

H. WENNERSTEN.
 CLOSURE FOR RECEPTACLES FOR FERMENTING GASEOUS LIQUIDS.
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1,056,241.

Patented Mar. 18, 1913.

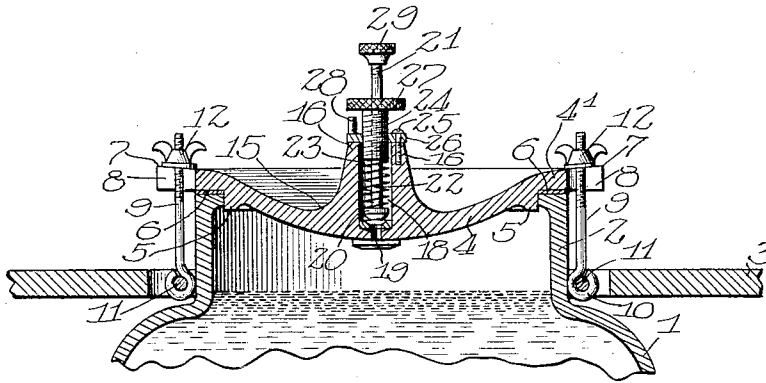


Fig. 1.

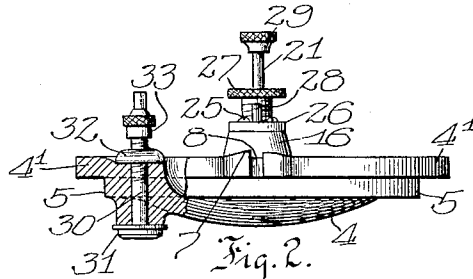


Fig. 2.

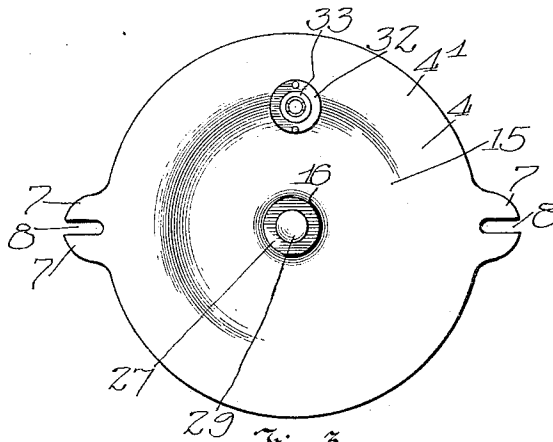


Fig. 3.

Witnesses
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HENNING WENNERSTEN, OF CHICAGO, ILLINOIS.

CLOSURE FOR RECEPTACLES FOR FERMENTING GASEOUS LIQUIDS.

1,056,241.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed December 11, 1911. Serial No. 665,128.

To all whom it may concern:

Be it known that I, HENNING WENNERSTEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Closures for Receptacles for Fermenting Gaseous Liquids, of which the following is a description.

My invention belongs to that general class of devices known as receptacle closures, and relates particularly to a closure for receptacles for containing fermented or gaseous liquids, as for example, for containing wort during the fermentation caused by the addition of yeast.

The device is particularly applicable for use on receptacles for home brewing, similar to that shown and described in my pending application, Serial No. 590,874, and relates to an improved closure therefor.

The device has among its objects the production of a device that is simple, convenient, efficient and satisfactory, that may be manufactured at small cost, and used wherever found applicable.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts, Figure 1 is a vertical sectional view of my improved closure and a portion of the receptacle. Fig. 2 is a side elevation of the closure and partial sectional view of the same, and Fig. 3 is a top plan view of the same.

Referring to the drawing, 1 represents the upper part of the receptacle, provided with a suitable neck 2, and surrounded, if desired, by an outer casing 3, it being understood that the receptacle and outer casing may be substantially as shown in my pending application mentioned.

The closure consists of a body 4, preferably provided with an extended part 5, arranged to closely fit the inner edge of the neck 2, the closure being extended as at 4¹ over the top of the neck. Packing 6, or its equivalent, may be arranged between the two if desired, so as to tightly seal the parts. The closure may be maintained in position in any desired manner, preferably by a plurality of bolts 9, which are provided with eyes 10 and mounted on a hoop or ring 11,

suitably secured to the receptacle, the bolts 9 passing up through openings 8 formed between the extending lugs 7 at the sides of the receptacle and the parts locked together by thumb nuts 12, or their equivalents. It will be particularly noted by referring to Figs. 1 and 2, that the lugs or extended parts 7 are preferably provided with inclined upper faces, upon which the thumb nuts bear. By inclining the upper faces of the extended parts there is no tendency for the nuts to slip off from the lugs, so that the parts are maintained in position.

The closure 4 is preferably recessed as at 15, and extended upwardly at the center as at 16, the extending part 16 being provided with a chamber 18 therein, which is connected by a duct 19 to the inner side of the closure, forming an outlet therethrough. The outlet is normally closed by a valve 20 provided with a stem 21. The valve seat in the chamber 18 may be of any suitable material, and may be formed in the closure or may be separable therefrom, as desired. The valve is normally maintained tightly upon its seat by a spring or resilient member 23, which bears against the upper side of the valve, and an adjustable member 24, through which the valve stem 21 extends. The member 24 may engage with the extended part 16, if desired, and in the preferred construction I preferably provide a plate 26, which is maintained in position by screws 25, or their equivalents, the same being provided with threads and arranged to engage the threads on the part 24. The opening for the valve stem 21 through the member 24, is preferably made large enough so as to permit the escape of gas or fluid there-through. For convenience in operating, the member 24 is provided with an extended part 27, and the movement of the part is limited by a stop 28 arranged on the part 26. The stem 21 is provided with a ball or knob 29 for convenience in raising the valve.

In the preferred construction I also show an air inlet, through which air may be admitted to the interior of the receptacle. The construction shown comprises a tube 30, within which is arranged a valve (not shown) the tube having ends 31 and 32 and a removable cap. It is unnecessary to describe the construction of the air valve, inasmuch as the same is the common form, the stem being adapted to permit air to pass into the receptacle to prevent its passing out

through the tube 30. When it is desired to increase the pressure within the receptacle, cap 33 is removed and a pump connected with the tube 30.

- 5 In use, after the fluid or contents have been introduced into the receptacle, the closure is positioned and locked in position by bolts 9 and thumb nuts 12. Should the pressure within the receptacle rise above the pre-determined pressure desired, as indicated by
10 the adjustment of the part 24, the excess pressure will raise the valve 20 and escape through the chamber 15, and up through the member 24. If at any time it is desired to
15 try the pressure, the stem 21 may be raised, thereby raising the valve. If it is desired to increase the pressure within the receptacle, air may be admitted thereto, as previously mentioned.
- 20 Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention, hence I do not wish to be understood as
25 limiting myself to the exact form, construction or combination of parts herein shown and described, or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:—

- 30 1. A closure for receptacles, comprising a body portion provided with an extended

central part with a depression thereabout, said extended part having an opening there-
through with a valve seat at the lower end
thereof, a valve member arranged in said 35
opening, means for normally adjustably
maintaining said valve member upon its
seat, comprising a resilient member, an ad-
justable member arranged at the outer end
of said opening, and means for limiting the 40
movement of said adjustable member, and
means extending without the opening for
raising the said valve from its seat as de-
sired.

2. A closure comprising a body part hav- 45
ing a pair of extended lugs at each side
thereof, with the upper face of said lugs in-
clined, and means carried by the receptacle
for engaging said closure comprising
threaded bolts secured to the receptacle and 50
projecting through said lugs, and nuts
threaded to the upper end of said bolts and
engaging the inclined face of said lugs, sub-
stantially as and for the purpose described.

In testimony whereof, I have hereunto 55
signed my name in the presence of two sub-
scribing witnesses.

HENNING WENNERSTEN.

Witnesses:

ROY W. HILL,
CHARLES I. COBB.