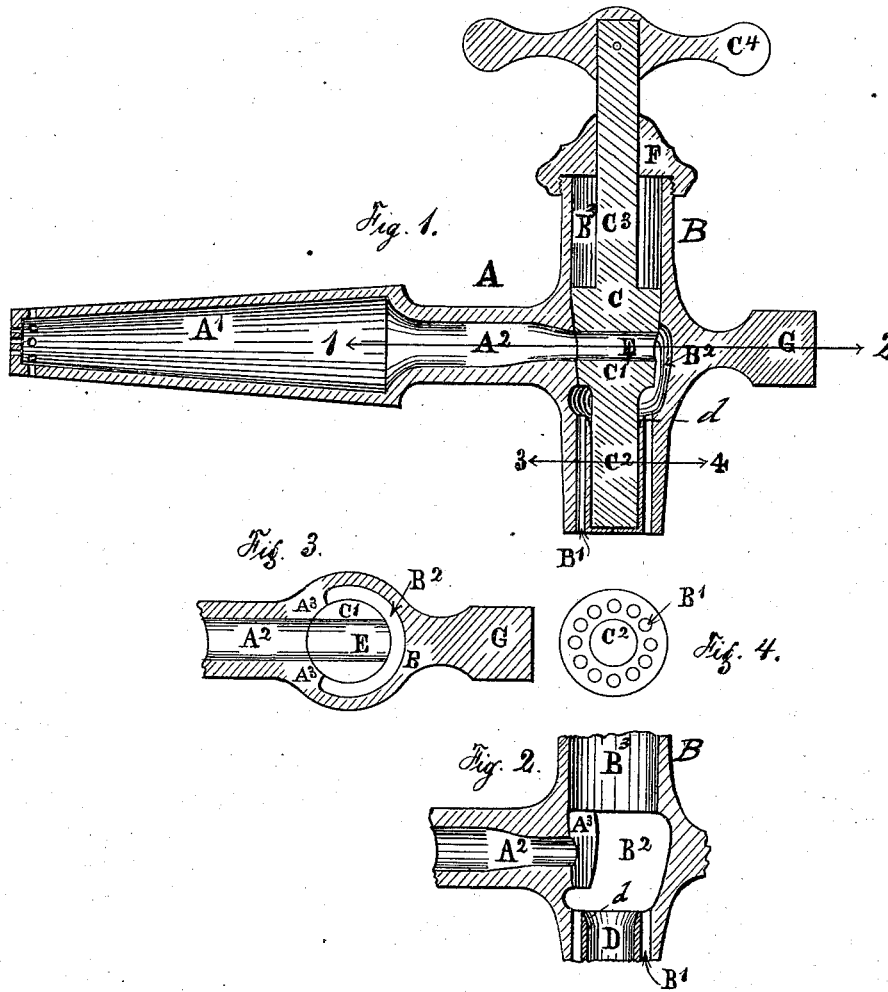


S. A. DUMAN.
Faucet.

No. 163,367.

Patented May 18, 1875.



WITNESSES:

Mervine Stark.
John B. Edmonds

INVENTOR.

Stephen A. Duman.
per Michael J. Stark,
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UNITED STATES PATENT OFFICE.

STEPHEN A. DUMAN, OF BUFFALO, NEW YORK, ASSIGNOR TO JOHN IRLBACHER AND JACOB DAVIS, OF SAME PLACE.

IMPROVEMENT IN FAUCETS.

Specification forming part of Letters Patent No. **163,367**, dated May 18, 1875; application filed June 20, 1874.

To all whom it may concern:

Be it known that I, STEPHEN A. DUMAN, of Buffalo, in the county of Erie and State of New York, have invented a Faucet; and I do hereby declare that the following is a full, clear, and exact description of the same, having reference to the accompanying drawings, in which—

Figure 1 is a longitudinal sectional elevation; Fig. 2, a like section with the plug removed; Fig. 3, a transverse section through line 1 2, and Fig. 4 a like section through line 3 4 of Fig. 1.

Like letters of reference indicate like parts in the various figures wherever they appear.

This invention relates to that class of faucets for drawing fermented liquors that are forcibly inserted into the cask containing the liquor; and it consists in the details of construction, as hereinafter fully described, and pointed out in the claims.

It has heretofore been the custom to construct faucets with a cylindrical chamber, having a conical seat and a squirting-cylinder located centrally within the lower part of the said chamber, or by arranging nicely turned and finished annular grooves around a tapering plug, to constitute a squirting-cylinder. In the first-mentioned kind the squirting-cylinders are made in a separate piece and soldered or otherwise attached to the discharge-nozzle of a faucet, or the lower part of the chamber is used as a squirting-cylinder. The faucets so constructed are subject to many objections, of which the following are the principal ones: First, the leakage resulting from the compression of the faucet-seat; and, second, their liability to general derangement, caused by the repeated severe blows the faucet receives when inserted into or withdrawn from the cask.

In order to overcome these objections and drawbacks, which is the object of my present invention, I construct the chamber with an annular recess larger in diameter than the said chamber, and place a seat, consisting of a section of a cone only, around the main passage and within the said recess, the said seat surrounding the main passage to such an extent only as to insure the proper closing of

the said main passage. By thus situating a seat in the chamber farthest from the source of the compression it cannot be affected by the said compression, and the faucet can, therefore, not leak when the metal of the body is deformed from the causes aforementioned. I furthermore form the squirting-cylinder in one piece with the said faucet-body by making the lower part of the chamber of a solid piece, and removing therefrom, by drilling or otherwise, so much of the metal as to form the squirting-cylinder, so that the faucet-body, chamber-seat, and squirting-cylinder are all formed in one piece of metal, which is far more substantial than those in which the squirting-cylinder is inserted into the discharge-nozzle, or where the lower part of the chamber constitutes the said squirting-cylinder.

A in the drawing is the body of a faucet for drawing fermented liquor. It consists of the tapering shank A^1 , provided with the main passage A^2 , the barrel B, and the head G. The barrel B contains a cylindrical chamber provided on its lower end with a squirting-cylinder, D, located centrally therein, and surrounded with a number of holes, B^1 . This squirting-cylinder is formed in one piece with the barrel B and shank A^1 by casting the lower part of the barrel solid, and removing therefrom, by drilling or otherwise, so much of the metal as to produce the said squirting-cylinder. The holes B^1 are also drilled through the solid part of the barrel, and terminate in an annular recess, B^2 , surrounding the chamber B^3 . Within this recess, and around the main passage A^2 , I provide a seat, consisting of a section of a cone, of such an extent only as to insure the proper closing of the said main passage by means of a tapering plug, C, having a plunger, C^2 , formed thereon, and being operated by the upper stem C^3 and a handle, C^4 . The conical plug is provided with a passage, E, to connect the main passage A^2 with the annular recess B^2 . The chamber is closed on its upper end with a screw-cap, F, through which the stem C^3 passes.

The operation of my faucet is similar to that of others, only that the liquor passes from the main passage A^2 through the key C, and, collecting in the recess B^2 , is discharged through

the series of openings B¹, terminating therein. If it is desirable to eject part of the liquor to cause the lively and sparkling foam so much desired, I raise the plug C, so that the liquor flowing from the main passage A² enters the chamber B³ directly, and flows through the openings B¹ into the vessel, at the same time filling the squirting-cylinder D, so that when the plug is depressed the contents of the squirting-cylinder will be forcibly ejected through a minute opening in the bottom of the said cylinder.

It will be observed that, by constructing the faucet-body, barrel, and squirting-cylinder of one piece of metal, and surrounding the said cylinder with a number of holes, my faucet is more durable than those in which the squirting-cylinder is inserted into the discharge-nozzle, or where the lower part of the chamber forms the squirting-cylinder, for the reason that the blows the faucet receives when inserted into or withdrawn from the cask have no effect upon the said squirting-cylinder, either to deform it, or to loosen it from its connection with the discharge-nozzle, and that the arrangement of the sectional conical seat within the chamber and around the main passage is such that the compression of the chamber cannot impair the seat, and thus cause the faucet to leak, which will soon take place in all faucets having a full conical seat, or where

the squirting-cylinder is formed around the conical plug.

Having thus fully described my invention, I desire to secure to me by Letters Patent the following:

1. The combination, with a chamber, B³, and a squirting-cylinder, D, located within, and formed in one piece with the said chamber, of the plug C, having the passage E, and surrounded by an annular space, B², provided with a section of a conical seat, A³, and the series of holes B¹, all when constructed and arranged substantially as described, and for the use and purpose set forth.

2. The combination, with the chamber B³, of the annular space B², provided with a part of a conical seat, A³, around the main passage A², and the series of holes B¹, all when arranged substantially as and for the use and purpose set forth.

3. The combination, with the annular space or recess, B², serving to protect the seat of the faucet against the effects of compression of the chamber B³, of a section of a conical seat surrounding the main passage A² only, substantially as described, and for the use and purpose set forth.

STEPHEN A. DUMAN.

Witnesses:

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