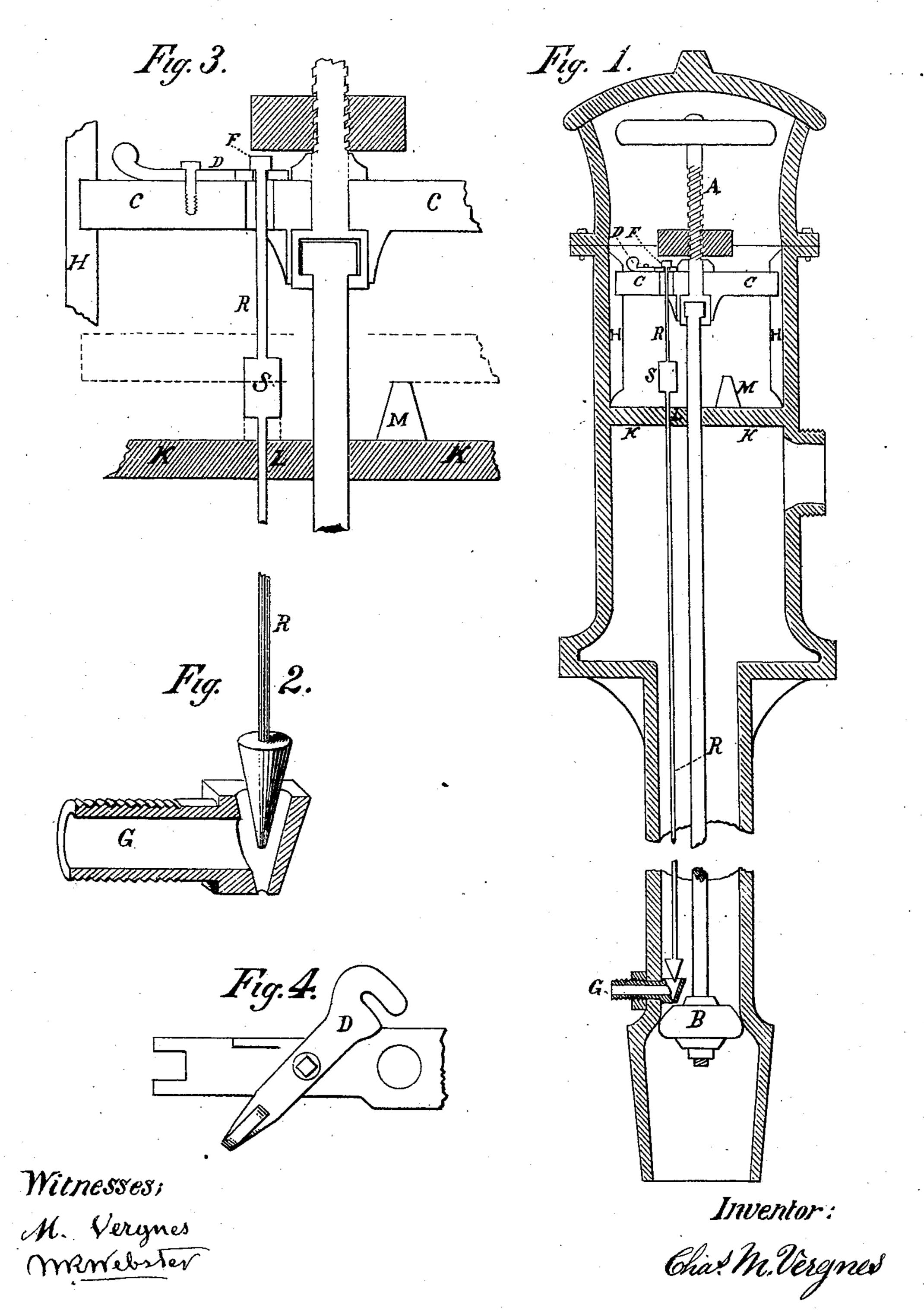
## C. M. VERGNES. Attachment to Street Hydrants.

No. 163,425.

Patented May 18, 1875.



THE GRAPHIC CO.PHOTO-LITH.39 & 41 PARK PLACE, N.Y.

## UNITED STATES PATENT OFFICE.

CHARLES M. VERGNES, OF NEW YORK, N. Y., ASSIGNOR OF ONE FOURTH HIS RIGHT TO CLINTON W. SWEET.

## IMPROVEMENT IN ATTACHMENTS TO STREET-HYDRANTS.

Specification forming part of L. tters Patent No. 163,425, dated May 18, 1875; application filed April 2, 1875.

To all whom it may concern:

Be it known that I, CHARLES M. VERGNES, of the city and State of New York, have invented an Attachment to Street-Hydrants, of which the following is a specification:

The object of my invention is to prevent street-hydrants from freezing, by an attachment so arranged that during the cold weather they may be empty, when they are not in actual use, and in no way interfering with their action at other times.

Figure 1 represents the hydrant now in general use, with my attachment applied to it. Fig. 2 is the perspective view of the plug and section of waste-pipe. Fig. 3 represents the working of the attachment by the motion of the main screw of the hydrant. Fig. 4 shows the catch by which the attachment is used or dispensed with when required.

When the main screw A, Fig. 1, raises the valve B to its highest capacity, the hydrant is closed, and the cross-piece C C rises, also. The catch D, being closed, raises the small rod RR by means of the head F, and consequently opens the waste-pipe G, causing the water in the hydrant to escape, either into the sewer or a small tank without a bottom, where it will be gradually absorbed by the earth. The cross-piece C C does not turn with the main

screw, but slides up and down, following the guides HH. The rod RR is furnished with a solid cylinder, S, which applies to the diaphragm K K, shutting the hole L, through which the rod R R passes when the sliding piece C C presses upon it, thus avoiding the necessity of furnishing the hole L with a boxing apparatus. The cylinder S also acts as a weight in the fall of the rod R R. At the opposite side of the cylinder, fixed to the diaphragm K K, is a block, M, of the same altitude, supporting the cross-piece C C in a horizontal position when at its lowest point.

The foregoing arrangement shows that during the winter, when the valve B is closed the waste-pipe is open and the hydrant becomes empty. In summer, by opening the catch D, as in Fig. 4, the hydrant will remain full, the

rod R R being free.

What I claim as my invention is—

The arrangement of the rod R R with the cylinder S, put in motion by the main screw A, and the catch D, regulating the action of the waste-pipe G, substantially as described.

C. M. VERGNES.

Witnesses:

W. R. WEBSTER, E. M. PLUM.