

No. 612,268.

Patented Oct. 11, 1898.

P. K. O'LALLY.
FAUCET.

(Application filed Nov. 18, 1897.)

(No Model.)

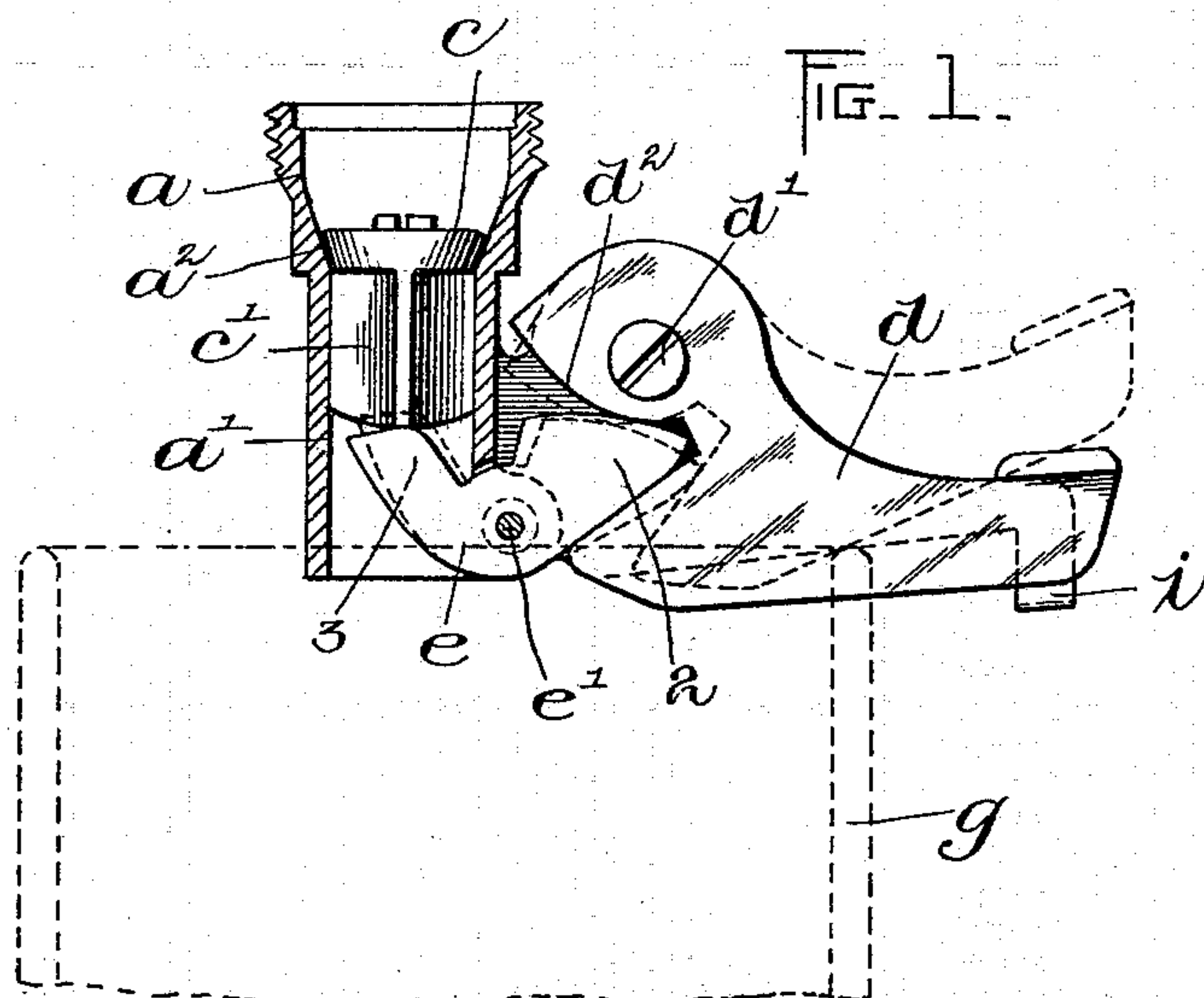
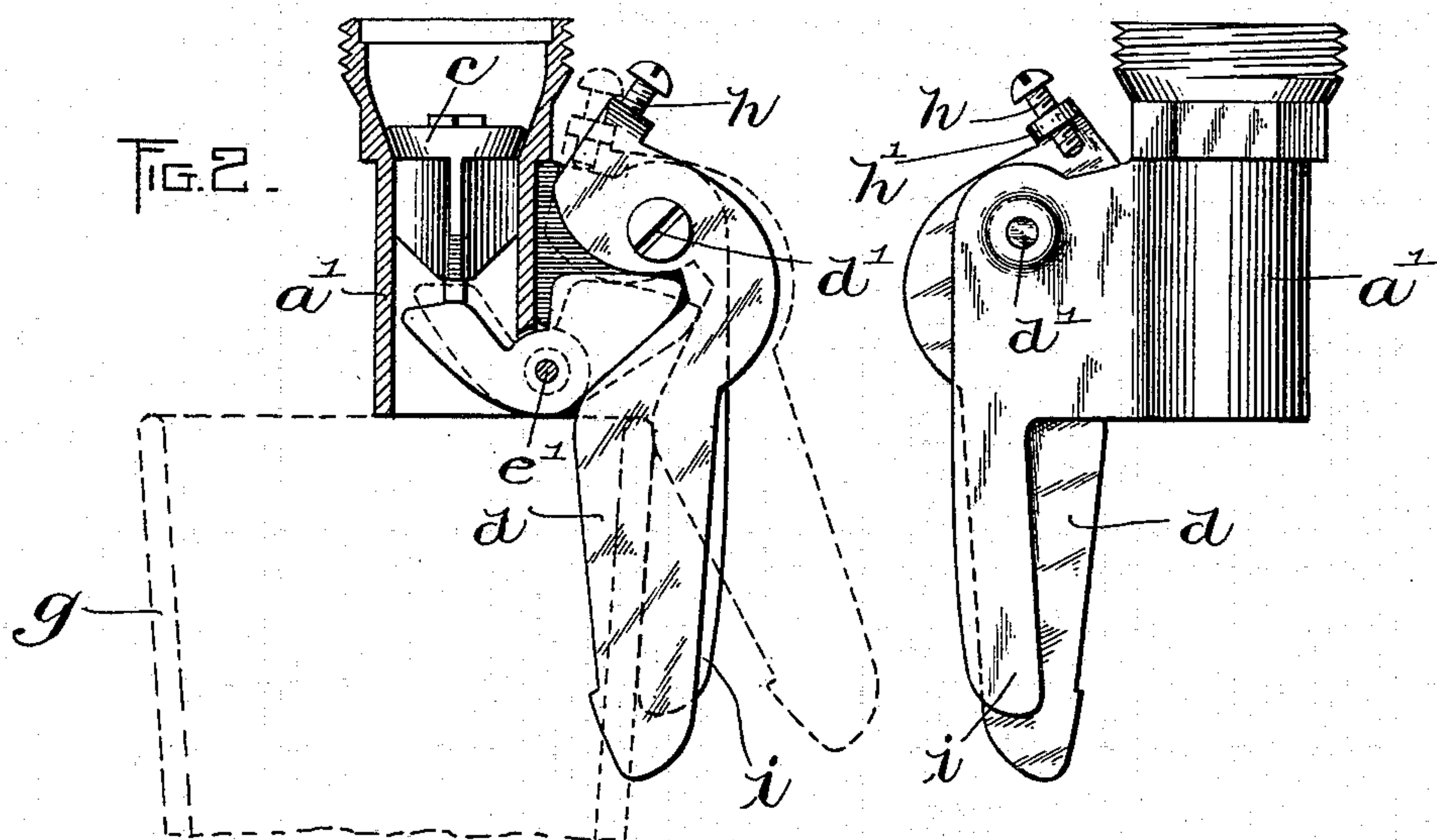


FIG. 3.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

PATRICK K. O'LALLY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
AMERICAN AUTOMATIC FAUCET COMPANY, OF SAME PLACE.

FAUCET.

SPECIFICATION forming part of Letters Patent No. 612,268, dated October 11, 1898.

Application filed November 18, 1897. Serial No. 658,908. (No model.)

To all whom it may concern:

Be it known that I, PATRICK K. O'LALLY, 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 faucets of the character shown in Letters Patent of the United States No. 591,785, granted to me October 12, 1897, in which a valve closing an outlet-nozzle is held to its seat by the pressure of the liquid and displaced by a lever pivoted to the casing and having an arm projecting into the nozzle and bearing against the valve or its stem.

The invention has for its object to enable the valve of the faucet to be opened or raised from its seat with the minimum expenditure of force; and it consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a faucet embodying my invention, the nozzle being shown in section. Fig. 2 represents a view similar to Fig. 1, showing an operating-lever of different shape. Fig. 3 represents an elevation of a portion of the faucet shown in Fig. 2, taken from the opposite side.

The same letters and numerals of reference indicate the same parts in all the figures.

In the drawings, *a* represents a portion of the casing of a faucet having a downwardly-projecting nozzle *a'* and a valve-seat *a''*. *c* represents the valve, fitted to said seat and having a stem *c'* projecting downwardly into the nozzle.

d represents an operating-lever which is fulcrumed at *d'* to an ear projecting outwardly from the nozzle and is provided with a shorter arm having a face *d''*, which is cam-shaped or eccentric relatively to the fulcrum *d'*. The longer arm of the lever *d* is arranged to be manipulated either by hand or by a liquid-receptacle pressed against it.

e represents an intermediate lever, which is fulcrumed at *e'* between the operating-lever *d* and the valve-stem. Said intermediate lever has an outer arm 2, bearing upon the

cam-shaped face *d''*, and an inner arm 3, which projects into the nozzle and bears upon the lower end of the valve-stem *c'*.

In Figure 1 I show the longer arm of the operating-lever *d* projecting in a substantially horizontal direction, so that it can be operated by the upward pressure of a vessel *g* against its lower edge, while in Fig. 2 said arm is shown as projecting downwardly, so that it can be operated by the horizontal pressure of a vessel against its inner edge. When the valve is closed, (by the pressure of liquid against it or by gravitation,) the levers are in the position shown in full lines; but when pressure is applied to the operating-lever it is moved to the position shown in dotted lines, and its cam-shaped face *d''* is thus caused to act with an easy movement upon the intermediate lever and displace the latter sufficiently to raise the valve from its seat. I find that this arrangement of levers enables the valve to be opened by a very light pressure, such as could be exerted by the pressure of a fragile drinking-glass against the operating-lever, without danger of breaking the glass.

In Figs. 2 and 3 I show an adjustable stop adapted to be adjusted to limit the outward or valve-opening movement of the lever *d* and stop said movement at any desired point, so that the faucet may be adjusted to prevent the valve from being opened beyond a predetermined degree. Said adjusting device is here shown as a screw *h*, engaged with a fixed lug *h'* on the operating-lever *d*, said lug having a screw-threaded orifice. The screw *h* is arranged to abut against the fixed ear, to which the operating-lever is pivoted.

i represents an elongated stop or abutment affixed to the nozzle and projecting therefrom in substantially the same direction that the longer arm of the operating-lever projects, said stop or abutment being in close proximity to the lever, so that a vessel pressed against the lever will strike the stop or abutment and be arrested by the latter. When the valve is closed, the lower or inner edge of the lever is inclined relatively to the corresponding edge of the abutment *i*, so that at the outer portion of the lever its lower or inner edge is nearer to the corresponding edge

of the abutment than at the inner portion of the lever. It will be seen, therefore, that when the portion of the vessel that is used to displace the lever is held near the outer end of the abutment the upward movement of the lever by the vessel would be less than when the said portion of the vessel is held at a point nearer the nozzle. When it is desired to have only a minimum opening of the valve, the vessel is held so that it will bear against the outer portion of the lever. When a greater opening is desired, the vessel is held so that it will bear against the inner portion of the lever.

15 I claim—

1. A faucet comprising a casing having an outlet-nozzle, a valve seated in the casing above the nozzle and having a stem projecting downwardly into the nozzle, an operating-lever 20 fulcrumed to the nozzle and having a longer arm which is arranged to be displaced by a vessel presented to the nozzle and a cam-shaped shorter arm between its fulcrum and the nozzle, and an intermediate lever fulcrumed between the operating-lever and the valve-stem 25 and having an outer arm bearing against the cam-shaped arm of the operating-lever, and

an inner arm projecting into the nozzle and bearing against the valve-stem.

2. A faucet comprising a casing having an outlet-nozzle, a valve seated in the casing above the nozzle and having a stem projecting downwardly into the nozzle, an operating-lever fulcrumed to the nozzle and having a cam-shaped shorter arm between its fulcrum and the nozzle, an intermediate lever fulcrumed between the operating-lever and the valve-stem and having an outer arm bearing against the cam-shaped arm of the operating-lever, and an inner arm projecting into the nozzle and bearing against the valve-stem, and a fixed elongated abutment adjacent to the longer arm of the operating-lever, one edge of said arm being inclined relatively to the corresponding edge of said abutment. 45

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 13th day of November, A. D. 1897.

PATRICK K. O'LALLY.

Witnesses:

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