

F. FEHR.

Apparatus for Regulating the Pressure in Beer-Casks.

No. 215,596.

Patented May 20, 1879.

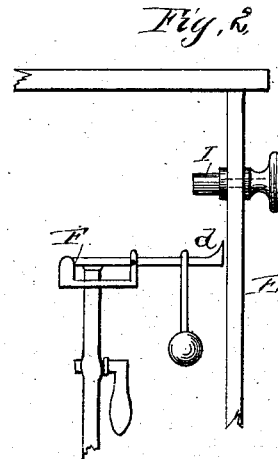
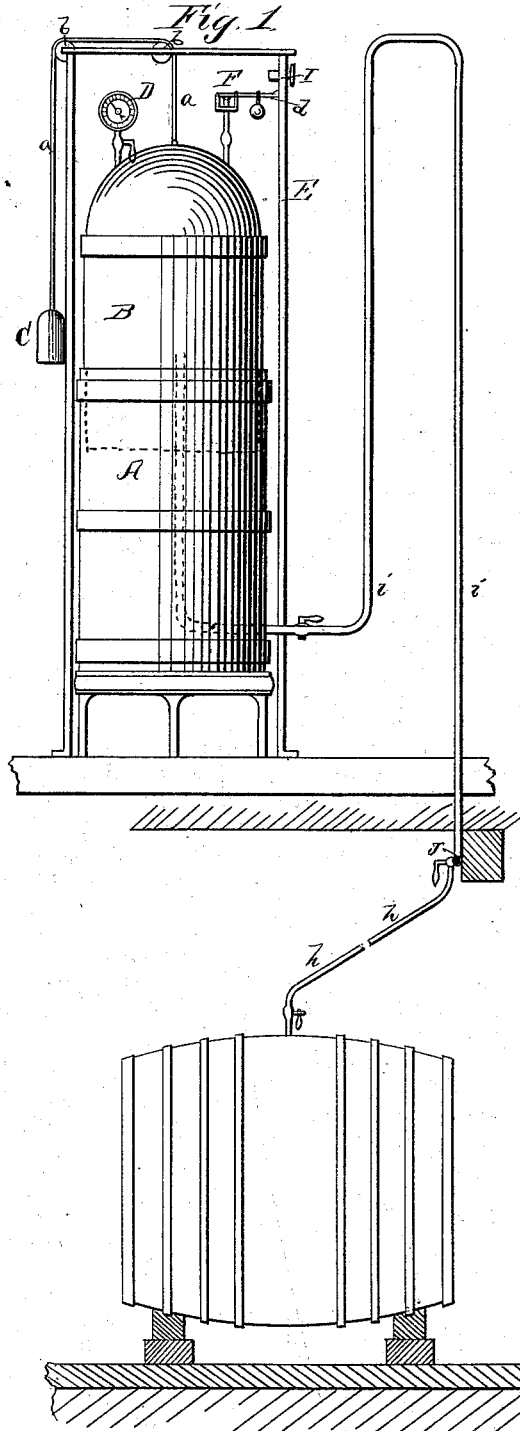
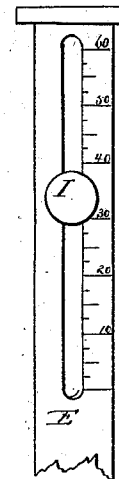


Fig. 3.



Witnesses:
W. C. McArthur
John E. Rogers.

Inventor:
Frank Fehr
per
Alexander Kellist
Attorneys.

UNITED STATES PATENT OFFICE.

FRANK FEHR, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN APPARATUS FOR REGULATING THE PRESSURE IN BEER-CASKS.

Specification forming part of Letters Patent No. **215,596**, dated May 20, 1879; application filed March 18, 1879.

To all whom it may concern:

Be it known that I, FRANK FEHR, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Apparatus for Regulating the Pressure of the Carbonic Acid in Beer-Casks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention has for its object the equalization of pressure of carbonic-acid gas in beer-casks when charged, and also the retention of a sufficient supply of gas in the receiver for the charging of fresh casks, while at the same time any excess of gas in the receiver may be automatically discharged, all substantially in the manner hereinafter described; and with the above object in view my invention consists in the employment and arrangement of such devices, as will be more specifically set forth in the claims.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side view of my machine applied to a cask, and Figs. 2 and 3 are details of the same.

A represents a gasometer, with the movable receiver B, similar to those used in gas-machines, the receiver being suspended by one or more cords or chains, *a*, passing over pulleys *b*, and having weights *C* at their ends.

On top of the receiver B is a gage, *D*, and a valve, *F*. This valve is opened by means of a lever, *d*, striking a stop, *I*, adjustable in the frame *E* of the gasometer.

From the gasometer A a pipe, *i*, connects with a pipe, *J*, which is to run the length of the cellar or vault, and this pipe is provided with a series of branch pipes, *h h*, for connection with the beer-casks, the various pipes being provided with suitable stop-cocks.

When a number of beer-casks are thus connected the carbonic-acid gas generated therein rises through the pipes and passes into the receiver, which is to be set for a pressure of eight pounds, more or less. As the gas generates and enters the receiver this rises until this pressure is gained, where it remains, the excess of pressure being automatically allowed to escape by the valve *F*.

During the process of fermentation if the beer in one cask should generate more gas than another the gasometer equalizes the same, so that the amount and pressure of gas in all the casks will always be uniform.

Any one or more of the casks may be disconnected, and other casks of new beer connected, without in any way causing the beer in the other casks to deteriorate, because the receiver will at once fall and retain the same pressure of gas as before.

One of the main features of my invention is the storage of a sufficient quantity of the carbonic-acid gas to supply new casks without drawing from those already undergoing fermentation.

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

1. In an apparatus for charging and equalizing the pressure of carbonic-acid gas in beer-casks, the combination of vessel A and receiver B with the adjusting-stop *I* and slotted graduated bar *E*, all arranged to operate substantially as and for the purpose set forth.

2. In an apparatus for charging and equalizing the pressure of carbonic-acid gas in beer-casks, the combination of vessel A, receiver B, valve *F*, lever *d*, and adjustable stop *I*, all as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

FRANK FEHR.

Witnesses:

JOHN F. KELLNER,
JOHN HELMUS.