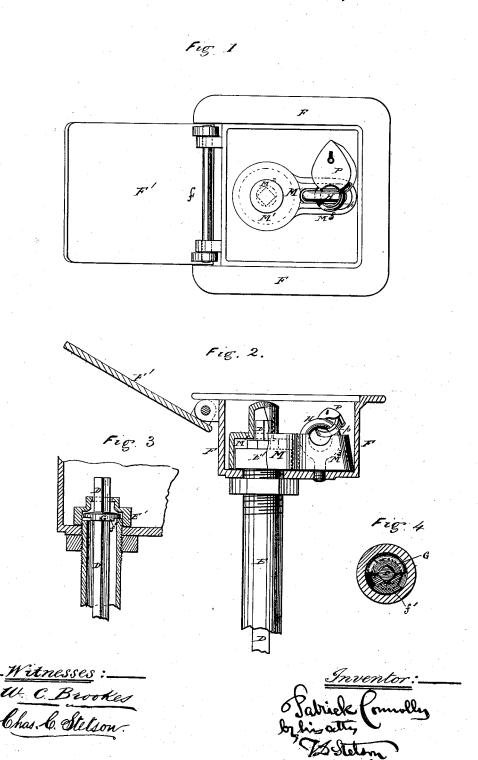
P. CONNOLLY. Locking-Valve.

No. 206,228.

Patented July 23, 1878.



UNITED STATES PATENT OFFICE.

PATRICK CONNOLLY, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN LOCKING VALVES.

Specification forming part of Letters Patent No. 206,228, dated July 23, 1878; application filed May 24, 1878.

To all whom it may concern:

Be it known that I, PATRICK CONNOLLY, of Brooklyn, county of Kings, in the State of New York, have invented certain new and useful Improvements relating to Locking or Controlling Stop-Cocks or Valves, of which the following is specification:

My invention is intended more particularly for locking the valves which control the watersupply for houses. It is a matter of great importance that the valves shall be within the control of the water department.

I have in a patent issued to me April 2, 1878, No. 201,996, described means for controlling the water-supply of houses at or near the line of the curb in the streets.

I construct a box of cast-iron or other suitable material, with a hinged cover adapted to protect the upper end of the shaft leading to the stop-cock. The cover may, when closed, be flush with the surface of the sidewalk, and beneither in the way nor unsightly. The cover may be easily lifted; but within the box I provide for applying a padlock, which may be as elaborate as desired.

So long as the water-rents are properly paid and the party in the house is entitled to the use of the water there is no obstruction to his controlling the cock at his pleasure; but when, for any reason, the department chooses to shut off the water my invention provides for doing so.

I provide a peculiarly-formed cap, which encircles and completely covers the head of the valve-rod. This cap matches on a staple or eye, in which latter a padlock may be en-

The accompanying drawings represent what I consider the best means of carrying out the invention, and form a part of this specification.

Figure 1 is a plan view with the cap applied and with the lock in place. Fig. 2 is a vertical section of the same. Fig. 3 is a vertical section of the upper end of the pipe E and the cap for closing it, and Fig. 4 is a plan view of the same, partly in section.

Similar letters of reference indicate like parts in all the figures.

The valve and the immediately adjacent parts may be exactly as described in my patent of April, 1878, above referred to.

E is a wrought-iron pipe, leading up therefrom to the surface, and F is a cast-iron box, provided with a cover, F', turning on an axis,

f, as will be readily understood.

D is the rod, connected with a valve, and extending up and down through the tube or pipe E. It may be square the whole distance, if desired. Its upper end especially should be square, and it is desirable that it should be case-hardened. It is guided at its upper end by a screw-cap, E', which loosely embraces the rod D, and is screwed upon the pipe E, leaving a sufficient end of the rod D projecting above to allow it to be operated by any suitable wrench.

H is a stouteye, riveted or otherwise securely

fixed in the bottom of the box F.

So long as the householder is allowed to control the water no other parts are necessary.

When the department chooses to shut off the water, the officer detailed for the purpose raises the cover of the box F, and, applying his wrench to the projecting end of the rod D, gives it a quarter-turn. This shuts off the water, as will be understood, by operating the valve below. My provision for locking now becomes available. The officer carries with him a supply of additional parts, which I will denominate as "caps," and suitable padlocks, which will be understood. I will designate the cap by the single M, using additional marks M1, &c., to designate special parts thereof. The caps may be of malleable cast-iron. The part M1 has a cylindrical cavity sufficiently capacious to match easily over the cappiece E'. A similar extension, M², on the top of this has a sufficient cavity to receive the projecting end of the rod D. A lateral arm, M3, is formed with a long slot adapted to fit easily over the eye II. A notch in the top of the arm M3 accommodates the bow b of a padlock, P. When these parts are in place and the padlock is securely locked, nothing short of violence can allow the householder to obtain control of the water.

It will be understood that my rod D may carry a stout collar turning within the cap E and provided with a stop playing in a suitable recess filed or otherwise produced in the top of the tube E, as set forth in my patent of April, 1878, above referred to. I prefer to so construct it. It will also be understood that, by making the box F a little larger and providing an additional pipe and rod, a connection for a street washer may be provided in the same box. It is not necessary in such cases to provide also means for locking the street-washer, because one locking means may by a proper construction and arrangement of the parts below be made to control the supply of water to both the house and the street-washer.

The padlocks may be provided with elaborate tumblers and analogous devices, as in

bank-locks, if preferred.

The evils which this invention is intended to obviate are serious. It is essential to the business management of the water that the water-department shall control the supply to each house independently. As ordinarily constructed, this is a work of such magnitude that the effective shutting off of the water from a house involves serious labor and expense to the department, and the re-establishing of the connections is still more serious to the householder. The expense is liable to fall on the wrong parties. When a landlord or tenant neglects to pay the water-taxes or extra taxes, the water-department, as heretofore operated, shuts off his water by elaborate digging and shutting off or disconnecting the supply at the main. A derelict tenant leaving the house in that condition, the landlord or the next tenant must pay the department for digging again and re-establishing the connections, and, further, must pay the bill for the previous digging. My invention saves all this.

In Figs. 3 and 4, G is a peculiarly-formed collar strongly fixed on the rod D. It is formed with a stop, f', which, as the rod D is turned, plays to the right and left in a recess formed in the upper end of the tube E. The projection f' thus serves as a stop to prevent the rod D from ever being turned more than the proper amount in either direction.

The cap E' fits loosely around the rod D and collar G, and engages with screw-threads on the exterior of the pipe E, as shown, and forms a very desirable finish for the top, leaving always sufficient of the rod D projecting to allow it to be seized and operated.

Modifications may be made by any good

mechanic. The top of the rod D may be fivesided or of other peculiar form, to prevent its being operated by any but a peculiar wrench possessed by the department. The cover of the box F may be held down by a secret catch or other means to avoid interference of boys or idle persons. The whole may be under or adjacent to a mounting-block or a hitchingpost or other fixture. The cap M may be made larger, and may contain the works of the lock in itself, so as to avoid the necessity for an additional padlock.

Some portion of the advantages of the invention may be secured in some cases while dispensing with the cover F' of the box, or with the entire box F, so long as there is an efficient eye or equivalent engaging means for holding and preventing the rotation of the

cap M.

I claim as my invention—

1. In combination with the rod D, connecting with the valve controlling the water-supply, a cap, M, applied and removed at will, with locking means P for securing it, adapted to serve as and for the purposes herein specified.

2. In combination with the box F, having a cover, F', and valve-rod D, the eye H, cap M, and separate padlock P, adapted for joint operation, as and for the purposes herein

specified.

3. The combination, with a stop-cock rodprotecting pipe, E, of a box, F, for protecting the valve-operating mechanism, secured to the upper end of such pipe E by means of a cap, E', adapted to allow of the passage of the rod D therethrough, substantially as and for the purposes described.

4. The combination, with the rod D, pipe E, box F, and cap E', of the locking-cap M,

substantially as set forth.

In testimony whereof I have hereunto set my name in presence of two subscribing witnesses.

-PATRICK CONNOLLY.

Witnesses:
EDITH BROOKES,
CHAS. C. STETSON.