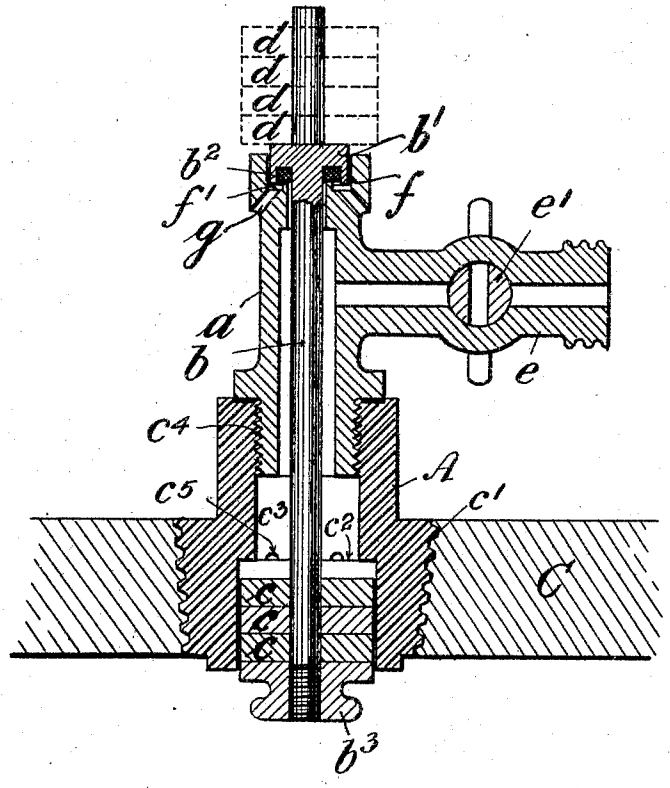
No. 788,724. PATENTED MAY 2, 1905.

W. LAUX.

BUNG FOR FERMENTING VESSELS.

APPLICATION FILED SEPT. 1, 1904.



Witnesses:

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No. 788,724. Patented May 2, 1905.

UNITED STATES PATENT OFFICE.

WILHELM LAUX, OF LIMBURG-ON-THE-LAHN, GERMANY.

BUNG FOR FERMENTING VESSELS.

SPECIFICATION forming part of Letters Patent No. 788,724, dated May 2, 1905.

Application filed September 1, 1904. Serial No. 223,031.

To all whom it may concern:

Be it known that I, WILHELM LAUX, a subject of the Emperor of Germany, residing at Limburg-on-the-Lahn, Germany, have invented new and useful Improvements in Bungs for Fermenting Vessels, of which the following is a specification.

My invention relates to bungs for fermenting vessels or casks; and the object is to provide a valve in the said bung to eject automatically any excess of carbonic acid or other gases or liquid produced by the fermentation of the contents of the said cask or vessel and to provide means on said valve by which the same may be adjusted to respond to a predetermined pressure in said cask.

My invention consists of a bung comprising a stock adapted to be screwed or otherwise fastened to the casks, a T-shaped extension secured to said stock and having a valve-seat, a valve-stem located in said stock and extension, weights on the lower and upper ends of said valve-stem, and outlets in said extensions to either lead the excess of gases into the open air or to and through a gage; and my invention further consists of the improvements hereinafter described, and pointed out in the claims.

My invention will be more fully understood taken in connection with the accompanying drawing, forming part hereof, in which my improved bung is shown in a vertical central section.

Referring now to the drawing for a further description of my invention, C is the head of a cask used for fermenting or storing liquids evolving gases. A is the stock of the bung, which is tightly secured to said head C by the screw-threads c'. The center portion of the stock A is bored out to form a seat c^2, a passage c^3, and a screw-thread c^4 for the reception of a T-shaped extension a, which is securely attached to said stock A. In the upper end of the extension is provided a cup-shaped recess f, having a valve-seat f' and orifices g leading from the said recess to the outside. The center of the extension a is bored out to receive a valve-stem b and leaving sufficient space for the gases to pass alongside. The stem somewhat below the upper end of the stem b is provided with a collar b', having a packing b^2 fitting over the valve-seat f'. On the lower end of the valve-stem b is provided a removable collar b^3, and between this collar and the seat c^2 of the stock A are provided disks c to serve as removable weights for adjusting the valve b b' to a desired pressure in the cask C. These disks fit loosely in the boring of the stock, so that gases evolving from the contents of the cask may pass up into the extension a. To provide a passage for the gases to the extension a when the valve-stem b is moved upward and the disks c abut against the seat c^2, passages or notches c^5 are cut into the seat. The disks c also prevent the stem b from being forced out of the bung.

On the extension a is provided a branch pipe e with valve e', and a pressure-gage (not shown) may be secured to the free end of the said pipe e to ascertain the pressure existing in said cask. The valve e' may also be used when draining the cask of its contents to let the atmosphere act upon the contents of the vessel and prevent the creation of vacuum therein.

To adapt the bung to various pressures, additional disks d may be placed on the upper end of the valve-stem b on top of the collar b', and by adding or taking away of the disks d the valve may be set to respond to any desired pressure to be maintained in the cask.

The operation of my improved bung is easily ascertained from the foregoing description and the drawing; but it may be remarked that modification in the arrangement of parts may be made without departing from the spirit of the invention.

Having thus described the nature and object of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bung having a hollow stock, a seat therein, a hollow extension on said stock, a valve-seat on the upper end of the said extension, a valve-stem inside the extension and the stock, a removable collar on one end of said valve-stem, disks mounted on said collar and adapted to abut the seat of the stock, a collar with packing on the other end of said valve-stem and adapted to fit the valve-seat

of the extension, orifices in the upper part of the extension below the valve-seat, and removable weights for adjusting the valve to a desired pressure, substantially as and for the purposes set forth.

2. A bung having a hollow stock, a seat therein, a hollow extension on said stock, a valve-seat on the upper end of said extension, a valve-stem inside the extension and the stock, a removable collar on the lower end of said valve-stem, disks mounted on said collar and adapted to abut the seat of the stock, a collar with packing on the upper portion of the valve-stem adapted to fit the valve-seat of the extension, orifices in the upper part of the extension below the valve-seat, removable weights on said valve-stem, a branch pipe communicating with the extension and a valve in said branch pipe substantially as and for the purposes set forth.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILHELM LAUX.

Witnesses:
LOUIS HEISERMANN,
PHILIPP BAUMGÄRTEL.