

A. M. & S. F. GOODWIN.
 FOUNTAIN BRUSH.
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1,002,673.

Patented Sept. 5, 1911.

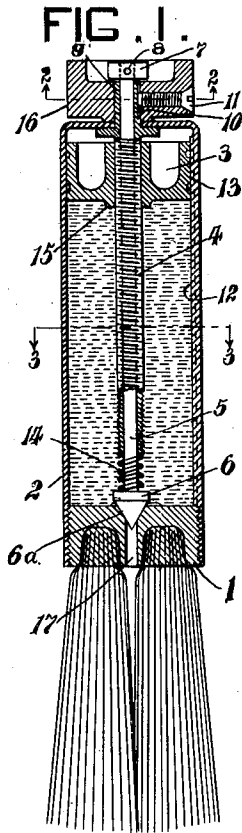


FIG. 2.

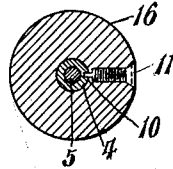


FIG. 3.

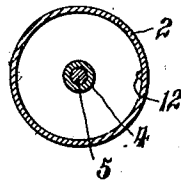
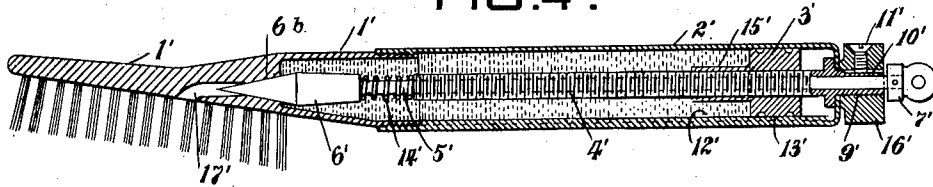


FIG. 4.



WITNESSES

D. F. Prenter
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UNITED STATES PATENT OFFICE.

ADAM M. GOODWIN AND STEWART F. GOODWIN, OF PITTSBURG, PENNSYLVANIA.

FOUNTAIN-BRUSH.

1,002,673.

Specification of Letters Patent.

Patented Sept. 5, 1911.

Application filed June 11, 1910. Serial No. 568,456.

To all whom it may concern:

Be it known that we, ADAM M. GOODWIN and STEWART F. GOODWIN, both citizens of the United States of America, residing at the city of Pittsburg, county of Allegheny, in the State of Pennsylvania, have invented a new and useful Improvement in Fountain-Brushes, of which the following is a full, clear, and exact description, reference being made to the accompanying drawings, which form a part of this specification.

This invention relates to fountain brushes. Its object is to provide a brush of this type which will be simple and durable in construction, and perfectly sanitary, and it consists in the combination and arrangement of parts as will be hereinafter more fully described.

Figure 1 shows a vertical section of a shaving brush to which our invention has been applied; Fig. 2 is a section through the controlling thumb nut; Fig. 3 a section through the hollow handle of the brush, and Fig. 4 is a vertical sectional view of a tooth brush embodying our invention.

The numeral 1 denotes the brush head proper, holding the bristles, which is screwed into the handle 2; 3 is the piston or plunger which works inside the handle 2 and is operated by the screw 4, which is hollow and contains the valve stem 5, which has on one end the valve 6, and on the other end, the collar 7 secured by the pin 8.

The screw 4 has an extension 9 outside the handle 2 which contains a keyway 10, which receives the flat pointed screw 11 carried by the thumb piece 16, binding the screw 4 to the said thumb piece 16. By turning the thumb piece 16, it will be apparent that the piston or plunger 3 will be driven up or down as required.

On the inside of the handle 2, we provide a longitudinal rib 12, and corresponding longitudinal groove 13 in the piston which prevents the piston or plunger from turning when being driven by the screw 4.

The spring 14 carried by the valve stem 5 between the valve 6 and the end of the screw 4 serves to hold the valve 6 in closed position in the valve seat 6^a, and thus prevents leaking of the fluid or paste through the port 17, which leads from the source of supply to the bristles, it also prevents water from entering the handle to the fluid or paste when the bristles are being washed off.

The piston 3 has the suitable boss 15 which

abuts against the valve 6, when the piston 3 has reached the limit of its downward travel and holds the valve down on its seat and consequently notifies the person using the brush that the fluid or paste has been exhausted and needs refilling.

In Fig. 4 we show our invention applied to a tooth brush and in which the numeral 1' indicates the brush head, holding the bristles, which screws into the handle 2'; 3' is the piston which is inside the handle 2'; and is operated by the screw 4' which is hollow and contains the valve stem 5'. The stem has on one end the valve 6', and on the other end the collar 7' secured by the pin 8'. The screw 4' has an extension 9' outside the handle 2' which contains a keyway 10' which receives the flat pointed screw 11' carried by the thumb piece 16' and binding the screw 4' to the said thumb piece 16'. By turning the thumb piece it will be apparent that the piston or plunger 3' will be driven up or down as required. On the inside of the handle 2' we provide a projection 12' and corresponding recess 13' in the piston which prevents the piston or plunger 3' from turning when being driven by the screw 4'. The spring 14' carried by the valve stem 5' between the valve 6' and the end of the screw 4' serves to hold the valve 6' in closed position in the valve seat 6^b and thus prevents leaking of the fluid or paste through the port 17', which leads from the source of supply to the bristles, it also prevents water from entering the handle to the fluid or paste when the bristles are cleaned by being washed off.

Referring to Fig. 1, the operation of our device will be readily understood.

By taking hold of the thumb piece 16 and pulling same away from the handle 2, the thumb piece 16 comes in contact with the collar 7 attached to the valve stem 5, thereby lifting the valve 6 off the seat by compressing the spring 14, while the valve is held off its seat by the pull, a slight turn of the thumb piece 16 turns the screw 4 which drives the piston down and forces the fluid or paste out through the port 17 and among the bristles; when enough fluid or paste has been forced out to meet requirements, the thumb piece 16 is let go and the spring 14 seats the valve and closes the opening.

The advantages of our invention will be appreciated by those skilled in the art to which it appertains. The device is simple

and durable in construction and efficient in operation and is perfectly sanitary.

It will be apparent that many changes may be made in the construction shown and we do not, therefore, desire to limit ourselves thereto.

Having thus described our invention, what we claim and desire to secure by Letters Patent is;

10 1. In a fountain brush, the combination of a handle embodying a casing, bristles carried thereby, a reciprocable plunger mounted in the casing, a valve stem surrounded by the plunger whereby the valve can be operated
15 independently and separately from the plunger, the casing having a port leading to the bristles.

2. In a fountain brush the combination of a handle embodying a casing, bristles carried

thereby, a reciprocable plunger mounted in 20 the casing, a hollow screw for reciprocating the plunger, a valve, and a valve stem therefor mounted in the hollow screw whereby the valve can be operated independently and separately from the plunger, and a port lead- 25 ing from the casing to the bristles, the plunger having a depending boss adapted to come in contact with and hold the valve in closed position.

In testimony whereof, we have hereunto 30 set our hands.

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Witnesses:

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S. LE FEVRE.