindle 6 is a spool or sleeve 10 having its inner end provided with a head 11 which is knurled or otherwise roughened to permit of easy turning or movement of the spool on the spindle, and said head is formed with an annular shoulder 12.

The outer end of a spool 10 is flared or provided with a conical portion 13 terminating in a peripheral flange 14, and frictionally seated on the flange 14 and the shoulder 12 is a transparent shell or casing 15 that may be made of celluloid, glass or any suitable material. Any suitable means may be employed for retaining the shell or casing on the spool so as to cooperate therewith in providing an annular compartment 16 affording clearance for floss 17 wound on the spool and having its end piece 5 extending through a small opening 18 in the shell or casing 15 adjacent the flange 14. The transparent shell or casing will permit of the floss being observed and the user of the holder or instrument can readily determine when the container needs replenishing.

The flared or conical portion of the spool 10 is adapted to frictionally fit on or bind against the tapering or conical portion 7 of the spindle 6, so that the container will be held stationary on the spindle under normal conditions and during the use of a holder. By loosening the spool 10 relative to the spindle the spool may be rotated to permit of floss being withdrawn therefrom and after the end of the floss has been properly positioned relative to the bow the spool may be rotated to draw the floss taut and maintain it so by the spool being pushed into frictional engagement with the tapered or conical portion of the spindle 6. It is now apparent that by a slight longitudinal movement of the spool or container that it may be fixed relative to the spindle or released relative thereto, and since the handle 9 is detachable, it is apparent that other floss containers may be readily mounted on the holder, either to provide a new supply of floss or to permit

of different kinds and grades of floss being used for cleaning the teeth.

It is also apparent that the handle 9 may be made to abut the head 11 of the spool, so that after the spool is set relative to the spindle, said spool may be jammed or locked against accidental displacement, particularly during the use of the holder.

It is thought that the utility of my invention will be apparent without further description, and while in the drawing there is illustrated a preferred embodiment of my invention, it is to be understood that the structural elements are susceptible to such variations and modifications as fall within the scope of the appended claims.

What I claim is:—

1. A floss holder comprising a spindle, a bow at the outer ends thereof, and a floss container adapted to have its outer end internally frictionally held on said spindle with its floss extending on to and held by the bow.

2. A floss holder comprising a spindle having a conical portion, a bow at the outer end of said spindle, and a floss container having a flared portion frictionally fitting on the conical portion of said spindle with its floss extending on to and held by said bow.

3. A floss holder as in claim 1, wherein said container comprises a spool having a head and a flange with a transparent casing mounted on the head and flange and cooperating with said spool in providing an annular compartment affording clearance for floss wound on said spool.

4. A floss holder comprising a spindle, a longitudinally shiftable floss container on said spindle and adapted to be frictionally held by engagement therewith, and means carried by said spindle for holding an end of the floss extending from said container.

5. A floss holder comprising a spindle, a floss container rotatable on said spindle, said floss container frictionally engaging the outer end of said spindle and adapted to be released relative to said spindle by longitudinal retraction thereon towards the inner end of said spindle, said floss container having an opening permitting of floss extending therefrom and means carried by said spindle for maintaining an end of the floss taut beyond the outer end of said floss container.

In testimony whereof I affix my signature in presence of two witnesses.

FERDINAND C. ROBERTS.

Witnesses:
G. E. McGRANN,
KARL H. BUTLER.