Apr. 17, 1923. 1,451,899

J. J. COOGAN

DISPENSING RECEPTACLE

Filed Sept. 24, 1921

Fig.1.

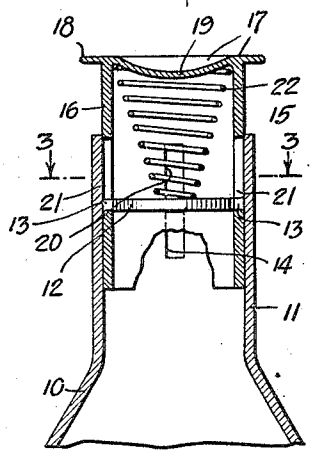


Fig.2.

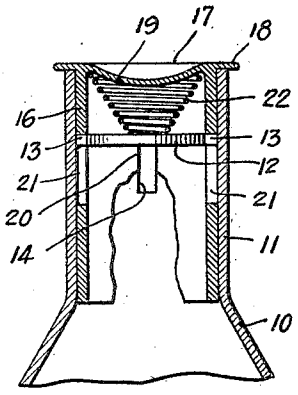


Fig.3.

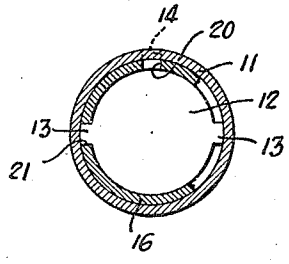
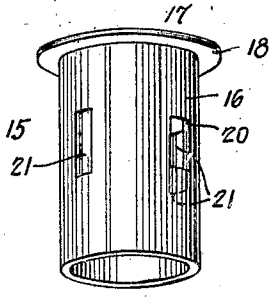


Fig.4.



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UNITED STATES PATENT OFFICE.

JAMES J. COOGAN, OF NEW YORK, N. Y.

DISPENSING RECEPTACLE.

Application filed September 24, 1921. Serial No. 502,908.

To all whom it may concern:

Be it known that I, JAMES J. COOGAN, a citizen of the United States, residing at New York city, borough of the Bronx, in the county of Bronx and State of New York, have invented certain new and useful Improvements in Dispensing Receptacles, of which the following is a specification.

This invention relates to dispensing receptacles, such as are commonly used for tooth paste, shaving soap, or other toilet preparations, condiments, or the like, and has particular reference to receptacles designed to be self closing so that loss of material from such causes as spilling, evaporation, or the like, will be dispensed with.

Among the objects of the invention therefore is to provide a receptacle, the closure or cap portion of which is carried permanently by the receptacle and so cannot become lost or separated incident to the use of the commodity, the cap or closure member being movable automatically in one direction by a spring for automatic closing of the outlet, and in the other direction by the operator's finger or thumb for the delivery of the commodity.

With the foregoing and other objects in view the invention consists in the arrangement and combination of parts hereinafter described and claimed, and while the invention is not restricted to the exact details of construction disclosed or suggested herein, still for the purpose of illustrating a practical embodiment thereof reference is had to the accompanying drawings, in which like reference characters designate the same parts in the several views, and in which—

Figure 1 is a vertical section indicating the normal position of the parts.

Fig. 2 is a view similar to Fig. 1 but showing the cap depressed and with the two delivery openings in registry.

Fig. 3 is a horizontal section on the broken line 3—3 of Fig. 1.

Fig. 4 is a detail perspective view of the cap detached.

Referring now more specifically to the drawings I show a receptacle 10 of any suitable material, size, or design and having a neck 11 of cylindrical or any other suitable form in cross section but essentially straight and having a smooth interior surface. Within the neck and preferably below the mouth thereof is fixed an abutment or shelf 12. The main portion of the abutment is shown as circular and spaced from the inner surface of the neck except for a suitable number of attachment tongues 13. The neck also is provided below the shelf with one or more delivery openings shown as a slot 14 for dispensing plastic materials such as tooth paste or shaving soap, but which obviously might be sifter holes or openings of other forms according to the commodity to be dispensed.

The cap indicated generally at 15 is shown comprising a barrel portion 16 fitted for easy sliding movement within the smooth inner surface of the neck 11. The inner end of the barrel 16 is open, but the outer end thereof is closed with a head 17 having a flange 18 wide enough to overlap the mouth of the neck whereby if the cap should accidentally stick in its depressed open position the cap may be grasped by the operator's fingers and be released. The central portion of the head 17 is provided with a depression 19 so as to make a more reliable seat for the operator's finger in the manipulation of the cap. The barrel 16 is provided with a slot 20 of a size or form corresponding to the slot 14, but normally spaced therefrom so that the portion of the barrel lying normally over the slot 14 closes the same making a practically air tight closure for the receptacle neck. When however the cap is depressed the two slots 14 and 20 register and so form in effect a single opening. See Fig. 2. On diametrically opposite sides the barrel is provided with other slots 21 which cooperate with the shelf tongues 13 and with which the walls of the slots have close sliding fit while the solid portion of the barrel is fitted in the space between the shelf disk and the inner surface of the neck. The inward movement of the cap may be limited either by contact between the flange 18 and the end of the neck or by the upper ends of the slots 21 striking against the tongues 13. The upward movement of the cap is limited by the lower ends of the slots 21 striking against the tongue 13.

Within the cap and located between the head 17 and the shelf 12 is a conical spiral spring 22, tending to throw the cap upward to its closed position. The depression 19 in the head 17 forms a seat for the larger end of the spring and thus the spring is held from buckling or displacement. The cap is of course held from rotation by reason of the co-operation between the slots 21

and the shelf tongues and therefore the two slots 14 and 20 must register when the cap is depressed. To dispense a commodity, such as tooth paste, in ribbon form or any other form according to the shape of the delivery opening in the neck, the operator grasps the tube or receptacle in one hand and while the cap is depressed by one finger thereof and the tube is squeezed by the same hand, with his other hand he manipulates the tooth brush or the like to receive the paste forced out through the registering openings.

I claim:

1. In a dispensing receptacle, the combination of a neck having a smooth straight interior surface, an abutment fixed within the neck and extending across the same, the main portion of the abutment being spaced from the neck but held in fixed position by tongues, and a cap having a straight barrel slidable within the neck in the space between the neck and the main portion of the abutment and having a closed outer end, said barrel being provided with openings through which said tongues project, and the neck and barrel being provided with openings adapted to register in one position of the cap for the delivery of the material.

2. A device as set forth in claim 1 in which the barrel and neck are cylindrical and the outer end of the cap is a head having a depressed central portion forming a finger seat.

3. A device as set forth in claim 1 in which the outer end or head of the cap is provided with a central inward depression and a coil extension spring is located within the cap and held in place by said depression.

In testimony whereof I affix my signature.

JAMES J. COOGAN.