Nov. 23, 1965 H. KAMBERSKY 3,219,045

SQUEEZE TUBE, PARTICULARLY FOR COSMETIC PREPARATIONS

Filed Oct. 18, 1962

Fig.1

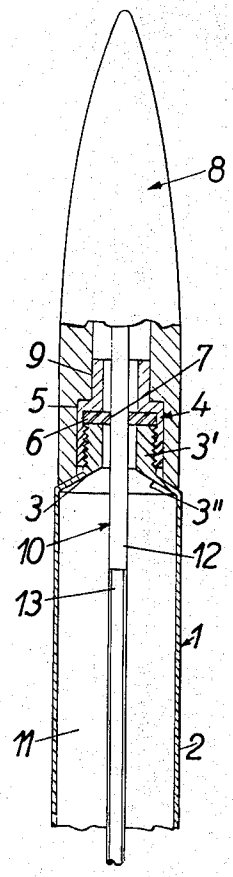


Fig.2

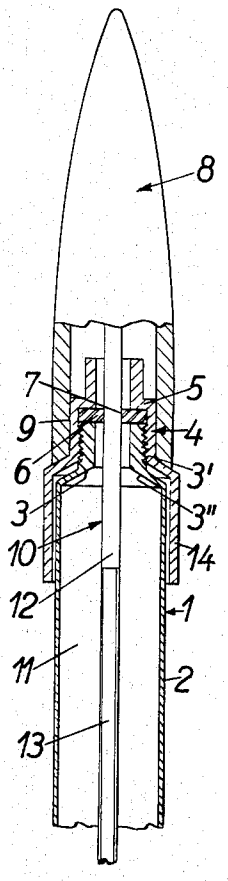
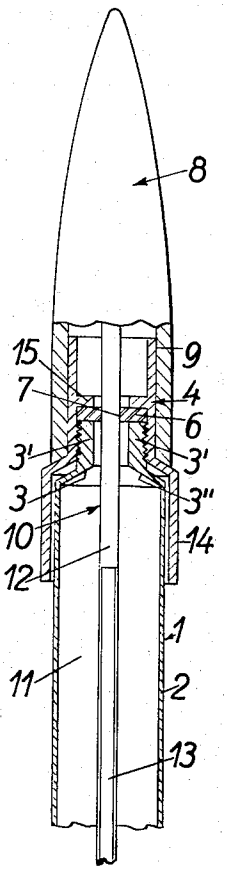


Fig.3



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SQUEEZE TUBE, PARTICULARLY FOR COSMETIC PREPARATIONS

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1 Claim. (Cl. 132—79)

This invention relates to a device for use with squeeze tubes particularly for cosmetic preparations, such as pasty mascara, lip paint or the like, in which an applicator stick guided in a resilient stripper can be inserted through the opening provided in the rigid neck portion of the tubes.

It is known to accommodate in squeeze tubes a stripper, in which an applicator stick is guided which extends into the tube. Before the tube is filled, these strippers had to be introduced into the still open, rear end of the tube body. For this reason, each tube had to be provided with a separate stripper, which operation was time consuming and uselessly added to the cost of the preparation.

This invention provides a device for use with squeeze tubes particularly for cosmetic preparations, in which device the above-mentioned disadvantages are eliminated in that the stripper is accommodated in a separate sleeve member, which is provided with a bearing shoulder and with an internal screw thread which can be screwed onto the screw thread of the rigid neck portion of a conventional squeeze tube, which latter screw thread is provided for the closing cap. The sleeve member comprises suitably two sections different in diameter, the section smaller in diameter accommodating the stripper and the internal screw thread, and the other section constituting a protecting grip, which when the sleeve member is screwed onto the tube covers the portion of the squeezable tube body which adjoins the rigid neck portion to prevent an unintended squeezing of the tube. The sleeve member may be so dimensioned that when it is screwed onto the tube an annular clearance is left between the sleeve member and the neck shoulder of the rigid neck portion.

The device according to the invention has the advantage that it can be used repeatedly, because when a tube has been completely emptied, it can be unscrewed from the device and replaced by a fresh filled tube.

Three embodiments of the invention are shown by way of example in the accompanying drawing, with reference to which the invention will now be described more fully.

FIG. 1 is a view partly in section showing an embodiment without protecting grip.

FIGS. 2 and 3 are also partly sectional views showing two embodiments each having a protecting grip.

The squeeze tube **1** is a commonly used tube and consists of a squeezable tube body **2** and a rigid part **3**, which comprises a thread-carrying neck **3'** and a neck shoulder **3''**.

As is apparent from FIG. 1, a sleeve member **4** having an internal screw thread is screwed onto the rigid threaded neck **3'** of the squeeze tube **1**. The bore of the sleeve member is offset to form a bearing shoulder **5**. A resilient stripper **6** in the form of a disc is clamped between the bearing shoulder **5** and the rim of the threaded neck **3'** and is formed with a central opening **7**. The stripper **6** is clamped between shoulder **5** and the rim of neck **3'** for a substantial portion of its circumferate extent and in a

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zone proximate the opening **7**. The sleeve member **4** has mounted on it a cap **8**, which is formed in its lower portion with seat faces **9** conforming to the external contour of the sleeve member. The cap **8** has secured therein an applicator stick **10**, which extends through the opening **7** of the stripper **6** into the pasty preparation **11** contained in the tube **3**. The applicator stick **10** is guided in the opening **7** of the stripper **6** and comprises a smooth cylindrical portion **12** extending from a fixing point in the cap **8**, and a grooved section **13** extending towards the free end of the stick. The preparation **11** can enter the peripherally extending grooves of this section **13**. When the applicator stick **10** is being withdrawn, the resilient stripper **6** causes the preparation **11** to be stripped from the smooth cylindrical section **12** so that the preparation adheres to the stripper in the grooves of section **13**.

In the embodiments shown in FIGS. 2 and 3, the sleeve member **4** is provided with a flaring skirt section **14** which is larger in diameter and forms a protecting grip for the tube. When the sleeve member **4** is screwed on the tube, the section **14** covers those areas of the squeezable tube body **2** which adjoin the rigid neck shoulder **3''**. As is apparent from FIG. 2, however, the lower portion of the cap **8** need not entirely conform to the external contour of the sleeve member **4**.

According to FIG. 3, the bearing shoulder is formed by an inwardly protruding flange **15**.

In all embodiments shown, the sleeve member **4** is suitably dimensioned such that the sleeve member **4** when screwed onto the tube does not rest on the neck shoulder **3''** of the rigid neck portion **3**. As a result, the resilient stripper **6** can be clamped more firmly to increase its stripping action when it has become worn.

What is claimed is:

In combination a tube adapted for containing a cosmetic preparation and having a projecting rigid neck portion which is externally threaded, and an applicator device comprising an internally threaded sleeve member threaded onto the neck portion of the tube, said sleeve member including a flaring skirt which encircles the tube in a zone adjacent the neck portion, said sleeve member including means defining a shoulder facing the neck portion of the tube, a resilient stripper in the form of a compressible block member of disc shape with a central bore, said stripper resting on the neck portion and being clamped in a zone proximate said bore thereof between the shoulder of the sleeve member and the neck portion of the tube, said sleeve member and neck portion having aligned bores of substantially common diameter, a cap slidably supported on the sleeve member for being freely applied thereon and freely removed therefrom, said cap, when applied to the sleeve member, covering only a portion thereof and leaving the skirt exposed for use as a finger grip to facilitate removal and application of the cap, and an applicator stick secured in said cap and extending through the bores in the sleeve, the resilient stripper and the tube when the cap is applied on the sleeve member, said sleeve member having sufficient clearance with said tube to permit adjustment of the degree of threaded engagement of the sleeve member and the neck portion to thereby adjust the degree of clamping of the resilient stripper, said applicator stick including a smooth cylindrical portion which passes through the bore of the stripper and which is engaged therewith as a function of the degree of clamping of the resilient stripper, said stick

including a grooved portion extending from the cylindrical portion and into which grooved portion the preparation in the tube is entrained as the preparation is stripped from the smooth cylindrical portion as the applicator stick is being withdrawn from the tube.

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