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POCKET SIZE COMBINATION TOOTHBRUSH AND PASTE DISPENSER

Filed Aug. 6, 1965

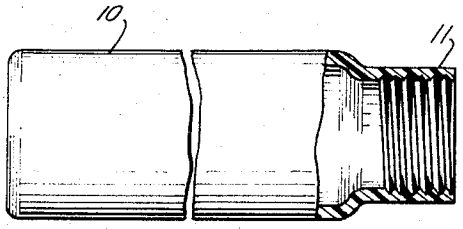


FIG. 1

FIG. 2

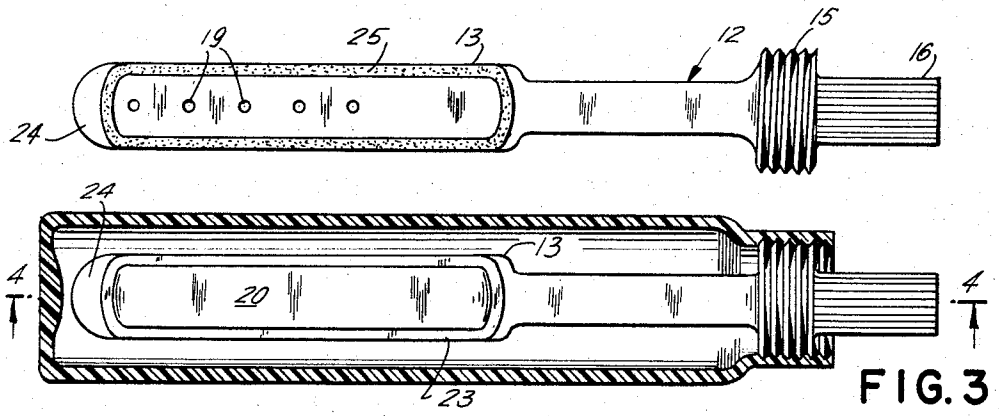


FIG. 3

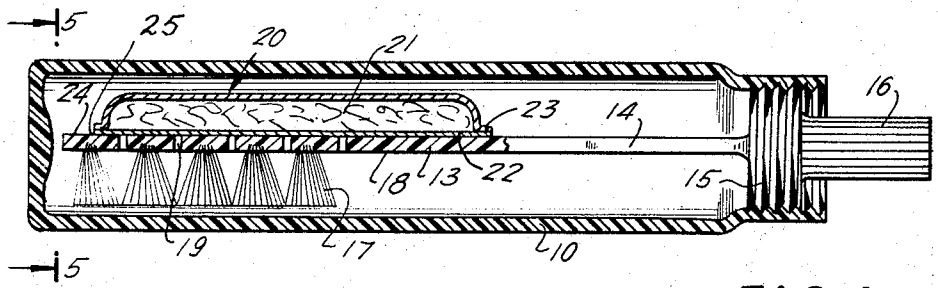


FIG. 4

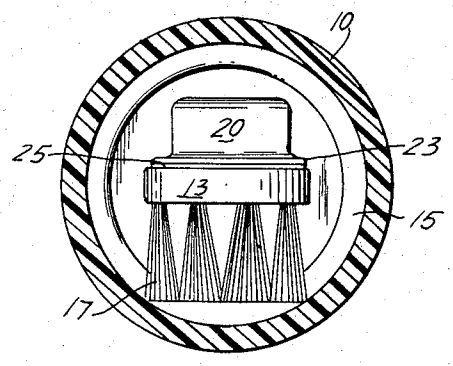


FIG. 5

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POCKET SIZE COMBINATION TOOTHBRUSH AND PASTE DISPENSER

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ABSTRACT OF THE DISCLOSURE

A toothbrush having a head and a handle; the head having bristles on the underside for only partway rearward of the head from its front end. Spaced passages through the head into the bristles; the remaining rearward portion of the head being solid. A paste-containing sack having the same length and width as the head and a flat bottom, is adhered to the top side of the head. Puncturing one or more holes, through one or more passages, permits squeezing paste from the sack on to the bristles. Elongation of the sack rearward a substantial distance from the rearmost passage and bristles, assures a large reserve of paste for repeated use.

This invention relates to toothbrush and toothpaste dispenser combinations, and an object of the invention is the provision of a novel and improved pocket sized self-contained combination of a toothbrush and toothpaste dispenser.

A more specific object of the invention is the provision of a combination toothbrush and a paste containing flexible sack, bag or the like attached or secured to the back of the brush with a plurality of passages through the brush body for conveyance of paste from the sack into the bristles of the brush.

A further object of the invention is the provision of such a combination wherein the exhausted paste containing sack may readily be replaced by a fresh full sack.

A still further object of the invention is the provision of such a combination in further combination with an enclosing vial or small bottle into which the brush and paste combination is screwed after use and from which it is readily unscrewed prior to use, by means of complementary screw threads on the vial, bottle or housing and on the body of the brush, thereby providing a sealed enclosure for the brush and paste container when it is carried in the pocket.

Another object of the invention is the provision of a paste container on the back of the toothbrush body in the form of a bag, sack or the like, which may be squeezed by a finger to urge paste on to the bristle side of the brush to the extent desired through one or more passages in the brush body or head.

The above as well as additional objects will be clarified in the following description wherein reference numerals refer to like-numbered parts in the accompanying drawing. It is to be noted that the drawing is intended primarily for the purpose of illustration and that it is neither desired nor intended to limit the invention necessarily to any or all of the details shown or described except insofar as they may be deemed essential to the invention. By way of example, the relative sizes or dimensions of the various parts or members comprised by the invention are subject to variation as a matter of choice.

Referring briefly to the drawing, FIG. 1 is a side view of a vial, a small bottle or a housing adapted to the present invention, forming part of the combination.

FIG. 2 is a top plan view of the toothbrush member per se of the combination.

FIG. 3 is a view showing the complete combination assembled for carrying in the pocket, the enclosing housing being shown in longitudinal section and the toothbrush and toothpaste combination being shown in top plan view.

FIG. 4 is a sectional view taken on the line 4—4 of FIG. 3.

FIG. 5 is an enlarged sectional view taken on the line 5—5 of FIG. 4.

Referring in detail to the drawing, the numeral **10** indicates a vial, small bottle, housing or the like, cylindrical in form and preferably made of a transparent material such as plastic or glass. The mouth of the housing, shown at **11**, is internally threaded.

The numeral **12** indicates a unitary toothbrush body consisting of a head **13** which has flat top and bottom surfaces, a neck portion **14**, and an enlarged circular threaded portion **15** having threads complementary to the threads in the mouth **11** of the housing, and a knurled extension or knob **16**.

The brush head **13** has brush bristles **17** on its underside **18**. The bristles are shown extending only part way from the front end of the head toward the rear end thereof, leaving a substantial length of the head near its rear end without bristles. The drawing shows, by way of example, the bristles under about the forward two-thirds portion only of the head, leaving the remaining or rearward portion of about one-third of the head free of bristles. Passages **19** extend through the same forward two-thirds portion of the brush head **13**, while the rear approximately one-third portion of the head is solid, or without passages. A bag, sack or the like **20** of substantially the same length and width as the head, contains a toothpaste **21**; the sack has a flat bottom surface **22** provided with a flange **23** around the circumferential edge thereof. The sack is preferably made of a suitable flexible or elastic plastic material and is sealed to be airtight. Such sealed sacs containing a paste or the like are readily manufacturable at present.

The top surface **24** of the brush head **13** is provided substantially throughout its length with an endless line or strip **25** of pressure sensitive adhesive material in the form of a layer substantially complementary to the shape and dimensions of the flange **23** on the sack. It is thus apparent that by aligning the flange **23** with the adhesive layer **25** and pressing down upon the flange, the sack will be adhesively attached to the brush head in the position shown. Likewise, when a sack has been emptied after repeated use, it may easily be torn off and a fresh filled sack applied in its place.

Assuming that a completely assembled pocket size combination such as is shown in FIGS. 3 and 4 has been purchased and is about to be used, the toothbrush and paste combination is unscrewed from the housing **10** by turning the knurled knob **16**. Then a pin or other sufficiently sharp instrument is passed upward through one or more of the passages **19** to pierce a hole through the bottom **22** of the sack. There are a number of sheet plastic materials available for making the sack, which are readily puncturable, such as Cellophane, by way of example.

Before or after wetting the bristles **17**, and while holding the brush unit in the hand, a finger tip may be pressed downward upon the sack, or against the rear (right hand, FIG. 4) end of the sack, to force paste through the punctured passage or passages to the bristle side of the brush head. Then the teeth may be brushed by grasping any part of the brush member such as the part **14**, **15**, or **16**. After using the brush it is again screwed into the housing **10** and thus may be conveniently carried in the pocket. This makes the device especially useful to travelers.

It is obviously not necessary to puncture all of the holes through the bag bottom at one time in order to obtain sufficient paste to use the brush once; in fact, in

most cases a single puncture is all that is necessary. In case, after non-use of the brush for a relatively long time, a punctured hole should get clogged by drying of the paste therein or in the corresponding passage **19**, then another hole may be punctured through another passage **19**, or the same puncturing instrument may be used to clear the clogged passage.

Instead of manufacturing the bag **20** of a plastic material, it may be made of a metallic soft foil such as is used in the manufacture of conventional toothpaste containers.

Thus each time the brush is to be used pressure is applied to the sack **20** to expel the desired quantity of paste from the sack on to the brush bristles. The elongation of the sack rearward of the bristles and the passages **19** serves to provide a substantial reserve of paste available for a large number of successive tooth-brushing applications.

While the invention has been described with particular reference to the accompanying drawing such is not to be construed as a limitation upon the invention which is best defined in the attached claims. For example, the flat bottom of the sack may be made thicker or of stiffer material, than the body thereof, or the adhesive may cover the entire area of the brush head which lies under the sack.

What is claimed and desired to be secured by Letters Patent is as follows:

1. A toothbrush and paste dispensing combination consisting of a brush head having flat top and bottom surfaces, a handle extending from the rear end of said head, said head having bristles on the underside of a first portion thereof which extends from the front end thereof

to a position spaced a substantial distance from the rear end thereof thereby leaving a substantial second portion of the head rearward of said bristles unprovided with bristles, said first portion only of said head having a plurality of passages extending therethrough between said bristles, a sealed sack of flexible material containing toothpaste and having a flat puncturable bottom, said sack having substantially the same length and width as said head and being mounted on the top side of said head with said bottom of the sack engaging the top surface of the head, and releasable adhesive means for securing said bottom of the sack to said top surface of the head.

2. A combination according to claim **1**, said bottom of the sack including a circumferential flange, said adhesive means comprising an endless strip of adhesive material on said top surface of the head and of the same length and width as said flange, said flange being superimposed on said strip.

References Cited

UNITED STATES PATENTS

1,753,290	4/1930	Graves	132—84
1,811,833	6/1931	Simon	132—84
2,294,631	9/1942	Rocca	15—184
2,550,190	4/1951	Greenberg	132—84
2,915,767	12/1959	Vaughan	15—167.1

FOREIGN PATENTS

1,074,371	3/1954	France.

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