

No. 610,452.

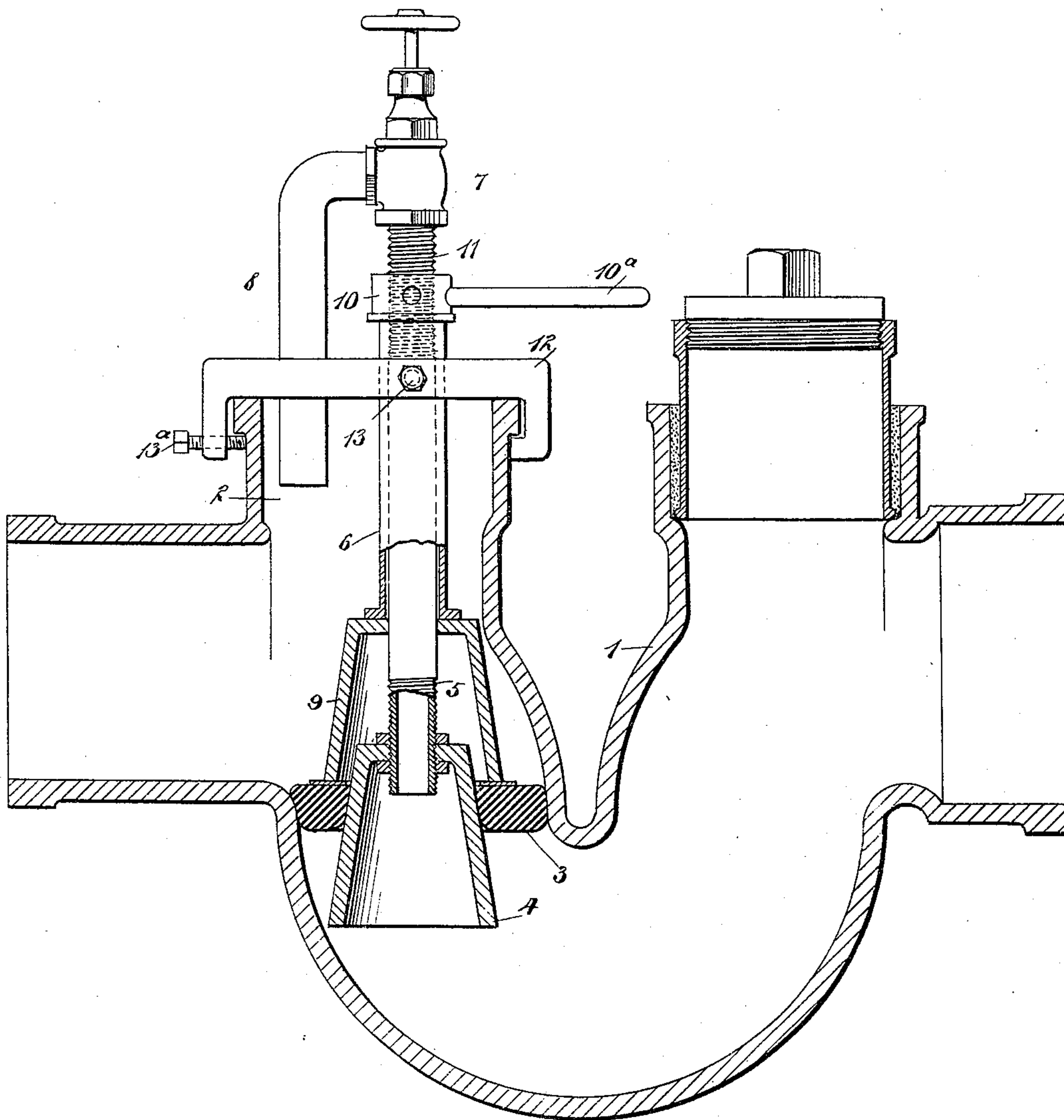
Patented Sept. 6, 1898.

G. E. LOEBLE & F. KATZENBERGER.

TESTING VALVE.

(Application filed Feb. 21, 1898.)

(No Model.)



WITNESSES:

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GOTTLOB E. LOEBLE AND FREDRICK KATZENBERGER, OF NEW YORK, N. Y.

TESTING-VALVE.

SPECIFICATION forming part of Letters Patent No. 610,452, dated September 6, 1898.

Application filed February 21, 1898. Serial No. 671,136. (No model.)

To all whom it may concern:

Be it known that we, GOTTLOB E. LOEBLE and FREDRICK KATZENBERGER, of the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented a new and Improved Testing-Valve, of which the following is a full, clear, and exact description.

This invention relates to improvements in valves for testing sewer-pipes; and the object is to provide a comparatively simple valve which may be inserted through a small hand-hole—that is, a four-inch hand-hole—and stop a five-inch or larger pipe.

A further object is to provide a valve that is not liable to get out of order or break, as often happens to inflated bags usually employed for stopping pipes.

We will describe a valve embodying our invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawing, forming a part of this specification, which is a sectional elevation of a testing-valve embodying our invention.

Referring to the drawing, 1 designates a pipe-trap of the usual construction and having a hand-hole 2, through which the testing-valve may be inserted. The valve comprises an expansion-ring 3, of rubber or like material, mounted on an expanding-block 4, which is made in the form of a frustum of a cone, and for the sake of lightness we preferably make it hollow; but it is obvious that it may be made solid. When the block is hollow, however, it may serve as a portion of the testing-pipe. The testing-pipe 5 forms the shank of the expanding-block. This pipe 5 communicates with the interior of the expanding-block and extends upward through a tube 6, and a valve 7 controls the communication between the tube 5 and an outlet-pipe 8, which extends downward to discharge water through the hand-hole 2 into the outlet of the trap. On the lower end of the tube 6 is a hollow pressure-block 9, which engages against the upper side of the expanding ring, and on the upper end of the tube is a nut 10, engaging with a thread 11, formed on the testing-pipe, the nut having a series of apertures to receive a suitable handle 10^a. The device may be held in its proper position by means of a clamp 12, engaged with the outer wall of the hand-hole and beneath a flange or rib on the

upper end of the hand-hole, having an opening through which the tube 6 passes, the clamp being held in place on the hand-hole by a set-screw 13^a and on the tube 6 by a set-bolt 13.

In operation after placing the valve in the trap, as indicated in the drawing, it is obvious that by turning the nut 10 the pressure-block 9 will be forced downward and the block 4 will be drawn upward and expand the ring 3 to a tight connection against the wall of the trap. Then by tightening the set-bolt 13 against the tube 6 the valve will be held in place. By opening the valve 7 the water-test may be made.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A testing-valve for pipes, comprising an expansion-ring, an expanding-block therein, a pressure-block, engaging with the upper side of the ring, a test-pipe forming a stem for the expanding-block, means engaging with the test-pipe for drawing the expanding-block into the ring, and a valve-controlled pipe leading from the test-pipe and arranged to discharge into the pipe being tested, substantially as specified.

2. A testing-valve for pipe-traps, comprising an expansion-ring, a conical expansion-block in the ring, a test-pipe extended from said block and forming the stem thereof, a valve at the outer end of the test-pipe, a pressure-block for engaging with the upper side of the expansion-ring, a tube extended upward from the pressure-block and surrounding the test-pipe, and a nut on the upper end of said tube engaging with a thread on the test-pipe, substantially as specified.

3. A testing-valve for pipe-traps, comprising an expansion-ring, an expansion-block therein, a tubular stem for the block and having a downwardly-extended valve-controlled outlet, a tube through which the stem passes, a pressure-block on the lower end of the tube, and a nut on the outer end of the tube engaging with a screw-thread on the stem, substantially as specified.

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