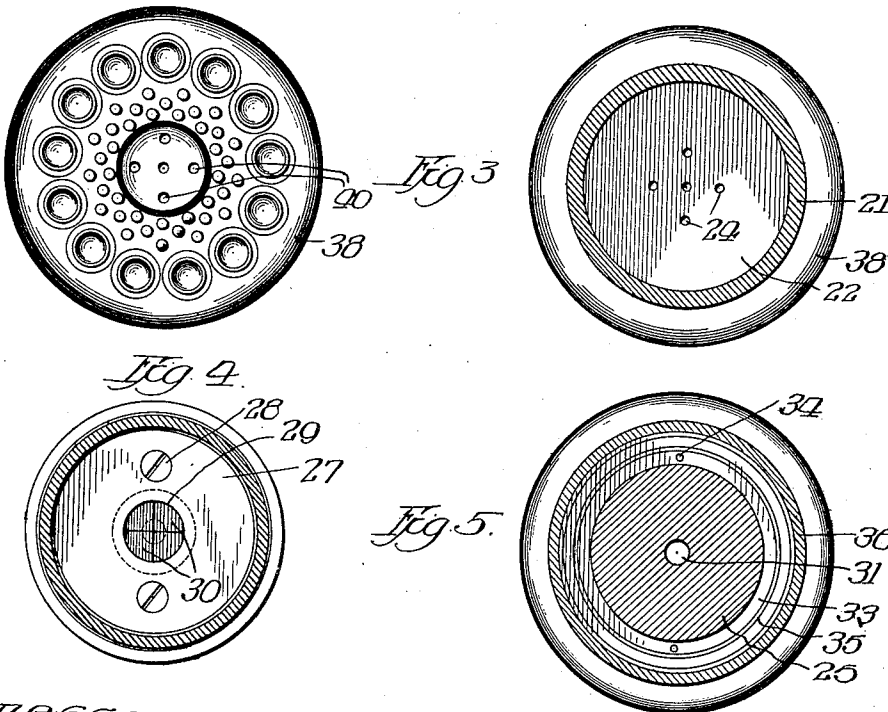
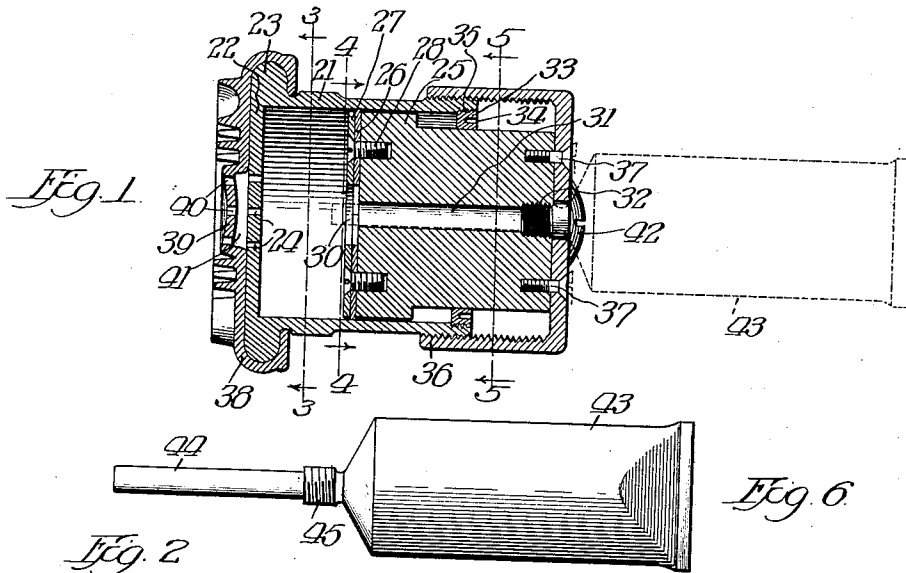


J. C. MARS.
CREAM MASSAGE DEVICE.
APPLICATION FILED FEB. 1, 1913.

1,117,207.

Patented Nov. 17, 1914.

3 SHEETS—SHEET 1.



Witnesses:

Ed. C. Devine

Frederic F. Geist

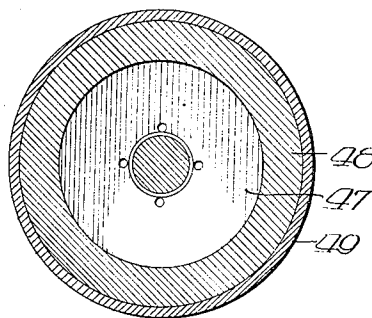
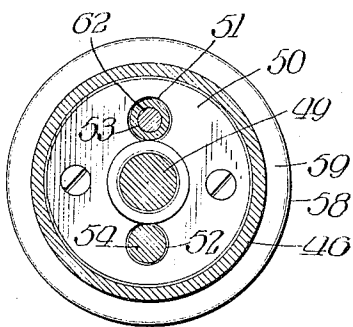
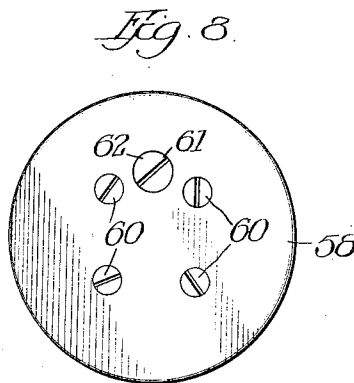
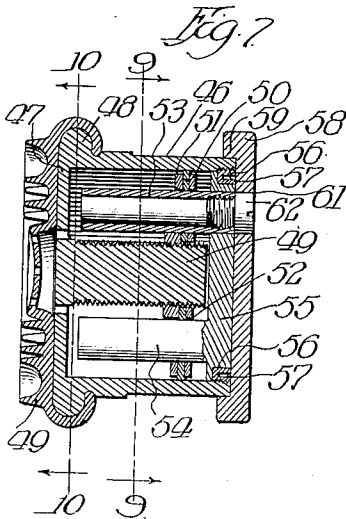
Inventor:
James C. Mars.

By Linthicum, Bell & Fuller
Attys.

J. C. MARS.
 CREAM MASSAGE DEVICE.
 APPLICATION FILED FEB. 1, 1913.

1,117,207.

Patented Nov. 17, 1914.
 3 SHEETS—SHEET 2.



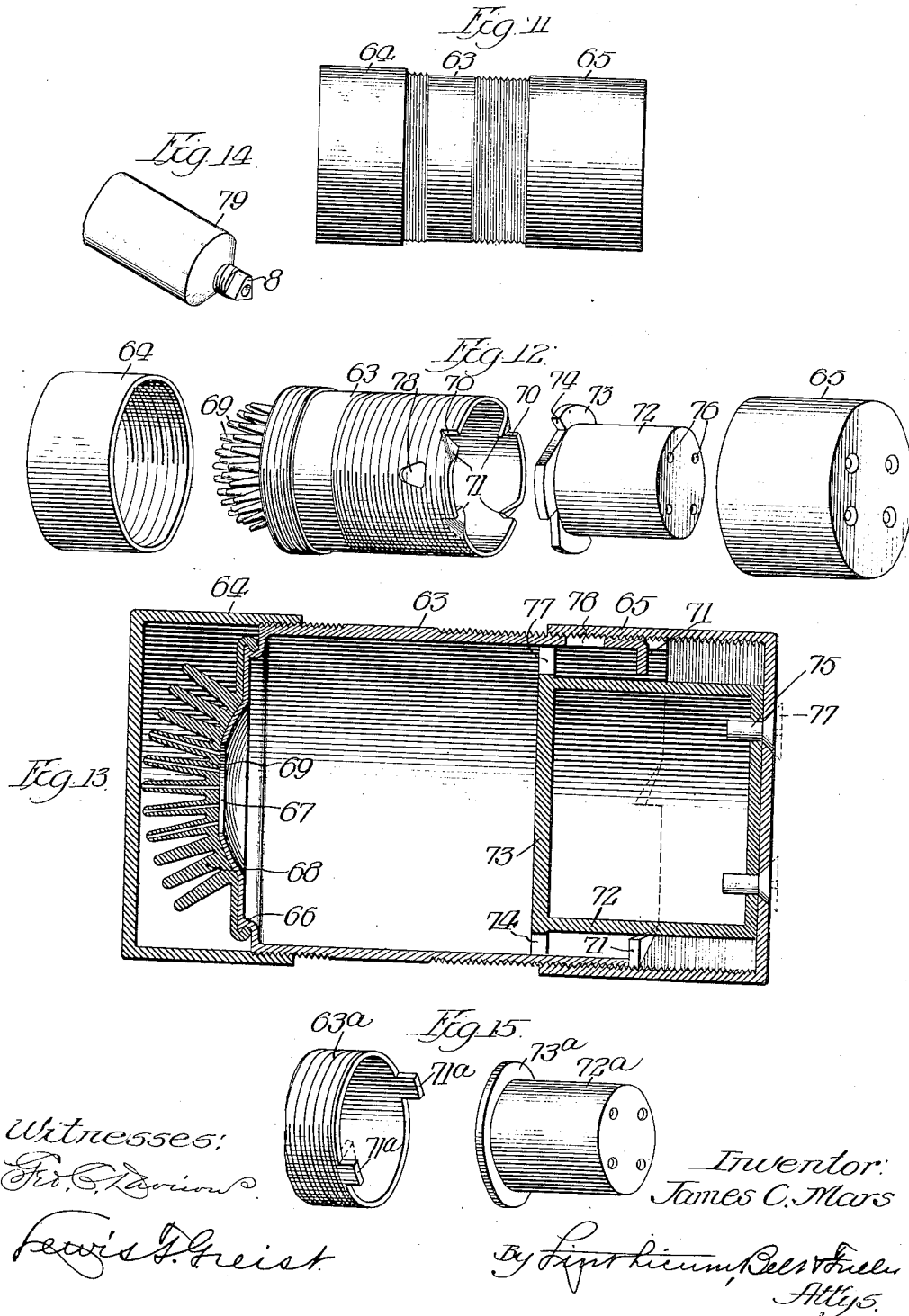
Witnesses
 Ed. K. Kavanagh
 Lewis F. Greist

Inventor:
 James C. Mars.
 By L. H. Lathum, Bell & Fuller
 Attys.

J. C. MARS.
CREAM MASSAGE DEVICE.
APPLICATION FILED FEB. 1, 1913.

1,117,207.

Patented Nov. 17, 1914.
3 SHEETS—SHEET 3.



UNITED STATES PATENT OFFICE.

JAMES C. MARS, OF CHICAGO, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO FLEUR DE LIS SPECIALTY COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

CREAM-MASSAGE DEVICE.

1,117,207.

Specification of Letters Patent.

Patented Nov. 17, 1914.

Application filed February 1, 1913. Serial No. 745,569.

To all whom it may concern:

Be it known that I, JAMES C. MARS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cream-Massage Devices, of which the following is a specification.

My invention has for its object the provision of a fountain massage device adapted for the convenient application in an efficient manner of face or shaving cream and the like.

The invention embraces also a safety feature whereby, after being originally charged with cream, the device can be refilled only with cream of a given quality or make.

To this end the invention comprises the fountain massage instrument proper and in combination therewith a peculiar form of cream charging device adapted to co-act with certain constructional features of the massage instrument whereby the refilling of the latter can be accomplished only by the cooperation of the two, thus guarding against fraudulent substitution to the injury of the user and manufacturer.

In the accompanying drawings and in the description predicated thereon I set forth preferred and modified embodiments of the invention which is likewise capable of embodiment in other and varied constructional forms. Wherefore, it will be understood that the drawings and description are to be construed in an illustrative sense and not as unnecessarily limiting the invention.

In the drawings: Figure 1 is a vertical longitudinal section through a massage instrument embodying the preferred form of the invention; Fig. 2 is an end view showing the massage pad; Figs. 3, 4, and 5 are vertical transverse sections on the lines 3—3, 4—4 and 5—5 respectively of Fig. 1; Fig. 6 is an elevation of a recharging tube adapted for use in connection with this form of the invention; Fig. 7 is a vertical longitudinal section through a modified form of the invention; Fig. 8 is a rear end elevation of the device shown in Fig. 7; Figs. 9 and 10 are vertical transverse sections on the lines 9—9 and 10—10 of Fig. 7 respectively; Fig. 11 is a side elevation of another modified

form of the invention; Fig. 12 is a view in perspective showing the disassociated elements of this form; Fig. 13 is a vertical longitudinal section through Fig. 1; Fig. 14 is a fragmentary view of the recharging tube adapted to this form of the invention; and Fig. 15 is a view in perspective of certain of the elements illustrating a modified feature.

Referring particularly to the form of invention shown Figs. 1 to 6 inclusive, the massage instrument proper comprises a barrel or cylinder 21 having at one end the head 22 provided with a peripheral flange 23 and with a plurality of apertures 24 shown as five in number. Within this cylinder is mounted for reciprocation a plunger or piston 25 advantageously provided upon its forward face with a flexible disk 26 secured in position by a plate 27 and screws 28. The plate 27 has a central opening 29, and that portion of the disk 26 in register with the opening 29 is divided upon intersecting lines to form valve segments 30. The piston 25 is provided with an axial bore or passage-way 31 coinciding with the axis of the opening 29 and the meeting points of the valve segments 30, the outer end of the said bore being interiorly threaded at 32 for a purpose which will hereafter be apparent. The rearwardly extending portion of the valve member is slightly reduced in cross section and between its outer surface and the inner surface of the cylinder 21 is interposed a threaded annulus 33 which, by means of a spanner wrench or other suitable tool engaging within the recesses 34, is turned upon engagement with the thread 35 formed upon the interior edge of the cylinder, which annulus serves as a rear abutment for the head of the piston to limit its rearward travel. The cylinder 21 is likewise exteriorly threaded at its rear end for engagement with the thread of the interiorly threaded cap 36 which takes over the rear end of the cylinder and incloses the annulus 33 and the piston 25 and is attached to the latter by means of the screws 37. The cylinder, piston, retaining plate, annulus and cap may be made of any suitable material such as hard rubber, celluloid or metal which will not corrode, while the valve disk is of leather, soft rubber or the like.

Snapped over the flanged head of the cylinder is the massage pad 38 which may have a face of any approved contour with a central cup 39 perforated at 40 to correspond to the perforations 24. The inner face of the pad is preferably cut away as indicated to provide an intermediate chamber 41 between the pad and the end face of the cylinder head.

When the several parts of the massage instrument are originally assembled the cylinder 21 is first partially filled with a cold cream and the piston 25 is then inserted, and the annulus 33 screwed into position to prevent the withdrawal of the piston. The cap 36 is then screwed into engagement with the cylinder and the screws 37 inserted to connect the piston and cap securely together. The flaring head of each of the screws 37 is deeper than the recess provided for its reception so that the notched head of the screw projects beyond the rear face of the cap 36, as indicated in dotted lines. The projecting portion of the screw head is then dressed off so as to remove the notch and prevent the removal of the screws, and the screw 42 is threaded into the passageway 31 to serve as a closure for the same. The subsequent turning of the cap 36 upon the cylinder advances the piston and forces the cream through the apertures 24 into the chamber 41 whence it finds its way through the apertures 40 to the exterior face of the massage pad in position for application. When the supply of cream within the cylinder is exhausted the piston is again retracted by a retrograde movement of the cap 36, but by reason of the fact that the screws 37 cannot be removed the cap cannot be unscrewed from engagement with the cylinder as the annulus 33 abuts against the head of the piston. This provision prevents the piston being removed and the cylinder recharged from any supply of cream, but provision is at the same time made for the recharging of the cylinder with cream from devices of a particular character. In Fig. 6 is shown a collapsible tube 43 of ordinary construction save that it has an elongated discharge nozzle 44 projecting from the threaded neck 45. When the screw 42 is removed the nozzle 44 is inserted into the bore 31, as indicated in dotted lines in Fig. 1, until its end passes beyond the valve segments 30 and the threaded neck 45 is screwed into the threads 42 of the piston. Pressure upon the collapsible body of the tube, will as readily understood, force the contents through the nozzle 44 past the valve segments 30 into the cylinder in advance of the piston, the recharging tube being then withdrawn, the valve segments close, and the screw 42 having been replaced the device is again ready for use.

Having reference to Figs. 7 to 10 inclu-

sive, the cylinder 46 has a similar perforated head 47 with a peripheral flange 48 upon which is secured the massage pad 49. Centrally within the cylinder and affixed to the head 47 of the same is a threaded spindle 49 and upon this spindle is threaded a valve member 50 which is in effect a piston head and will be so denominated. This piston head is provided at diametrically opposite positions with apertures 51, 52 by which it is slidably mounted upon studs 53 and 54 of the piston 55. As in the former case, an annulus 56 is threaded into the outer end of the cylinder and is provided with apertures 57 for engagement with the spanner wrench or the like. A cap 58 incloses the outer end of the ring and piston and has a flange 59 which takes over the outer end of the cylinder. The bearing surface between the flange 59 and the cylinder 46 is smooth so as to permit of free angular movement. The cap 58 is secured to the piston 55 by means of screws 60. The stud 54 is solid, but the stud 53 is tubular and a hole 61 is provided in the cap 58 which registers with the bore of the tubular stud 53. As in the former case the screws 60, after the device is assembled, are dressed off so as to present a smooth surface and prevent their retraction, and a filler screw 62 is inserted in the tubular stud 53, its head filling the hole 61 in the cap 58. When normally charged with cream the parts of the device will occupy substantially the same position as shown in Fig. 7, and the turning of the cap 58 upon the cylinder 46 will, by means of the studs, turn the piston head and cause the same to advance along the threaded spindle 49, whereas the cap itself and the studs do not advance. It will thus be seen that the exterior length of the device remains constant and does not gradually become less as in the construction previously described.

When it is desired to recharge the device the cap 58 is turned in a contrary direction and the piston head caused to recede to the rear of the cylinder. The screw 62 is thereupon removed and the nozzle of the charging device previously described is inserted within the bore of the tubular stud 53, its threaded neck being engaged with the threaded portion of the stud previously engaged by the screw 62. The cream is thus charged into the cylinder through the tubular stud and after withdrawal of the nozzle of the charging tube the screw 62 is again inserted and fills the bore of the stud so as to make the same substantially solid.

Having reference to the form of the device shown in Figs. 11 to 14 inclusive, here it will be observed that the cylinder 63 is exteriorly threaded at both ends, at the front end for the reception of the protective cap 64, and at the rear end for the reception of the actuating cap 65. The head of the cyl-

inder has an inset flange 66, and is provided with a central opening 67, a massage pad 68 being snapped over the flange 66 as indicated. In this form of the device a certain number of massage elements 69 are about the central portion of the device provided with longitudinal bores for the passage of the cream. The cylinder 63 is at its rear end slitted longitudinally at intervals, as indicated at 70, and the adjacent wall is bent inwardly at 71 so as to provide in effect an intumed tooth. The piston member 72 is provided with a head 73 which in its periphery is angularly notched as indicated at 74 so as to pass the teeth 71 of the cylinder when brought into register therewith but to engage with said teeth if angularly turned when in the plane thereof. Screws 75 seated within the cap 65 engage threaded holes 76 of the piston so as to unite the cap and piston permanently after the heads 77 of the screws have been dressed down as in the previous case.

It will be observed that as the cap 65 is rotated it advances along the cylinder 63 and thus causes the piston head 73 to advance within the cylinder forcing the cream through the perforations of the massage pad. When the cream is exhausted and the cylinder is retracted by the rotation of the cap 65 in a reverse direction the walls of the notches 74 will engage with the teeth 71 and prevent further rotation of the cap, which latter is permanently secured to the piston. In order to provide for the recharging of the cream from an authorized source of supply the wall of the cylinder 63 is, in its rear portion, provided with an angular opening 78 which is uncovered by the cap 65 when in its rearmost position so as to afford communication from without to the interior of the cylinder in advance of the piston head. A collapsible tube 79 is provided having an angular nozzle 80 of a shape corresponding to that of the angular opening 78. The nozzle 80 being inserted within the angular opening 78 the contents of the tube 79 can be forced into the cylinder by collapsing the tube in the usual manner, whereas the ordinary collapsible tube cannot be inserted within said opening. Obviously the shape of the opening and of the nozzle may be varied at will.

In Fig. 15 I have shown a slightly modified form of interlocking feature adapted to the type of instrument shown in Figs. 11 to 14 inclusive. In this case the cylinder 63^a is provided with terminal tongues 71^a adapted to be bent downwardly as indicated in the lower portion of the figure and when in this position to engage over the head 73^a of the piston 72^a so as to prevent its withdrawal and thus prevent the removal of the cap to which it is permanently affixed as before described. It will be understood that the

tongues 71^a are inwardly bent at the time the instrument is assembled after being primarily charged with cream.

I claim:

1. A fountain massage device including a reservoir normally locked against refilling, in combination with a recharging device provided with means arranged to co-act with the massage device to release the lock and to effect the filling of the said device, substantially as described.

2. A fountain massage device comprising a cylinder, a piston therein, means to actuate the piston to progressively discharge the contents from the cylinder, means to prevent the removal of the piston for refilling, and a recharging device provided with means co-acting with the massage device to effect the filling of the latter, substantially as described.

3. A fountain massage device comprising a cylinder, a piston therein, means to actuate the piston to progressively discharge the contents from the cylinder, means to prevent the removal of the piston for refilling, a cylinder charging device, the cylinder and charging device provided with co-acting parts whereby to render the latter operative, substantially as described.

4. A fountain massage device comprising a cylinder, a valved piston therein, means to actuate the piston to progressively discharge the contents from the cylinder through the pad, in combination with a recharging device arranged to coact with the valve of the piston to refill the cylinder, substantially as described.

5. A fountain massage device comprising a cylinder, a piston therein having a longitudinal bore, and means to actuate the piston to progressively discharge the contents from the cylinder, in combination with a recharging device comprising a reservoir provided with a nozzle adapted to be inserted within the bore of the piston, said reservoir providing means for discharging its contents through the nozzle and bore into the cylinder in advance of the piston, substantially as described.

6. A fountain massage device comprising a cylinder, a piston therein having an axial bore extending throughout its length, a forwardly opening valve controlling the forward end of the bore, and means to actuate the piston to progressively discharge the contents from the cylinder, in combination with a recharging device comprising a collapsible tube having an elongated nozzle adapted to enter the bore of the piston and to operate the valve whereby the collapsing of the tube will discharge its contents through the bore and the valve into the cylinder in advance of the piston, substantially as described.

7. A fountain massage device comprising

4
 5 a cylinder, a piston therein having a longitudinal bore extending therethrough, the forward end of the bore communicating with the interior of the cylinder in advance of the piston, and the rear end of the bore interiorly threaded and communicating with the outer face of the instrument, and means to actuate the piston to progressively discharge the contents from the cylinder, in
 10 combination with recharging means comprising a collapsible tube having an elongated nozzle adapted to enter the bore of the piston and a threaded neck adapted to engage within the threaded end of the bore
 15 whereby the collapsing of the tube will force its contents through the bore into the cylinder in advance of the piston, substantially as described.

20 8. A fountain massage device comprising a cylinder having its wall exteriorly and interiorly threaded, a piston mounted within the cylinder, a threaded annulus mounted within the rear end of the cylinder and serving as a rearward abutment for the piston
 25 head, a cap overlying the rear end of the piston and threaded upon the cylinder, means to permanently secure the cap to the piston in order to prevent their disassociation and removal, the piston provided with
 30 a longitudinal bore extending from its forward face through the rear face of the cap, in combination with recharging means comprising a reservoir having an elongated nozzle adapted to enter the bore of the piston,

said reservoir provided with means for expelling its contents through the nozzle into the cylinder in advance of the piston, substantially as described. 35

9. A fountain massage device comprising a cylinder having its wall exteriorly and interiorly threaded, a piston mounted within the cylinder, a threaded annulus mounted within the rear end of the cylinder and serving as a rearward abutment for the piston head, a cap overlying the rear end of the piston and threaded upon the cylinder, means to permanently secure the cap to the piston in order to prevent their disassociation and removal, the piston provided with a longitudinal bore extending from its forward face through the rear face of the cap, a valve controlling the forward end of the bore and the rear end of the bore being interiorly threaded, in combination with recharging means comprising a collapsible
 40 tube having an elongated nozzle adapted to enter the bore of the piston and to operate the valve and also having a threaded neck to engage within the threaded end of said bore, whereby the collapsing of the tube will
 45 discharge its contents through the bore past the valve into the cylinder in advance of the piston, substantially as described. 50

JAMES C. MARS.

Witnesses:

LEWIS T. GREIST,
 MELVIN B. ERICSON.