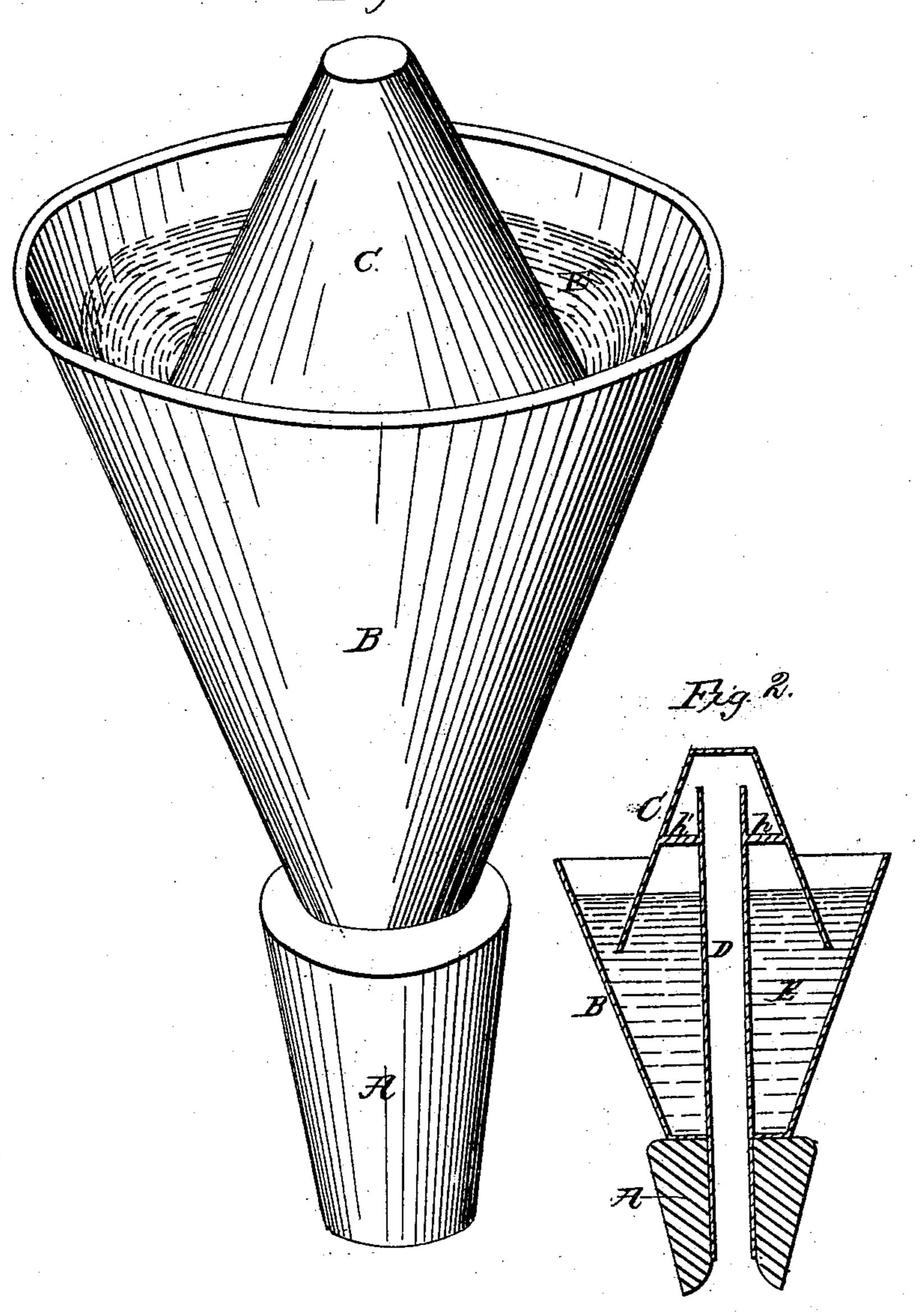
# A. Stimson,

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Nº279,407. Fig. 1. Patented June 30, 1868.



Witnesses

Sentverned Walkers Featherstoner Inventor; Alfred A Shruson.

# Anited States Patent Pffice.

## ALFRED A. STIMSON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 79,407, dated June 30, 1868.

### IMPROVEMENT IN BUNGS FOR CASKS.

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

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, Alfred A. Stimson, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and improved Automatic Bung; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in providing the bung with an aperture, into which is inserted a tube surrounded by a reservoir containing liquid. Above the said tube is affixed an inverted cup, whose edge is immersed in the liquid contained in the reservoir, which will prevent flies, bugs, or dirt from entering the barrel or reservoir in which the bung is inserted, yet will allow the gases and dirty scum to escape and pass off through the reservoir of water when the contents of the barrel are in the act of fermentation.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my bung in the usual form, and provide it with an aperture or hole through its centre lengthwise. Into this I fit a metal tube of the desired length, say six or eight inches. This tube I surround with a metal reservoir, extending above the bung, say, four or five inches, which may be made conical, and the larger end six or eight inches across. I then construct a smaller conical-shaped cup, say, three inches in diameter. At the larger end I affix a cross-piece, by which I suspend this cone-shaped cup by the centre tube, and in an inverted position, or mouth down, within the larger one, leaving an intervening space around between the edge of the small one and the sides of the outer one, to admit the passage of dirt or scum which has been forced up through the centre tube by the gases evolved when the contents of the barrel are in a state of fermentation.

Now, to prevent bugs, flies, dirt, or air from getting into the barrel, or coming in contact with the contents of the barrel, I fill the outer reservoir with water, which covers the edge of the inverted cup sufficiently to prevent the ingress of any objectionable matter liable to come in contact with the contents of the barrel, when left open, to allow the dirt or scum to pass off in the usual manner when in a state of fermentation, yet freely allow gases and dirt or scum an easy egress.

This automatic bung may be constructed in a variety of forms, as several methods have been contemplated, but the one described is considered as the best, the water or liquid stopple being the desideratum sought in the invention, for the purpose set forth.

Figure 1 is a perspective view of my invention.

Figure 2 is a transverse central section of the same.

The letters of reference correspond in the figures.

In the drawings, A represents a bung, of wood, having a hole through its centre.

D represents a tin or other tube, inserted in the hole in the bung, or may be formed in the same piece as the bung, and in wood or metal.

B represents a reservoir, which may be made conical, if desired, and of tin or other material, while C represents a smaller vessel, or conical-shaped cup, which may be of tin also, having a support or cross-piece, h, by which it is to be attached rigidly to the tube D in any suitable manner.

E represents water or liquid contained in the vessel B, while the edge of cup C is immersed therein.

It will be readily seen that if the bung, constructed as represented, be inserted in a barrel containing new cider, for instance, and fill the reservoir with water, and when the cider commences to "work" or ferment, the gases, scum, dirt, &c., will rise to the top of the barrel, and, by the force of the gases, will be carried up the tube D and fall over its end into the water, E, and then bugs, flies, dirt, or air are completely shut out from contact with the cider. Thus it will automatically take care of itself, as the barrel will not need filling up occasionally, to allow the scum and dirt to work out at the bung-hole, when left open, as heretofore.

By my invention I am enabled to produce cider which is superior in strength and clearness, also of a pleasanter or better flavor, being perfectly clear, and kept from the air in the act of fermentation.

What I claim as my invention, and desire to secure by Letters Patent, is-

The bung A, constructed with tube D, cup C, reservoir B, for holding water, all constructed to operate substantially in the manner described, and for the purposes set forth.

ALFRED A. STIMSON.

Witnesses:

SYLVĒNUS WALKER, GEO. CLARK, Jr.