

March 13, 1934.

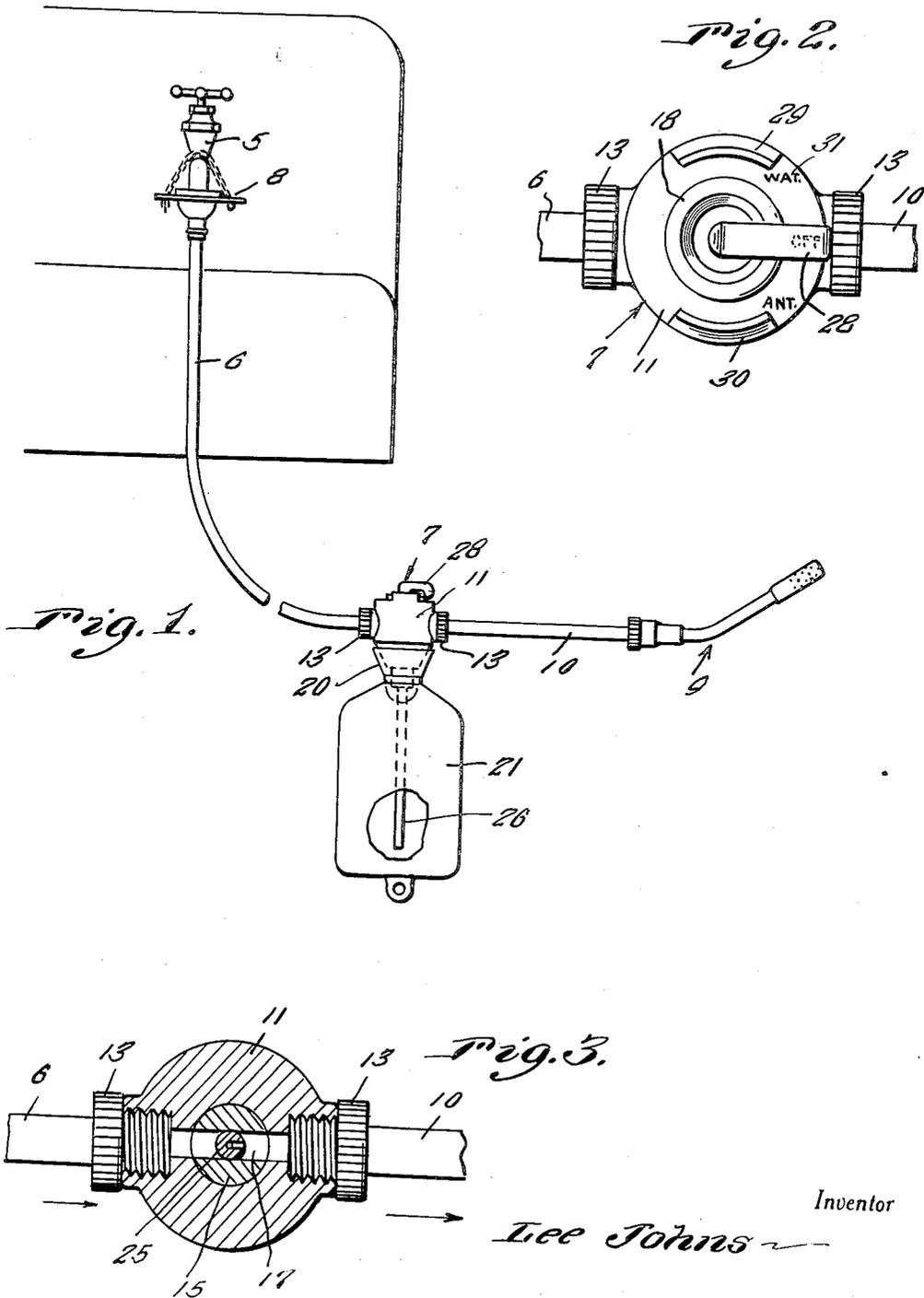
L. JOHNS

1,950,680

SYRINGE

Filed Sept. 2, 1932

2 Sheets-Sheet 1



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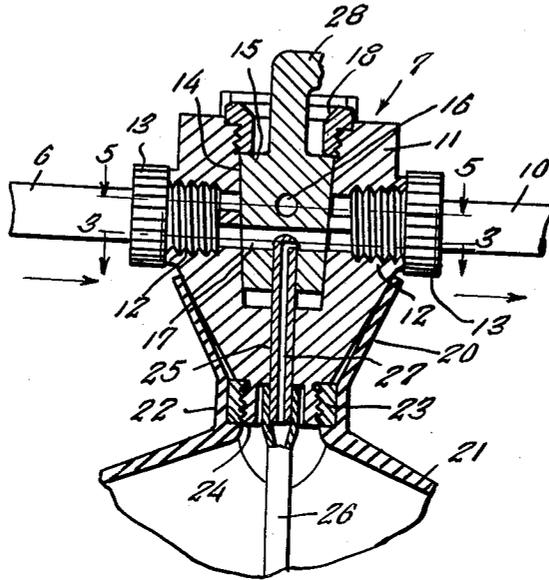
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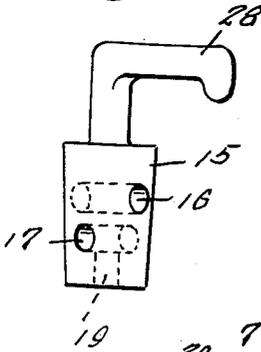
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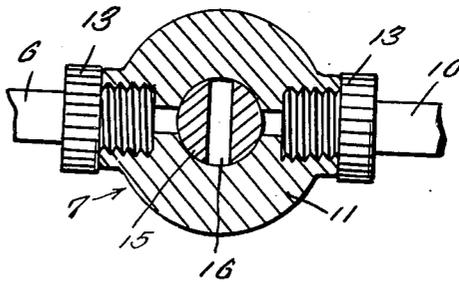
*Fig. 4.*



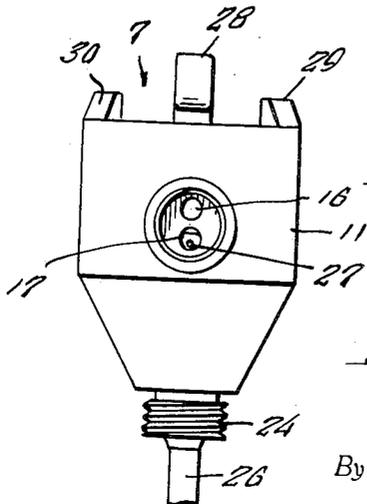
*Fig. 7.*



*Fig. 5.*



*Fig. 6.*



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# UNITED STATES PATENT OFFICE

1,950,680

SYRINGE

Lee Johns, Miami, Fla.

Application September 2, 1932, Serial No. 631,567

4 Claims. (Cl. 128—229)

This invention relates to new and useful improvements in syringes and more particularly to syringes of the douche type.

An important object of the present invention is to provide a syringe wherein a medicinal can be used with hydrant pressure in a regulated manner.

Another important object of the invention is to provide a syringe supply control of the hydrant pressure type wherein a medicinal from a collapsible container can be used and discharged by the hydrant pressure without exerting pressure into the said collapsible container.

Various other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:

Figure 1 represents a side elevational view of the novel syringe control attached to a faucet.

Figure 2 represents a top plan view of the control.

Figure 3 represents a horizontal sectional view through the control on substantially line 3—3 of Figure 4.

Figure 4 represents a fragmentary vertical sectional view through the control.

Figure 5 represents a horizontal sectional view taken substantially on line 5—5 of Figure 4.

Figure 6 represents a side elevational view of the control looking toward the open side of the suction tip.

Figure 7 represents a side elevational view of the valve element.

Referring to the drawings wherein like numerals designate like parts, it can be seen in Figure 1 that numeral 5 represents a faucet and numeral 6 represents a rubber tubing attached to the control denoted by numeral 7 at one end and at its opposite end by a suitable connector 8 to the aforementioned faucet 5.

Numeral 9 represents the syringe nozzle which forms the subject matter of a copending application of mine and this is connected by means of a tube 10 to the control 7.

Referring to Figure 4, it can be seen that the control 7 includes a cylindrical body 11 having a threaded bore 12 at each side thereof, that is, at diametrically opposite points on its periphery for receiving the threaded connector 13 of the tubes 6 and 10. For the purpose of convenience, the tube 6 will be referred to as the inlet tube while tube 10 will be referred to as the outlet tube.

Extending vertically in the body 11 is a downwardly tapering bore 14 for receiving the tapered valve plug 15, having the vertically spaced ducts

16 and 17 therein. It will be observed that these ducts 16 and 17 are at right angles with relation to each other. A jamb nut 18 serves to retain the valve plug 15 in the aforementioned bore 14 and as is clearly shown in Figures 4 and 7, the plug 15 is provided with a vertically extending bore 19 opening at one end into the duct 17 and at its lower end through the bottom of the plug 15. The lower portion of the body 11 is tapered so as to snugly engage into the usual apron portion 20 of a rubber bottle 21 of the collapsible type. The portion 22 of this bottle or bag is provided with an internally threaded annulus 23 for receiving the externally threaded reduced portion 24 depending from the tapered lower portion of the body 11. A bore 25 extends upwardly through the tapered portion of the body 11 to open into the tapered bore 14 and at its lower end, this bore 25 merges into a counterbore which receives the upper end of the rubber tube 26, the latter depending into the bag 21 to the extent substantially shown in Figure 1.

Numeral 27 represents the siphon tip which extends upwardly through the bore 25 of the body 11 and through the bore 19 to project into the duct 17 of the valve plug 15 in the manner substantially shown in Figures 3 and 4. The lower end of this siphon tip 27 engages into the aforementioned tube 26 in the manner substantially shown in Figure 4.

Between each threaded bore 12 in the body 11 and the tapered bore 14 is a pair of openings vertically spaced, the upper openings being registrable with the upper duct 16 in the valve plug 15 while the lower openings are registrable with the lower duct 17 of the plug 15, this depending upon the position of the plug 15.

By referring to Figure 2, it can be seen that the numeral 28 represents a handle on the upper end of the plug 15 which is movable to extreme positions abutting the stops 29 and 30. When the handle 28 is engaging the stop 29, the duct 16 is alined with the tubes 6 and 10 and the duct 17 is out of registry with the said tubes. In this position of the valve, only water from the hydrant will pass through the control 7 and this is convenient when the douche is being used solely for a water flushing treatment. However, when the handle 28 is abutting the stop 30, the duct 17 is in registry with the tubes 6 and 10 while the duct 16 is out of registry. Water under pressure will now pass from the tube 6 through the duct 17 of the plug 15 and out by way of the tube 10. The water, rushing through the duct 17, will create a suction in the tip 27, siphoning the chemical

liquid from the bag 21 so that it mixes with the water.

Adjacent the stop 29 can be placed indicia 31 denoting "Water" while adjacent the stop 30 can be placed indicia denoting "Antiseptic". Between these two points can be placed indicia denoting "Off" and in this position, the plug 15 has neither of its ducts 16 or 17 in registry with the tubes 6 and 10.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size, and materials used may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

What is claimed is:

1. A syringe control comprising a body having a fluid pressure inlet and an outlet, a valve bore in the body, said inlet and outlet communicating with the bore, a valve plug in the bore, said plug being provided with a pair of upper and lower ducts at right angles with respect to each other, said valve plug being provided with a vertical bore communicating with the lower duct and opening through the bottom of the plug, a chemical container attached to the body, and a tube depending into the container and extending upwardly through the vertical bore in the plug to terminate in the lower duct of the plug, said tube being provided with an opening in the upper end thereof on the side opposed to the said outlet, said upper duct being registrable with the inlet and outlet when the plug is turned from a position registering the lower duct with the inlet and outlet.

2. A syringe control comprising a body having a fluid pressure inlet and an outlet, a bore in the body with which the inlet and outlet communicate, a movable valve element in the bore having a pair of ducts therein selectively communicable with the inlet and outlet, a medicinal container, and a conduit extending from the interior of the container terminating within one of the ducts of the valve element, said conduit being provided with an opening at its end within the duct and on its side opposed to the said outlet, said valve being operative to register either of said ducts with the inlet and outlet.

3. A syringe control comprising a body having a fluid pressure inlet and an outlet, an opening in the body with which the inlet and outlet communicate, a valve element movable in the said opening and provided with a duct registrable with the inlet and outlet, a fluid container attached to the body, and a conduit extending from the interior of the container terminating within the said duct.

4. A syringe control comprising a body having a fluid pressure inlet and an outlet, an opening in the body with which the inlet and outlet communicate, a valve element movable in the said opening and provided with a duct registrable with the inlet and outlet, a chemical container attached to the body, and a conduit extending from the interior of the container to terminate within the said duct, the end of the said conduit within the said duct being constructed to provide a siphon tip.

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