

(No Model.)

A. V. GOLTERMANN.
SHUT-OFF FOR FOUNTAIN SYRINGES.

No. 591,228.

Patented Oct. 5, 1897.

Fig. 1.

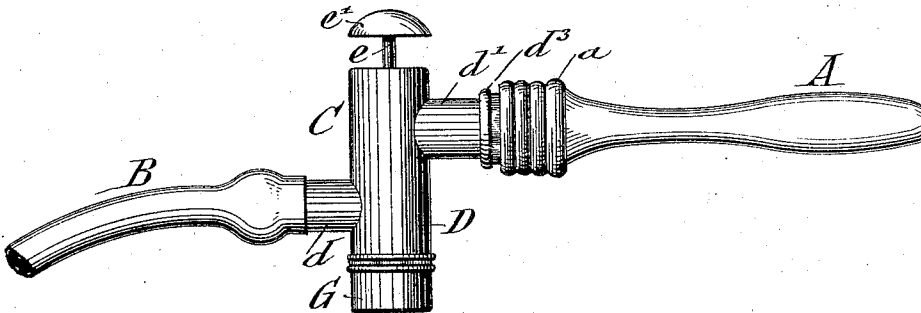


Fig 2

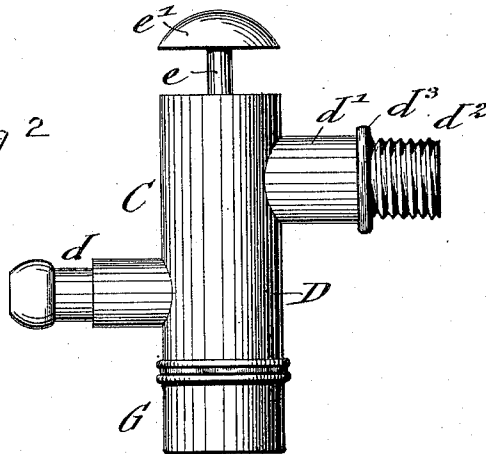
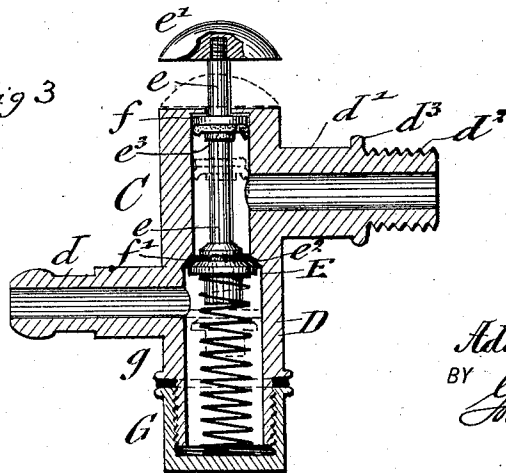


Fig 3



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SHUT-OFF FOR FOUNTAIN-SYRINGES.

SPECIFICATION forming part of Letters Patent No. 591,228, dated October 5, 1897.

Application filed March 6, 1897. Serial No. 626,201. (No model.)

To all whom it may concern:

Be it known that I, ADA V. GOLTERMANN, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Shut-Offs for Fountain-Syringes, of which the following is a specification.

This invention relates to certain improvements in the shut-offs for fountain-syringes, so that in place of the slide now in general use a simplified and practical shut-off is employed, enabling the opening of the valve and the supply of the liquid to the nozzle by the same hand which holds the nozzle, leaving the other hand free to be used as desired.

The invention consists of a shut-off for a fountain-syringe comprising a valve-casing or a cylinder, branches or nipples extending laterally from said cylinder and offset with respect to each other, an annular shoulder forming a valve-seat and protruding from the inner wall of the hollow cylinder between the branch pipes or nipples, a valve-stem guided in one end of said cylinder and provided with an operating-knob at its outer end and with a valve-disk at its inner end adapted to seat against said shoulder, and a spring interposed between the valve and a screw-cap which closes the open end of the cylinder, as will be hereinafter described and then particularly pointed out in the claim.

In the accompanying drawings, Figure 1 represents a side elevation of my improved shut-off for fountain-syringes, shown in connection with the discharge-nozzle and the supply-pipe. Fig. 2 is a side view of the shut-off detached, and Fig. 3 is a section through the central longitudinal plane of the shut-off.

Referring to the drawings, A represents the discharge-nozzle of the fountain-syringe, B the rubber supply-tube, and C my improved shut-off, which is arranged between the supply-tube and the nozzle and with which said parts are connected. The shut-off consists of a hollow cylinder or valve-casing D, provided at the respective sides of the same and at each side of a line extending transversely through the same with a branch pipe or nipple d , indicating a branch pipe or nipple which is enlarged at one end, so as to

receive and retain the end of the rubber supply-tube B, while d' indicates a branch pipe or nipple which is provided with an external screw-thread d^2 and with an annular shoulder d^3 , which screw-thread receives the internally-screw-threaded enlarged inner portion a of the discharge-nozzle A, and which shoulder d^3 serves as the abutment for said enlarged inner end of the nozzle, whereby the nozzle is firmly secured to the shut-off. By extending the branch pipes or nipples d d' sidewise and oppositely from the cylinder D the latter is as it were disposed transversely with relation to the nozzle and the supply-tube, so that the shut-off can be conveniently grasped for the purpose of manipulating its valve E. This valve is of disk shape, is arranged inside of the cylinder, and is provided with a stem e , extending axially of the cylinder and guided in an opening f in one end of the same, the upper end of said valve-stem being furnished with a detachable knob e' for depressing the valve and unseating it from the integral annular shoulder f' , which is formed on the inner wall of the cylinder and is arranged intermediately of the offset branch pipes or nipples. A yielding washer e^2 is placed upon the stem above the valve E. An additional yielding washer e^3 is arranged on the upper part of the valve-stem for preventing the liquid from flowing through the hole f .

g indicates a helical spring coiled within the cylinder below the valve and interposed between the valve and an internally-screw-threaded cap G, which is received by an external screw-thread formed on the cylinder at the end which is opposite the operating-knob of the valve.

On pressing upon the operating-knob of the valve the same is unseated, so that the liquid can flow through the discharge-nozzle, while upon releasing the pressure the spring returns it against its seat. The manner of arranging the cylinder with respect to the nozzle—that is to say, transversely of the nozzle—necessitates the above-described peculiar construction, and such disposal of the cylinder is advantageous for the reason that in operating the valve the finger which rests against the cap at one end and the finger or thumb which presses upon the knob of the

valve at the other end of the cylinder are spread apart, thereby enabling a stronger pressure upon the valve and a more ready and easy opening of the same than were the cylinder and the valve disposed otherwise. The shut-off can be readily detached from the tube and the nozzle and the screw-cap and valve removed, so that said parts can be cleaned when desired.

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

A shut-off for fountain-syringes, consisting of a valve-casing provided with a guide-opening in one end, said casing having a removable cap at the other end, branch pipes or nipples extending from opposite sides of said casing, and being offset with relation to each other, a valve-seat in said casing, arranged between the branch pipes, a valve-stem guided

in said guide-opening and provided with a valve, a washer fitted on the valve, a second washer arranged above the valve-washer, and means for retaining the same on the valve-stem, both of said washers and the valve being arranged in the chamber of the casing and at a suitable distance apart, so that the fluid passing through the casing is prevented from flowing in either direction past the two washers, and a knob arranged at the outer end of the valve-stem, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ADA V. GOLTERMANN.

Witnesses:

PAUL GOEPEL,
GEO. L. WHEELLOCK.