

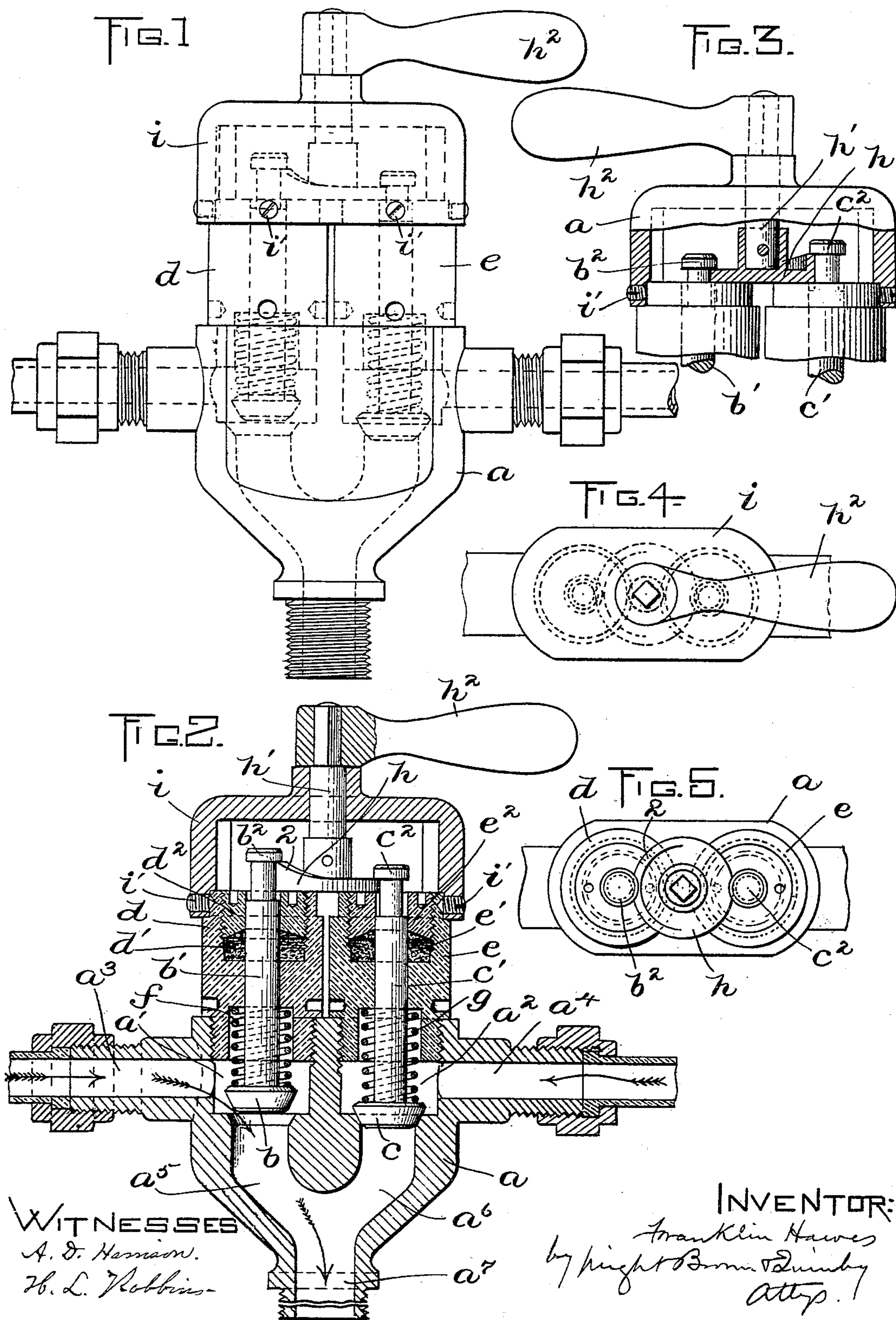
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Patented Jan. 24, 1899.

F. HAWES.  
FAUCET.

(Application filed July 6, 1898.)

(No Model.)



WITNESSES  
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# UNITED STATES PATENT OFFICE.

FRANKLIN HAWES, OF BOSTON, MASSACHUSETTS.

## FAUCET.

SPECIFICATION forming part of Letters Patent No. 618,227, dated January 24, 1899.

Application filed July 6, 1898. Serial No. 685,232. (No model.)

*To all whom it may concern:*

Be it known that I, FRANKLIN HAWES, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Faucets, of which the following is a specification.

This invention relates to double-acting faucets adapted for use with a cold and hot water supply.

The invention consists in certain features of improvement, which I shall proceed to explain, with the aid of the accompanying drawings, and then set forth in the appended claims.

Figure 1 represents a side elevation of a faucet embodying my improvements. Fig. 2 represents a median vertical section of the same. Fig. 3 represents a detail view, in section and elevation, showing the operating-handle in a position opposed to that in Fig. 2. Fig. 4 represents a plan view. Fig. 5 represents a plan view with the cap and handle removed.

The same reference characters indicate the same parts in all the figures.

Referring to the drawings, *a* designates a body or casing formed with two valve-chambers *a'* *a''* and with inlet-passages *a<sup>3</sup>* *a<sup>4</sup>* there-to adapted to connect with hot and cold water pipes. Outlet-passages *a<sup>5</sup>* *a<sup>6</sup>*, joining below into a single outlet *a<sup>7</sup>*, lead from the valve-chambers, the upper orifices of the outlets constituting seats for two plunger-valves *b* *c*, which control the liquid-delivery through the outlets. Said valves have elongated stems *b'* *c'*, journaled in blocks or sleeves *d* *e*, which screw into the casing *a*, the sleeves being recessed at their lower ends to receive springs *f* *g*, which abut the valves and tend to close the same. At their upper ends the valve-stems *b'* *c'* pass through stuffing-boxes formed in the sleeves *d* *e* and containing suitable packing *d'* *e'*, confined by adjustable glands *d<sup>2</sup>* *e<sup>2</sup>*, which screw into threaded recesses in the sleeves. *b<sup>2</sup>* *c<sup>2</sup>* are heads or flanges formed on the valve-stems *b'* *c'* by reducing them near their upper ends. Said heads rest on the margin of a cam-plate *h*, attached to the lower end of an operating-spindle *h'*, whose upper end is provided with a handle *h<sup>2</sup>*. A raised portion or abutment 2 is formed on one-half

of the cam-plate *h*, and when said plate is turned so that this raised portion comes underneath the head on one of the valve-stems the said stem and its valve are raised, while the other stays depressed by the action of its spring. The spindle *h'* is journaled in a cap or cover *i*, which is attached by screws *i'* *i''* to the upper ends of the sleeves *d* *e*. The valves may, if desired, be provided with a suitable soft packing.

As here shown, the parts are so arranged that on turning the operating-handle so that it points toward the right, as shown in Fig. 2, the valve *b* is opened, admitting liquid from the passage *a<sup>3</sup>* into the outlet or spout, the valve *c* remaining closed. When said handle is turned to point toward the left, as shown in Fig. 3, the valve *c* is opened, admitting liquid from the passage *a<sup>4</sup>* into the outlet, the valve *b* remaining closed. When the handle is turned at right angles to these two positions, both the valve *b* and the valve *c* remain closed.

The faucet being coupled to hot and cold water supply pipes, it will be seen that on properly manipulating the operating-handle a supply of either hot water or cold water can be obtained from the delivery-spout.

Among the advantages due to my improvements in double-acting faucets are simplicity, compactness, durability, and accessibility of the parts for repair or replacement.

I claim—

1. A faucet comprising a body or casing containing two valve-chambers and inlet and outlet passages connected therewith, two valves operating in said valve-chambers, two sleeves independently screwed into the body and journaling the valve-stems, the latter projecting outside of the sleeves and a cam member engaging the valve-stems outside of the sleeves and adapted to be moved to operate the valves.

2. A faucet comprising a body or casing containing two valve-chambers and inlet and outlet passages connected therewith, two valves operating in said valve-chambers, two sleeves detachably secured to the body and journaling the valve-stems, a cap detachably secured to the sleeves, an operating-spindle journaled in said cap, and a cam member mounted on

said spindle and engaging the valve-stems so as to operate the valves when said spindle is rotated.

3. A faucet comprising a body or casing containing two valve-chambers and inlet and outlet passages connected therewith, two valves operating in said valve-chambers, two sleeves detachably secured to the body and journaling the valve-stems, springs abutting said sleeves and surrounding the valve-stems, said springs operating to close the valves, a cam-plate overlying the outer ends of the sleeves and engaging the valve-stems, said cam-plate operating to open the valves against the tension of the springs when suitably rotated, and means for rotating said cam-plate.

4. A faucet comprising a body or casing containing two valve-chambers and inlet and outlet passages connected therewith, two valves operating in said valve-chambers and having elongated stems, two sleeves detachably secured to the body and journaling the valve-stems, stuffing-boxes in said sleeves surrounding the valve-stems, and a cam member engaging the valve-stems and adapted to be moved to operate the valves.

In testimony whereof I have affixed my signature in presence of two witnesses.

FRANKLIN HAWES.

Witnesses:

C. F. BROWN,  
A. D. HARRISON.