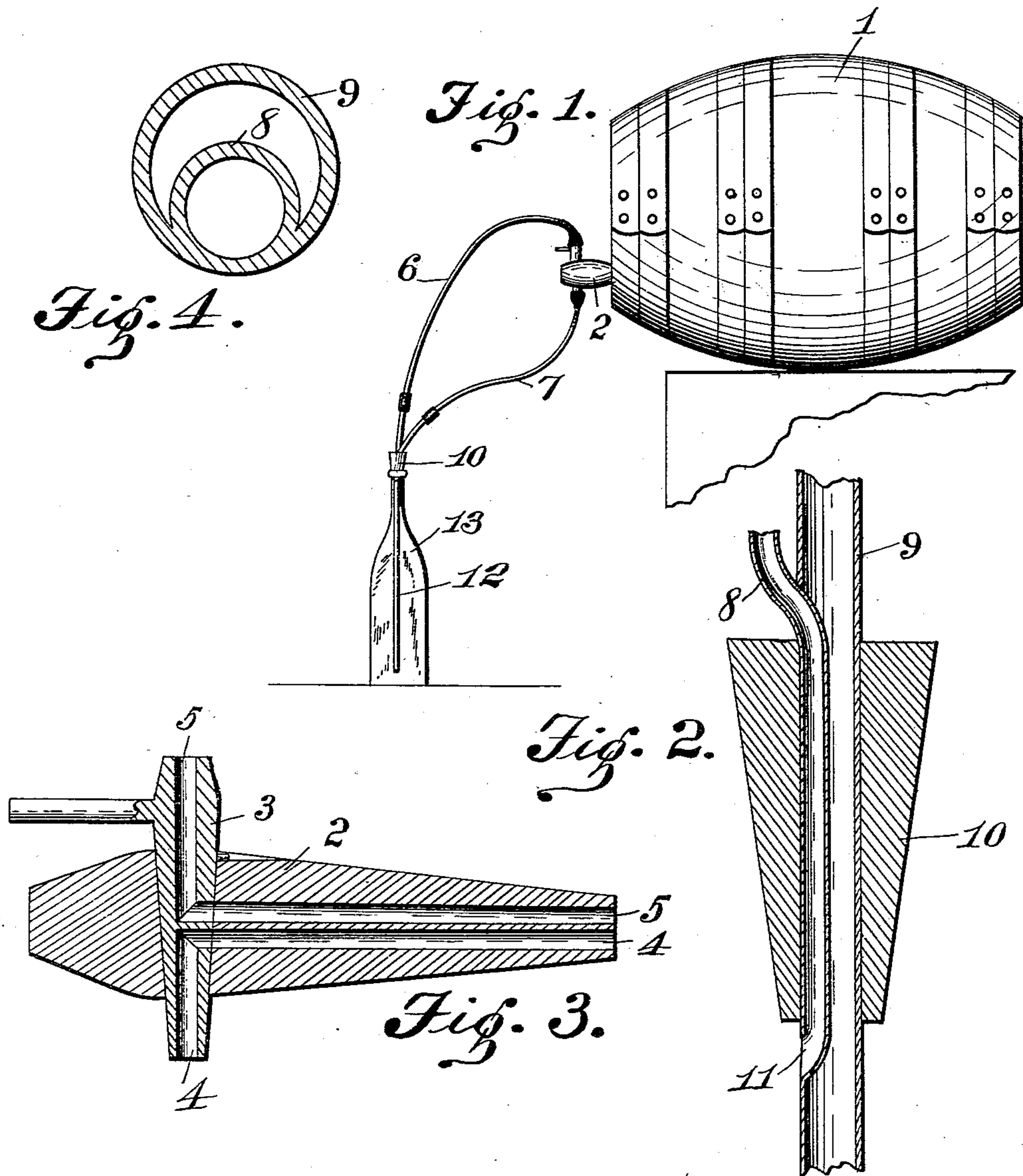


(No Model.)

H. STAUB & C. DUERST.  
SPIGOT.

No. 560,070.

Patented May 12, 1896.



Witnesses:

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# UNITED STATES PATENT OFFICE.

HENRY STAUB AND CASPER DUERST, OF PITTSBURG, PENNSYLVANIA.

## SPIGOT.

SPECIFICATION forming part of Letters Patent No. 560,070, dated May 12, 1896.

Application filed September 3, 1895. Serial No. 561,203. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY STAUB and CASPER DUERST, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Filling Bottles, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain new and useful improvements in bottle-fillers, and more particularly to that class employed for drawing malt liquors—such as beer, ale, porter, &c.—from barrels or kegs into bottles or other vessels; and we do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which our invention relates to make and use the same.

Our invention has, primarily, for its object the provision of novel means whereby the carbonic-acid gas is effectually retained in fermented liquors when drawn from kegs or other vessels into bottles. Furthermore, our invention aims to obtain a uniform pressure of the liquor irrespective of the liquor-level in the keg or vessel.

The invention has for its further object to automatically close or shut off the flow of liquor when the bottle is filled, thereby preventing an overflow.

The invention has for its still further object to construct a spigot of the above-referred-to class that will be extremely simple in construction and strong, durable, and effectual in its operation.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more particularly described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like figures and letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a side elevation of a barrel provided with our improved spigot and clearly illustrating the relative position of the parts

when in operation. Fig. 2 is an enlarged vertical sectional view of the stopper or plunger and arrangement of the tubes. Fig. 3 is an enlarged vertical sectional view of the spigot proper. Fig. 4 is an enlarged horizontal sectional view of the tubes as shown in Fig. 2.

In the drawings, 1 indicates the keg; 2, the spigot proper, having a way-cock 3.

The numeral 4 represents the ordinary passage for the liquor; 5, an additional passage for air, the latter leading to the top of the way-cock and the former to the lower end thereof. The said spigot is further provided with a shoulder *a*, against which lug *b* of the turn-plug abuts to limit its movement and indicate when the spigot is entirely open. A flexible tube 6 is coupled to the top of the way-cock, and a similar tube 7 is coupled to the lower portion of the way-cock. The said tubes 6 and 7 are connected to metallic tubes 8 and 9, respectively. The said tube 8 passes downwardly in the inner tube 9 and is cast integral therewith. A stopper or plunger is secured around the outer tube 9. Said plunger is composed of rubber or like material and is cone-shaped, so as to form an airtight connection. Below the plunger is arranged an air-inlet 11 of the tube 8, a flexible tube 12 being secured to the end of the tube 9 slightly below the air-inlet 11, said tube extending downwardly in the bottle 13.

The operation of the apparatus is as follows: All parts being in position, as shown in Fig. 1 of the drawings, the way-cock is opened, allowing the liquid to flow through the passage 4 of the way-cock, and thence through the tubes 7, 9, and 12 into the bottle. As the liquid fills the bottle, the air will pass into the air-inlet 11 of the tube 8, and thence through the tube 6 into the air-passages 5 of the spigot into the barrel.

It will be seen that by employing the above-described apparatus only a certain amount of air will enter the keg, the amount of air being equal to that contained in the bottles as they are filled. Malt liquors drawn in this manner can be preserved for a great length of time and additional air-pressure upon the liquid in the barrel is dispensed with, as a uniform degree of pressure is obtained by the above-described apparatus.

It will be noted that various changes may



be made in the details of construction of our improved spigot without departing from the general spirit of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, a spigot having longitudinal air and liquid passages and an exterior shoulder, a turn-plug having an air-passage in its top a liquid-passage in its bottom and provided with a lug to engage the shoulder of the spigot, said passages in the plug being separated by a partition, tubes connecting with the air and liquid passages and in combination, a stopper having a central aperture to receive a pipe having an interior tube, the pipe conveying liquor into the bottle and the interior tube conveying the air from the bottle, the tubes of the spigot being connected with the pipe and tube of the stopper, as and for the purpose described.

2. In a bottling device, a spigot having longitudinal ways to convey liquid and air, a

turn-plug having an opening at the top communicating with the air-passage, and an opening in its bottom connecting with the liquid-passage, the openings at the top and bottom being separated, a lug on the turn-plug to engage the shoulder of the spigot, tubes connecting with the top and bottom passages of the turn-plug, and in combination, a stopper having a central aperture a pipe extending through the aperture and adapted to convey liquid, an internal tube cast with the pipe, said tube protruding above the stopper and having an opening through the wall of the pipe below the stopper to convey air from the bottle to the air-tube of the spigot, as and for the purpose described.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY STAUB.  
CASPER DUERST.

Witnesses:

H. C. EVERT,  
H. E. SEIBERT.