

No. 619,133.

Patented Feb. 7, 1899.

R. F. BURKE.
BUNG AND TAP FOR BARRELS.

(Application filed Feb. 11, 1898.)

(No Model.)

Fig. 1.

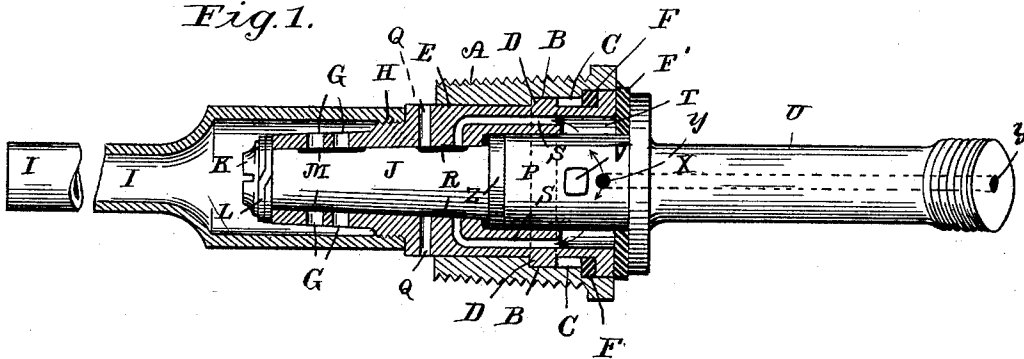


Fig. 2.

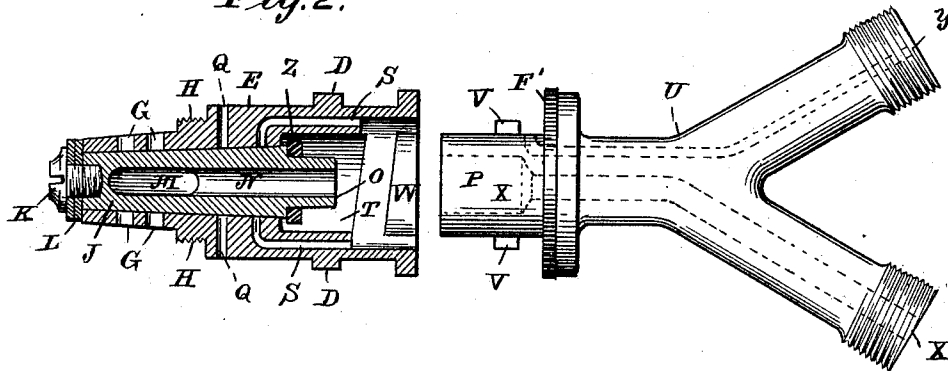


Fig. 3.

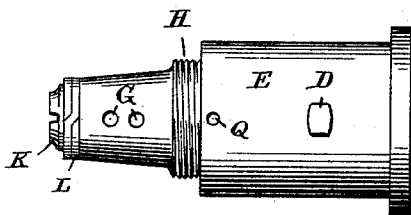


Fig. 4.

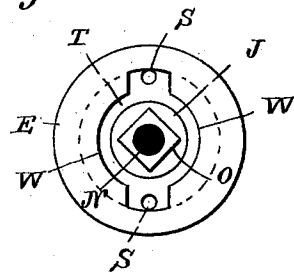
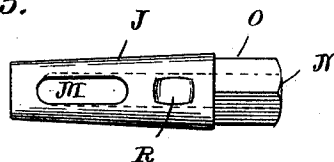


Fig. 5.



Witnesses:

C. M. Newman
Nellie C. England,

Inventor.

Richard F. Burke
By Allen Webster

Attorney.

UNITED STATES PATENT OFFICE.

RICHARD F. BURKE, OF WILLIAMSBURG, MASSACHUSETTS.

BUNG AND TAP FOR BARRELS.

SPECIFICATION forming part of Letters Patent No. 619,133, dated February 7, 1899.

Application filed February 11, 1898. Serial No. 669,953. (No model.)

To all whom it may concern:

Be it known that I, RICHARD F. BURKE, a citizen of the United States of America, residing at Williamsburg, county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Bungs and Taps for Barrels, of which the following is a specification, reference being had to the accompanying drawings and letters of reference marked thereon.

My invention relates to devices adapted to be employed in barrels containing liquids, whether under pressure or otherwise, whereby they may be readily tapped and as readily closed.

The object of my invention is to produce a device a portion of which may remain permanently in a barrel or cask, the same being so constructed that by the introduction of a key-like faucet an inner core can be turned in a manner to permit the free discharge of the contents and the introduction of air into the cask. Said discharge is effected through a special device for the purpose which will be comparatively inexpensive in cost of manufacture, convenient to adjust, easy to manipulate, and at the same time to provide a secure and tight connection.

On the accompanying drawings, forming a part of this specification, the same letters of reference denote like or corresponding parts throughout the several figures, of which—

Figure 1 shows a sectional elevation of my improved tap and faucet connected for use. Fig. 2 is a disconnected side view of a faucet and tap, the latter being shown in central sectional elevation. Figs. 3 and 4 show a side view and front end elevation, respectively, of my improved tap. Fig. 5 is a detached side elevation of the plug within the tap.

Referring to the characters of reference marked upon the drawings, A indicates a bushing, the outer portion being threaded, by means of which it is attached within the base of a keg. The inner surface of said bushing is provided with an annular recess B, having lateral intersecting ways C, through which lugs D of the bung E pass for engagement. This bushing in practice is placed into the keg and becomes permanent therein, while the bung may be removed on special occasions, such as when it is desirable to coat the

inner surface of the keg with pitch or similar substance.

The bung proper consists of a cylindrical body portion upon which the lugs D, before mentioned, are formed. This body is further provided with a flange, against which is fitted a rubber washer F, forming a packing between said flange and the face of the bushing A, before mentioned. The rear end of the bung is slightly tapering, as shown in the drawings, and is provided with openings G, through which the liquid passes. Adjacent to this tapering portion is formed a threaded shoulder H, by means of which a pipe connection I is secured. This pipe in practice may be of any desired length, but preferably sufficient to reach to the bottom of the keg, particularly when used for ale or like liquors. Arranged within the bung is a plug J, its outer surface being ground to accurately fit the tapering base of said bung, as clearly appears in Figs. 1 and 2. This plug is held in position by the employment of a screw K and spring-washer L, which prevents longitudinal movement, but allows said plug to be rotated therein. The plug is further provided with a port M, which connects with the central longitudinal base N, through which the fluid passes to the faucet. The outer end of the plug is provided with a square head O, on which the shouldered socket P of the faucet is fitted and whereby said plug is rotated in a manner to register the ports of the plug with those of the bung. In practice I preferably cover the plug with a coating of hard rubber or similar substance, thus preventing the same from corroding.

In addition to the fluid-passages above described I provide an air-inlet, which, like the fluid-exit, is opened and closed by the movement of the plug. This inlet consists of the radial holes Q Q, passing through the body of the bung and in line with the ports R R of the plug. These ports (see Figs. 1 and 5) are of a sufficient length to connect the holes Q with the openings S S, which latter extend longitudinally through the wall of the body portion and open into the chamber T, as shown.

The faucet U is attachable to the bung by means of lugs V, which in practice engage the cam-surfaces W of the inner wall of the bung, as will be apparent from an inspection of Fig. 2.

Said faucet is preferably Y-shaped, having a main fluid-passage X, through which a discharge is effected, and a small air-inlet Y, by means of which air is introduced into the chamber T and finally through the ports R and to the interior of the keg. The free ends of the faucet are provided with threaded heads, by means of which a hose or other connection may be secured, as is customary in devices of this class. The faucet is further provided with a flange and a rubber washer F', by means of which a sealed connection is secured between the face of the tap and said faucet. A similar rubber connection Z is also secured between the faucet and plug, as will be seen in Figs. 1 and 2, thus insuring a tight fit to prevent the leakage of fluid from the passage thereof.

It will now be seen that if the plug be turned to the position shown in Fig. 2 its solid wall will cover and close the openings G and that when it is turned a quarter-turn, or thereabout, as shown in Fig. 1, said opening will be opposite the radial openings in the bushing and will allow the contents of the cask to flow therethrough and into the opening in the plug and finally be discharged through the faucet. At this instant a like connection is formed by the registration of the ports R with the radial holes Q and the openings S in the body of the bung, permitting a free vent-passage through the faucet, as will be obvious from an inspection of the drawings.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A barrel-tap comprising a bung having lateral openings G and holes Q and a tapering interior base, a tapering plug shaped to fit said base and provided with lateral openings to register with those of the bushing and a central longitudinal opening connected therewith, ports R within said plug, openings

S and holes Q to register therewith, a faucet adapted to engage said bushing and provided with fluid and air passages to register with those of the bushing substantially as shown and described.

2. A barrel-tap comprising a bushing threaded to engage a keg, a bung detachably connected therewith and comprising a body portion having a tapered inner end, a plug fitted within said tapered portion and provided with openings forming a fluid-passage, holes in the bung adapted to register with said opening of the plug, an air-passage within said bung adapted to be opened and closed by the rotation of the plug, a faucet and means for detachably connecting the same with the bung with opening through said faucet for fluid and air, means for forming a separate connection for each with similar passages of the bung, substantially as shown and described.

3. The combination in a barrel-tap, of a bung comprising a flanged body portion and a tapering inner end having a threaded shoulder, a pipe tapped to fit said shoulder, a tapered plug fitted in a base of the bung and having a central opening and ports M and R radial openings in the bung to register with those of the plug, holes Q and openings S in the bung to register with port R, a faucet adapted to engage and operate the plug and comprising a body having a central fluid-passage adapted to register with the central bore of the plug, and an air-inlet adapted to communicate with air-passage of the bung, rubber washers F and Z fitted between the faucet and bung, substantially as shown and described.

RICHARD F. BURKE.

Witnesses:

CHAS. A. PHILLIPS,
GEO. M. FITZ GERALD.