

A. L. WEBSTER.  
NOZZLE FOR CANS AND CASKS.

No. 105,151

Patented July 5, 1870.

Fig. 1.

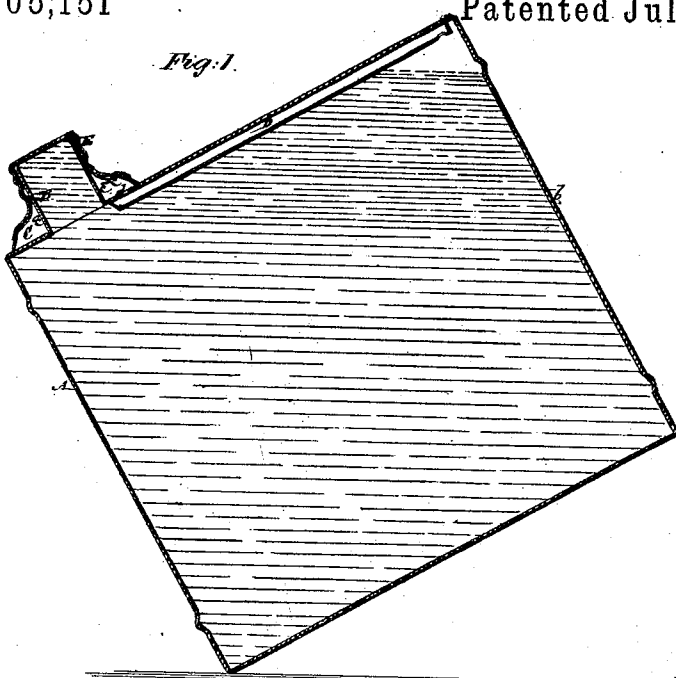


Fig. 2.

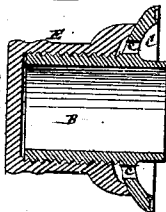


Fig. 3.

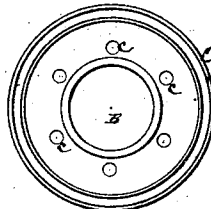


Fig. 4.

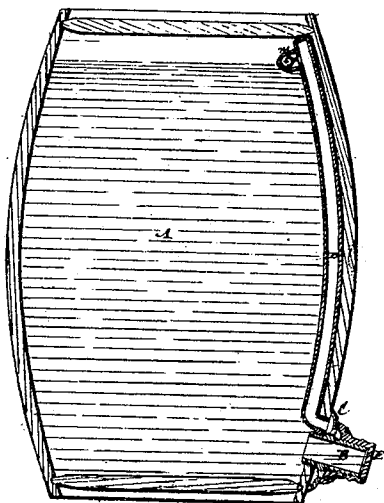
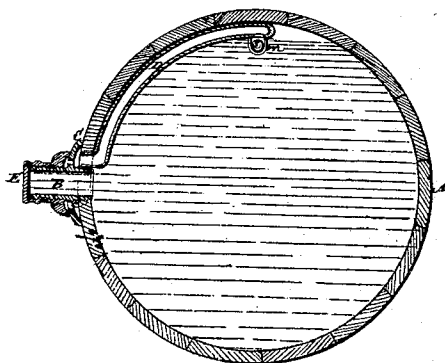


Fig. 5.



Witnesses:  
Fred Haynes  
Fred Trench

A. L. Webster

# UNITED STATES PATENT OFFICE.

ABEL L. WEBSTER, OF CLEVELAND, OHIO.

## IMPROVEMENT IN NOZZLES FOR CANS AND CASKS.

Specification forming part of Letters Patent No. **105,151**, dated July 5, 1870.

*To all whom it may concern:*

Be it known that I, ABEL L. WEBSTER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Ventilating-Nozzle for Cans, Barrels, and other Vessels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a sectional view of a can with my invention applied thereto, said can being represented as in the act of being tilted; Figs. 2 and 3, a longitudinal section and interior face view of the nozzle under a modified construction of its parts; and Figs. 4 and 5, sectional views of the invention under different modifications or arrangements of the same as applied to a cask or barrel.

Similar letters of reference indicate corresponding parts.

This invention is applicable not only to cans and barrels, but to other close vessels for containing and pouring off liquids of various kinds, in which a nozzle is or may be used, and in which a vent is necessary to facilitate the running or drawing off of the contents of the vessel. It also is applicable not only to vessels of a portable character, but also to stationary vessels or chambers in which the contents are required to be drawn off by means of a pump or otherwise—as, for instance, to water-tight compartments of ships.

The nozzle may be variously constructed to adapt it to different kinds of vessels, and the air-passage, with which it is provided or made to communicate for establishment of the vent, be arranged either inside or outside of the vessel, or within the wall or shell of it.

Said invention consists in a ventilating-nozzle which embraces as its component parts or appendages a bib or spout, an outside vent-chamber, which is covered by a screw-cap or vent, that may also be made to close the bib, and an air or ventilating duct, arranged to connect the vent-chamber with the upper portion of the vessel.

The invention, in its application to a barrel or other vessel liable to be inverted in handling or moving it about, likewise includes an automatic valve for closing the air-duct, to prevent the contents of the vessel from run-

ning down or into said duct, but which opens for the admission of air to secure vent.

Referring, in the first instance, to Fig. 1 of the drawing, A represents a can having the improved nozzle under one of its forms or modifications applied to it, *b* representing the top of the can. This nozzle embraces a spout, B, surrounded, at its junction with the can on the outside of the latter, by an annular air or vent chamber, C, which is provided with vent-holes *c*, and is in communication, by an orifice, *d*, with an air or ventilating duct, D, that connects with the upper portion of the interior of the can, so that on taking off a screw-cap, E, which is made to close both the spout B and vent-holes *c* of the chamber C, air is readily admitted through the vent-holes *c*, chamber C, orifice *d*, and air-duct D to the upper portion of the can, which facilitates running off the contents of the latter by its spout B without bubbling or hinderance of any kind.

In Fig 1 the screw-cap E is represented as made out of sheet metal, with its screw-thread pressed in it, and made to fit a screw-thread formed by pressure on or around the outer end of the chamber C, which has the spout B soldered to or made to fit closely within it.

In Figs. 2 and 3 substantially the same devices are shown, but of a more solid and somewhat different construction, the perforated annular chamber C being cast on the spout and confined to the inner or rear portion thereof, while the spout B has a screw-thread on its inner end, which a female screw in the cap E is made to fit.

When the nozzle is required to be connected with the vessel otherwise than by soldering, as in fitting it to a cask or barrel, then the inner end of the spout B should be made to project beyond the inner face of the annular air-chamber, so that said spout is caused to enter the vessel.

Figs. 4 and 5 represent the invention as applied to a barrel under different arrangements of the nozzle and its air-duct, to adapt it in the one case to a standing position of the barrel on its end and in the other case to a lying position of the barrel on its bilge.

Substantially the same combination of parts, however, is used as in the can hereinbefore described, and the action is the same, A being

the vessel or barrel; B, the spout; C, the perforated vent-chamber; D, the air-duct, and E the screw-cap; but the end portion of the inner duct, which opens into the barrel, is provided with a ball or other valve, *s*, which may be contained in a cage, *m*, and which is arranged so that, when the barrel is at rest in the position it is required to stand or lie for drawing off its contents, said valve drops or automatically opens the orifice in the upper end of the duct to secure to the nozzle its hereinbefore-specified ventilating action; but when the barrel is inverted, as in handling or moving it about, the valve *s* becomes self-closing, and prevents the liquid in the barrel from passing into or filling the air-duct D.

By the application of the invention to a cask or barrel a bung-hole in the latter, to effect

vent, may be dispensed with, and the filling of the barrel be effected through the spout of the nozzle.

What is here claimed, and desired to be secured by Letters Patent, is—

1. A ventilating-nozzle for cans or casks in which the cap, screwing down from above, is made to cover not only the spout, but the air-ducts, whereby we are enabled not only to fill, but to draw the liquid from the same opening, substantially as set forth.

2. The combination of the spout B, cap E, air-chamber *c*, provided with ducts *d* D, substantially as shown and described.

ABEL L. WEBSTER.

Witnesses:

FRED. HAYNES,  
R. E. RABEAU.