April 1, 1924. 1,488,810

J. K. FRASER

TOILET ARTICLE

Filed Oct. 15, 1921

Fig. 1

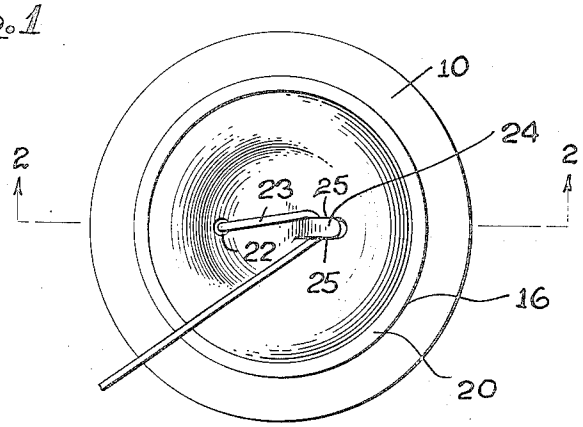
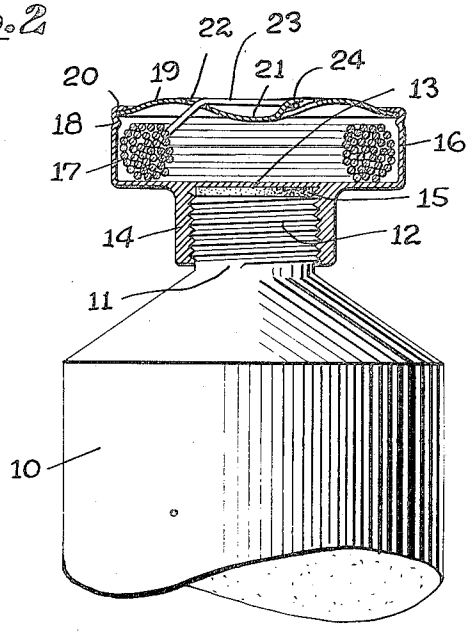


Fig. 2



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UNITED STATES PATENT OFFICE.

JAMES K. FRASER, OF NEW YORK, N. Y.

TOILET ARTICLE.

Application filed October 15, 1921. Serial No. 507,858.

To all whom it may concern:

Be it known that I, JAMES K. FRASER, a citizen of the United States, and a resident of the city, county, and State of New York, have invented an Improvement in Toilet Articles, of which the following is a specification.

This invention relates to toilet articles and more particularly to closures for containers adapted to receive a tooth-cleansing preparation.

An object of this invention is to provide a closure for containers of tooth-cleansing preparations and particularly for tooth-paste tubes or containers within which closure is embodied a chamber or container adapted to receive a supply of dental floss to be used in connection with or as an adjunct to the contents of the main container.

Another object is to provide a metallic cap, cover or closure construction for containers of the above character in which the metal of the cap is efficiently utilized not only to form a closure for containers and a dental floss holder, but also is so conformed as to provide an ample handle portion in order to permit a ready and convenient manual manipulation of the closure itself with respect to the main container.

Another object is to provide a dental floss receptacle with a cutting device for the dental floss that will be protected from injury and deformation from the exterior. It is also an object of this invention to provide a dental floss receptacle with means by which the dental floss, after cutting, may be readily grasped and withdrawn for further use.

Other objects will be in part obvious or in part pointed out hereinafter.

The invention accordingly consists in the combination of elements, arrangement of parts, and features of construction as will be exemplified in the structure hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the drawings, in which is illustrated an embodiment of this invention,

Figure 1 is a plan view of the closure; and

Figure 2 is a vertical section on the line 2—2 of Fig. 1, certain parts being shown in elevation for the sake of greater simplicity.

Referring now to the drawings, and more particularly to Fig. 2, I have shown a container 10 adapted to receive a tooth-cleansing toilet preparation and provided at its upper end with an opening through which the contents of the container 10 may be extracted. In the embodiment illustrated, the container 10 is shown as a collapsible tooth-paste tube and the opening at its upper end is preferably made through the reduced end or neck portion 11 which I prefer to provide with threads 12 to facilitate the application of the closure or cap thereto.

The cap or closure construction of my invention comprises preferably a main closing member 13 preferably of metallic construction and has associated on one side thereof a downwardly extending cylindrical portion 14 which I prefer to thread interiorly so as to engage with the threads 12 of the reduced neck portion 11 of the container 10. A sealing member 15, preferably in the form of a disk and preferably made of a material such as cork for example, is inserted within the cylindrical attaching member 14 to insure an air-tight or liquid-tight contact between the closing member or wall 13 and the upper edges of the reduced neck portion 11 through which the exit passage from the container 10 is made. It will be understood that I prefer to provide the attaching member 14 with threads to engage with corresponding threads on the container 10 but that any other suitable means may be provided to insure the attaching of the closing member 13 to the container 10. Thus, for example, the parts may be attached together by means of suitably formed and co-operating friction surfaces upon their respective parts.

The closing member or wall 13 is extended radially and is provided with lateral wall forming portions 16 which are preferably made integrally with the main closing member 13, thus to form a cup shaped chamber preferably of a cylindrical conformation. The conformation thus given the several parts may conveniently be made as by spinning or by stamping, for example.

Within the cup shaped chamber thus formed by the main closing wall 13 and the lateral wall 16 is placed a roll 17 of dental floss, the latter being wound to such thickness and to such a diameter as to fit within the chamber. Upon the interior and upper

end of the lateral wall 16 there is integrally formed therewith a circumferentially extending lip or ledge 18 adapted to support a cover plate 19 to close the chamber within which the roll of dental floss 17 is placed. The lip 18 may be formed on the interior of the wall 16 in any convenient manner and after the cover plate 19 has been inserted thereon, the upwardly extending portions of the lateral wall 16 are overturned as at 20 to lock the cover plate 19 in position.

The cover plate 19 is preferably given the conformation more clearly illustrated in Fig. 2, in which it will be noted that its central portion is depressed in an inward direction so as to form what may be termed a pocket 21 in the exterior face thereof. At a relatively elevated portion of the cover plate 19 with respect to the pocket 21 there is provided an aperture 22 through which the strand 23 of the dental floss is withdrawn from the chamber. The strand is preferably taken from the inside of the roll 17 of the floss so that as the floss is consumed, it will be taken from the inside of the roll 17 and thus avoid the necessity of having the roll 17 rotate within the chamber. A portion of the metal of the cover plate 19 is stamped and bent in an outward direction to form a cutting lip or hook 24 whose lateral edges 25 are preferably beveled so as to provide a sharp knife or cutting edge. The lip 24 is stamped out of the cover plate 19 at a point within the pocket 21 substantially diametrically opposite the aperture 22 through which the strand is drawn. The upturned or projecting cutting lip 24 will thus be formed within the recess or pocket portion 21 in the cover plate 19, and it is preferably upturned to such an extent that its outermost point will be within the plane passing through the upper portion of the pocket 21. The cutting lip 24 will thus be substantially within the pocket 21 and will thus be protected from injury by reason of blows to which the floss container may be subjected. Such blows will be taken up by the raised portion of the cover plate 19 and the danger of having the cutting hook 24 deformed is thus eliminated.

As is clearly shown in Fig. 2, the strand 23 after being cut by the cutting lip 24 will be bridged across the pocket 21 from the aperture 22 to the cutting lip 24, which in operation tends to retain the severed end of the strand. When it is desired to further use the floss, it may be readily engaged by the fingers and withdrawn to the desired extent, the pocket 21 preventing the exposed end of the strand 23 from closely hugging the surface of the cover plate and from thus making the engagement of the exposed strand by the fingers difficult.

The exterior of the lateral wall 16 is preferably knurled so as to provide a convenient gripping surface for the hand. Furthermore, as has been hereinbefore noted, the lateral wall 16 being formed upon a radially extended portion of the cover member or wall 13 thus provides a more convenient and larger leverage by means of which the closure may be more readily detached from the container 10. It may also be noted that the closure is thus also enlarged to a material extent as compared with the usual form of closure employed so that the loss of the cap or closure through the apertures in the drains of the usual lavatories is by reason of its dimensions effectively prevented.

As hereinbefore noted, the closure of this invention is particularly adapted for use in connection with containers for toothpaste. It is well known that the application of such toilet preparations as tooth-paste or cream and the like is not of itself sufficient to remove particles of food lodging between the teeth and, further, that injury to the teeth is in large measure caused by the decay of such food particles lodged therebetween. By means of this invention, however, the means for efficiently and completely cleansing the teeth are effectively combined and co-related so that the use of one will readily suggest the use of the other.

It will further be noted that there has been provided in this invention a structure in which the several objects above set forth, as well as others, together with many advantages are successfully achieved.

As many embodiments may be made of the above invention and as many changes might be made in the embodiment above set forth, it will be understood that all matter hereinafter set forth is to be interpreted as illustrative and not in a limiting sense.

I claim as my invention:

1. In a closure for containers for tooth paste and the like, a substantially cup-shaped member having a bottom and a substantially cylindrical side wall formed integral therewith and adapted to retain a roll of dental floss or the like, a substantially cylindrical, internally threaded member formed integral with the before mentioned bottom and depending therefrom, said cup-shaped member being of greater diameter than the depending member, a cover for the open end of said cup-shaped member, said cover being provided with a pocket forming depression having an aperture and an outwardly directed cutting lip positioned entirely within said pocket forming depression.

2. In a closure for containers for tooth-paste and the like, in combination, a main closing member, cylindircal means integrally formed therewith and associated on one side of said member for securing said member to a container, thereby to form a closure therefor, substantially cylindrical means integrally formed with said closing

member and associated upon the other side thereof and having a materially larger diameter than said first mentioned cylindrical means, whereby a gripping portion for the device is formed, said last mentioned cylindrical means being hollowed out to form with said main closing member a chamber, a roll of dental floss in said chamber, and means mounted upon said last mentioned cylindrical means adapted to form a closing side for said chamber, said means being apertured to permit the withdrawal of said floss from said chamber.

3. In a device of the character described, in combination, means forming a chamber adapted to receive a roll of dental floss, a closing member secured to said means and adapted to retain said roll within said chamber, said closing member having an inwardly directed pocket-forming depression, an aperture in said closing member and positioned substantially at one side of said depression to permit the withdrawal of said floss from said chamber, and an outwardly directed cutting lip upon said closing member and positioned substantially opposite said aperture, and within said pocket-forming depression whereby after withdrawal and severance of said dental floss, said floss is bridged across said depression.

4. A device of the character stated comprising a closure for a tube adapted to hold tooth paste or the like, having a cup-shaped element of greater diameter than the tube closure and adapted to hold dental floss or the like integrally formed on the top thereof, said cup-shaped element being provided with a closure having a pocket forming depression for the open end thereof.

5. A device of the character stated comprising a closure for a tube adapted to hold tooth paste or the like, having a cup-shaped element of greater diameter than the tube closure and adapted to hold dental floss or the like formed integral with, and on the top thereof, said cup-shaped element being provided with a closure having a pocket forming depression for the open end thereof, said closure having an aperture and an outwardly directed cutting lip positioned within the depression.

In testimony whereof I have signed my name to this specification this 13th day of October, 1921.

JAMES K. FRASER.