(No Model.)

W. CURLETT.

FAUCET.

No. 583,458. Patented June 1, 1897.

Fig. 1.

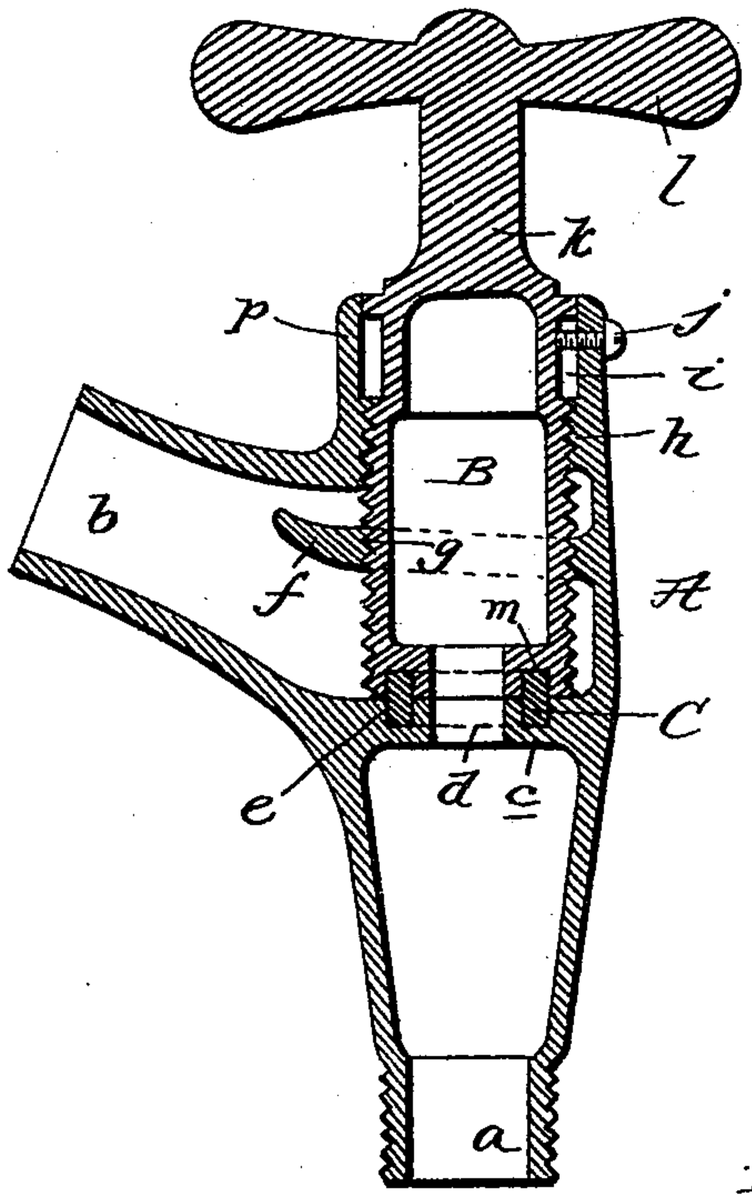
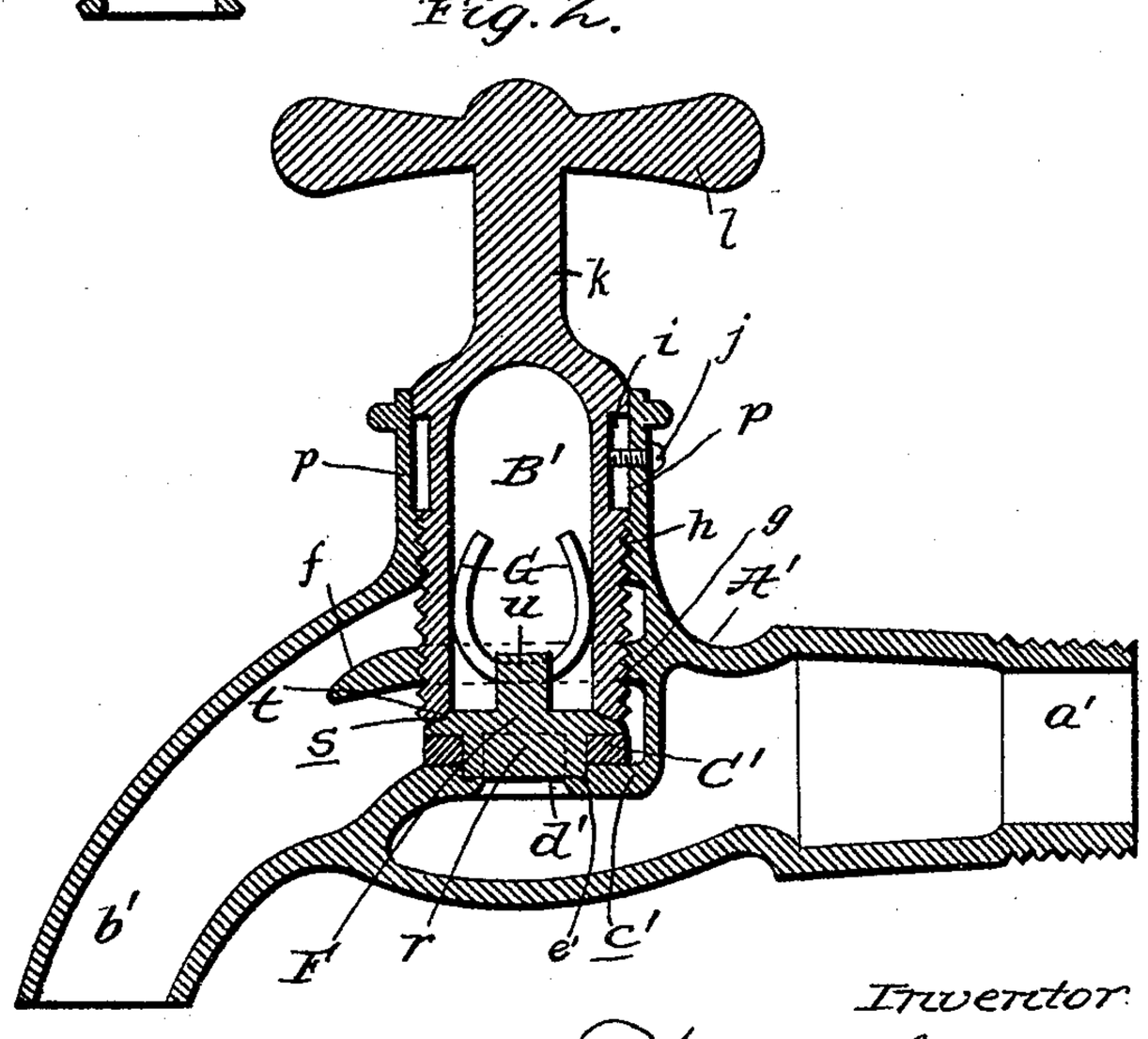


Fig. 2.



Witnesses:
H. C. Raeder
H. A. James.

Inventor
William Curlett
By James J. Shelby
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM CURLETT, OF SAN FRANCISCO, CALIFORNIA.

FAUCET.

SPECIFICATION forming part of Letters Patent No. 583,458, dated June 1, 1897.

Application filed May 20, 1896. Serial No. 592,351. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CURLETT, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Faucets; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in that class of faucets which embody reciprocating valves; and its novelty and advantages will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1 is a vertical section of my improved faucet with the valve in its closed position; and Fig. 2 is a similar view of a modified construction, in which the valve is also shown in its closed position.

Referring by letter to said drawings, and more particularly to Fig. 1 thereof, A indicates the shell or casing of my improved faucet, which for the sake of cheapness and durability is preferably cast in one piece, as shown. This shell or casing A has the threaded lower end *a* for the connection of a supply-pipe, the lateral nozzle or spout *b* at an intermediate point of its length, and the partition-wall *c*, which is designed to serve as a valve-seat and is provided with a central opening *d*, and is also provided in its upper side around the opening *d* with a groove *e*, the purpose of which will be presently described. The said shell or casing A also has a wall *f*, which is arranged above the partition-wall *c* and opposite the discharge-spout *b*, and is designed and adapted to deflect water to said discharge-spout, and thus prevent it from leaking out of the upper end of the valve. This wall or diaphragm *f* is provided with a threaded aperture *g*, and above said diaphragm the shell or casing A is interiorly threaded, as shown and indicated by the letter *h*, for the engagement of the exteriorly-threaded valve B.

The valve B, which engages the threads *g* of diaphragm *f* and the interior threads *h* of the casing, so that it will move up and down when turned, is hollow, for a purpose presently described, and it is provided adjacent to its upper end with a peripheral recess *i* to receive the screw *j*, carried by the shell or casing, and merges at such upper end into the stem *k*, which has a suitable handle *l* attached to it, as illustrated.

The two series of threads *g h* serve in practice to guide the valve B in a true line in its movements toward and from the valve-seat formed by wall *c*, and in virtue of said valve being made hollow, as shown and before described, it will be seen that it is adapted to act as an antihammer when shutting off the water or assuming its closed position, or, in other words, is designed and adapted to obviate the objectionable hammering noise so generally incident to the closing of ordinary faucet-valves.

At its lower end the valve B is provided with a groove *m*, similar in shape and size to and alined with the groove *e* in partition *c*, and in this groove *m* a washer C, of rubber or other suitable material, is arranged and secured in any approved manner. This washer C is slightly less in size than the groove *e* of partition *c*, and in consequence of this it will be seen that when the valve is closed, as shown, the washer assists in effecting a most perfect and thoroughly water-tight joint, and yet is completely and effectually protected from the action of water, which is an important advantage and a desideratum in this class of devices.

When it is necessary for purposes of repair or for any other reason to remove the valve from the shell or casing, it is simply necessary to turn the screw *j* outwardly and turn the valve B, so as to move it upwardly, when it may be readily removed, the interiorly enlarged upper end *p* of the shell or casing offering no obstruction to the passage of the valve.

In Fig. 2 of the drawings I have shown a construction which embodies a modified form of shell or casing A′ and a modified valve-body B′. The shell or casing A′ has an induction end *a′*, a discharge end *b′*, and a partition *c′*, provided with an aperture *d′*, and aside from the arrangement of these parts it is similar to the shell or casing shown in Fig. 1, with the exception that instead of the upper side of the partition *c′* being grooved it is provided around the opening *d′* with a rabbet *e′*, for a purpose presently described.

The valve-body B′ is similar to the body B of Fig. 1, with the exception that the packing-ring C′ instead of being arranged in a groove at the lower end of the body is arranged on the reduced portion *r* of a piece F, which has its upper side beveled, as indicated by *s*, to conform to the correspondingly-beveled end *t* of the body B′, and also has the reduced portion *u*, which is arranged in and connected with the body B′ by the spring G, as shown. This spring G, which is of approximate **U** shape, is connected to the reduced portion *u* of piece F, and its arms by tending to spring outwardly frictionally engage the inner side of the valve-body B′, and thereby securely connect the piece F thereto. While said spring G securely connects the piece F with the body B′, it will be observed that it will permit of said piece F being readily disconnected from the body when desirable.

When the valve is in its closed position, as shown, the reduced portion *r* of the piece F will be seated in the rabbet *e′* of the partition *c′*, and the packing-ring C′ will bear against the upper side of the partition *c′*, and consequently the packing-ring will be effectually protected against the action of water.

It will be appreciated from the foregoing that both embodiments of my invention are very cheap, simple, and durable, are easily and quickly operated and are not liable to leak or make a hammering noise when the valve is being closed, which is an important advantage.

Having described my invention, what I claim is—

1. The faucet described comprising a shell or casing having a valve-seat, a discharge-opening above the valve-seat and interior threads *h*, above the discharge-opening and also having the interiorly-enlarged upper end *p*, and the deflector wall or diaphragm arranged opposite the discharge-opening and provided with the threaded aperture *g*, the hollow exteriorly-threaded reciprocating valve engaging the threads *h*, and the threaded aperture *g*, and having the peripheral recess *i*, above the exterior threads and also having the stem and handle, and the screw extending through the shell or casing and into the interiorly-enlarged portion P thereof and the peripheral recess *i* of the valve, all substantially as specified.

2. The faucet described comprising a shell or casing having a valve-seat provided with an opening and also having interior threads above the valve-seat, the hollow exteriorly-threaded reciprocating valve or valve-body engaging the threads in the shell or casing, a piece carrying packing, and the **U**-shaped spring connected to said piece and having arms impinging against the inside of the hollow valve or valve-body, substantially as and for the purpose set forth.

3. The faucet described comprising a shell or casing having a valve-seat provided with an opening and with a rabbet surrounding said opening and also having interior threads above the valve-seat, the hollow exteriorly-threaded reciprocating valve or valve-body engaging the threads in the shell or casing, a piece F, having a reduced portion adapted to seat in the rabbet of the valve-seat, a packing-ring surrounding the reduced portion of said piece F, and the **U**-shaped spring connected to the piece F, and having arms impinging against the inside of the hollow valve or valve-body, substantially as specified.

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

WILLIAM CURLETT.

Witnesses:

ALBERT J. HICKOX,

MARK LANE.