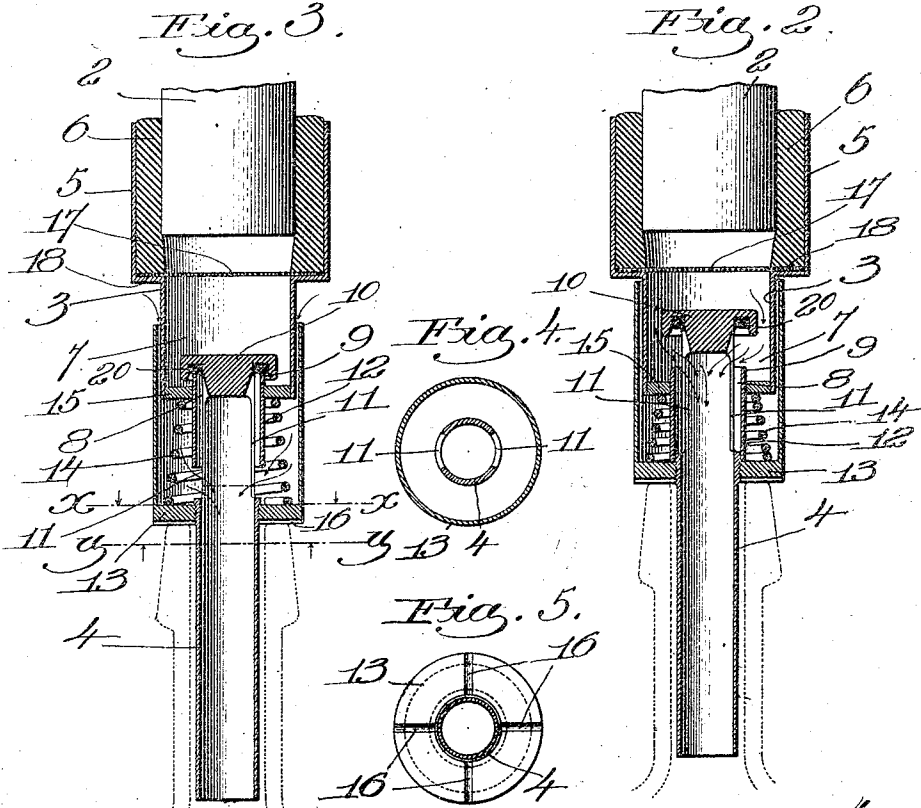
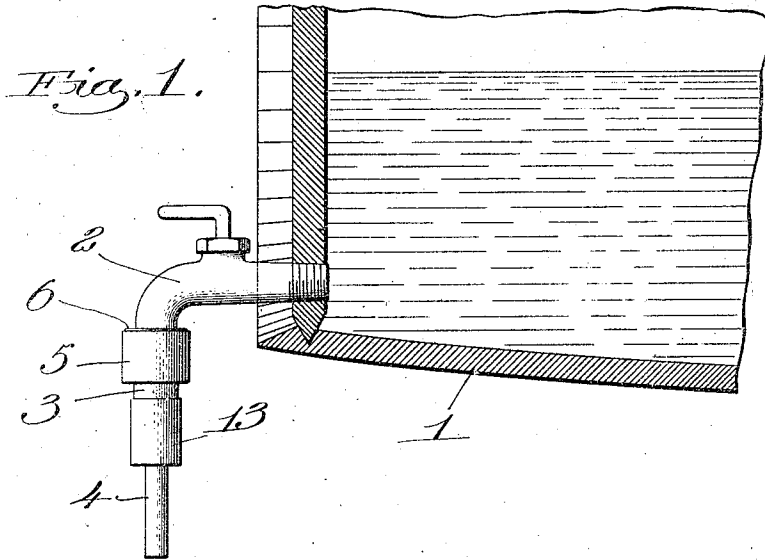


W. H. BAHAN.  
 BOTTLE FILLER.  
 APPLICATION FILED JAN. 15, 1912.

1,052,556.

Patented Feb. 11, 1913.



Witnesses:  
 Fred S. Grunke  
 Warren C. Neil

Inventor  
 William H. Bahan  
 by Edwards Hand & Smith  
 Attys.

# UNITED STATES PATENT OFFICE.

WILLIAM H. BAHAN, OF LAWRENCE, MASSACHUSETTS.

## BOTTLE-FILLER.

1,052,556.

Specification of Letters Patent. Patented Feb. 11, 1913.

Application filed January 15, 1912. Serial No. 671,302.

*To all whom it may concern:*

Be it known that I, WILLIAM H. BAHAN, a citizen of the United States, residing at Lawrence, county of Essex, State of Massachusetts, have invented an Improvement in Bottle-Fillers, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawings representing like parts.

This invention relates to bottle fillers and has for its object to provide a novel device of this sort which is designed to be used in connection with an ordinary faucet.

All bottle fillers with which I am familiar are more or less complicated mechanisms and include a tank and one or more filling tubes leading therefrom through which the bottles are filled. Devices of this nature are commonly used for filling bottles with beer, whiskey and other liquor. There are many small dealers who have only small quantities of liquor which they desire to place in bottles, and in such a case it is hardly worth while for the dealer to invest a large amount of money in a bottle-filling machine to fill the small number of bottles which he requires. When a dealer has no bottle-filling machine, it has been customary heretofore for him to fill the bottles by using an ordinary funnel, but this method is more or less unsatisfactory because of the time required to manipulate the funnel and bottles and because there is always more or less waste incident to the operation.

In the filling of bottles it is customary to filter the liquor before transferring it to the bottle. The filter is usually a separate and distinct device from the bottle-filling machine, so that the filling of bottles from a cask involves first drawing the liquor from the cask and filtering it and then taking the filtered liquor and transferring it into the bottles.

I have provided a novel combined bottle filler and filtering device by which the liquor is simultaneously filtered and delivered directly into the bottles and I have arranged said device so that it can be readily attached to the faucet of a cask, keg, or barrel. With my improved device single bottles can be rapidly and accurately filled with filtered liquor directly from the cask and without

the necessity of any handling of the liquor as is necessary where the filtering and filling operations are carried on separately. Furthermore, my device can be very cheaply and inexpensively manufactured and can be readily furnished to small dealers who do not wish to lay out a great amount of capital for a bottle-filling machine.

Referring to the drawings wherein I have illustrated the preferred embodiment of my invention, Figure 1 is a view in side elevation of the filler attached to the faucet of the cask, keg, etc., the latter being shown in section; Fig. 2 shows the bottle applied to the filling tube and the position of the parts during the operation of filling the bottle; Fig. 3 is a view similar to Fig. 2 showing the valve of the bottle-filling device closed; Fig. 4 is a section on the line  $x-x$ , Fig. 3; Fig. 5 is a section on the line  $y-y$ , Fig. 3.

In the drawings 1 designates a cask, barrel or keg containing liquor and 2 the faucet through which liquor is drawn therefrom. These parts are of usual construction and form no part of the present invention.

My improved bottle filler comprises a body portion 3-shaped to be inserted over the end of the faucet and adapted to be attached thereto, and a filling tube 4 through which the liquor is discharged into the bottle. The body portion 3 is shown as having the enlarged upper end 5 within which is received a ring 6 of rubber, cork, or similar material that makes a tight joint between the body 3 and the faucet. If this ring is made of rubber or cork which is more or less elastic, said ring may be made of a size to snugly fit the faucet so that the filling device will be held in place by the frictional engagement of the ring with the faucet. This provides means whereby the device may be readily applied to or removed from the faucet.

The body portion 3 is provided with the valve chamber 7 at the lower end of which is an opening 8 for receiving the filling tube 4, said opening being surrounded by a valve seat 9. The filling tube 4 is provided at its upper end with a valve 10 to rest on the valve seat and it is formed in its side with ports 11 through which the liquor flows when the valve is raised. The body 3 is

formed with the extension 12 that acts partly as a guide for the filling tube, and the ports 11 are of such a length that when the valve 10 is resting on the valve seat said ports extend below the extension 12, thus admitting air to the filling tube to allow the liquor to readily drain out therefrom, as will be presently described.

The filling tube has screw-threaded there- to a spring cup 13 which cup is thus held in position and fits over the portion of the body containing the valve chamber. A spring 14 surrounds the filling tube and bears at one end against the spring cup and at the other end against the shoulder 15 on the body, said spring tending normally to keep the valve seated. In using the device it is applied to the faucet, as shown, and then the neck of the bottle to be filled is inserted over the lower end of the filling tube and brought into engagement with the spring cup 13, as shown in Fig. 2. The spring cup and filling tube are lifted upwardly by the pressure of the bottle thereby to unseat the valve and permit the liquor to flow through the ports 11 into the filling tube, and thus into the bottle. The lower end of the spring cup is shown as having grooves 16 to permit the escape of air from the bottle as the latter fills. When the bottle is filled it is lowered and the spring 14 immediately seats the valve and prevents further flow of the liquor. When the valve is seated the lower ends of the ports 11 are situated below the extension 12, and as the spring cup does not fit tightly over the body 3 the air will readily pass in between the cup and the body and into the ports 11 so that all the liquor in the filling tube will immediately drain out therefrom. As a result when the bottle is withdrawn from the filling tube there will be no drip and consequent waste, as would be the case if means were not provided to vent the filling tube from the top when the valve is closed.

I have associated with my filling tube a filter so that the liquor can be filtered as the bottles are filled. This filter is preferably contained in the enlarged portion 5 of the body and it may be a filter made of three or four more layers of reticulated material, or it may be a filter made of any suitable filter material. The filter which is shown generally at 17 is illustrated as made of one or more layers of reticulated material and rests on the shoulder 18 at the bottom of the enlarged upper end 5 and is confined in place thereon by the ring 6. Said ring, therefore, serves not only to make a tight joint between the filling tube and faucet, but also serves as a means for holding the filling device to the faucet and for holding the filter in place.

It will thus be seen that my invention is a combined bottle filler and filter so ar-

anged that the liquor is filtered while it is being delivered to the bottle.

My device not only has the advantage of being simple and inexpensive to manufacture, but it has the advantage of obviating the necessity of handling the liquor two times during the operation of filling bottles. Moreover, my device can be readily applied to or removed from a faucet, and, therefore, makes a very useful device for a dealer who wishes to fill a limited number of bottles from a cask and does not go into the bottle-filling business on a large scale.

I will preferably make my valve with a ring or washer 20 of leather, fiber, or some other similar material, which is adapted to rest on the valve seat 9. This ring is shown as set into a groove in the valve, and the walls of the groove confine the ring in place and preserve its shape.

The presence of the filter above the valve and valve seat is of advantage since it prevents the passage to the valve seat of any foreign matter which would be likely to clog the valve or prevent it from properly seating itself on the valve seat.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a bottle filler, the combination with a body having a valve chamber, and a discharge opening, and provided with an extension, of a filling tube extending through said extension and said opening, a valve carried by the filling tube having ports in its side through which the liquor flows when the filling tube is raised to open the valve, said ports being of such a length as to extend below the extension when the valve is closed, a cup secured to the filling tube and telescoping over the body, a spring confined between said cup and body for normally holding the valve closed, said spring being entirely within the cup, substantially as and for the purpose set forth.

2. In a bottle filler, the combination with a body having means for attachment to a faucet and a valve chamber, a discharge opening in the bottom of said chamber and an extension depending from said body below said discharge opening, of a filling tube extending through said extension and the discharge opening, a valve sustained by the filling tube, a spring tending normally to keep the valve closed, and means for venting the filling tube at its upper end when the valve is closed.

3. In a bottle filler, the combination with a body having a valve chamber and a discharge opening and provided with an extension, of a filling tube extending through said extension and said opening, a valve carried by the filling tube for closing the discharge opening, said filling tube having ports in its side through which the liquor

flows when the filling tube is raised to open the valve, said ports being of such a length as to extend below the extension when the valve is closed whereby air may enter the upper end of the filling tube to vent the same.

In testimony whereof, I have signed my

name to this specification, in the presence of two subscribing witnesses.

WILLIAM H. BAHAN.

Witnesses:

LOUIS C. SMITH,

WILLIAM H. BAHAN, JR.