COLLAPSIBLE TUBE HOLDER AND FLATTENING DEVICE

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The present invention comprehends the provision of a device to facilitate use of a collapsible paste receiving tube, such as is commonly employed to dispense tooth paste and the like.

The chief characteristic of the present invention resides in the provision of a device with which a tube of the character above mentioned can be quickly and easily associated, and the contents of the tube easily forced therefrom in any desired quantity for use, in a manner whereby all of the paste can be removed from the tube.

Another object of the invention resides in the provision of a device for the purpose above mentioned, which supports the tube in a novel and unique manner so that it is always in a convenient position for use, and one with which the tube can be very quickly associated with or removed therefrom as the occasion may require.

A further object of the invention resides in the provision of a novel construction of means for attaching the device to a suitable support.

The nature and advantages of the invention will be better understood when the following detail description is read in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this application like numerals of reference indicate similar parts in the several views and wherein:

Figure 1 is a side elevation of the device showing the manner of using the same, with the support for the device being illustrated in section.

Figure 2 is a bottom plan view.

Figure 3 is a front elevation.

Figure 4 is a detail view of one end of the spring.

Figure 5 is a fragmentary side elevation showing a modified construction of means for supporting the device.

The device embodies a substantially annular-shaped holder indicated at 10, and which in accordance with one embodiment of the invention is characterized by spaced parallel lugs 11 and 12 respectively, between which a shelf or other suitable support 13 is adapted to be received. Associated with the lug 12 is an adjusting screw 14 utilized to cooperate with the support 13 to hold the device attached thereto. The support 10 is open adjacent its bottom to receive a collapsible tube 15, the adjacent ends of the holder being bifurcated to accommodate rollers 16 and 17 respectively. The rollers 16 is carried by a shaft 18 slidably mounted in slots 19 to permit the roller 16 to be adjusted toward and away from the roller 17 as the occasion may require. The shaft 18 is also connected with the extremities of a substantially U-shaped spring 20, the tension of which is regulated by an adjusting screw 21. Consequently the roller 16 is yieldably supported with relation to the roller 17, and slightly spaced therefrom to accommodate the collapsible tube 15. The roller 17 is carried by a shaft 22 having a crank handle 23, through the instrumentality of which the roller 17 is rotated, and as illustrated this roller is corrugated to obtain a proper purchase upon the collapsible tube, and thereby move the same upwardly within the holder 10, as it is flattened incident to the use of the tube. The holder 10 may if desired be provided with side openings 24 which also lighten the holder itself.

In Figure 5 I have illustrated a modified construction of means for attaching the holder to a vertical support, such as a wall or the like indicated at 25. In this embodiment of the invention I employ a substantially U-shaped bracket 26, the extremities 27 of which are offset to lie flat against the support 25 and secured thereto by suitable fastening elements 28. The limbs of the bracket are formed with ribs 29 which are received by grooves 30 formed on the confronting faces of the lugs 11 and 12 respectively. The grooves are arranged to align with the ribs 29, whereupon the holder can be slid laterally over the bracket and supported in the manner clearly illustrated in Figure 5.

In practice one end of the collapsible tube 15 is clamped between the rollers 16 and 17.
respectively, with the tube in an inverted position as clearly illustrated in Figure 1. The tube is thus supported in this manner for convenient use when desired, and by slightly rotating the roller 17, the tube is flattened or collapsed, forcing the desired quantity of paste from the open end of the tube for use. As the tube is flattened, it is moved upwardly within the holder 10 conforming to the shape of the latter, and when the contents have been completely used, it is only necessary to operate the screw 21, thereby relieving the roller 16 of a certain amount of tension, so that the entire tube can be moved sidewise from the holder 10. If desired, the holder may be provided with hooks 31 from which tooth brushes or the like, not shown, may be supported.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood, that I do not limit myself to what is herein shown and described and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What is claimed is:
A collapsible tube holder and flattening device comprising a split annular tube receiving member, spaced parallel attaching lugs projecting from one side of the member, a pair of spaced rollers journaled in the adjacent ends of said member and adapted to support a tube suspended therefrom, means for rotating one of said rollers whereby the tube is moved within the member in a flattened condition, one end of said member having slots in which the adjacent roller is slidably adjustable with relation to the other roller, a substantially U-shaped spring supporting the adjustable roller and an adjusting screw supported by the member and engaging said spring to tension the latter whereby its roller is mounted to yield with relation to the other roller.

In testimony whereof I affix my signature.

PASQUALE J. SASSANO.