G. G. Percival,

Faucet,

No. 48,995, Patented July 25, 1865.

Fig: 1

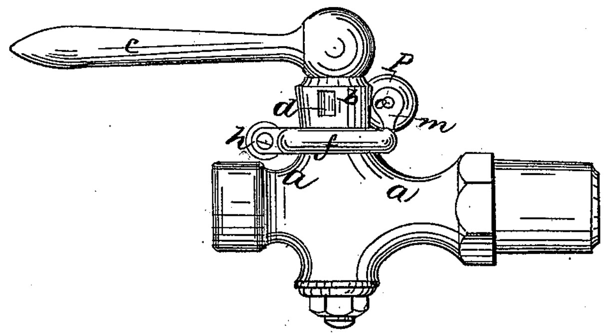
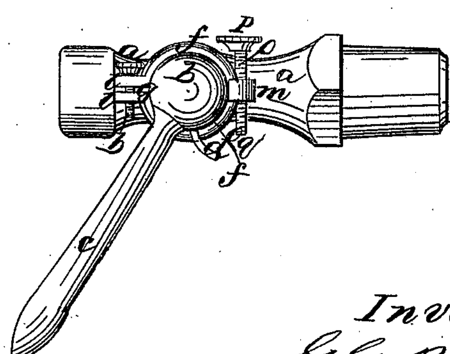


Fig: 2



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UNITED STATES PATENT OFFICE.

GEO. G. PERCIVAL, OF BROOKLYN, N. Y.

IMPROVEMENT IN FAUCETS.

Specification forming part of Letters Patent No. **48,995**, dated July 25, 1865.

To all whom it may concern:

Be it known that I, GEO. G. PERCIVAL, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Faucets, Stop-Cocks, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention consists in attaching to the key or plug of a faucet, stop-cock, or other similar device used for regulating the flow of liquids, gases, &c., through pipes or any other of the ordinary conducting devices therefor, or in forming upon the same, a projecting arm, which arm, when the key is turned in the proper direction, comes to a bearing against any proper-shaped arm or projecting piece of the barrel of the cock susceptible of adjustment thereon, whereby the length of movement of the key in one direction can be adjusted at pleasure, and thus allow more or less of the liquid or gas to pass through the cock, as may be desired, while at the same time, and without necessitating the alteration of such adjustment, by turning the key in the opposite direction the cock can be opened, so as to allow the passage of liquid or gas through the same to its fullest extent.

My improvement is represented in the accompanying plate of drawings, of which Figure 1 is a side view of a stop-cock; Fig. 2, a plan or top view of the same.

a a represent the barrel of the stop-cock, *b* its key, and *c* the handle attached to upper end of key for the turning of the same within the barrel *a*, the key being inserted and turning within its barrel in the usual manner; *d*, a projecting arm of the key *b*, which may be either attached to the same in any proper manner or form a part thereof, according as may be desired; *f*, a ring split at *g*, placed and fitting around the upper end of the barrel *a*, and secured thereon by a screw-bolt, *h*, passing through the projections *l l* of the ring, by the screwing or unscrewing of which the ring can be either tightly fastened and held upon the barrel *e* or sufficiently loosened as to be either moved about upon the same or removed therefrom at pleasure, first, however, when the ring is to be removed, taking the key out of the barrel in the ordinary manner; *m*, a vertical standard forming a part of the ring *f*, through the upper ends of which a set-screw, *o*, is passed provided with a milled head, *p*, for convenience in turning the same, said screw being so placed that when the key is turned in the proper direction its projecting arm shall impinge against the end *q* thereof.

When desired to adjust the cock so that by turning it in the proper direction only a given quantity of liquid or gas can pass through the same, the set-screw is turned in its bearings so as to decrease or increase the length of movement which can be given to the key in the direction in which it is to be turned by bringing its end *q* nearer to or farther from the key-arm thus only allowing the cock to be opened in direct proportion thereto. In this adjustment of the set-screw with regard to the key-arm the movable ring in which it is placed may be also employed—as, for instance, in adjustments requiring a considerable length of movement of the set-screw the ring can be turned, first, however, being loosened, so as to bring the end of the set-screw nearly to the point at which it is desired to set it and there fastened, when the set-screw can be adjusted, as before described. The set-screw and the key-arm also are so arranged with regard to each other that, although when the key is turned in one direction its arm will come to a bearing against the set-screw as described, the key can be sufficiently moved in the opposite direction thereto as to open the cock to its fullest capacity. (See Fig. 2.)

Among the many advantages of the above described mode of adjusting or setting a stop-cock so that only a stated quantity of liquid or gas can pass through it at one and the same time when the key is turned in one direction while by being turned in the opposite direction the full capacity of the cock can be used when desired, may be here mentioned, that a more perfect regulation of the flow of liquids, &c., is secured, and that it is not necessary to disturb or alter its adjustment to fully open it, which has been invariably the case in the use of the many arrangements of devices heretofore provided for regulating the flow of liquids, &c.

In lieu of having the set-screw in the movable ring, it can be inserted within the arm of

the key and adjusted therein with regard to any proper projecting piece of the barrel or of its ring, either fixed or adjustable thereon, as described; and, also, the ring can be dispensed with and the set-screw inserted in a fixed standard of the barrel; and, also, instead of using a set-screw as the adjustable stop for the movement of the key, an arm may be employed susceptible of adjustment at pleasure; and there are evidently many other modifications which can be made in the detail construction and arrangement of the two arms of the key and barrel without departing from the principle of the present invention, as hereinbefore stated.

It may be here remarked, as another modification of my improvement, that the arm on the key can be dispensed with, if desired, and a proper shaped and arranged adjustable arm only used upon the barrel for the handle of the cock itself to come to a bearing against.

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

The combination, with a faucet, of the split ring *f*, arm *d*, and screw-pin *p*, substantially as shown and described.

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Witnesses:
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