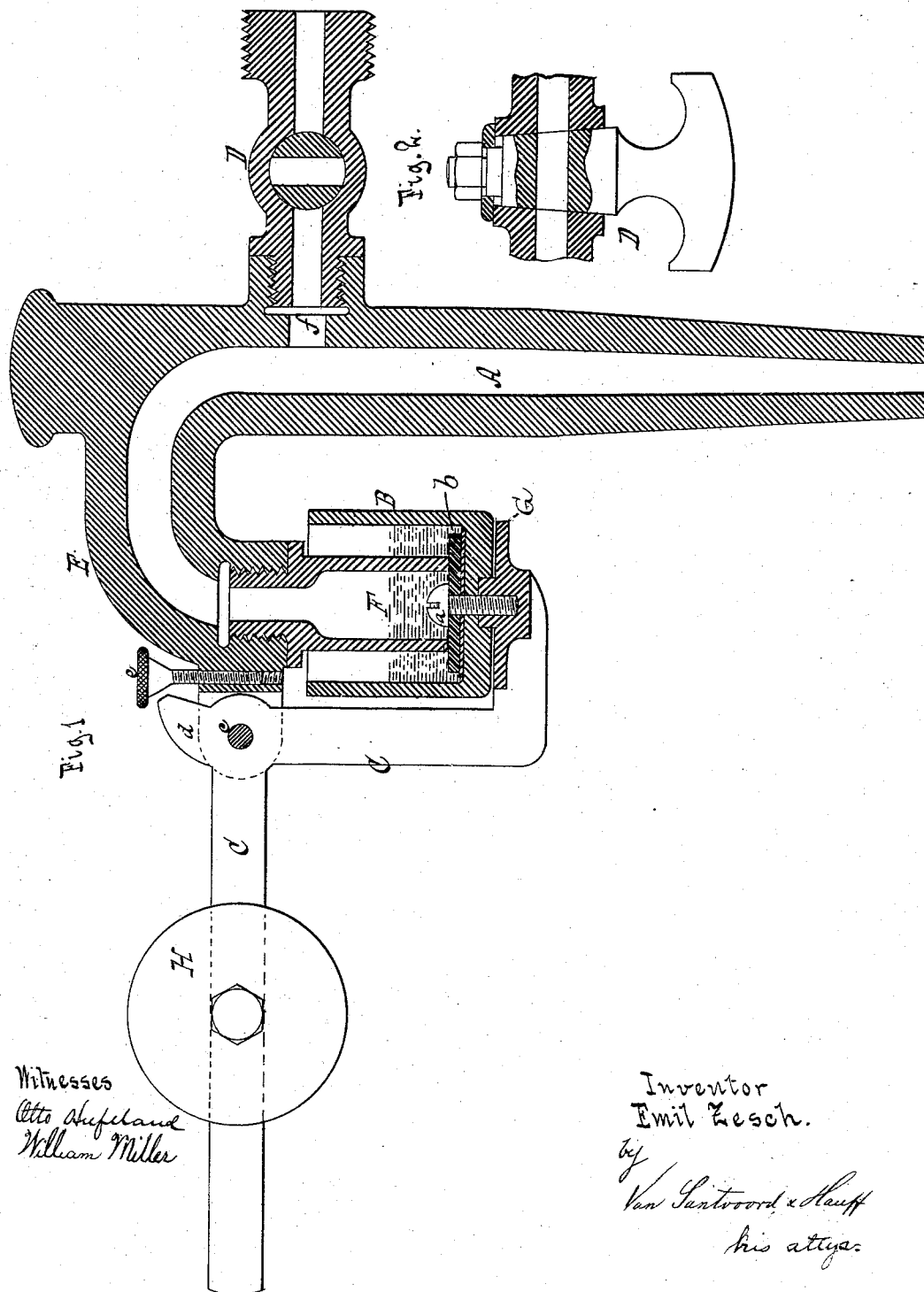


E. ZESCH.
 Relief Attachment for Beer-Fermenting Casks.
 No. 219,057. Patented Aug. 26, 1879.



Witnesses
 Otto Schupel and
 William Miller

Inventor
 Emil Zesch.
 by
 Van Santvoord & Hauff
 his attys.

UNITED STATES PATENT OFFICE.

EMIL ZESCH, OF STAPLETON, NEW YORK.

IMPROVEMENT IN RELIEF ATTACHMENTS FOR BEER-FERMENTING CASKS.

Specification forming part of Letters Patent No. **219,057**, dated August 26, 1879; application filed April 9, 1879.

To all whom it may concern:

Be it known that I, EMIL ZESCH, of Stapleton, in the county of Richmond and State of New York, have invented a new and useful Improvement in Relief Attachments for Beer-Fermenting Casks, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal central section of a device embodying my invention. Fig. 2 is a detail view of the air-inlet cock.

Similar letters indicate corresponding parts.

My invention relates to attachments for beer-fermenting casks, principally to relieve the same of surplus gas and froth during fermentation, another function thereof being to admit air under pressure when it is desired to draw off beer from the cask.

It has been found that the devices hitherto adopted for this purpose are liable to "gum," which is a serious obstacle to their proper working; and to overcome this disadvantage is the primary object of my invention, which consists in the combination, with a hollow stem having a return-bend, of a cup-shaped valve adapted to cover the mouth of the hollow stem, and a balance-lever carrying said valve, in such a manner that if the hollow stem is forced into the bung-hole of a cask the cup-shaped valve is brought to an upright position, and may be supplied with water or other liquid, whereby any gummy substance issuing from the cask is dissolved. In addition to the parts named, the hollow stem has combined therewith a laterally-projecting air-inlet cock adapted to connect with an air-pump.

In the drawings, the letter A designates the hollow stem, B the valve, C the balance-lever, and D the air-inlet cock, of my attachment.

The stem A has a return-bend, E, so that the mouth F thereof is in corresponding plane to the shank, which latter is suitably shaped to enter the bung-hole of a cask or a hole in the bung.

The valve B is made in form of a cup or vessel, of larger diameter than the mouth of the stem A, and it is attached to a disk formed or secured on the lever C by a screw, *a*, which serves also to fasten a packing-disk, *b*, on the

bottom of the cup, for closing the mouth F of the return-bend E of stem A.

The lever C is so arranged that the valve B is held over the mouth of the stem A, the same having its fulcrum on a pin, *c*, which is secured to ears projecting from the stem A. Upon the lever C is arranged an adjustable balance-weight, H.

To admit of regulating the movement of the lever C, I have, in this example, constructed the same with a toe, *d*, and have combined therewith a stop-screw, *e*.

When the stem A is attached to a cask the valve B stands upright, in which position it is adapted to hold water or other liquid.

In the use of my attachment water or other liquid is poured into the valve B, the liquid being discernible through its side if the valve is made of glass; and hence, while the surplus gas and froth are permitted to escape from the cask, the faces of the stem and valve are both kept free from gummy or sticky substances.

The cock D is of ordinary construction, and it is fitted in a screw-threaded hole, *f*, formed in the side of the stem A, so that said cock projects laterally from the stem. At its outer end the cock D has a screw-thread for the attachment of a pipe emanating from an air-pump, so that when it is desired to draw off beer from the cask air may be forced into the same.

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

1. In an attachment for regulating pressure in beer-fermenting casks, the combination of a hollow stem having the return-bend E, a cup-shaped valve covering the mouth of the hollow stem, and a balance-lever carrying said valve, all constructed for use substantially as described.

2. The combination of an air-inlet cock with the hollow stem A, valve B, and balance-lever C, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 2d day of April, 1879.

EMIL ZESCH. [L. S.]

Witnesses:

PHILIP LOEB,

FRED. BACHMANN.