CLOSING CAP FOR COLLAPSIBLE DISPENSING TUBES

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The present invention relates to closing caps, particularly the variety used in connection with collapsible dispensing tubes employed in the trade to contain and conveniently discharge toothpaste, face-cream and the like, and the primary object of the invention is to generally improve upon closures in this classification by providing a structure which is simple and expedient and aptly suitable for the purposes intended.

More specifically, the invention relates to that subdivision of the art devoted to the embodiment therein of caps as such are hinged or otherwise attached to the discharge neck in such a way as to minimize the likelihood of loss and displacement. As of this date the art to which the invention pertains appears reasonably well developed and characterized by diversified cap structures, many having features in common but all more or less differing because of specific improvements and distinction. Therefore, the present invention constitutes a further contribution to this line of endeavor, the same being possessed of moderate yet appreciable different structural characteristics, whereby to provide a further adaptation in this field individual in itself.

Other features and advantages will become more readily apparent from the following description and the accompanying illustrative drawing.

In the drawing, wherein like numerals are employed to designate like parts throughout the same:

Figure 1 is an elevational view with parts in section showing the extended discharge neck and the novel two-part closing cap as constructed in accordance with the principles of this invention.

Figure 2 is a view in elevation observing Figure 1 in a direction from right to left.

Figure 3 is what may be conveniently called a side elevational view showing how the cap may be flipped to and swung to open position.

Referring now to the drawing by distinguishing reference characters the conventional collapsible tube is denoted by the numeral 4, this being provided with a longitudinally elongated screw-threaded discharge neck 5. The cap proper, denoted by the numeral 6, comprises a knurled disk 7 with an underlying internally screw-threaded annular rim 8. The rim is provided at a predetermined point with an extension or limb 9 constituting an attaching and hinging member. The free end of the limb 9 is formed into an auxiliary extension 10 which is bored to form a hinging knuckle, this being fitted between companion furcations 11 on a relatively short extension 12 carried by the adapter ring or collar 13. A suitable hinge pin 14 passes through the furcations and the knuckle 10 to provide a sturdy and reliable hinging joint. The ring 13, like the rim 8, is screw-threaded. Thus both parts, 8 and 13, of the complete cap assembly are unitarily adjustable. That is to say, it is necessary to back the ring off of the screw-threaded neck in order to give clearance for the opening and closing movement of the cap. When the cap is directly over the discharge end of the neck it can be threaded closed just the same as the ordinary simple one-piece screw-threaded cap now generally provided on dispensing containers of this classification.

It is to be noted that the extension 12 is of the same width as the extension or limb 9. Likewise, these parts are of the same thickness as the adapter collar or ring 13 and the cap rim 8. The cap is spaced from the ring and the intervening space is bridged by the hinged coacting extensions 9 and 12. The longitudinal edge portions of these extensions provide abutments against which the fingers of the hand can be placed to facilitate uniform and unitary turning of the two parts 8 and 13. Because of the spaced distance between said parts 8 and 13, simply turning the cap 6 would place too much of a strain on the remote collar. Thus by grasping the cap and also placing the fingers against the two extensions 9 and 12, uniform distribution of stress and strain is accomplished.

It is thought that the description taken in connection with the drawing will enable a clear understanding of the invention to be had. Therefore, a more lengthy description is thought unnecessary.

While the preferred embodiment of the invention has been shown and described, it is to be understood that minor changes coming within the field of invention claimed may be resorted to if desired.

I claim:

As a new article of manufacture a closing cap for the discharge neck of the dispensing tube of the class described comprising an internally screw-threaded adapter collar provided on its upper edge with a relatively narrow bifurcated vertical extension, a screw-threaded cap including a rim portion, said rim portion having a depending extension corresponding to the first named extension in thickness and width, the latter extension having a projection forming a knuckle interposed between the furcations, and a hinge pin extending through the knuckle and furcations to mechanically hinge the two extensions together to join the cap to the ring.