

J. T. COLEMAN.  
 FOUNTAIN BRUSH.  
 APPLICATION FILED DEC. 5, 1910.

995,769.

Patented June 20, 1911.

Fig. 1.

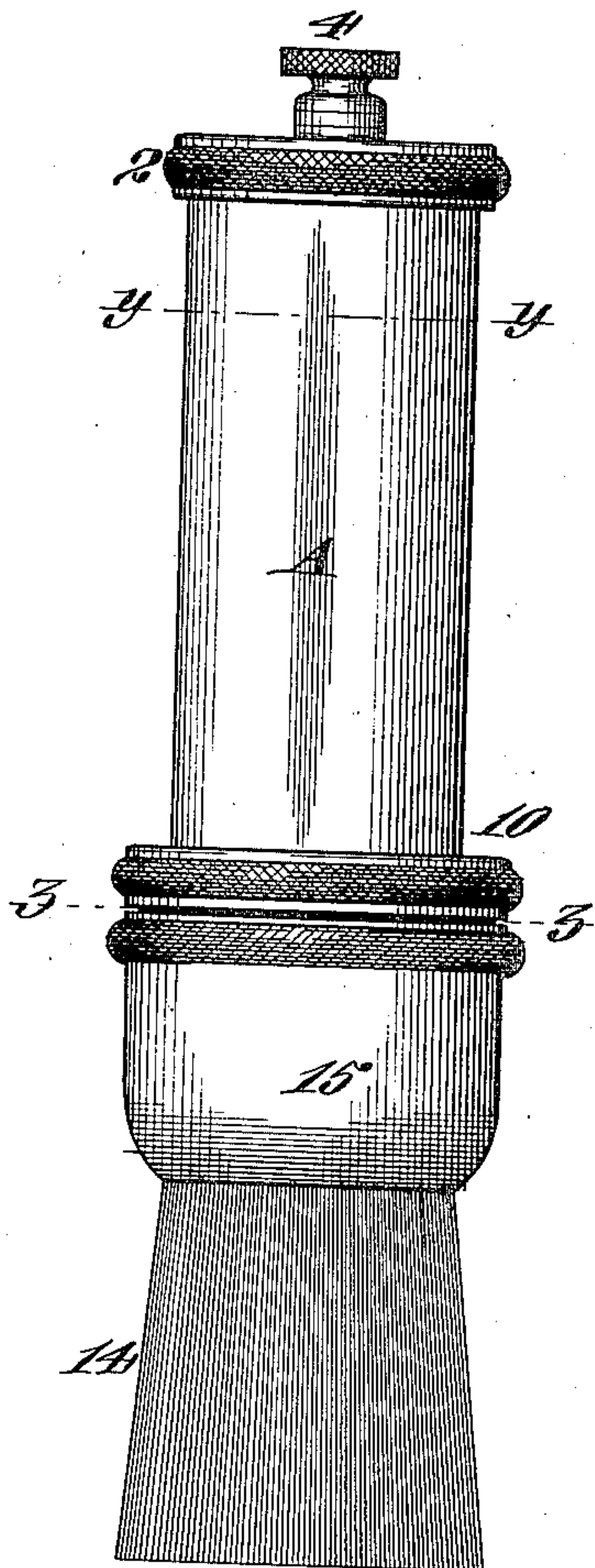


Fig. 2.

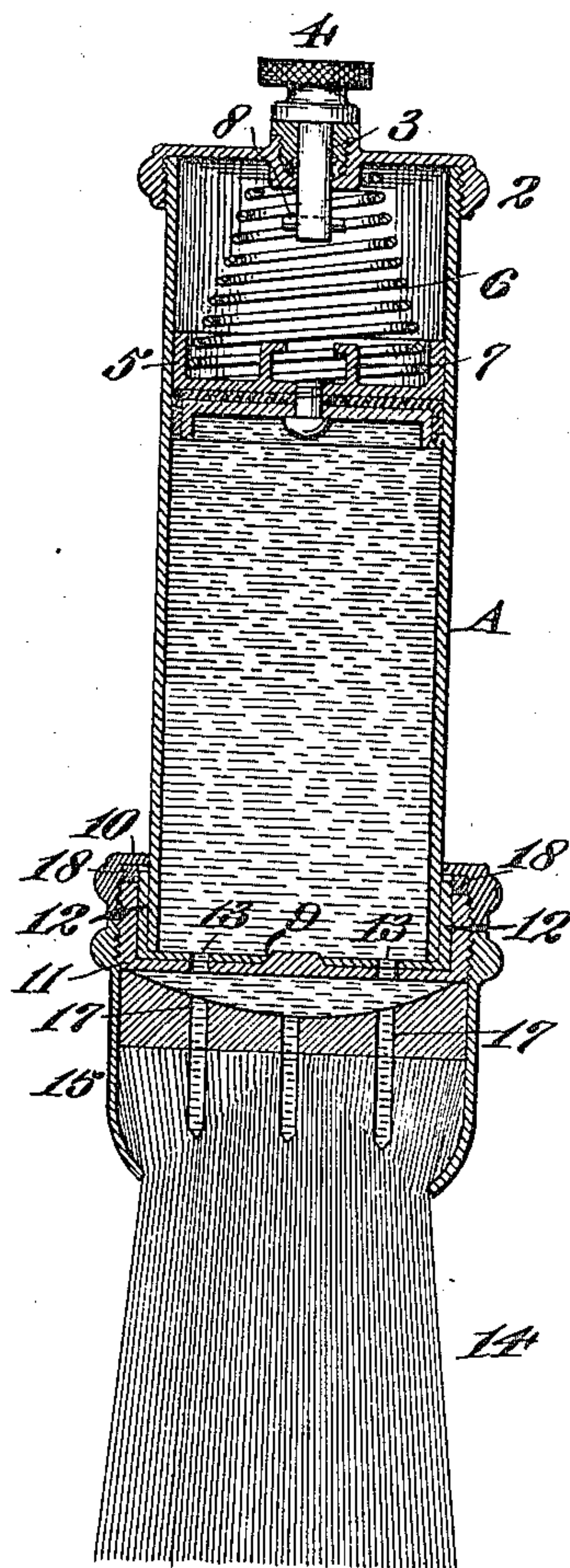


Fig. 3.

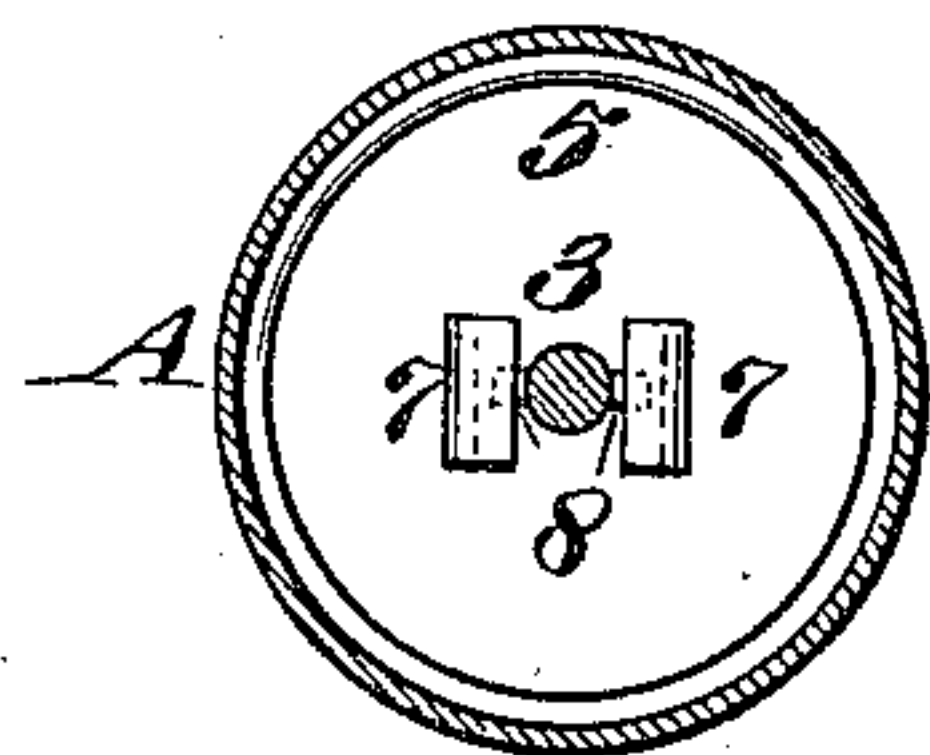
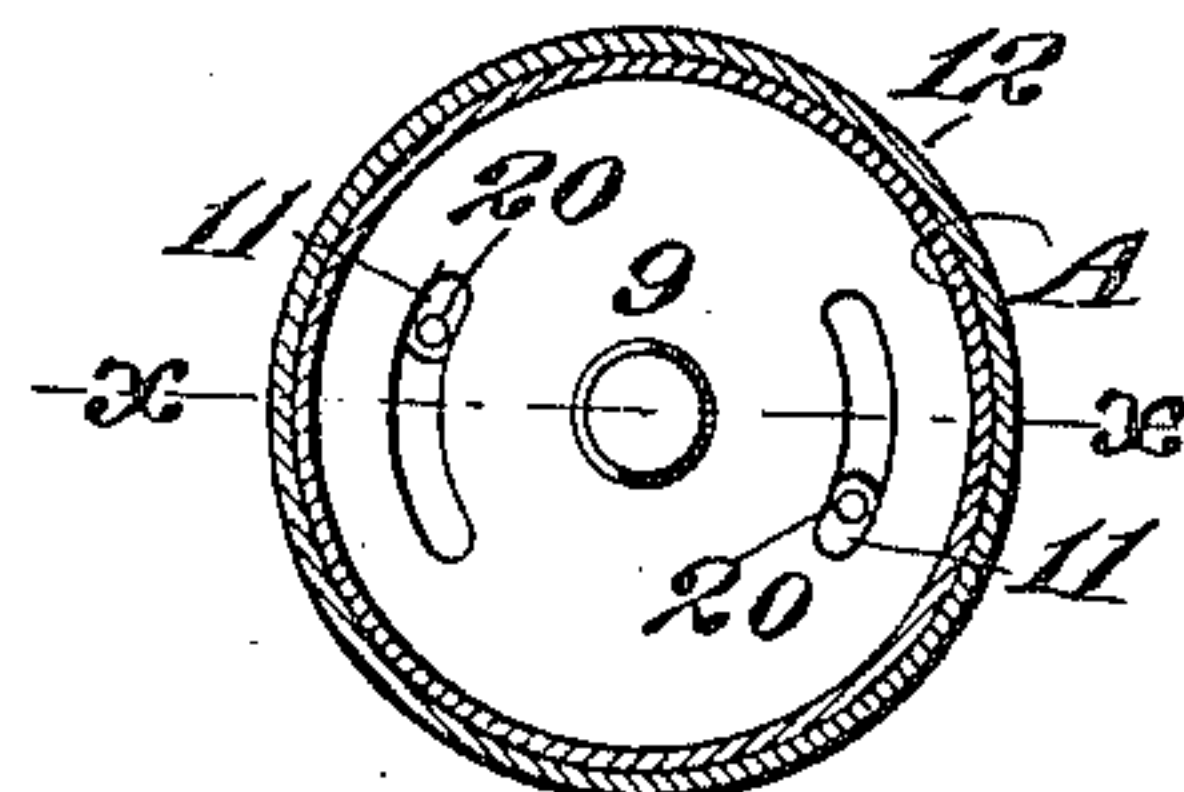


Fig. 4.



Witnesses,  
 Charles Pickles  
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Inventor,  
 James T. Coleman.

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# UNITED STATES PATENT OFFICE.

JAMES T. COLEMAN, OF OAKLAND, CALIFORNIA.

FOUNTAIN-BRUSH.

995,769.

Specification of Letters Patent. Patented June 20, 1911.

Application filed December 5, 1910. Serial No. 595,565.

*To all whom it may concern:*

Be it known that I, JAMES T. COLEMAN, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Fountain-Brushes, of which the following is a specification.

My invention relates to a reservoir or fountain brush, adaptable for such uses as a brush of this character may serve for.

It consists in the combination of parts and details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is an elevation. Fig. 2 is a vertical section on line X—X of Fig. 4. Fig. 3 is a horizontal section on line Y—Y of Fig. 1. Fig. 4 is a horizontal section on line Z—Z of Fig. 1.

It is the object of my invention to provide improvements in brushes of this character by which I may more perfectly regulate and control the passage of the material from the reservoir, and means by which the reservoir may be conveniently filled, and the apparatus manipulated.

As shown in my invention A is a reservoir which may be cylindrical or any other desired shape. The upper end of the reservoir has a cap 2 by which it is closed and through which a shaft or spindle 3 extends, having a suitable turning handle 4, from the outside. Within the cylinder a closely fitting piston 5 is adapted to move. This piston is normally pressed downwardly by a spring 6, the lower end of which rests in the chambered interior of the piston, and the upper end against the cap 2 in close proximity with the stuffing pockets through which the shaft 3 passes. Within the piston is an upwardly extending, centrally located, locking device with shoulders 7, and through the shaft 3 passes a pin 8 which may be engaged with the lock 7 when the piston has been pushed to the upper end of its stroke. In this condition the reservoir or chamber A may be filled from the lower end through a valve opening 9, made in the cap 12, which is secured to the lower end of the reservoir. As shown in the present case, a turnable collar 10 surrounds the lower end of the reservoir and is retained by the shoulder formed by the upturned flange of the cap 12.

The valve 11 is a disk having upturned, exteriorly, screw-threaded flanges, which flanges fit over the exterior portion of the

cap 12 and screw into the threaded interior of the collar 10, thus holding the inner face of this valve in contact with the outer surface of the cap 12. Curved slots are made through the cap 12 concentric with, and exterior the center thereof. Correspondingly curved slots are made in the valve, and by turning the slots of the valve to register with the edges of the seat 12 the material within the reservoir may be allowed to flow through these openings. The amount of opening may be adjusted by turning the collar 10, and the valve which is screwed into it, to increase or diminish the length of the openings, thus regulating the flow from the reservoir. A stop 20 limits the opening or closing movement of the valve.

The brush 14 may be of bristles or suitable material and is compressed into a cap 15, having an inturned flange at the lower end, which, when the bristles are properly fitted into the cap, compresses them within the periphery of this shoulder allowing the inner ends of the bristles to expand and fill the larger portion of the interior of the cap. The upper ends of these bristles are then secured together by a fusible alloy poured into the interior of the cap forming heads upon the bristles which prevent their being removed. The upper portion of this fusible alloy is preferably bored out to make a concavity within the cap, and holes 17 are made through the fusible material and extending sufficiently into the mass of bristles which form the brush, to allow the contents of the reservoir to flow down when the valve is opened and enter the space formed below the valve and to thence flow down into the bristles through which it may percolate to the end. The interior of the cap 15 is screw-threaded so that it may be screwed upon the exterior threads of the valve 11 until it abuts against the lower edge of the collar 10.

The operation of the device will then be as follows: The reservoir having been filled after withdrawing the piston 5, temporarily locking it to the spindle 3, and inverting the reservoir the closure may then be replaced, and the valve disk 11 fitted to the collar 10; leakage being prevented within the collar by a suitable soft packing 18. By turning the collar 10 with relation to the ports 13 the valve and its seat are brought into such relation as may be desired to allow the escape of the material within the reservoir. The length of these segmental ports is such that



any desired opening may be had and the valve then locked in place by screwing up the outer cap 15, which forms a lock against the collar 10 and completes a symmetrical structure. By turning the knob 4 until the spindle releases the piston the spring 6 will be allowed to act and press upon the contents of the reservoir thus forcing it into the brush to any degree allowed by the opening of the valve. The latter may be readily closed at any time by rotating it upon its seat and a very convenient adjustment may thus be had.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

1. The combination in a fountain brush of a reservoir having a filling opening, means for impelling the contents from said opening, a valve and a valve seat fitting the filling end of the reservoir, said valve and seat having ports capable of registering one with the other, and an exterior screw cap engaging said seat for locking the valve to its seat.

2. The combination in a fountain brush, of a reservoir, a spring pressed plunger movable therein, releasable means for locking the plunger in one end of the reservoir, a valve seat fitting one end having a central filling port, segmental ports formed exterior to the filling port, a valve having corresponding ports and turnable upon the valve seat, a turnable flanged collar upon the reservoir, and a brush-holding socket having its end fitting and registering with the collar and serving to lock the valve in position.

3. The combination in a fountain brush,

of a reservoir, an internally threaded collar turnable about the delivery end of the reservoir, an adjustable valve and seat, and a screw-threaded, brush-holding cap engageable with the valve and lockable against the collar.

4. The combination in a fountain brush, of a reservoir, an internally threaded turnable collar, a valve and seat adjustable and lockable with relation to each other, a cap within which the brush material is compressed, and a filling within which the inner ends of the brush are embedded.

5. The combination in a fountain brush, of a cap having inturned shoulders formed at the outer open end, brush material compressed into the cap and extending through the shoulder opening, a filling in which the inner ends of the brush are embedded with openings extending into the brush material, a valve seat fixed to the lower end of the reservoir and having segmental ports made therethrough, a valve having ports adapted to register with the ports of the valve seat, and an exterior flange, an internally threaded collar turnable about the reservoir and into which the valve flange may be screwed, and a brush-holding cap having internal threads adapted to screw upon the valve flange and cause the brush-holding cap to lock the collar and valve.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JAMES T. COLEMAN.

Witnesses:

A. W. LEFTON,  
JAMES MORRISON.