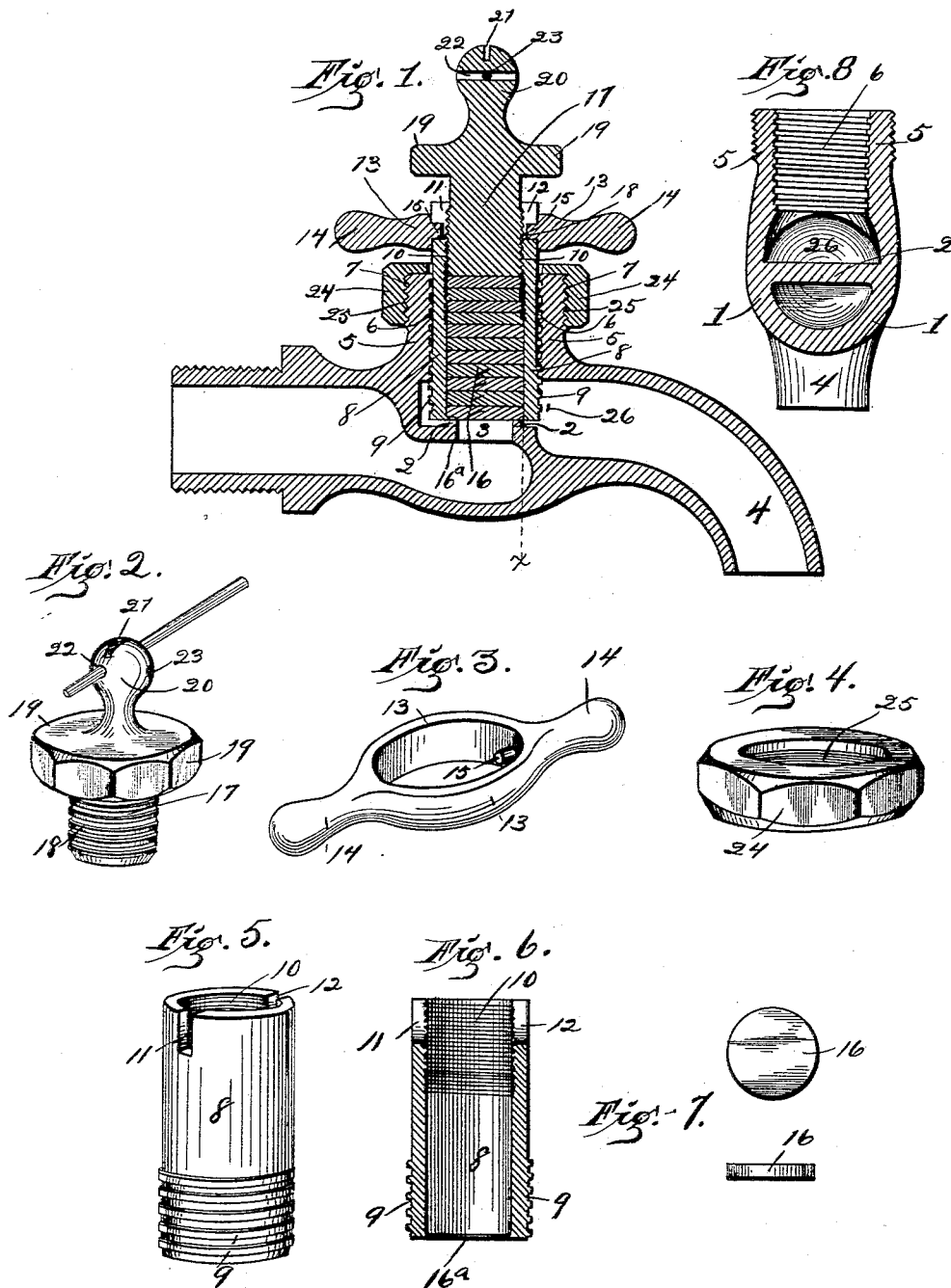


(No Model.)

F. SCHNEIDER & J. FOLEY.
FAUCET VALVE.

No. 504,755.

Patented Sept. 12, 1893.



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UNITED STATES PATENT OFFICE.

FREDERICK SCHNEIDER AND JAMES FOLEY, OF LEAVENWORTH, KANSAS.

FAUCET-VALVE.

SPECIFICATION forming part of Letters Patent No. 504,755, dated September 12, 1893.

Application filed November 25, 1892. Serial No. 453,149. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK SCHNEIDER and JAMES FOLEY, of Leavenworth, Leavenworth county, Kansas, have invented certain new and useful Improvements in Faucet-Valves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to that class of faucets in which a spigot or plug is made to open or close an aperture in portion to form an outlet or escape opening for the passage of a fluid, and has for its object the providing of a plug or spigot carrying a number of flexible disks, that form a packing, the lower one of which rests upon the seat of the aperture, and means for ejecting said lower disk when it becomes worn with use, and causing a new disk to take the old one's place, thereby obviating the expense, time, and labor involved in introducing a new disk in an ordinary faucet.

A further object of our invention is to render the faucet inoperative by the removal of the handle, so that no one except the holder of the handle can open or close the faucet.

To the above purposes, our invention consists in certain new and novel features of construction and arrangement, as will be herein-after described and claimed.

In order that our invention may be more fully understood, we will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1. is a vertical longitudinal sectional view of our improved faucet. Figs. 2., 3., 4., and 5. are detail perspective views of different parts of our faucet. Fig. 6. is a vertical sectional view of the cylinder shown in Fig. 5. Fig. 7. shows top and side views of one of the flexible disks. Fig. 8. is a cross sectional view taken on the dotted line indicated by X—X of Fig. 1.

Similar figures refer to similar parts throughout the several views.

The numeral 1 designates the main body portion of our faucet, and showing the horizontal valve seat 2 formed in the interior thereof. This valve seat has a circular aperture 3 in its center, through which, when the valve is raised, the water or other fluid has free passage to the discharge spout 4. The

upwardly extending portion 5 of the body 1 is screw threaded on its interior surface, this screw threaded portion being designated by the numeral 6, and it is also screw threaded on its exterior, designated by 7. The valve which operates in this portion consists of a tubular casing or cylinder 8, screw threaded on its lower outer surface, designated by 9, and is also screw threaded on the interior upper surface, 10. Two downwardly projecting notches, 11 and 12, are formed in the opposite sides of the upper edge of the cylinder 8. A yoke handle, for the purpose of manipulating the cylinder 8, consists of a solid ring, 13, with outwardly extending handles 14. On the inner edge of the ring 13 are lugs 15—15, which are adapted to enter the notches 11 and 12 when the yoke handle encircles the cylinder. A layer or series of flexible disks numbered 16 are placed in the cylinder, and are held therein by a slight inwardly projecting flange 16^a, at the lower and inner margin of the cylinder 8.

17 designates a plug, the downwardly extending portion of which is of the same diameter as the bore of the cylinder 8, and screw threaded, 18, to engage in the screw threads 10 of the cylinder. An angular head 19 allows the plug to be operated by a wrench, and an upwardly extending head 20, provided with a slot 21, and horizontally extending bores 22 and 23 allow the said plug to be operated by a screw driver or levers. A cap 24, internally screw threaded at 25, engages the screw threaded portion 7 of the projection 5, and is formed with a central opening surrounding the cylinder 8. The cap 24, is of angular shape marginally, to form a series of vertical faces, for the engagement of a suitable wrench, by which the cap is manipulated.

The opening from the aperture 3 to the spout 4 is designated by 26.

In the operation of our improved faucet, it is opened by giving the yoke handle a few turns, which by reason of the lugs in the said cylinder causes the said cylinder containing the flexible disks to rise from the valve seat, thus allowing direct passage through the aperture to the discharge spout. By a reverse movement of the handle the aperture is closed. When the lower disk that rests directly upon

the valve seat becomes worn with use so that it causes leakage, the operator can, by raising the valve a slight distance, then screwing down with the plug, push the old worn disk out of the cylinder, and thus bring a new one into use. By reason of the opening 26 and spout 4 being of a larger diameter than the old disk, said disk will pass out of the faucet with the flow of water or other fluid. When the supply of disks in the cylinder becomes so exhausted that the plug will not affect the lower one a fresh supply can be put in at the top of the cylinder by removing the plug.

To prevent any one's using the faucet except the holder of the handle, the valve is first screwed down tightly upon the valve seat, the plug then removed, the handle taken off, and the plug then screwed tightly in the cylinder.

In the use of an ordinary faucet, when the flexible disk on the valve becomes worn, to replace it with a new one necessitates time, labor and expense, and if said faucet be connected with a pipe of a water system of a building, very often the entire water supply for said system has to be cut off, during the replacing of said new disk. By the use of our invention these inconveniences are entirely overcome. Thus will be seen the value and advantages gained by our invention.

Having thus described our invention, what we claim as new and useful, and desire to secure by Letters Patent, is—

1. A faucet, comprising a seat or partition, having an opening therethrough, and a passage communicating with said opening, and a valve, comprising a cylinder longitudinally adjustable in said passage, a removable handle for said cylinder, and flexible packing disks carried by said cylinder and adapted to close or open the opening in the seat or partition as the cylinder is moved to or from the said opening, and a plug adjustable within said cylinder and adapted to bear firmly upon said disks, and to expel said disks at times, substantially as set forth.

2. A faucet valve, comprising a cylinder having its lower portion externally screw-threaded and its upper portion internally screw-threaded, and an inner marginal flange at its lower end; a removable handle engaging the upper end of the cylinder, and a series of flexible disks supported within said cylinder and bearing upon said flange, and a screw-threaded plug fitting within said cylinder, and bearing upon said disks, substantially as set forth.

3. The combination with a valve for faucets, comprising a cylinder, having an inner marginal flange at its lower end, a series of flexible disks within the cylinder and supported by the inner marginal flange, and notches or recesses in its upper end, and an adjustable plug bearing upon the disks within the cylinder, of a removable handle, comprising a yoke or ring inclosing the upper end of said cylinder, and provided with outwardly projecting handles, and lugs or pins projecting inwardly and engaging the notches or recesses in the upper end of the cylinder, substantially as set forth.

4. The combination with a valve, comprising a cylinder having a handle at its upper end, an inner marginal flange at its lower end, and its upper portion internally screw-threaded, and a series of flexible disks supported within said cylinder by the inner marginal flange at its lower end, of a plug having screw-threads engaging the internal screw-threads of the cylinder and bearing at its lower end upon the said disks, and a head provided with a groove and intersecting bores, and an angular portion or head, adapted to be engaged by a wrench, all arranged substantially as set forth.

In testimony whereof we affix our signatures in the presence of two witnesses.

FREDERICK SCHNEIDER.
JAMES FOLEY.

Witnesses:

SAML. CUSHING,
J. C. A. DENNEY.