

Oct. 18, 1938.

E. L. HOLLENBECK

2,133,295

FOUNTAIN BRUSH AND TUBE HOLDER

Filed March 2, 1936

Fig. 1.

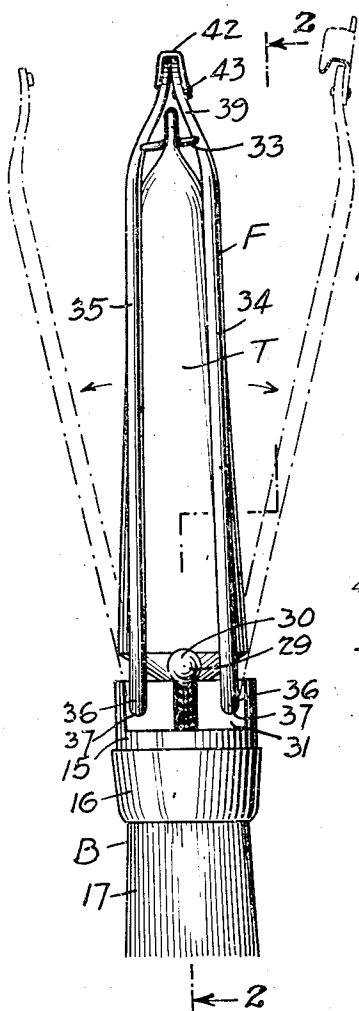


Fig. 2.

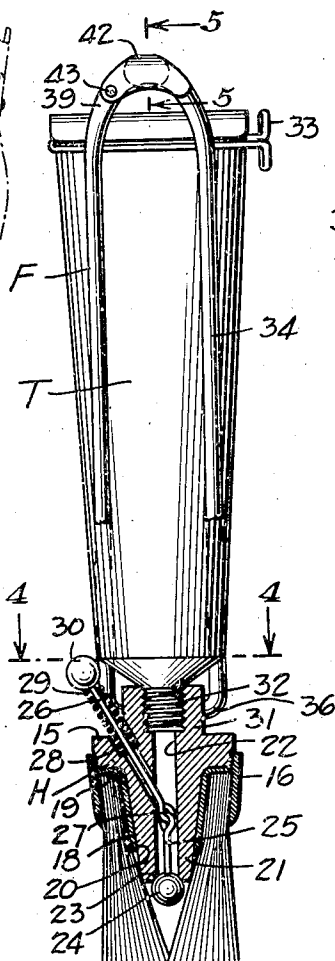


Fig. 4.

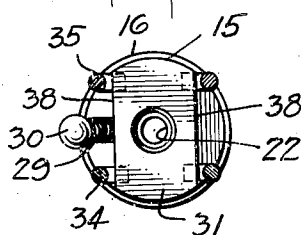


Fig. 3.

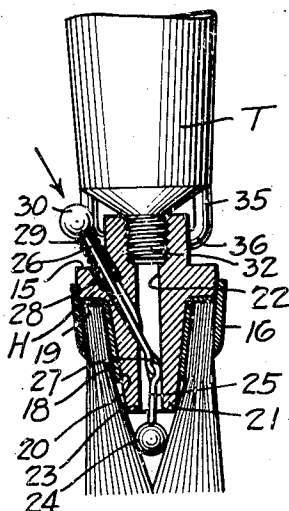
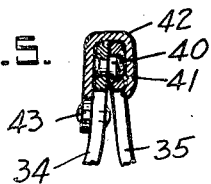


Fig. 5.



INVENTOR
ERNEST L. HOLLENBECK
BY
Edwin D. Jones.
ATTORNEY

UNITED STATES PATENT OFFICE

2,133,295

FOUNTAIN BRUSH AND TUBE HOLDER

Ernest L. Hollenbeck, Los Angeles, Calif.

Application March 2, 1936, Serial No. 66,586

6 Claims. (Cl. 221-60)

My invention relates to collapsible tubes containing any form of paste designed to be applied to a surface with a brush, such as paint used in making stencils, or shoe polish in paste form.

It is a purpose of my invention to provide a holder by which a paste tube and a fountain brush are associated one with the other to permit paste from the tube to be discharged into the brush, the holder providing a handle by which the brush can be manipulated in the customary manner to apply the paste so delivered to the brush to a surface.

It is also a purpose of my invention to provide a brush and tube holder in which the tube is supported on the brush against accidental collapsing, while permitting intentional collapsing either by compression with the fingers or by use of a winding key, to replenish the brush with paste when and as required.

A further purpose of my invention is the provision of a brush and tube holder embodying a valve which is normally closed to seal the tube against leakage or accidental expulsion of paste, but which can be opened manually to allow paste to pass into the brush.

A still further purpose of my invention is the provision of a holder which allows the ready detachment of the tube so that when empty a filled tube can be easily substituted.

I will describe only one form of fountain brush and paste tube holder embodying my invention, and will then point out the novel features thereof in claims.

In the accompanying drawing:

Fig. 1 is a view showing in side elevation one form of fountain brush and tube holder embodying my invention, the open position of the frame of the holder being illustrated in dash lines.

Fig. 2 is a sectional view taken on the line 2-2 of Fig. 1.

Fig. 3 is a fragmentary sectional view similar to Fig. 2 showing the valve of the holder in open position.

Fig. 4 is a transverse sectional view taken on the line 4-4 of Fig. 2.

Fig. 5 is an enlarged sectional view taken on the line 5-5 of Fig. 2.

Referring specifically to the drawing, my invention in its present embodiment comprises a head, designated generally at H, which is in the form of a single casting made of metal or any other suitable material, and having a circular portion 15 screw-threaded exteriorly to receive thereon a collar 16. This collar is part of a fountain brush B the bristles 17 of which are secured

between the collar and a sleeve 18 having a base flange 19 which is secured at its edge to the inside of the collar. This sleeve 18 is of truncated conical form to provide an opening 20 in its small end.

The head H includes also an integral nozzle 21 of truncated conical form which, with the brush B applied, is adapted to extend into the sleeve to form a seat for the latter which is sufficiently snug to form a paste tight seal between the two. A duct 22 extends axially through the nozzle 21 and at the small end of the nozzle a seat 23 is formed for a valve 24 of ball form. This valve is provided with a stem 25 which is movable freely in the duct and operatively connected to a rod 26 by looping the confronting ends of stem and rod, as indicated at 27.

The rod 26 is loosely fitted in a passage 27 formed in the head H to communicate with the duct 22. At the outer end of the passage a pocket 28 is formed in which a spring 29 is received. This spring surrounds the rod and engages a knob 30 on the outer end of the rod so as to yieldably urge the rod outwardly and, through the stem 25, to cause the valve 24 to normally occupy closed position on the seat 23.

At that side opposite from the nozzle 21, the head H is formed with a projection 31 into which the duct 22 leads. This projection is interiorly threaded to receive the neck of a conventional form of collapsible paste tube T, and to thereby place the interior of the tube in direct communication with the duct 22.

For the dual purpose of holding the tube T against unscrewing from the collar 31, and securing the tube in axial alignment with the head H so as to prevent lateral or transverse bending of the tube yet allowing the tube to be compressed either by the fingers or by rolling it upon itself with a conventional form of key 32, I provide a frame F. This frame is characterized by having openings therein extending lengthwise of the frame, and made up of parts which are separable to permit the ready attachment and detachment of a paste tube to and from the head H to allow an empty tube to be replaced by a filled one when and as required.

In the present instance the frame F comprises two parts 34 and 35 of identical construction, each being made of a single length of wire bent in the form of a U with its free ends terminating in trunnions 36 loosely fitted in recesses 37 in the flattened sides 38 of the projection 31. In this manner the frame parts are pivotally mounted on the head to occupy the closed position shown

in solid lines in Fig. 1, or the open position shown in dash lines in the same figure.

The bights 39 of the frame parts are flattened and bent inwardly so that they meet when the frame is closed. At the point of meeting, the frame part 34 is formed with a pin 40 extending into an opening 41 in the other frame part. A latch 42 of U-form is pivoted as at 43 on the frame part 34 so that it can be swung from non-latching position to the latched position shown in Figs. 2 and 5.

In this latched position the latch embraces the bights 39 to prevent the frame parts from separating, and secures the pin 40 within the opening 41 to prevent movement of the frame parts relatively in any direction so that the frame is held as a unit in axial alignment with the head H. Merely by moving the latch to released position and removing the pin from the opening the frame parts can be swung to open position.

In practice, the tube is applied to the holder by first opening the frame F and then screwing the tube neck into the head H. Now by closing and latching the frame parts the tube is supported in axial alignment with the head but exposed at its sides to permit collapsing thereof either with the fingers or by rolling the tube upon itself through rotation of the key, the handle of which is exposed for gripping and turning.

To expel paste from the tube into the brush it is necessary first to open the valve 24 by pressing inwardly on the knob 30, when by collapsing the tube any amount of paste can be expelled into and through the duct 22 and finally into the brush. Once the knob is relieved of pressure the valve closes to prevent further expulsion of paste. It will be noted that by using a ball valve it cleans itself of paste as it returns to closed position and thus a paste-tight seal is effected.

With the brush supplied with paste as described the user can by gripping the frame F manipulate the brush in the usual manner to spread the paste onto a surface to be covered. To replenish the brush with paste when and as required further collapsing of the tube preceded by opening of the valve is all that is necessary.

Although I have herein shown and described only one form of fountain and tube holder embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of my invention and the spirit and scope of the appended claims.

I claim:

1. In a holder of the character described; a head; a frame having two parts pivoted on the head to open and close; and a latch on the frame for securing the two parts in closed position, comprising a pin on and extending transversely

of one of the frame parts extending transversely into the other frame part, and a keeper pivoted on one frame part to secure said pin within the said other frame part.

2. A holder of the character described, comprising; a head having a duct therethrough into which a collapsible tube is adapted to be threaded; a frame having two parts; and means for mounting both of said parts on the head so that they are movable relative to the head so that an open position in which a collapsible tube can be received between the parts and screwed into the duct and unscrewed therefrom, and a closed position in which the tube is secured in the duct against unscrewing and lateral movement on the head, and yet accessible for collapsing.

3. In a holder of the character described; a head having a duct therein in which the nozzle of a tube is adapted to be received; and a frame having at least two parts both pivoted on the head to occupy an open position in which the tube can be received between or removed from the parts and the nozzle extended into or removed from the duct, and a closed position in which the tube is secured within the frame.

4. In a holder of the character described; a head having a duct therein in which the nozzle of a tube is adapted to be received; a frame having two parts both pivoted on the head to occupy an open position in which the tube can be received between or removed from the parts and the nozzle extended into or removed from the duct, and a closed position in which the tube is secured within the frame; and a latch on the frame parts for securing the latter in closed position and fixed against movement relatively and with respect to the head to secure the tube axially aligned with the duct.

5. In a holder of the character described; a head having a nozzle on one side thereof; a duct axially located in the head and nozzle; a passage extending obliquely from the duct outwardly through the nozzle and head; a valve for closing the nozzle end of the duct; a stem in the duct fixed to the valve; a rod pivotally connected to the stem within the duct and extending outwardly through the passage; a knob on the rod; and a spring on the rod between the knob and head for urging the valve to closed position on the nozzle through the rod and stem.

6. In a holder of the character described; a head having a duct therein in which the nozzle of a collapsible tube is adapted to be received; and a frame having at least two parts of U-form both pivoted on the head to occupy a closed position in which the parallel portions of said parts embrace said tube to support it in axial alignment with the head, and an open position in which the tube is removable from the head.

ERNEST L. HOLLENBECK.