O. ANDERSON.

FOUNTAIN PAINT BRUSH.

APPLICATION FILED JULY 13, 1909

938,362. Patented Oct. 26, 1909.

Fig. 1.

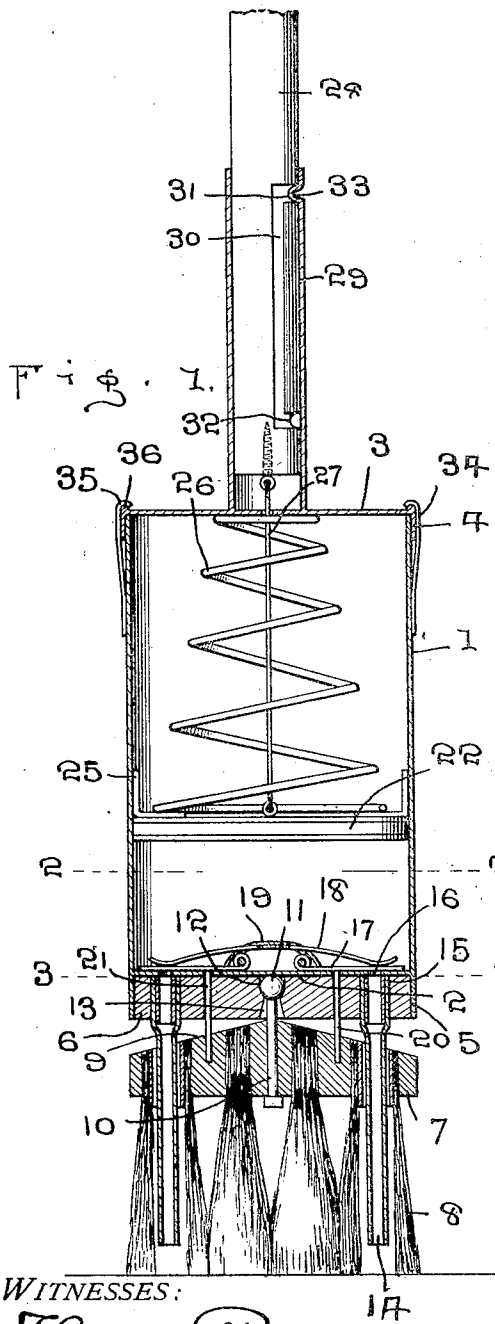


Fig. 2.

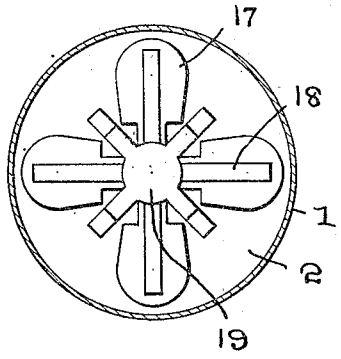
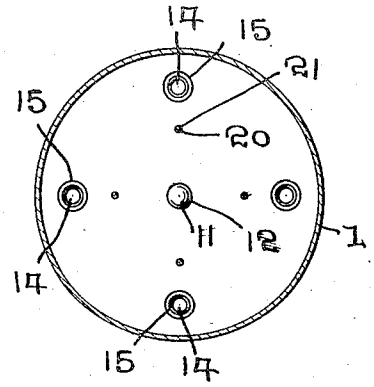


Fig. 3.



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UNITED STATES PATENT OFFICE.

OSCAR ANDERSON, OF McGREGOR, MINNESOTA.

FOUNTAIN PAINT-BRUSH.

938,362. Specification of Letters Patent. Patented Oct. 26, 1909.

Application filed July 13, 1909. Serial No. 507,295.

To all whom it may concern:

Be it known that I, OSCAR ANDERSON, a citizen of the United States, residing at McGregor, in the county of Aitkin and State of Minnesota, have invented certain new and useful Improvements in Fountain Paint-Brushes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in fountain paint brushes and my object is to provide a brush of this kind whereby the paint will be gradually fed into the brush as the same is being used.

A further object is to provide a suitable reservoir for containing a quantity of paint.

A further object is to provide means for directing pressure on the contents of the reservoir.

A further object is to provide means for disposing the pressure applying device adjacent the upper end of the reservoir.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings forming part of this application, Figure 1 is a central vertical sectional view through the brush. Fig. 2 is a transverse sectional view as seen on line 2—2, Fig. 1. Fig. 3 is a similar view as seen on line 3—3, Fig. 1.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates a reservoir which is preferably cylindrical in cross section and 2 indicates the bottom of the reservoir, while 3 indicates the covering therefor, said covering having a depending flange 4, to fit around the upper edge of the reservoir. The bottom 2 is positioned above the lower end of the reservoir 1 to form a seat 5 for a disk 6, while immediately below the disk is positioned the head 7 of the brush 8, the upper surface 9 of the head being conical. The head 7 is attached to the disk 6 by means of a bolt 10, the upper end of said bolt having a ball head 11, which fits a semi-circular seat 12 formed in the upper surface of the disk, while the lower portion of the opening 13 in the disk is flared, whereby said bolt will be permitted to swing for a purpose to be hereinafter set forth.

The paint from the reservoir 1 is conveyed to the bristles of the brush 8 and in position to be spread upon an object through the medium of flexible tubes 14, the upper ends of said tubes being fixed in openings 15 in the disk 6 and in position to register with ports 16 in the bottom 2, said flexible tubes being directed downwardly through the tufts of bristles forming the brush, so that the paint will be engaged with the brush adjacent its free end.

Hingedly secured to the upper face of the bottom 2 are valves 17, which are adapted to extend over the ports 16 and normally close the same to prevent the paint from passing through the flexible tubes 14, said valves being held in their normally closed positions by means of springs 18, said springs being carried by a spider 19, the ends of which are attached to the bottom 2.

In order to open the valves 17 to permit the paint to flow through the flexible tubes 14, pins 20 are attached to the head 7 and extend upwardly through openings 21 in the disk 6, the upper ends of the pins engaging the lower face of the valves, and said pins are forced into engagement with the valves by the swinging or inclination of the head 7.

A downward pressure on the paint in the reservoir is accomplished by placing a piston 22 within the reservoir the diameter of said piston being such as to snugly fit the reservoir and said piston is held against tilting within the reservoir by means of guides 23 placed at various points upon the piston and in position to engage the wall of the reservoir. Downward pressure is directed on the piston 22 by means of a spiral spring 26, the lower end of said spring resting against the piston, while the upper end thereof engages the lower face of the covering 3 and as the paint is used from the reservoir, the piston will be moved downwardly by the pressure of the spring.

In order to depress the spring and place the piston in position for ready removal from or induction into the reservoir, a cable 27 is attached at one end to the central portion of the piston and at its upper end to the lower end of a handle 28, said handle extending into a socket 29 formed integral with the upper face of the covering 3 and it will be readily seen that as said handle is moved upwardly through the socket, the piston will be likewise drawn upwardly until the ends of the guides 25 engage the lower face of the covering, the handle being provided with a vertical slot 30 and horizontally

disposed slots 31 and 32 at its upper and lower ends, respectively and with these slots coöperate a lug 33 carried by the socket 29. By this construction it will be readily seen that when the lug 33 is seated in the slot 31, the handle will be held against longitudinal movement and the piston left in position to be forced downwardly in the reservoir, and that by giving the handle a sufficient rotation to bring the lug into registration with the slot 30, said handle may be elevated and the lug brought into registration with the slot 32, when by rotating the handle in the opposite direction, the lug will be seated in the slot 32 and the piston retained in position adjacent the lower face of the covering 3.

In addition to the depending flange 4 for holding the cover in engagement with the upper end of the reservoir, a number of spring latches 34 are attached to the outer face of the reservoir, the upper ends of said latches having hook terminals 35, adapted to extend over a rib 36 around the edge of the cover and thus securely lock the cover in engagement with the reservoir.

When the brush is filled and applied to use, the pressure of the brush against the object will cause the head to tilt or swing laterally, which will force one of the pins 20 against its respective valve and open the same, whereby a quantity of paint will be forced through the feed tube and deposited in the bristles of the brush, the reverse stroke of the brush causing the valve at the opposite side thereof to be opened or if the brush is properly positioned, two of the valves will be opened simultaneously. In this manner, a predetermined quantity of the paint is fed into the brush, thereby avoiding wastage of the paint or the necessity of dipping the brush into a receptacle containing the paint, thereby wasting considerable time in filling the brush.

What I claim is:

1. In a self-feeding device, the combination with a reservoir; of a head below said reservoir, means to pivotally attach the head to the reservoir, bristles carried by said head, tubes extending from said reservoir into said bristles, valves to normally close the upper ends of said tubes, and means carried by the head adapted to open said valves when the head is rocked on its pivot.

2. In a self feeding brush, the combination with a reservoir; of a head having a conical upper surface, means to pivotally attach the head to the reservoir, bristles carried by said head, flexible tubes extending from the reservoir into said bristles, valves above the ends of said tubes, springs adapted to normally retain the valves in their closed positions, pins carried by the head adapted to open said valves when said head is rocked and means to direct pressure on the contents of the reservoir and cause the same to pass through said tubes.

3. In a self feeding brush, the combination with a reservoir, a brush pivotally attached thereto and means to feed the contents of the reservoir into said brush; of a piston in said reservoir, means to force said piston against the contents of the reservoir, a cover for the reservoir, a socket extending upwardly from the reservoir, a handle, a cable extending from said handle to said piston and means to retain said handle in its adjusted position.

4. In a self feeding brush, the combination with a reservoir, a brush attached thereto and means to convey the contents of said reservoir into said brush; of a piston in said reservoir, a spring above said piston, adapted to direct downward pressure thereon, a cover for the reservoir, a socket for said cover, a handle entering said socket and having a vertical slot therein and a laterally extending slot at each end of the vertical slot, a lug on said socket adapted to enter said slots, a cable extending from said handle to said piston, whereby when the handle is elevated in the socket, the piston will be raised and the spring depressed, said laterally extending slots being adapted to hold the handle in its adjusted position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OSCAR ANDERSON.

Witnesses:
PETER LARSON,
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