

Nickolas Schlessor
Hydrant

118059

PATENTED AUG 15 1871

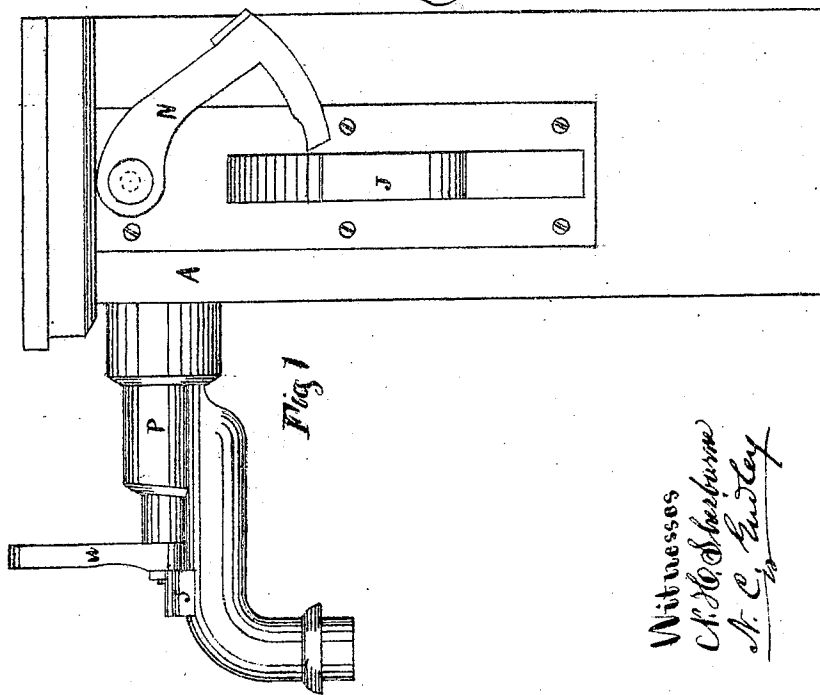


Fig 1

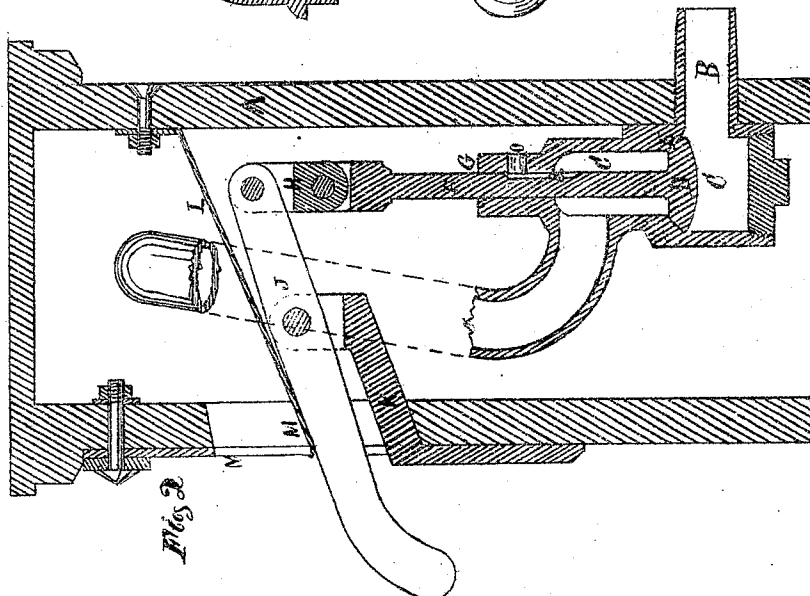


Fig 2

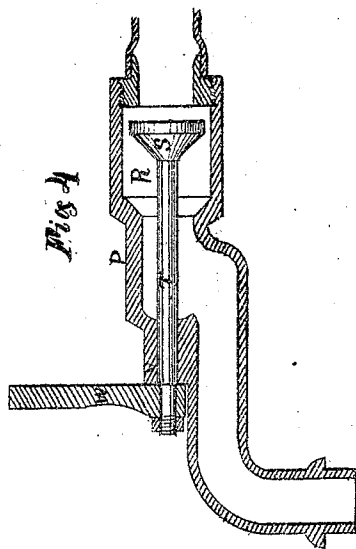
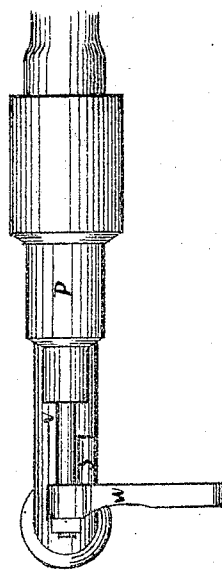


Fig 4

Fig 3



Witnesses
C. H. Osburn
N. C. Gentry

Inventor
Nickolas Schlessor
By Darrell H. Co
his Atty

UNITED STATES PATENT OFFICE.

NICKULAS SCHLEFFER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN HYDRANTS.

Specification forming part of Letters Patent No. 118,059, dated August 15, 1871.

To all whom it may concern:

Be it known that I, NICKULAS SCHLEFFER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hydrants; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side elevation of a hydrant embodying my invention. Fig. 2 is a vertical central section of the same. Fig. 3 is a top view of the faucet employed, and Fig. 4 is a vertical longitudinal central section of the same.

Similar letters of reference indicate like parts in the several figures of the drawing.

My invention relates to the construction and manner of operating the valves employed in the discharge-pipes of hydrants; and the improvement consists in so arranging the same as to be closed by the action of a spring jointly with the pressure of the water; also, in providing the valve-stem with a groove or channel corresponding with an opening formed through the side of the pipe, whereby the water is discharged from above the valve when closed.

In the drawing, A represents the case within which the respective parts constituting my invention are secured. B is the pipe which communicates with the main pipe of the reservoir in the usual manner, and is provided upon its inner side with a chamber, C, within which is secured the check-valve D, so arranged as to be forced upward into its seat, as shown at E, by the pressure of the water against its lower surface. F is the valve-stem, which may be made as a part of the valve or may be connected thereto in any suitable manner, and extends upward through the pipe, as shown at G. H is a connecting-rod, which is pivoted at its lower end to the upper end of the said valve-stem, and is hinged at its upper end to the end of a horizontal lever, J, pivoted to a metal frame, K, affixed to the side of the case. L is a spring which is attached to the inner side of the case and extends forward to and rests upon the upper surface of the lever, as shown at M, the object of which is to force the said lever downward when not in use. N is

a metal hook, which is secured to the upper and outer side of the case, and so arranged as to take under the outer end of the lever when raised, the object being to secure the valve in an open position, thereby allowing the water to pass into the pipe above the valve. The said valve-stem is provided with a groove or channel, *d*, formed in its side and so arranged as to communicate with an opening, *e*, cut through the side of the pipe, as the said valve is closed, for the purpose of allowing the water contained within the pipe above the valve to escape, thereby preventing the same from freezing. P is the faucet, which is connected to the end of the said pipe in the usual manner. The cavity within the faucet is so arranged as to form a chamber, R, within which is secured the valve S, so arranged as to be forced into its seat by the pressure of the water against its end, thereby firmly closing the same. Firmly fixed to or made a part of the valve is a stem, T, which extends horizontally outward through the upper side of the faucet-case, as shown at V. Affixed to the outer end of the stem is a lever, W, which is so arranged that, by a slight downward or rocking movement as the valve is forced inward, it is made to engage the inner end of a lug, *f*, projecting upward from the upper side of the faucet, thereby holding the same in an open position.

My improved hydrant is operated as follows: The outer end of lever J is raised upward and secured by hook N, which adjusts or forces valve D downward, opening the same. The water then passes into the pipe above the valve. Valve S of the faucet is then forced inward and lever W moved downward against the inner end of lug *f*, thereby securing the said valve in an open position, allowing the water to escape from the pipe. As a sufficient amount of water has been discharged from the pipe, lever J is disengaged from hook N. Valve D is then forced back into its seat by the pressure of water together with the recoiling of spring L, thereby closing the same, which brings groove *d* of the valve-stem in connection with opening *e* of the pipe, thus allowing the water remaining in the pipe above the valve to escape therefrom.

It will be understood that the position of the

pipe containing the valve is placed a sufficient depth in the ground to protect the same from freezing.

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

The combination of valve D, stem F, connecting-rod H, spring L, lever J, and hook N, the

whole arranged to operate together, substantially as and for the purpose described.

The foregoing specification of my invention signed by me this 15th day of April, A. D. 1871.

NICKULAS SCHLEFFER.

Witnesses:

N. C. GRIDLEY,

N. H. SHERBURNE.