

T. Simmons,

Cask Air-Vent.

N^o 50,176.

Patented Sep. 26, 1865.

Fig. 1

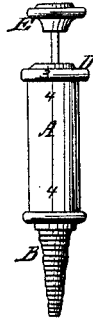


Fig. 3.



Fig. 4.



Fig. 2.

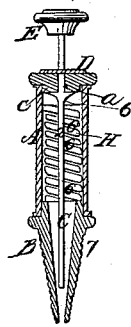


Fig. 5.

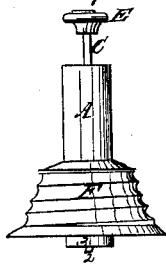


Fig. 7

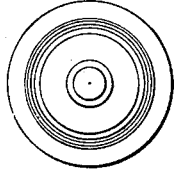


Fig. 8

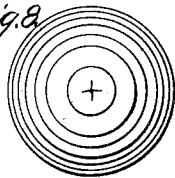
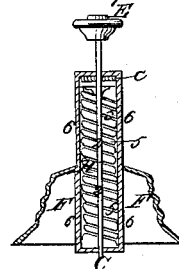


Fig. 6.



Witnesses:
George Stearns
John M. Auduck

Inventor:
Thomas Simmons

UNITED STATES PATENT OFFICE.

THOMAS SIMMONS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN VENTS FOR BARRELS.

Specification forming part of Letters Patent No. 50,176, dated September 26, 1865.

To all whom it may concern:

Be it known that I, THOMAS SIMMONS, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improved Air-Valve for Close Vessels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and the letters and figures marked thereon, which form part of this specification.

The nature of my said invention consists in a novel arrangement of a movable cushion or piston, an air-aperture, and a spiral spring, or its equivalent, for pressing said cushion upon the said aperture and closing the same, whereby by a slight pressure upon a projecting stem the said cushion is removed from the aperture to allow the air to enter, when by removing the pressure the aperture is closed by the action of the aforesaid spring.

The object of my invention is to produce a cheap and simple device to be attached to casks and other close vessels containing fluids which are required to be drawn off from time to time, and especially ale and beer casks, or casks containing fermented and effervescing fluids which are required to be kept closed from the air, whereby, at those times when the fluids are to be drawn, the air may be admitted to cause the fluids to flow freely, while at all other times the cask or vessel remains hermetically closed.

To enable those skilled in the art to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a side elevation of my invention; Fig. 2, a vertical central section of the same; Fig. 3, a top view of the cap upon the cylinder; Fig. 4, a bottom view of my invention. Fig. 5 is a side elevation of my invention, with a metallic screw attachment; Fig. 6, a vertical section through Fig. 5; and Figs. 7 and 8 are top and bottom views, respectively, of my invention as shown in Fig. 5.

Similar letters of reference in the different figures denote the same parts of my invention.

A represents a short cylinder, which may be provided with a tapering or other screw-point, B, for convenience in attaching the same or screwing the same into casks.

C represents a piston projecting up through and working in a central aperture in the cylinder-cap D. Through this cap, and around the said central opening, are small slots (marked *a*,) for the admission of air under the circumstances hereinafter described. To the top or upper end of the said piston C is attached a knob or handle (marked E) for convenience in operating the piston.

c (shown in Figs. 2 and 6) represents a valve or cushion, which may be attached permanently to the piston or operated by means of a shoulder or projection thereupon, and is designed to rest closely against the lower side of the cap D, thus covering and closing the air-slots *a*.

H represents a spiral spring coiled around the piston within the cylinder, having its lower end upon the bottom of the cylinder or a suitable projection upon the perimeter of the cylinder to support it, and its upper end resting against the aforesaid valve or cushion upon the piston, so that the action of the spring holds up the cushion and closes the air-slots *a*.

There is a suitable opening in the bottom of the cylinder extending down through the tap-screw B, whereby the air is admitted from the cylinder into the vessel to which the device is to be attached.

Instead of the tapering screw shown at B and above described, if preferred the metallic screw-cap shown at F in Figs. 5 and 6 may be used—such as used in closing kerosene-oil cans and other volatile oils or fluids.

When the apparatus has been securely and properly attached to the cask or vessel from which the contents are to be drawn, the natural position of the parts closes the valve and excludes the air. When, however, it is desired to draw from the cask or vessel its contents, or any portion thereof, and the pressure of the atmosphere is required to cause the fluid to flow readily, by pressing down upon the knob E the spring H is compressed and the cushion *c* is removed from the slots *a*, admitting air into the cylinder, whence it readily passes into the cask with the desired results.

By removing the pressure from the knob or piston the parts resume their original position and the valve is closed, excluding the air from the cask.

Having described the construction and operation of my invention, I will now specify what I claim and desire to secure by Letters Patent.

I claim—

1. The combination and arrangement of the cylinder A, the piston C, cushion c, spring H, and air-slots a, substantially as specified and shown.

2. In combination with the above-mentioned parts, the employment of the tapering hollow screw B, as and for the purposes set forth.

THOMAS SIMMONS.

Witnesses:

W. E. MARRS,

CHAS. COY.