June 12, 1951 C. W. LE NOIR 2,556,547

CONTAINER FOR PASTE-LIKE SUBSTANCE, HAVING A PERFORATED PISTON WHICH EXTRUDES SAID SUBSTANCE WHEN MOVED AXIALLY TOWARDS THE CONTAINER BOTTOM

Filed May 17, 1947

Fig. 1.

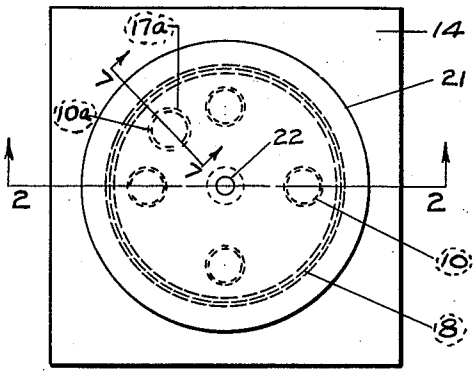



Fig. 2.

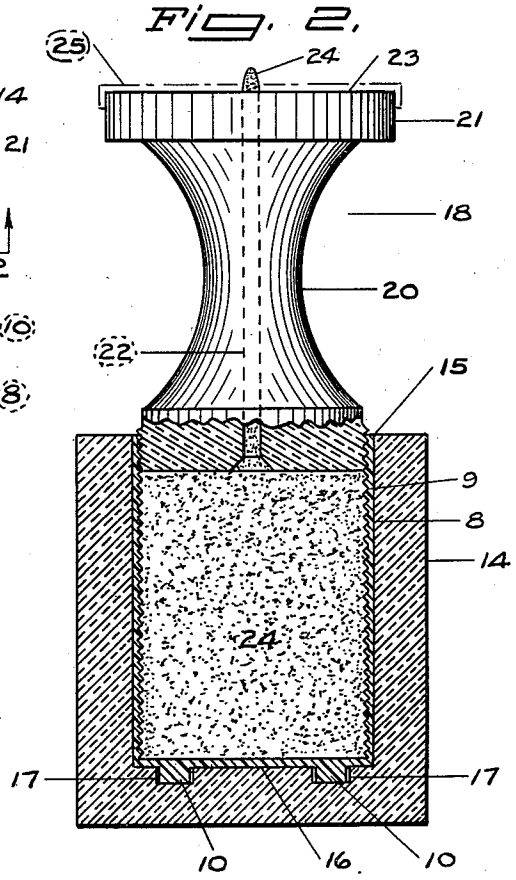



Fig. 3.

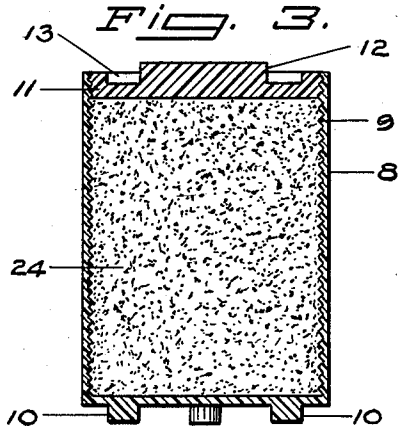



Fig. 4.

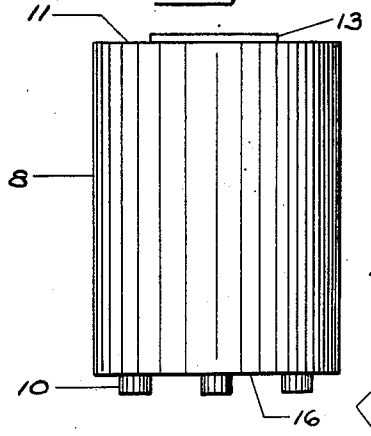



Fig. 5.

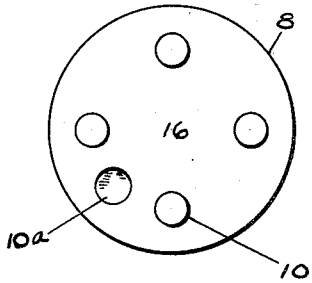



Fig. 6.

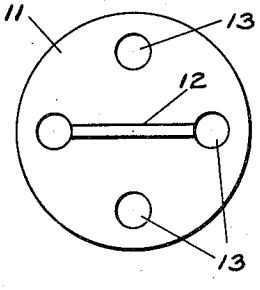
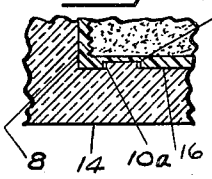



Fig. 7.




INVENTOR
CHESTER W. LE NOIR
BY Edward C. Healy
ATTORNEY

Patented June 12, 1951 2,556,547

# UNITED STATES PATENT OFFICE

2,556,547

## CONTAINER FOR PASTE-LIKE SUBSTANCE, HAVING A PERFORATED PISTON WHICH EXTRUDES SAID SUBSTANCE WHEN MOVED AXIALLY TOWARDS THE CONTAINER BOTTOM

Chester W. Le Noir, San Francisco, Calif.

Application May 17, 1947, Serial No. 748,694

1 Claim. (Cl. 222—320)

1

This invention relates to improvements in containers and dispensers for all cerate, unguent and other substances having a soft pliable consistency, such as cold cream, tooth paste, soft soap, and various types of ointments, paints and the like.

The invention particularly relates to a simple inexpensive discardable receptacle for retaining the pliable substance and to an especially constructed device for dispensing the substance out of the receptacle.

The primary object of the present invention is the provision of an internally threaded receptacle having an externally threaded cover, the said receptacle being formed of a thin rigid material, such as a thin plastic or sheet metal, thus providing a discardable receptacle for marketing the product, a further object being to provide an especially constructed paste dispenser having a container capable of receiving and retaining the said receptacle, and an externally threaded apertured ejector capable of replacing the said cover on the receptacle, whereby the substance is dispensed through the ejector, and when the substance is completely dispensed a new filled receptacle can be readily inserted in the dispenser.

A still further object of the present invention is to provide means for keying the receptacle in the dispenser to prevent the revolving thereof during the circumferentially turning of the ejector for dispensing the substance from the receptacle.

A still further object of the present invention is to form the externally threaded ejector with a greatly enlarged top portion having a smooth top flat surface and to dispense the substance through a small elongated passageway concentrically extending through the ejector to the said enlarged top flat surface, whereby the entire quantity of the substance dispensed can be readily wiped off of the said surface by the user's finger.

A still further object of the present invention is to provide a combination discardable receptacle and dispenser of the character described that is durable, sanitary, simple in construction, economical to manufacture, positive in operation and highly efficient and serviceable in use.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawing forming a part of the specification, wherein for the purpose of illustration like numerals designate like parts throughout the same,

Fig. 1 is a top plan view of the improved dispenser.

Fig. 2 is a central vertical longitudinal sectional view of the dispenser with a filled receptacle therein, the said sectional view being taken on line 2—2 of Fig. 1, for the purpose of clarity a portion of the ejector being shown in elevation.

Fig. 3 is a central vertical sectional view of an internally threaded filled receptacle with the cover thereon,

Fig. 4 is a vertical elevational view of the receptacle.

Fig. 5 is a bottom plan view of the receptacle, and

Fig. 6 is a top plan view of the cover for the receptacle, and

Fig. 7 is a vertical sectional fragmentary view through the bottom of the dispenser and the receptacle on line 7—7 of Fig. 1, particularly illustrating a recess in the bottom of the receptacle for receiving a key-like projection on the inner bottom of the dispenser.

Referring in detail to the drawing and to the different parts thereof, the numeral 8 designates the receptacle, internally threaded as at 9 and provided with a plurality of projecting keys 10 on the bottom face thereof as illustrated in Figs. 3, 4 and 5. The said receptacle is preferably cylindrical in shape and is formed of a thin plastic, sheet metal, or any suitable material facilitating economical manufacture. Any suitable means can be provided for covering the receptacle, the present construction showing an externally threaded cap 11 formed with a ridge 12 on the top face thereof and with a plurality of circular indentations 13 as illustrated to advantage in Figs. 3 and 6. The said indentations 13 are of such size and spaced relation relative to the rounded projecting keys 10 on the bottom face of the receptacle as will receive the said keys when the receptacles are stacked one on the other, whereby the packing of the receptacles is facilitated. It will be noted that the projecting keys 10 provide small legs for supporting the receptacle and as the device is preferably molded of plastic, practically add no extra cost to the construction.

The dispenser preferably comprises a suitable container 14 having a cylindrical chamber 15 for receiving the receptacle 8, the bottom face 16 of the said chamber being provided with a plurality of keyways 17 capable of receiving the keys 10 provided on the bottom face of the receptacle, whereby the said receptacle is keyed to the container. The numeral 10a designates a key-like projection on the inner bottom face of the dispenser and the numeral 17a designates an indentation on the outer bottom face of the receptacle forming a keyway capable of receiving the said

projection as shown to advantage in Figs. 1 and 7. The said keys and keyways can have any suitable form and arranged in any suitable manner to serve the purpose of the invention. The body forming the said container is preferably constructed of glass and is shown as being rectangular in shape, but the said container body may have any suitable shape and formed of any suitable material. The dispenser includes in its embodiment, a specially constructed ejector, designated as a whole by the numeral 18, which ejector is externally threaded at the lower end portion thereof as at 19, which threaded portion is adapted to fit into the internally threaded receptacle 8 and be operative therein. The ejector is preferably formed with a curved recessed portion 20 and a greatly enlarged top portion 21. An elongated aperture 22 vertically extends through the ejector, whereby a passageway is formed for dispensing the substance from within the receptacle to the enlarged top face 23 as illustrated to advantage in Fig. 2, whereby the creamy substance dispensed can be wiped over the surface of the face 23 by a person's finger when it is desired to use the substance.

From the foregoing description taken in conjunction with the accompanying drawing, it is obvious that the cover 11 is removed when the receptacle is placed in the container and the ejector 18 is threaded into the receptacle. When the circumferential movement is imparted to the ejector the substance, designated by the numeral 24 will be dispensed to the face 23. It is very important, particularly in dispensers of the smaller sizes that the top of the ejector forming the dispensing face 23 be of a considerably larger diameter than the lower threaded portion 19 of the dispenser, that operates in the receptacle 8 in order to provide sufficient area to wipe the dispensed substance for obtaining the same on a person's finger. A suitable removable cover 25, shown in dot and dash lines in Fig. 2 is provided for covering the top face 23 to keep the same in a clean and sanitary condition.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the shape, size, material and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claim.



Having thus described my invention, I claim:

A device of the character described for use as a container and dispenser for substances having a soft pliable consistency, comprising a base member forming a circular vertical open ended chamber, a plurality of rounded keyways in the inner bottom face thereof, a cylindrical open ended internally threaded receptacle removably positioned in the said chamber, a plurality of rounded projections on the outer bottom face of the said receptacle extending in the said keyways in the bottom face of the chamber for keying the receptacle therein, an externally threaded ejecting member threadedly positioned in the said receptacle, the said ejecting member being equipped with an inwardly curved recessed portion and an enlarged top flat portion, and a passageway vertically extending through the ejecting member to the said top flat portion, whereby substance from within the container is dispensed therethrough when circumferential movement is imparted to the ejecting member.

CHESTER W. LE NOIR.


## REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

| Number | Name | Date |
|---|---|---|
| 941,253 | Hood | Nov. 23, 1909 |
| 1,055,028 | Flynn et al. | Mar. 4, 1913 |
| 1,223,172 | Jacobson | Apr. 17, 1917 |
| 1,329,229 | Donovan | Jan. 27, 1920 |
| 1,341,652 | Lawrence | June 1, 1920 |
| 1,571,775 | Garris | Feb. 2, 1926 |
| 1,623,690 | Little | Apr. 5, 1927 |
| 1,632,473 | Greenland | June 14, 1927 |
| 1,832,197 | Finn | Nov. 17, 1931 |
| 1,926,367 | Booth | Sept. 12, 1933 |
| 2,000,493 | Miller | May 7, 1935 |
| 2,009,761 | Calderara | July 30, 1935 |
| 2,378,624 | Edwards | June 19, 1945 |
| 2,412,325 | Devine et al. | Dec. 10, 1946 |