(No Model.)

# G. T. EYANSON.

## COCK OR FAUCET.

No. 508,211. Patented Nov. 7, 1893.

Fig. 4

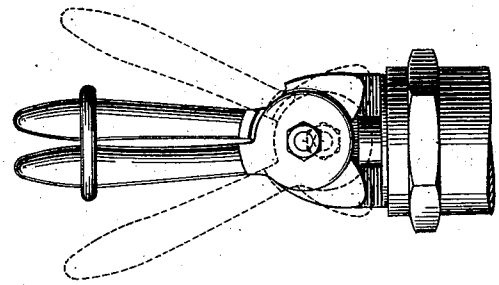


Fig. 2

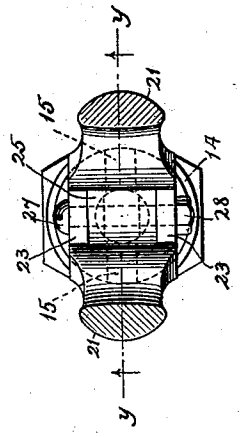



Fig. 3

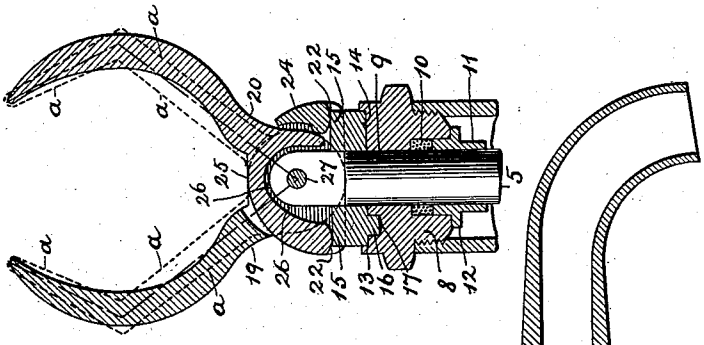
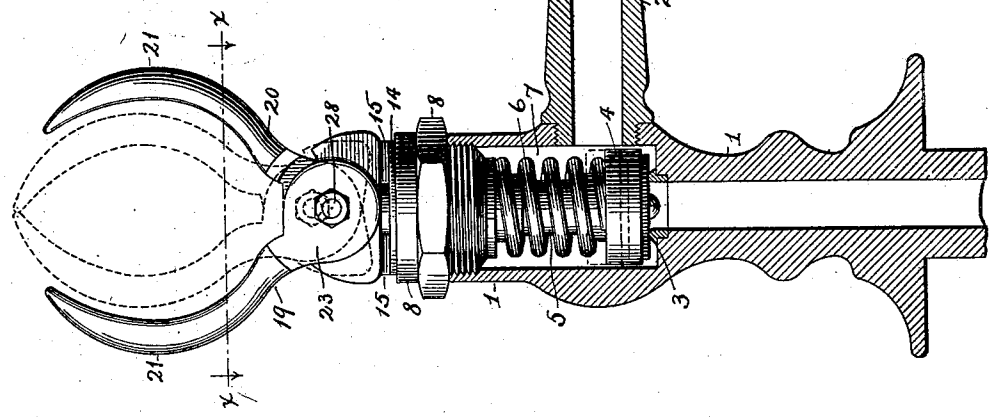



Fig. 1




Witnesses
Ida Macdonald
H. W. Lloyd

Inventor
George T. Eyanson.
By his Attorney
Jacob Felbel

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

GEORGE T. EYANSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE MEYER-SNIFFEN COMPANY, LIMITED, OF NEW YORK, N. Y.

## COCK OR FAUCET.

SPECIFICATION forming part of Letters Patent No. 508,211, dated November 7, 1893.

Application filed September 13, 1892. Serial No. 445,737. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE T. EYANSON, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Cocks or Faucets, of which the following is a specification.

My invention relates to that class of cocks and faucets in which a pair of hand-levers is employed to elevate a spring-actuated valve, as shown for instance in the patent to P. W. Doherty, No. 161,768, dated April 6, 1875, and my invention has for its objects to improve the construction of such cocks and faucets and provide a contrivance in which the hand-portions of the levers are so formed or shaped as to preclude or render most difficult the operation of fastening them together for the purpose of mechanically holding up or open the valve and permitting a constant or unduly long flow of water without keeping the hand upon and squeezing together the handle-portions of said levers. Heretofore the construction has always been such that a key-ring or analogous device could be slipped over the handles when drawn toward each other to raise the valve, and made to serve as a tie or clasp to lock the valve permanently open or elevated, which is of course highly objectionable in this class of contrivances.

My invention consists in the features of construction and combinations of devices hereinafter more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1, is a side view, partly in section, of a cock or faucet embodying my invention. Fig. 2 is a horizontal section taken at the line $x, x$ of Fig. 1. Fig. 3 is a partial vertical section taken at the line $y, y$ of Fig. 2, and Fig. 4 is a partial side elevation to illustrate the previous form or construction of handle-ends, and the application thereto of a ring or clasp for holding them together.

In the several views of the same part will be found designated by the same numeral of reference.

1 is the body of the faucet, 2 the spout, 3 the valve-seat, 4 the valve, 5 the valve-stem, and 6 the spring for maintaining the valve normally upon or against its seat.

At the upper end of the valve chamber 7 is a screw-cap 8, through a central opening 9, in which passes the upper portion of the valve-stem, the under side of the cap being preferably recessed for the reception of a packing-ring 10 and follower 11, against a flange 12, on which the upper end of the valve spring bears. The upper, outer face of the screw-cap is formed with a circular depression 13, into which is fitted a ring 14, having a central perforation for the passage of the valve-stem and provided on its upper side with two diametrically-opposed tracks, or fulcra 15, preferably cast integral with the ring. On the under side of the ring is provided a pin or lug 16, which enters a hole or depression 17 formed in the cap, by which means the ring is prevented from accidentally turning relatively to the cap. There may be two such holes or depressions 17 to secure the ring in either of two positions according to the direction it is desired to have the tracks or fulcra and the hand-levers stand with respect to the spout or discharge portion of the cock or faucet.

19 and 20 designate the crossed hand-levers, which are made slightly different, but each consists essentially of a handle-portion 21, and a bearing portion 22. The lever 19 is formed with two side plates 23, and an end piece 24, connecting them together, and forming on its under side the bearer 22. In the space formed between the two side plates is fitted the lower end 25 of the hand-lever 20, which adjacent to the bearer 22 is slotted or cut-away as at 26, for the reception of the upper end of the valve-stem. The side plates 23, and the end portion 25 are perforated in line with a hole in the upper end of the valve-stem, and a pivot-pin or small bolt 27 is passed through these several perforations and is held in place by a nut 28. When the parts have been thus secured together the bearing portions 22 rest upon the tracks or fulcra 15.

The handle portions 21 are of peculiar form or construction, in that about or slightly above the pivot 27 they extend first upwardly from each other, and then upwardly toward each other. In other words, the lower por-

tions of the handles diverge, and the upper portions converge. In the normal position, the upper extremities of the converging portions stand an inch, more or less, apart, in order to permit the raising of the valve, which is accomplished by the squeezing together of the handles. By giving the handles both an outward and inward bend, they can never be brought into parallelism as heretofore, and when squeezed to lift the valve, as shown by the dotted lines at Fig. 1, the slant or obliquity of the outer surfaces of the handles is such that a key-ring or other ordinary device cannot be slipped over and made to lock the handles in their closed positions. Nor will the slanting sides permit the tying of the handles by a string or cord, which will slip under the stress of the valve-spring. The outward and inward bends of the handles may be made on either curved or straight lines, or both. I prefer to curve the handles, as shown at Fig. 1, as a more graceful construction is thereby produced. But the bends may be made on straight lines, as indicated by the lines *a* at Fig. 3.

Besides the advantage of preventing the locking open of the valve, the shape or construction of the handles affords a much better and surer grip for the hand of the user in the act of raising the valve. In the old construction the handles cannot be brought close together and the valve entirely raised by the full hand, but only by the free end of the thumb and one or two opposing finger tips. With my improved construction the levers may be grasped firmly and squeezed by the whole hand, thus securing the advantage of additional sets of muscles, particularly the powerful ones at the bases of the fingers and thumb. Thus the valve may be raised with less effort and more conveniently than heretofore.

From what has already been said, the operation will readily be understood, and it seems only necessary to state that when the handles are drawn toward each other, the bearing portions, below the pivot, approach each other, and riding on the tracks or fulcrums operate to lift the valve-stem against the tension of its spring and raise the valve from its seat. Upon releasing the grip on the handles the spring of course returns all of the moving parts to their first positions.

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

1. In a self-closing faucet, a pair of valve-lifting levers, the handle-portions of which are formed first to diverge from and then to converge toward each other, substantially as set forth.

2. In a self-closing faucet, a pair of valve-lifting levers, the handle-portions of which first diverge from and then converge toward each other on curved lines, substantially as set forth.

3. In a faucet, the combination with the body, of a valve, a spring-actuated valve stem, a cap having fulcra, and a pair of crossed levers pivoted together and to the valve-stem, and having each a bowed or crooked handle-portion, substantially as set forth.

4. In a faucet, the combination with the body, of a valve, a spring-actuated valve-stem, a cap having a depression, a ring having fulcra seated in said depression, means for preventing said ring from accidentally turning, and a pair of crossed-levers pivoted together and to said valve-stem, and having each a handle-portion diverging first outwardly and upwardly and then converging inwardly and upwardly, substantially as set forth.

Signed at Philadelphia, in the county of Philadelphia and State of Pennsylvania, this 7th day of September, A. D. 1892.

GEO. T. EYANSON.

Witnesses:
ANDREW ZANE,
GEO. W. REED.