

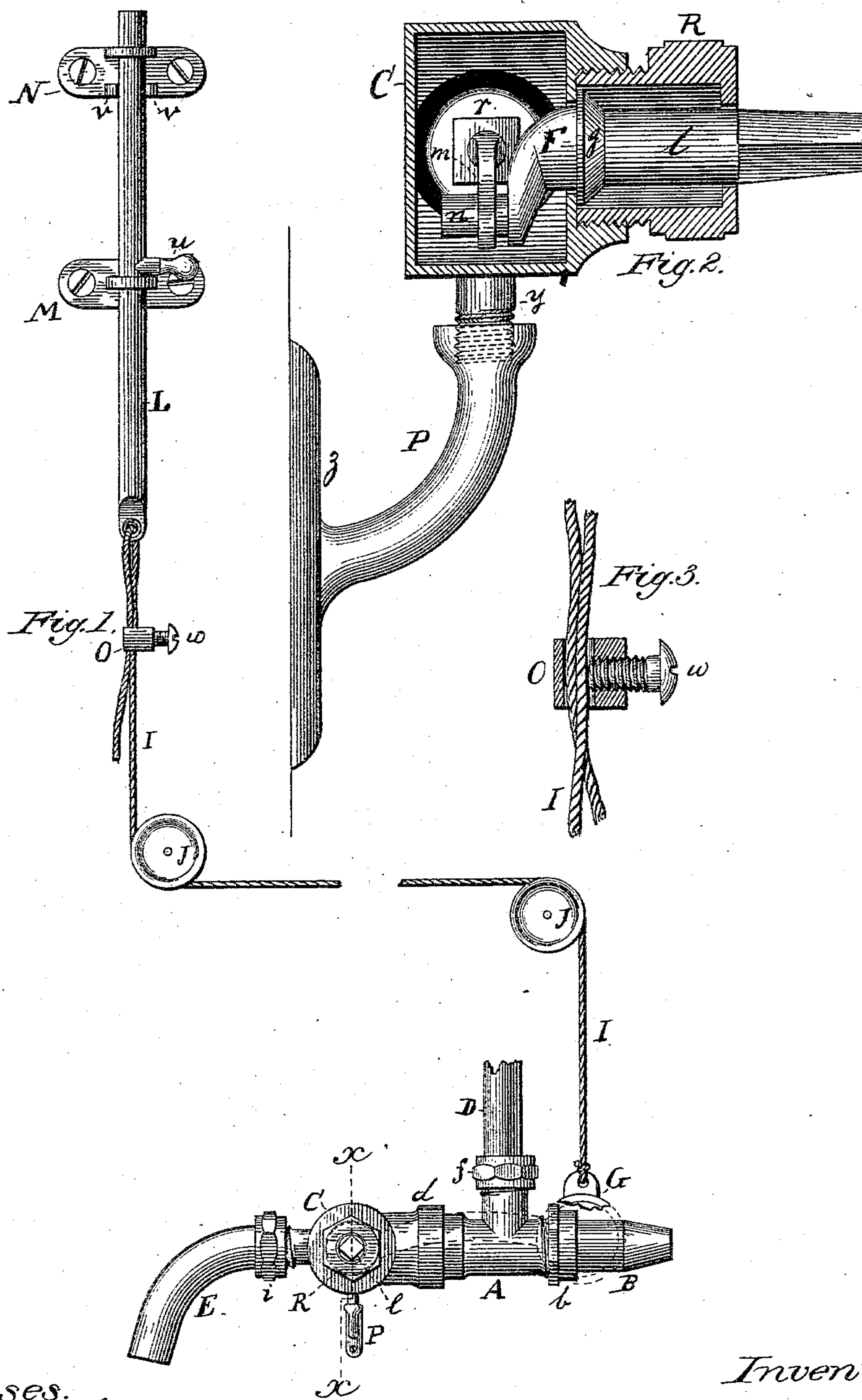
(No Model.)

2 Sheets—Sheet 1.

J. KELLY.  
STOP AND WASTE COCK.

No. 283,613.

Patented Aug. 21, 1883.



Witnesses.  
Will R. Orin  
Louis Volting

Inventor.  
John Kelly  
By Wm B Lotz  
Attorney



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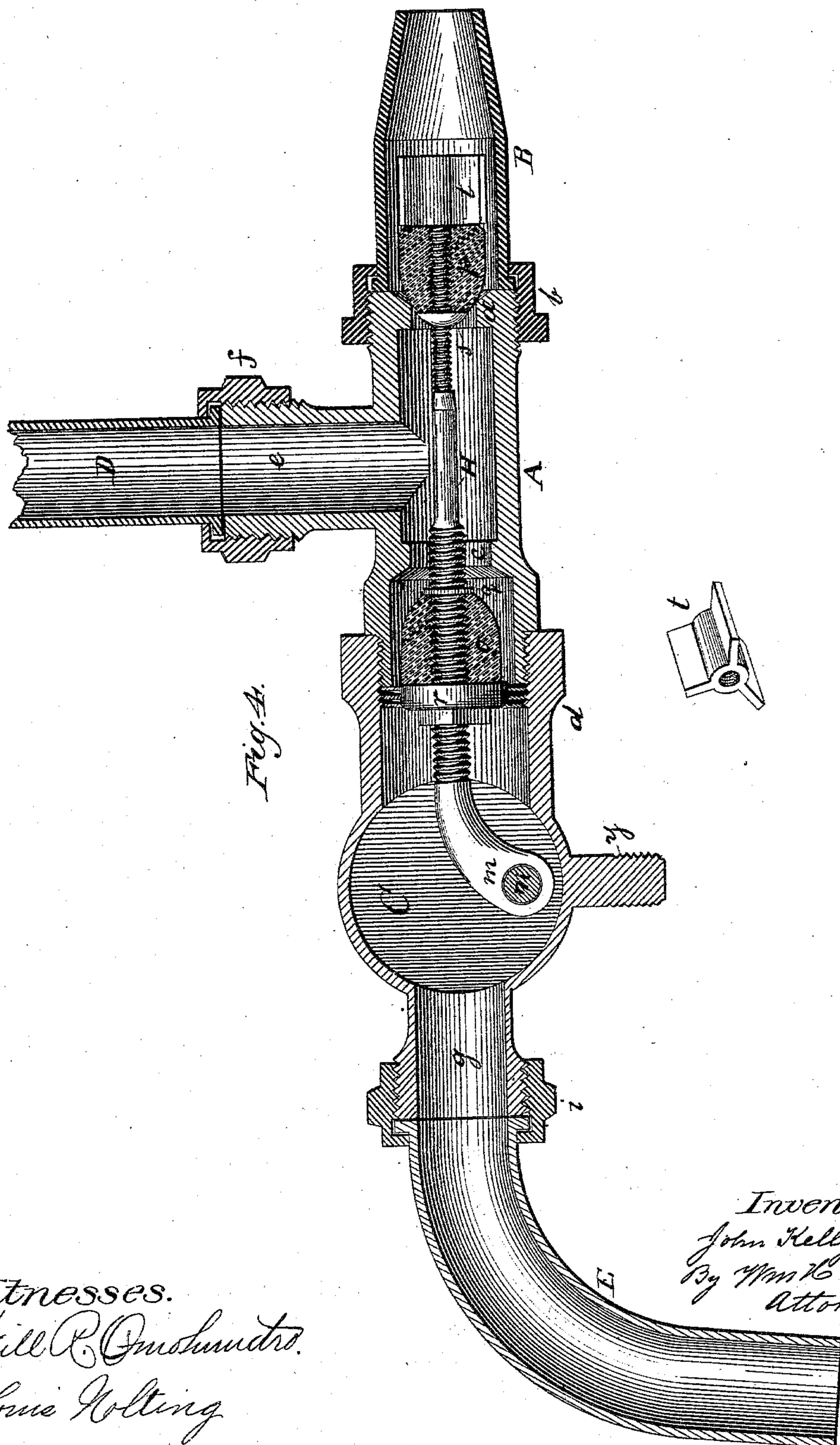
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STOP AND WASTE COCK.

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Witnesses.  
Will R. Omslow  
Louis Holting

Inventor:  
John Kelly  
By Wm H. Lotz  
Attorney



# UNITED STATES PATENT OFFICE.

JOHN KELLY, OF CHICAGO, ILLINOIS, ASSIGNOR OF TWO-THIRDS TO  
THOMAS KELLY AND JAMES KELLY, OF SAME PLACE.

## STOP AND WASTE COCK.

SPECIFICATION forming part of Letters Patent No. 283,613, dated August 21, 1883.

Application filed December 18, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN KELLY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Stop and Waste Cocks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to cocks or valves for shutting off the water-supply in houses, or to be used in connection with water-closets, and it is an improvement on the stop and waste cock described in Letters Patent No. 256,222, granted to me on April 11, 1882, and on the water closet valve described in my application filed June 28, 1882, and bearing Serial No. 65,404; and it consists of the novel devices and combinations of devices that constitute the stop cock or valve and its operating appurtenances, as hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 represents an elevation of my stop cock or valve and its connections for operating the same; Fig. 2, a transverse section on line *x x* in Fig. 1; Fig. 3, a detached sectional view of the cord-clamp, and Fig. 4 a longitudinal vertical section of the stop cock or valve.

Corresponding letters in the several figures of the drawings designate like parts.

A denotes a pipe that has formed a conical valve-seat, *a*, in one end, and is exteriorly screw-threaded to engage the coupling-ring *b*, that connects the nozzle B, to which the supply-pipe is to be soldered. At *c* another conical valve-seat is formed in pipe A, whence such pipe is expanded and is exteriorly screw-threaded for connecting the internally-screw-threaded mouth *d* of crank-chamber C. To a branch nozzle, *e*, between the valve-seats *a* and *c*, is connected by a screw-collar, *f*, the pipe D, that leads to the several faucets and valves in the rooms of the house. The screw-nozzle *g* of crank-chamber C, that is opposite the mouth *d*, connects with an elbow-nozzle, E, by a screw-coupling, *i*. Whenever the water-supply is shut off, by closing valve *p* valve *o* will be opened, when the water contained in the

several pipes of the house will run off through nozzle E either into the ground or into the sewer, with which such nozzle can be connected by a pipe. Through an opening in one side of chamber C is inserted a crank, F, having a conical collar *j*, that shoulders against the rim of such opening, and concentric with this opening is provided an internally-screw-threaded socket, K, for attaching the stuffing-box sleeve R, through which the stem *l* of crank F is projected, and that is filled with packing for forming a hermetic joint around such crank-stem *l*. The projecting portion of such crank-stem *l* is formed square for connecting a lever (shown in dotted lines in Fig. 1) that carries a weight, G.

The valve-rod H has a curved and eyed end, *m*, that engages with crank-pin *n*. This valve-rod H is tapering and screw-threaded for securing the conical or semi-globular valves *o* and *p*, that are made of hard rubber, and are to form hermetic joints with the valve-seats *a* and *c*. The valve *o* is adjustably held between a small screw-collar, *q*, and the flanged nut *r*, and the valve *p* is adjustably secured between a small screw-collar, *s*, and wing-nut *t*, and both valves *o* and *p* are secured upon such valve-rod H, to be farther apart than the distance between the valve-seats *a* and *c*, in a manner that with closing one valve upon its seat the other valve will thereby be opened. The wing-nut *t*, in the manner it is constructed, not only forms a thumb-nut, but also a guide for the valve *p* in nozzle B. The water entering pipe A through valve-opening *a*, the pressure of the water is against valve *p*, and therefore such valve would be naturally closed by such water-pressure, and will be forced against its seat. Besides, the weight G, when released, tends to close such valve. This weight G, I connect by a cord, I, with the eyed end of a cylindrical bar, L, that has to its middle a rectangular handle, *u*, and is guided in two eye-brackets, M and N, the upper one of which is provided below its guide-eye with side lugs, *v*, that will allow the handle *u* to pass between while held forward, and upon either one of which lugs *v* such handle will be supported by giving it a quarter-turn for holding the bar L on an elevated position. By this bar L the



weight G is raised as high as it will go until the valve *o* is hermetically closed against its seat *c*, and is locked in that position by turning the handle *u* upon one of the lugs *v*; but as soon as released, by turning the handle *u* toward the front to pass between the lugs *v*, the rod L will drop until its handle *u* rests upon the eye of bracket M, when the weight G will swing downward and the crank F will pull the valve-rod to close valve *p* and open valve *o*. The cord I is guided over as many pulleys J as necessary between weight G and bar L to lead it to the desired position of bar L. The cord I is preferably of wire, and its upper loop connection with bar L, for proper adjustment, I prefer to tie with a nut, O, that is sleeved over the looped ends of the cord, and has a set-screw, *w*, by which the cords are clamped together. The stop cock or valve has a screw-stud, *y*, that enters a screw-threaded socket of a bracket, P. This bracket P has a plate, *z*, that is secured by wood-screws against the wall, or against one side of a box that is buried into the ground.

The pipe A and crank-chamber C can be connected or arranged in a different manner for providing the valve-seats in proper positions relative to pipe D and crank F from what has been shown and described herein, without changing the principle and general construction of my device, and therefore I do not wish to be restricted to the particular arrangement herein described and shown.

What I claim is—

1. In a stop-cock, the pipe A, having valve-seats *a* and *c*; nozzle B, adapted to connect with the supply-pipe, and branch *e* for coup-

ling the service-pipe D, and combined with chamber C, crank F, nozzle E, and valve-rod H, that carries valves *o* and *p*, and is pivoted to crank F, the whole being constructed and arranged substantially as described, to operate as specified.

2. A stop-cock having branch *e*, valve-seats *a* and *c*, and chamber C, in combination with valve-rod H, having valves *o* and *p*, and crank F, substantially as described, to operate as specified.

3. A stop-cock having branch *e*, valve-seats *a* and *c*, and chamber C, with stuffing-box R, in combination with valve-rod H, having valves *o* and *p*, crank F, and weighted lever G, all constructed and arranged substantially as set forth, to operate as specified.

4. In a stop-cock, in combination with reciprocating valve-rod H, having valve *p*, wing-nut *t*, substantially as and for the purpose set forth.

5. In combination with a stop-cock provided with crank F for operating the valves, and with weighted lever G, rod L, having handle *u* and guided in eye-brackets M and N, the latter being provided with lugs *v*, and the rod L being connected with lever G by a cord, I, all substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

JOHN KELLY.

Witnesses:

LOUIS NOLTING,  
R. G. SCHMID.