W. B. MILLER & W. POWELL.

Beer-Faucet.

No. 161,427. Patented March 30, 1875.

Fig. 1.

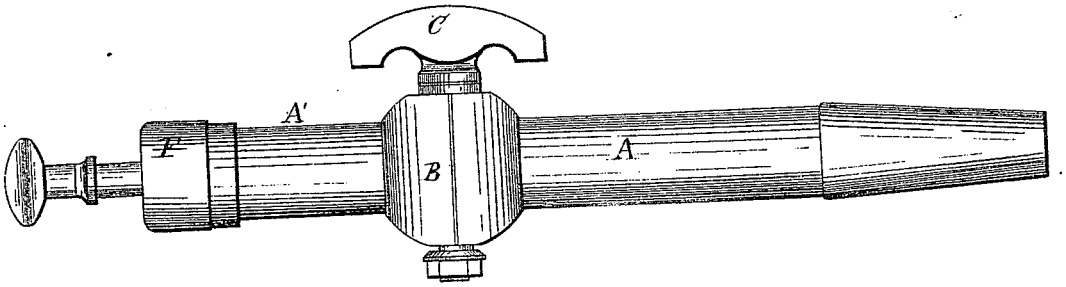


Fig. 2.

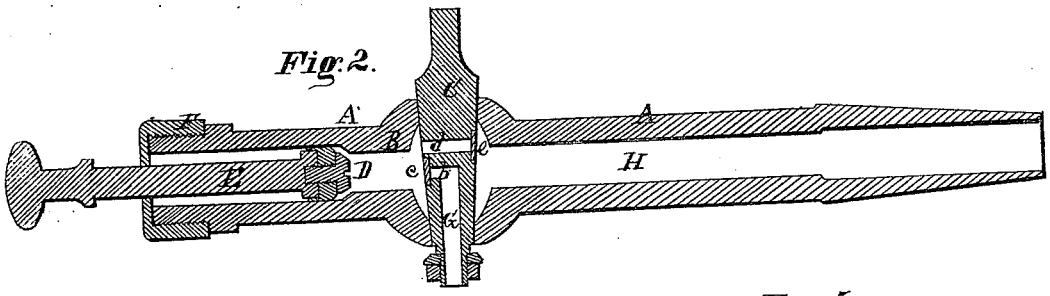


Fig. 3.

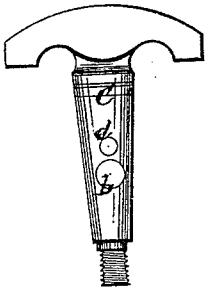
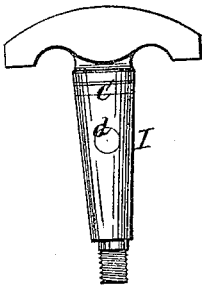


Fig. 4.

Fig. 5.



Witnesses.

A. F. Connell.

J. C. Moore.

Inventors.

Wm B Miller & Wm Powell

Per. Burridge & Co.

Attys.

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

WILLIAM B. MILLER AND WILLIAM POWELL, OF CLEVELAND, OHIO.

IMPROVEMENT IN BEER-FAUCETS.

Specification forming part of Letters Patent No. 161,427, dated March 30, 1875; application filed October 21, 1874.

To all whom it may concern:

Be it known that we, WM. B. MILLER and WM. POWELL, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Faucets, of which the following is a description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the faucet. Fig. 2 is a transverse longitudinal section. Figs. 3, 4, and 5 are different side views of the faucet-key.

Like letters of reference refer to like parts in the several views.

The object of this invention is to charge beer-barrels with air as fast as the contents of the barrel are drawn out, thereby avoiding the necessity of removing the bung or vent for the admission of air to cause a flow of the beer, without allowing the gases and flavor of the beer to escape, which should be retained in the barrel.

The construction and operation of the faucet are as follows:

In the drawing, A represents the body of the faucet; B, the chamber, wherein is fitted the key C, which is or may be in shape the same as that of an ordinary faucet. In the front end of the cylinder A′ is fitted a piston, D, Fig. 2, of which E is the piston-rod, working in a stuffing-box, F. In the lower end of the key C is an outlet, G, having open communication with the port *a*, Fig. 4, and with the port *b*, Fig. 3. Said port *b* is provided with a valve, *c*, Fig. 2, opening outward into the chamber B. Immediately above the port *b* is a hole, *d*, made entirely through the key, as shown in Fig. 2. Said hole *d* is also provided with a valve, *e*, opening outward into the bore H of the body A.

The practical operation of the faucet is as follows: In order to draw liquor from the barrel, the key C is turned in such relation to the body A as to bring the port *a*, Fig. 4, in open relation to the bore H. As a consequence, the beer will flow out through said port *a* down through the outlet G. The flow of the liquor is stopped by turning the key so as to bring the plain side I, Fig. 5, to face the bore H.

In order to get air into the barrel without causing an escape of the gas therefrom, which should be retained therein for the benefit of the beer, the key is turned to the position shown in Fig. 2, which will bring the hole *d* in direct relation to the bore H, through which, however, the air and gases in the barrel cannot escape, for the reason that the hole is closed by the valve *e*.

On drawing out the piston a vacuum will be formed on the side A′ of the key, which will at once be filled with air from the outside by passing up through the outlet G, pushing open the valve *c*, and thereby filling the vacuum caused by the moving out of the piston. The air thus received into the chamber of the piston is forced into the barrel by the return of the piston. The air not being able to escape by way of the outlet through which it found its way in, is, in consequence of the closing of the valve *c*, forced through the hole *d* into the bore H, thence into the barrel, from which it cannot return, for the valve *e* closes the hole against its return when the piston is again drawn out.

It will be obvious that by this means air can be supplied to the barrel to cause the beer to flow therefrom, at the same time allowing no escape of the gases and flavor of the liquor, whereby its good quality is secured.

By means of the pump a uniform pressure can be maintained in the barrel, and to any degree that may be required.

What we claim as our invention, and desire to secure by Letters Patent, is—

The herein-described faucet, consisting of the body A, cylinder A′, piston D, key C, having therein hole *d*, and valve *e*, port *b*, port *a*, and valve *c*, outlet G, and chamber B, constructed and arranged to operate substantially as described, and for the purpose set forth.

WILLIAM B. MILLER.
WILLIAM POWELL.

Witnesses:
F. D. STOW,
F. A. LANE.