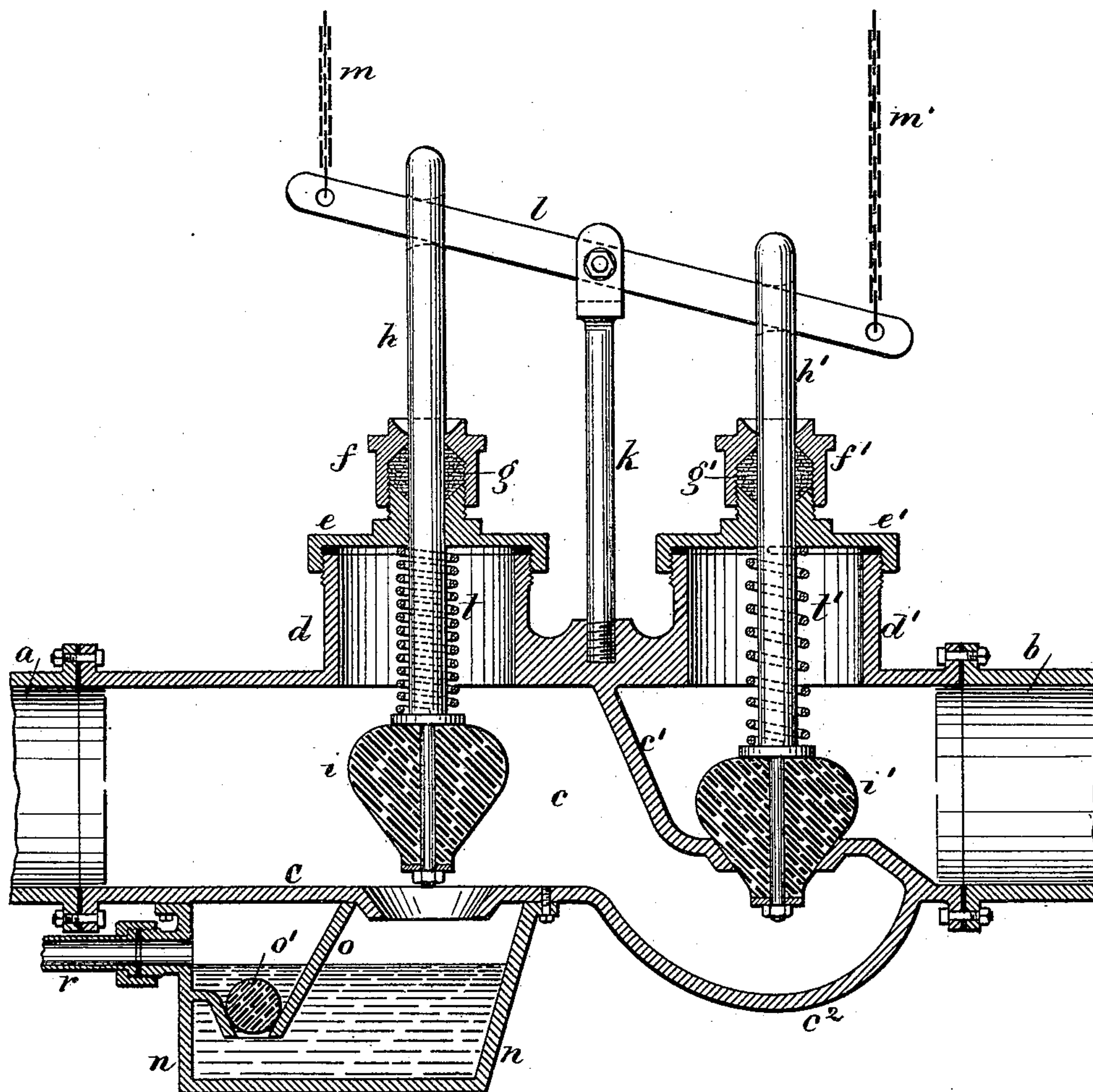


(No Model.)

E. J. BRADY.
SERVICE STOP COCK.

No. 353,533.

Patented Nov. 30, 1886.



Witnesses
J. Staib
Chas. H. Smith

Inventor
Edward J. Brady
per Lemuel W. Lorrill
Att'y.

UNITED STATES PATENT OFFICE.

EDWARD J. BRADY, OF BROOKLYN, NEW YORK.

SERVICE STOP-COCK.

SPECIFICATION forming part of Letters Patent No. 353,533, dated November 30, 1886.

Application filed August 9, 1886. Serial No. 210,408. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BRADY, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful
5 Improvement in Service Stop-Cocks, of which the following is a specification.

Stop or service cocks for buildings are located between and connected to the pipe from the street water-main and the service-pipe of
10 the building, and said cocks are used to cut off the supply of water to the building. Much difficulty has heretofore been experienced in consequence of the water in the service-pipes of a building freezing in cold weather, and
15 especially at night.

My invention relates to a stop or service cock having two valve-seats and valves connected by their valve-stems to a lever which operates them alternately and simultaneously,
20 the one being opened while the other is closed. One valve admits or stops the water from the main pipe, while the other valve closes or opens a discharge-passage for the water in the house service-pipes to pass out into the sewer
25 or other waste. I also provide and connect to the valve-case at the discharge-passage a case forming water-way and a trap containing a ball-valve. The outlet-pipe from this case connects with the sewer, and when the en-
30 trance for water from the main pipe is closed the discharge-valve is simultaneously opened and all the water in the service-pipes is discharged into the sewer, and liability from freezing is avoided, and the ball-valve and water
35 remaining in the trap act to prevent the entrance of sewer gas into the service-pipes of the building.

In the drawing I have represented my improvement by a vertical section.

40 *a* is part of the house service-pipe, *b* part of the pipe from the street-main, and *c* the valve-case, which parts are bolted or secured together by couplings in any well-known manner. The valve-case is made with the short
45 cylinders *d d'*, covers *e e'*, and caps *f f'*, and between said covers and caps are the packing-glands *g g'*, through which parts the stems *h h'* of the valves *i i'* pass. Helical springs *t t'* surround the valve-stems.

The post or standard *k* is connected to the
50 top of the valve-case, and the lever *l* is pivoted to said standard and passes through slots in the valve-stems *h h'*, and to the ends of said arm *l* chains or wires *m m'* are connected. Said wires or chains pass from the cellar of
55 the building, where my improved service-cock will generally be located, up through the building to some particular room, (which might be the janitor's quarters,) from which place the
60 said service-cock can be operated to admit water to the building, or to close the supply and at the same time open the discharge, so that the water in the pipes of the building will run off into the sewer.

The valve-case *c* is formed with a partition,
65 *c'*, in which is the conical seat for the valve *i'*, and with a depressed portion, *c''*. The seat of the valve *i* is formed in the bottom of said case *c*, and the trap-case *n* is bolted to the case *c* beneath the seat of the valve *i*. There is a
70 partition, *o*, in the case *n*, and a ball-valve, *o'*, and a discharge-pipe, *r*, to the sewer, and a coupling connecting said pipe to the trap-case *n*.

In the drawing the valve *i'* is shown closed,
75 and the water from the street main thereby cut off, while the valve *i* is open and the water in the service-pipes of the building is free to descend and run off into the sewer. If the chain *m'* is pulled, the position of the valves
80 is reversed, the valve *i'* being opened and water admitted, and the valve *i* closed and the discharge shut off. There should always be water in the trap case *n* to assist in forming
85 the gas-seal.

My improved stop-cock is adapted for use
in apartment-houses, in which case one cock can be used in the plumbing of each apartment or flat to close the water from that flat
90 without interfering with any other.

I claim as my invention—

The combination, with the main pipe *b* and service-pipe *a*, of a valve case, *c*, connecting
said pipes, and having an opening and valve-seat in the bottom, a transverse partition, *c'*,
95 in said case, having an opening and valve-seat therein, the conical valves *i i'* above the respective seats, the perpendicular valve-stems

h h', the caps and packing-glands through which the stems pass, the springs *t t'* around the valve-stems within the case, the lever *l*, connected to the valve-stems, a fixed pivot for
5 said lever, the trap-case *n* below the seat of the valve *i*, the partition *o*, valve *o'*, and a discharge-pipe to the sewer, substantially as set forth.

Signed by me this 4th day of August, A. D. 1886.

EDWARD J. BRADY.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.