H. I. CHAPMAN.

Non-Freezing Hydrant for Fire-Plugs, &c.

No. 160,571. Patented March 9, 1875.

Fig. 1

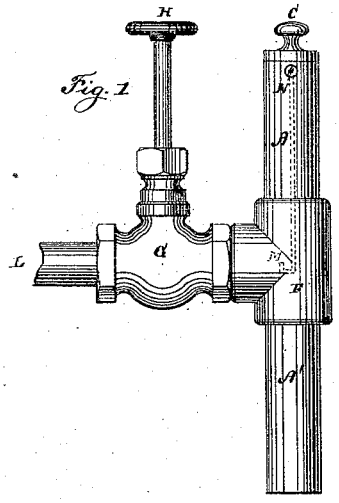


Fig. 2.

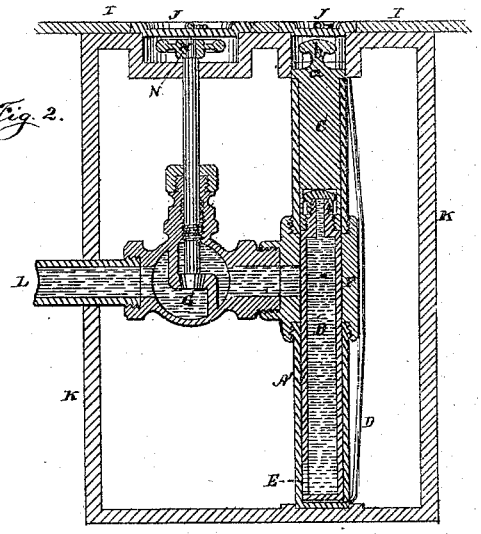
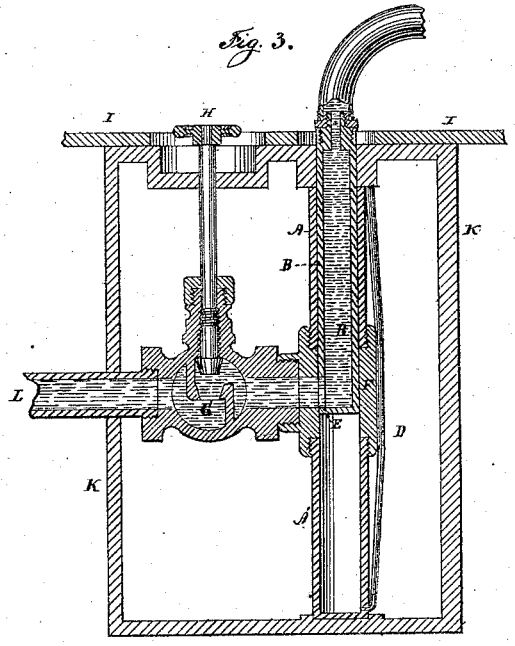


Fig. 3.



WITNESSES:

Henry Lauten

C. Krembs

INVENTOR:

Huston I. Chapman.

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

UNITED STATES PATENT OFFICE.

HUSTON I. CHAPMAN, OF PORTLAND, OREGON.

IMPROVEMENT IN NON-FREEZING HYDRANTS FOR FIRE-PLUGS, &c.

Specification forming part of Letters Patent No. **160,571**, dated March 9, 1875; application filed February 23, 1875.

To all whom it may concern:

Be it known that I, HUSTON I. CHAPMAN, of Portland, State of Oregon, have invented a Non-Freezing Hydrant for Fire-Plugs and Domestic Use, of which the following is a specification:

The object of my invention is to prevent the water freezing in hydrants. This is done as follows:

Figure 1, the hydrant closed up. A A′ is a cylinder perfectly round and smooth on the inside, with the lower end closed, and is connected to the street-main by the pipe D and stop-cock G. The stop-cock G is opened and closed by means of the rod and wheel H. Inside of the cylinder A A′ is another perfectly-fitting cylinder C B, with a flange, *a*. D is a screw-pin, which fits into the groove in the cylinder C B, represented by the dotted lines M.

Fig. 2 is a sectional view of Fig. 1. B is the lower part of the cylinder C B, and is hollow, with a thread shoulder at the top, and a nipple inserted in the top, which is closed by a screw-cap. The bottom is closed, and at E is a hole exactly fitting the connecting-pipe L. C is the upper part of the cylinder C B, and is made of brass, or wood and brass. At the bottom it is sufficiently hollow as to admit the top and nipple of the part B, and has at the bottom a thread shoulder that exactly fits upon the thread shoulder of the part B. L is the connecting-pipe, and G the stop-cock, operated by the rod and wheel H. I I is the sidewalk. J J are covers fitting into the sidewalk, and protecting the hydrant and wheel of stop-cock. K K is a wooden box, in which the hydrant and stop-cock are placed, and the remaining space is filled with dry sawdust or like material. D is a small pipe for the purpose of admitting air into the lower part of A A′. Fig. 2 represents the hydrant in working order and at rest.

Fig. 3 is also a sectional view of Fig. 1, and shows the hydrant in use. To use the hydrant, take off the covers J J and take hold of the top *b;* lift up the cylinder C B until the pin N has reached the bottom of the groove M; then turn it to the left as far as the groove runs in that direction, and let it come to rest. This will bring the hole E opposite the connection-pipe L. Unscrew the part C and lay it aside; remove the cap from the nipple on the top of B, and attach the hose or fire-engine to the nipple. Unscrew the stop-cock G by means of the rod and wheel H, and the water from the street-main will be forced through the connecting-pipe L, into the cylinder B, through the hole E, and out through the nipple and pipe at the top of B. When through using the hydrant and wish to return it to its place, the first thing done is to close the stop-cock G by using the wheel H; then disconnect the hose or fire-engine and place the cap upon the nipple; screw the part C onto B; then raise up on C B until the pin strikes the bottom of the groove; then turn the cylinder to the right until it is stopped by the groove, and lower the cylinder into place; replace the covers J J, and the hydrant is protected from the cold and frost. The cylinders A A′ and C B can be made any required length, and thus prevent all chances of freezing.

I claim as my invention—

In combination with the pipe L, the cylinder A A′ and the sliding cylinder C B, substantially as and for the purposes described.

HUSTON I. CHAPMAN.

Witnesses:

J. T. COLDWELL,

H. H. BACON.