

S. KRAUSHAAR.
FAUCET.

No. 180,891.

Patented Aug. 8, 1876.

Fig. 1.

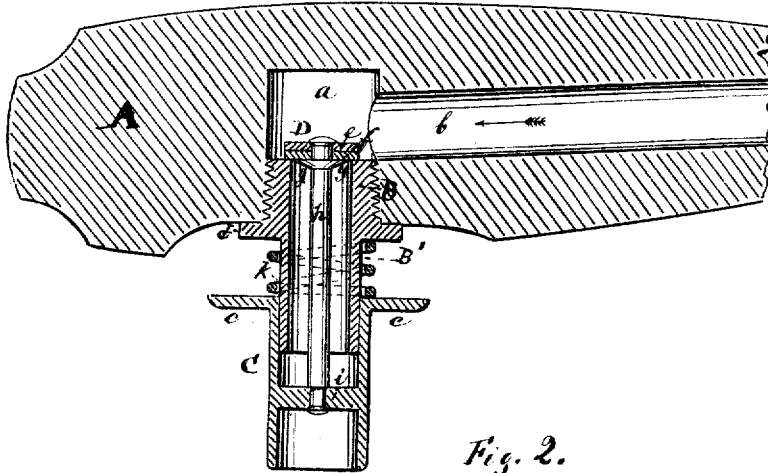
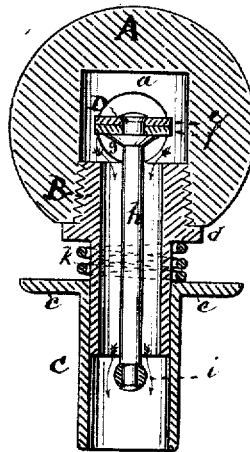


Fig. 2.



Witnesses
J. R. Drake
J. H. Parsons.

S. Kraushaar
Inventor.

UNITED STATES PATENT OFFICE.

SAMUEL KRAUSHAAR, OF BUFFALO, NEW YORK.

IMPROVEMENT IN FAUCETS.

Specification forming part of Letters Patent No. 180,891, dated August 8, 1876; application filed April 15, 1876.

To all whom it may concern:

Be it known that I, SAMUEL KRAUSHAAR, of Buffalo, in the county of Erie and State of New York, have made certain Improvements in Faucets, of which the following is a specification:

The object of my invention is to obviate the defects usually incident to self-closing faucets, which result in the continual dripping and escape of liquid and gas; and it consists in constructing the valve-seat with a downward-projecting tube attached thereto, in which the valve and valve-stem work, a coiled spring and a movable sleeve being placed around the outside of the tube, and arranged to operate as hereinafter described.

In the drawings, Figure 1 is a longitudinal cross-section through the center of the faucet with the valve closed. Fig. 2 is a vertical cross-section with the valve open.

A represents the wooden or metal faucet, with the valve-chamber *a*, and usual liquid-passage *b* therein. In the under side is screwed a metal valve-seat, B, having a downward-projecting tube, B', forming part of the valve-seat. Over the lower part of the tube B' is another tube or sleeve, C, having a circular shoulder, *c*, formed thereon for a twofold purpose, hereinafter described. Between this shoulder *c* and the shoulder *d* of the valve-seat B is a coiled spring, *k*, around the tube B'. Inside the valve-chamber *a* is the valve D, composed of a metal washer, *e*, next, a rubber or leather packing or disk, *f*, and, lastly, a beveled shoulder, *g*. The washer and packing-disk set on the top of the valve-seat B, the beveled shoulder *g* filling the opening below. These parts are attached to a vertical valve rod or stem, *h*, which projects down through the tube B' and into the sleeve or tube C, where it is attached to a cross-piece, *i*, therein, so that when the sleeve is raised by the shoulder *c*, it pushes the valve from the seat, and opens the passage for the liquid to flow, as shown by arrows in both figures.

The pressure on the valve by the liquid inside will partly aid to keep the valve closed; but to insure this action, and to return the valve to its place as soon as the upward pressure is removed from the operating shoulder *c*, I arrange the coiled spring *k*, as before explained.

By the use of this spring, all plugs, cranks,

handles, &c., to open the valve, are done away with.

The greater the pressure on the top of the valve by the liquid, the tighter it presses on the valve-seat, and is aided in this also by the spring *k*, which is at a constant tension.

The valve is operated by the forefinger placed one side of the sleeve, below the shoulder *c*, and the second finger on the other side, both against the shoulder with the thumb on top of the faucet. A slight pressure of the fingers upward opens the valve at once by raising it. On releasing the pressure it closes, stopping the flow of liquid instantly, and without any dripping or overflowing the glass or measure.

The shoulder *g* on the valve is made beveled or conical, as shown, so that it will be self-centering. The pressure of the liquid on the top of the valve centers it, and also, when there is the least pressure on the shoulder *c*, it opens, allowing an instantaneous flow of the liquid.

By the use of the outside sleeve C, the valve-stem *h* needs no packing whatever; therefore there can be no leakage from that source, which is one great advantage of this construction. The sleeve-tube C, being of larger circumference than the valve-seat tube B', gives a greater space for the passage of the liquid. It therefore flows freely, and has no tendency to escape between the sleeve C and tube B', which needs no packing whatever, as there is no backward flow.

The strength of the wooden or metal faucet A is much increased by not having any hole going through it vertically, as such soon wear out from the constant pounding they receive when inserting them in barrels, &c.

I claim—

The combination and arrangement of the outside movable sleeve C, outside spring *k*, the valve D, and stem *h* with the tube B' and valve-seat B, substantially as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

S. KRAUSHAAR.

Witnesses:

J. R. DRAKE,
T. H. PARSONS.