(No Model.)

J. STEPHENSON.

WATER FAUCET.

No. 256,510. Patented Apr. 18, 1882.

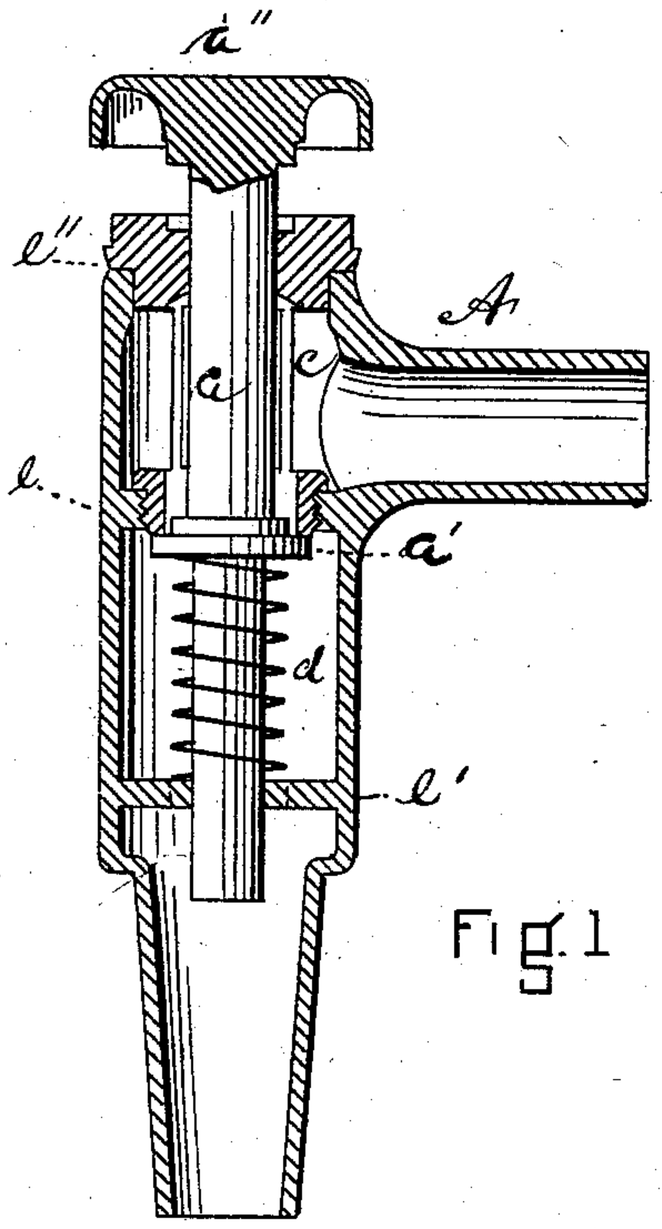

Fig. 1

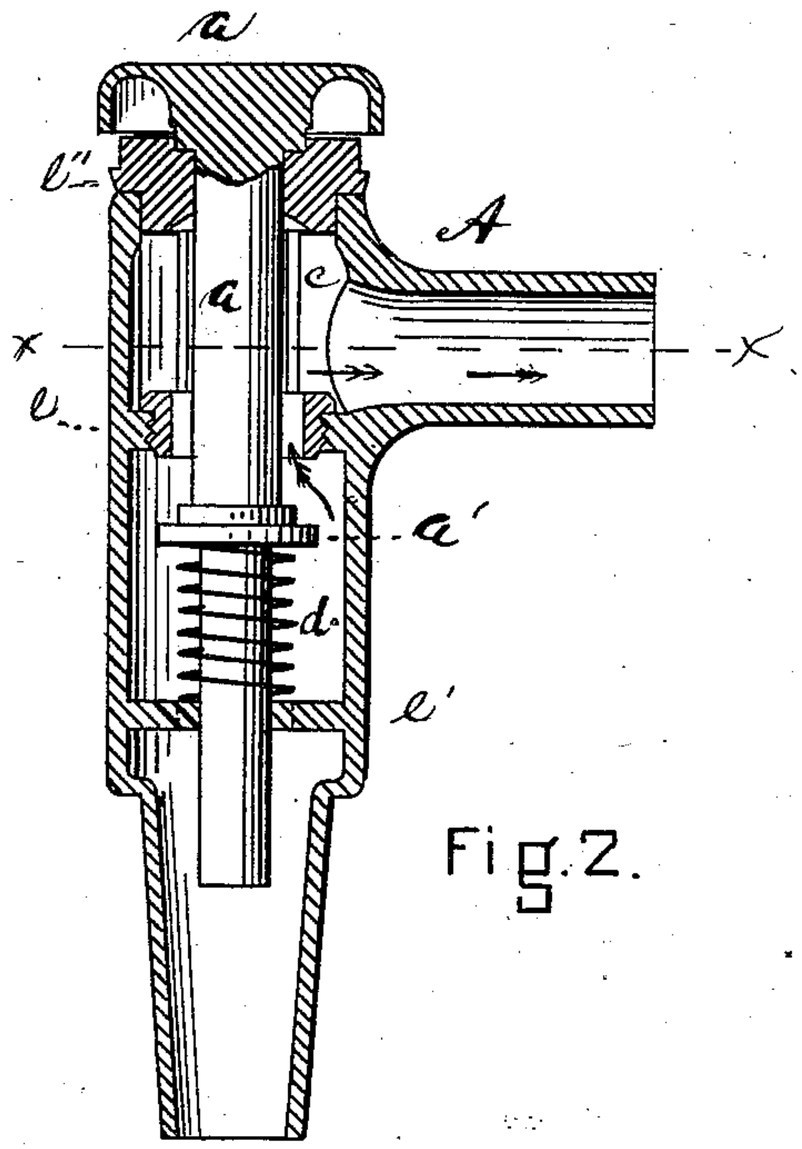

Fig. 2.

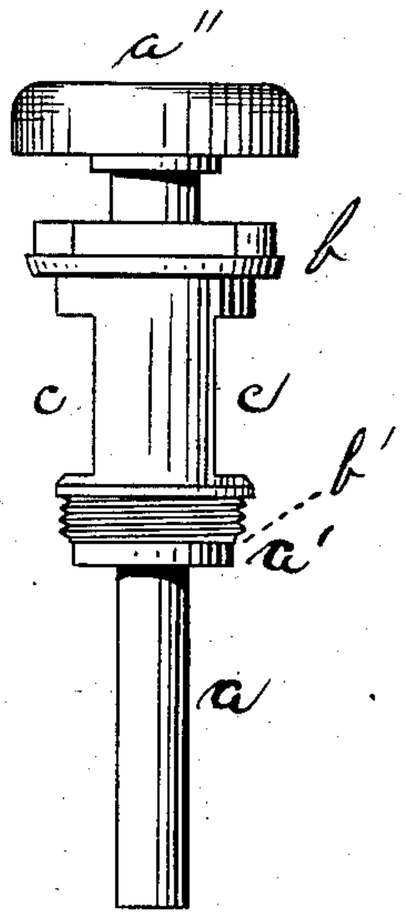

Fig. 3.

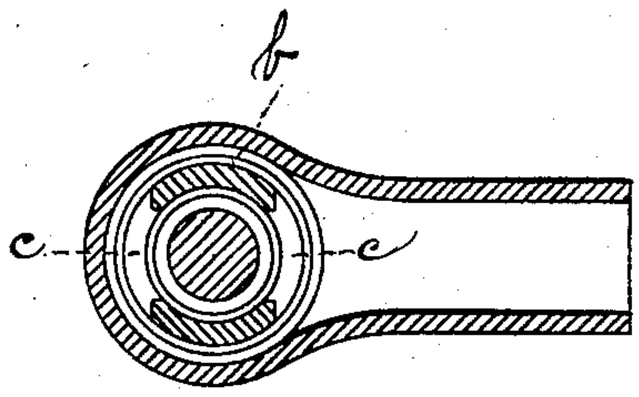

Fig. 4.

WITNESSES

John Mc Donald
Charles Gates

INVENTOR

John Stephenson
by W. S. Hill Attorney

UNITED STATES PATENT OFFICE.

JOHN STEPHENSON, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOHN H. FELLOWS, OF SAME PLACE.

WATER-FAUCET.

SPECIFICATION forming part of Letters Patent No. 256,510, dated April 18, 1882.

Application filed August 10, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN STEPHENSON, of Haverhill, county of Essex, and State of Massachusetts, have invented a new and useful Improvement in Faucets for Drawing Liquids, which improvements are fully set forth in the following specification.

My invention relates to certain improvements in faucets; and it consists of a novel method of construction, whereby the parts constituting the valve and its seat are both made separable from the case or body of the faucet, instead of one of these being made integral with the body or case, as in the method of manufacture heretofore in use.

The advantages derived from the use of my invention are that the valve and its seat may be made of a different metal from the body, if desired, and that the same may be easily removed for the purpose of making repairs, or that they may be replaced by an entire new valve without the necessity of removing the faucet from its connection with the water-pipes or other service.

In the drawings accompanying this specification I have shown my invention as when applied to a spring or self-closing faucet, although it is obvious that other methods of operating the valve may be employed without departing from the essential feature of my invention.

Figure 1 is a sectional view, showing the position of the different parts when the valve is resting on its seat or when the faucet is closed. Fig. 2 shows the same when the faucet is open or when the valve is relieved from its seat. Fig. 3 is an elevation showing the valve-stem *a*, with a knob at its outer end, and the sleeve or seat-piece *b*; and Fig. 4 is a cross-section on line *x x* in Fig. 2.

The case or body A is made hollow, as shown, and has a dividing-wall between the inlet-opening and the outlet, into which the sleeve or seat-piece *b* is inserted by a screw-joint, as shown at *e*. It also has a bridge or yoke, *e'*, which forms a bearing, in which the inner end of the valve-stem *a* moves. The sleeve or seat-piece *b* serves as a valve-seat, water-way, and as a bearing for the outer end of the valve-stem *a*. It is chambered or enlarged at its inner end, forms a water-way of annular shape around the valve-stem *a*, and its sides are cut away, as shown at *c c*, making openings, through which the water may pass to the outlet, as indicated by the arrows in Fig. 2. The extreme inner end of the sleeve *b* forms the seat of the valve, as shown at *b'*. It may be made flat, as shown, or it may be of any other form desired. The sleeve is screwed into the wall *e*, and may be packed to make a tight joint. It is also fitted to make a tight joint at the end of the case A, as shown at *e''*.

The valve-stem *a* is provided with a knob, *a''*, by pressing upon which the valve *a'* will be relieved from its seat and the faucet opened, while the spiral spring *d*, acting against the valve *a'* and against the yoke *e'*, will close the valve, and the pressure of the water will act to keep the valve always closed.

It will be apparent that, should it become necessary at any time to refit the valve, by unscrewing the sleeve *b* both the valve and its seat may be removed from the case A, when they can easily be repaired, or they may be at once replaced by duplicate parts without necessitating the assistance of a plumber or without removal of the faucet proper.

I have thus fully described the nature and operation of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

In a faucet for drawing liquids, the seat-piece *b*, fitted within the case A, as shown, having openings *c c*, and arranged to form a seat for the valve *a'*, a journal for the valve-stem *a*, and a cap for the case A, and operating in combination with the stem *a*, spring *d*, and case A, substantially as shown, and for the purpose specified.

JOHN STEPHENSON.

Witnesses:

JOSEPH K. JAMES,

CHARLES M. KIMBALL.