

(No Model.)

T. H. WALKER.
Automatic Faucet.

No. 229,503.

Patented June 29, 1880.

Fig: 1.

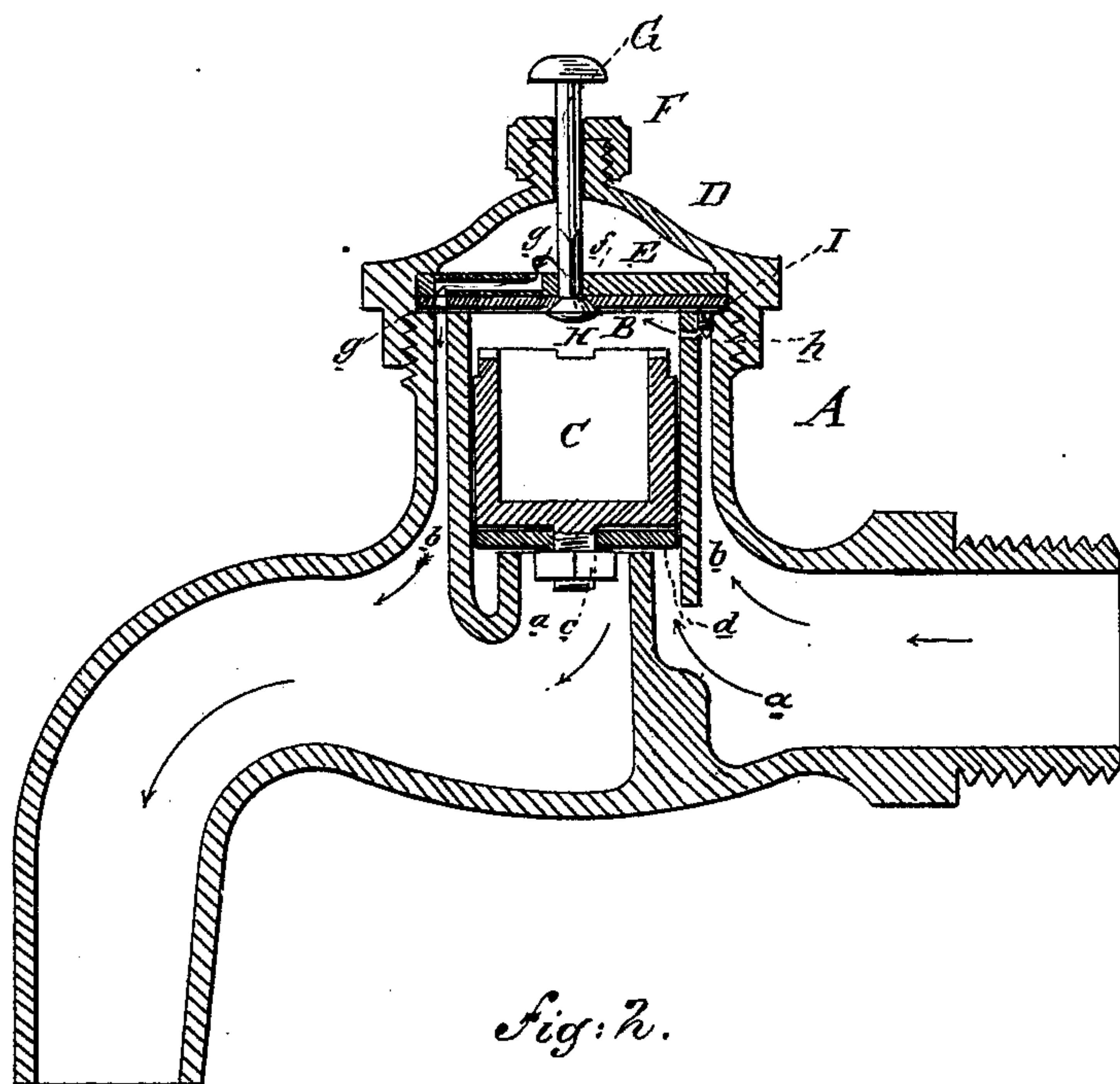


Fig: 2.

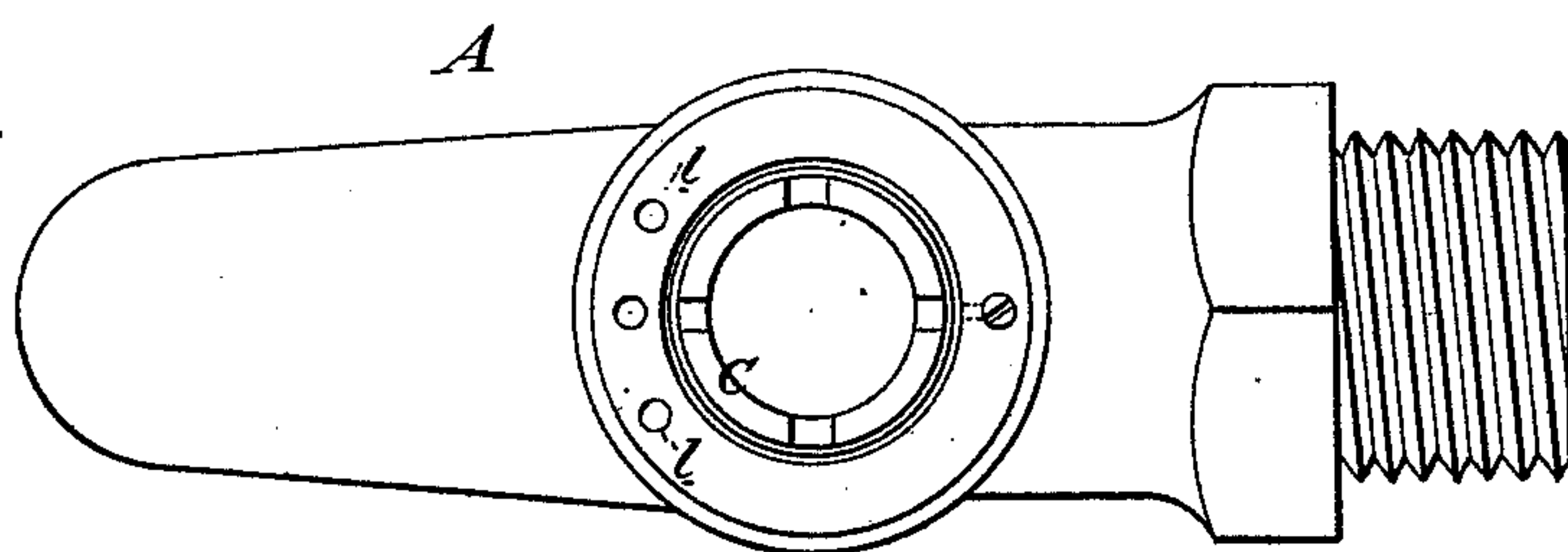
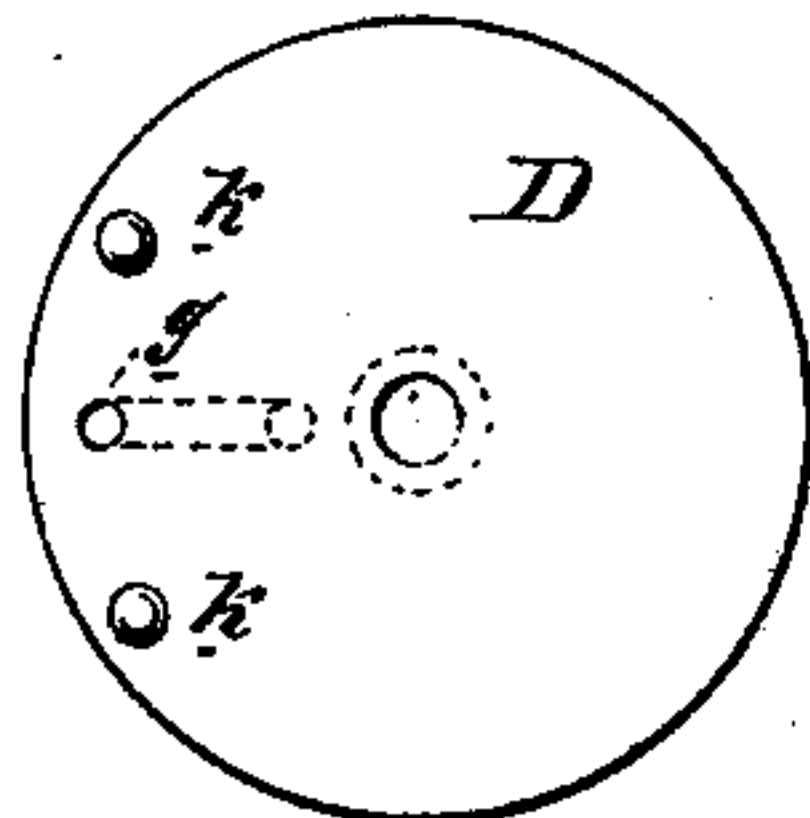


Fig: 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS H. WALKER, OF KANSAS CITY, MISSOURI.

AUTOMATIC FAUCET.

SPECIFICATION forming part of Letters Patent No. 229,503, dated June 29, 1880.

Application filed March 29, 1880. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. WALKER, of Kansas City, in the county of Jackson and State of Missouri, have invented a new and Improved Automatic Faucet, of which the following is a specification.

The object of this invention is to provide a self-closing faucet that will close without spring or screw; and the invention consists in combining, constructing, and arranging the parts, as hereinafter described.

Figure 1 is a longitudinal sectional elevation of a faucet. Fig. 2 is a plan of the same with cap and plate removed. Fig. 3 is a plan of the reverse of the plate.

Similar letters of reference indicate corresponding parts.

In the drawings, A is the faucet-shell, provided with an upward tubular projection, *a*, which extends upward into the central cylindrical chamber, B, between the walls of which chamber B and the shell of the faucet are the water-passages *b b*. Within this chamber B is a hollowed or chambered valve, C, on the bottom of which is fixed, by screw and nut *c*, the packing *d*, said packing closing tight down on the upper edge of the tubular projection *a*, which constitutes the seat of the valve C.

D is a hollow screw-cap of the faucet, in the under side of which is fixed the metal plate E, which plate E is provided with a central opening, *f*.

On the top of the cap D is the stuffing-box F, down through which, and through the central opening in the plate E, is passed the valve-stem G, which stem is of rectangular cross-section where it passes through the opening *f* in the plate E and for a short distance above it. On the end of this stem G is a valve, H, which closes up into its seat on the under face of the said plate E. This plate E is further provided with water-passage *g*, which extends from its upper face near its center through its lower face near its periphery, as shown. On the under face of this plate is secured a suitable washer or packing for making a tight joint, as the packing rests upon the upper edge of the central chamber, B.

Projecting downward from the connecting-ring between the chamber B and shell of the faucet A is a screw, I, which may be turned down to regulate the flow of water into the chamber B from without through the opening *h*.

The pins *k k*, projecting downward from the plate E, enter the holes *l l* in the connecting-ring between the chamber B and shell of the faucet A, and thereby hold said plate in position.

Water entering the faucet in the usual way flows up the water-passage *b* through the hole *h* and into the chamber B; filling thereby the chambered valve C and the space above it in the said chamber B; and this pressure of water therein holds the said valve C down upon its seat and prevents the passage of the water through the faucet, so that the faucet, as will be seen, is a self-closing faucet, the weight of the said valve and the pressure of the water within it and above it overbalancing the pressure of the water beneath the said valve.

In order to permit the flow of water through the valve the valve-stem and valve G H are pressed down, thereby relieving the pressure of the water in and above the valve C, and allowing the said water to flow up through the opening *f*, around the rectangular section of the valve-stem G, into the chambered cap D, and thence down through the water-passage *g* of the plate E into the water-passage *b* on the discharge side of the faucet, and thence out of the faucet, and at the same time the water pressure in and about the valve C being relieved, the pressure beneath it is sufficient to raise the said valve, so that the water also will flow into the cylindrical chamber B over the seat of the valve C, down through tubular projection *a*, and thus out from the faucet.

The arrows in Fig. 1 denote the direction of the flow of water when the valve-stem and valve G H are pushed down.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with the faucet-shell A, having projection *a*, of the cylinder B, having water-passages *b b*, the chambered valve C on packing *d*, the cap D, having plate E, with central opening, *f*, and water-passage *g*, the valve H, provided with stem G, and the water-regulating screw I, working in hole *h*, all substantially as shown and described.

THOMAS H. WALKER.

Witnesses:

EDW. R. LORING,
JOHN A. RONEY.