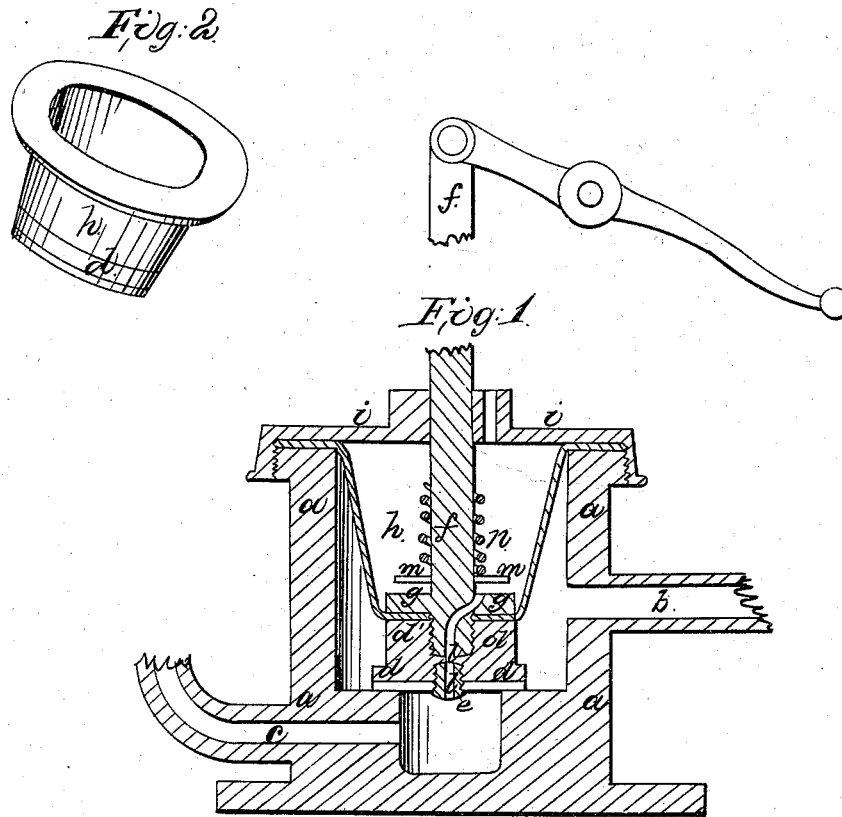


L. MAGERS, F. DAVIS & W. DUKEHART.
STOP COCK FOR HYDRANTS.

No. 2,683.

Patented June 22, 1842.



UNITED STATES PATENT OFFICE.

L. MAGERS, F. DAVIS, AND WM. DUKEHART, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN STOP-COCKS FOR HYDRANTS.

Specification forming part of Letters Patent No. 2,683, dated June 22, 1842.

To all whom it may concern:

Be it known that we, L. MAGERS, F. DAVIS, and W. DUKEHART, of the city and county of Baltimore, and State of Maryland, have invented a new and useful Improvement in Hydrant-Cocks; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section through the cock; Fig. 2, the valve detached.

In the box *a* two circular chambers are formed, one above the other, the lower one being about half the diameter of that above it. Into the side of the upper chamber the induction-pipe *b* enters from the reservoir, the eduction-pipe *c* communicating with the lower one, which is covered with a valve, *d*, made of any suitable metal, having a projection, *d'*, on the upper side. This valve has a piece of leather covering its under surface and attached thereto by a screw, *e*. The rod *f* has a screw cut on the lower end, which is screwed into the projection on the valve, and a flange, *g*, just above the screw, of the same diameter as the projection *d'*. Between this projection and the flange *g* a piece of leather or other suitable substance, *h*, is firmly held, the screw passing through it. This leather extends up all around to the top of the chamber, where the edges turn outward, thus assuming the form of a cup, with a flange around its upper edge somewhat in the shape of a hat. The rim is secured down by means of a cap, *i*, which is screwed down over the top of the upper chamber, through which the rod *f* passes. This rod is raised perpendicularly by means of a lever attached to its upper end, like a pump-break, the form of the leather packing *h*, together with its elasticity, allowing the rod motion and preventing its leaking without its passing through a stuffing-box. Through the screw *e*, valve *d*, and rod *f* there is a hole, *l*, made, running up above the flange

g, where it opens into the upper chamber above the packing *h*. Another hole is made in the cap *i*, of the same size, for the purpose of drawing off the water from the eduction-pipe when the hydrant is stopped, and thus prevent its freezing up in cold weather. To prevent the water issuing from the lower chamber through this hole while the hydrant is running, there is a ring of leather or other suitable substance, *m*, a little smaller than the flange *g*, which rests on it. Above this a spiral spring, *n*, is put on the rod, and rests against the under side of the cap when screwed down. This spring does not act upon the ring till the valve *d* is raised. The ring then comes in contact with the spring and is forced down against the hole, thus preventing the water issuing through it. When the valve *d* is at rest, the pressure of the whole head of water bears upon it. On raising the valve the water runs under it into the lower chamber and out of the pipe *c*. At the same time the spring *n* presses the ring *m* against the flange, which stops the hole *l*, as above described. As soon as the valve is brought down to its seat again, the water then in the pipe *c* has free egress through the passage *l*.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of the elastic packing *h* with the stop-cock of a hydrant, as herein described.

2. The opening *l* through the valve and rod, for drawing off the water from the eduction-pipe when the hydrant is not in action, and in combination therewith the ring and spiral spring, in the manner and for the purpose herein described.

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Witnesses:

J. COHEN,
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