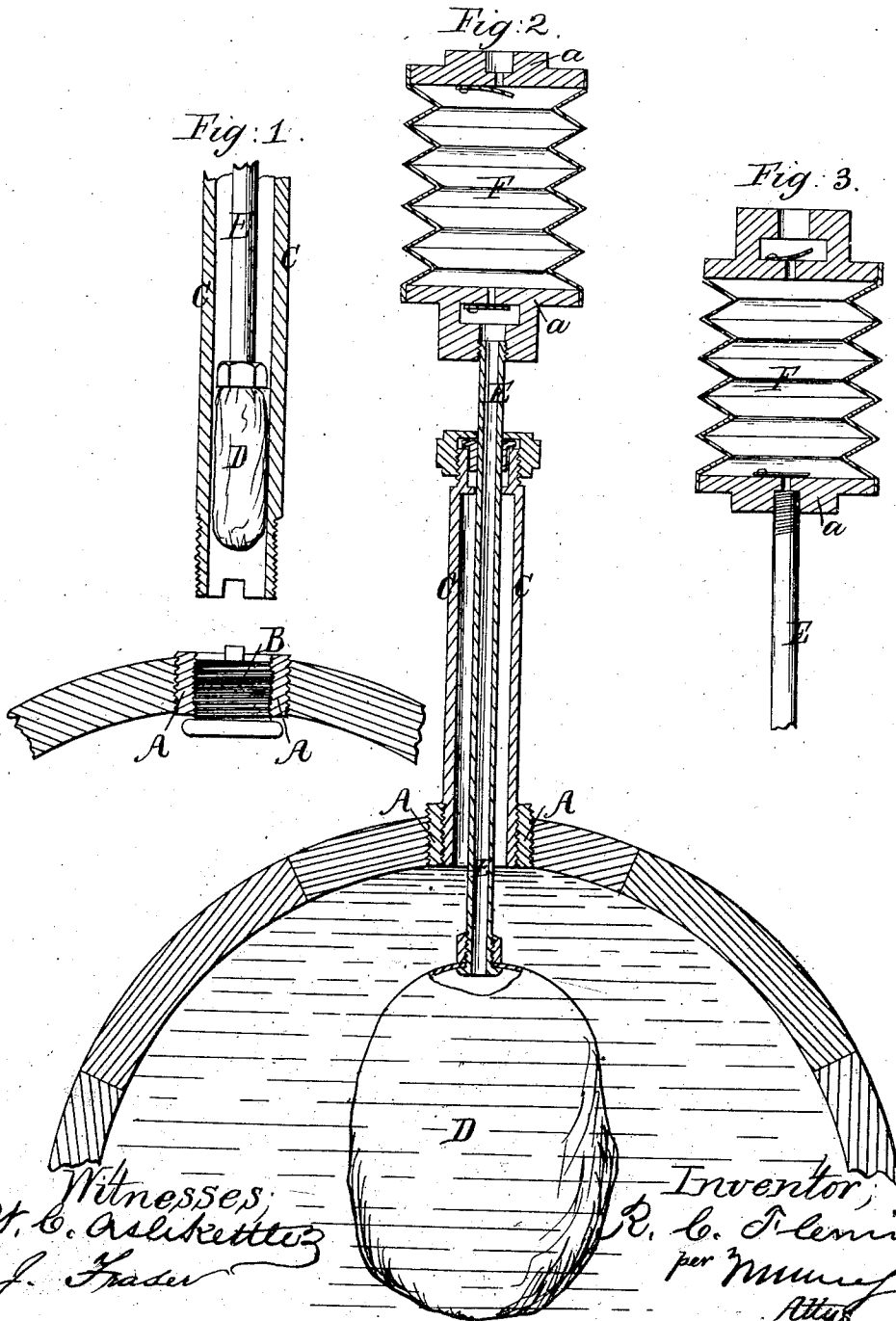


R. C. Fleming,

Barrel Vent.

No. 78447.

Patented June 2, 1868.



Witnesses,
H. C. Ashkett
J. Fraser

Inventor,
R. C. Fleming
per Munn & Co
Attys

United States Patent Office.

RICHARD C. FLEMING, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 78,447, dated June 2, 1868.

IMPROVEMENT IN VENTS FOR BARRELS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, RICHARD C. FLEMING, of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented a new and improved Vent for Barrels; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents a sectional elevation of my invention, before it is inserted in a barrel.

Figure 2 is a sectional elevation of the same, showing it inserted in a barrel.

Figure 3 is a detail sectional view of the upper part of the same, in a reversed position.

Similar letters of reference indicate corresponding parts.

This invention relates to a new device for preserving beer, ale, and other liquids, and consists in a novel manner of inserting in the barrel, and of inflating, an expansive bag, which is to be filled with air, and which, as the liquid is being gradually withdrawn, is becoming filled, and fills the vacuum which is created in the barrel by the discharge of the contents. The air is thereby not brought in contact with the remaining contents of the barrel, and the same will therefore retain their original quality.

A, in the drawing, represents a metal ring, screwed into the bung-hole of a barrel, and fitted with internal screw-thread or otherwise, to fit it for the reception of a plug, B, by means of which the barrel is closed, during transportation, and as long as the contents are to remain undisturbed.

As soon as the barrel is to be opened, a valve, C, is screwed into the ring A, as in fig. 2. The plug B may for this purpose be either previously removed, or may be fitted at its upper end so that it will be screwed into the barrel, by means of the tube C, as indicated in fig. 1. The plug will in the latter case remain in the barrel, and can be discharged when the barrel is empty by unscrewing the ring A, and by then dropping the plug out.

D is an elastic or other expansible bag, which is attached to the lower end of a hollow rod, E, and which can be drawn into the tube C, as in fig. 1. When the tube C is screwed into the ring A, as in fig. 2, the rod E is pushed downward until the bag is suspended within the barrel.

F is a pair of bellows fitted upon the upper end of the rod E, as shown. By expanding the bellows, as in fig. 2, the weight of its upper block, a, will suffice to contract it again if a vacuum should be produced by drawing off some of the liquid in the barrel, and thus before the faucet is opened, it is only necessary to expand the bellows, when they will automatically fill the bag, as long as beer is being drawn off.

By reversing the bellows on the rod E, as in fig. 3, so that its valves open upward, they can be used for pumping the air out of a filled bag and of an empty barrel.

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

1. The combination of the screw-ring A with the tube C, tubular rod E, and bag D, all made and operating substantially as herein shown and described.

2. The bellows F, in combination with the device set forth in the foregoing clause.

RICHARD C. FLEMING.

Witnesses:

A. T. EGGLETON,
JAS. A. MERSHON, Jr.