

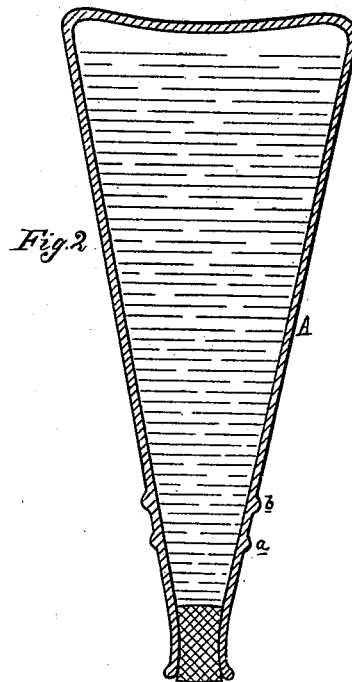
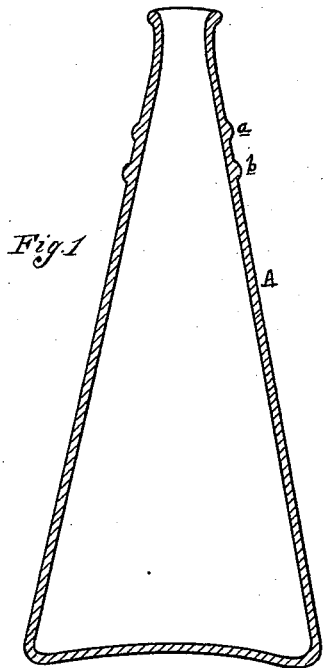
(No Model.)

E. J. SALISBURY.

METHOD OF PACKING LIQUIDS.

No. 342,540.

Patented May 25, 1886.



*Attest:*  
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*W. J. Sprague*

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*W. J. Sprague*

# UNITED STATES PATENT OFFICE.

EDGAR J. SALISBURY, OF MOUNT CLEMENS, MICHIGAN.

## METHOD OF PACKING LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 342,540, dated May 25, 1886.

Application filed October 29, 1885. Serial No. 181,252. (No model.)

*To all whom it may concern:*

Be it known that I, EDGAR J. SALISBURY, of Mount Clemens, in the county of Macomb and State of Michigan, have invented new and useful Improvements in Shipping-Bottles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to certain new and useful Improvements in the method of packing and shipping liquids of various kinds.

It is well known that there are liquids which contain air in a natural condition—that is, the gravity of the air in the liquid is equal to that outside, and that there are aerated liquids wherein the gravity of the air is lighter than that outside. In other words there are still liquids and effervescing liquids. It is also well known that many of these liquids are put up for shipment in bottles made of glass; that there is danger of these liquids freezing up in cold weather, and in such case the loss is great because of the bursting of the bottles, owing to the expansion of the liquid in freezing. It is the purpose of the present invention to remedy this difficulty by the method herein-after described, by which little if any danger will arise from the freezing up of the liquids.

30 Figure 1 is a central vertical section of my improved glass vessel. Fig. 2 is a like view of the same inverted and filled with liquid.

In the drawings, A represents a glass bottle or vessel, the side walls of which are formed upon a true taper from the bottom to a point where the mouth, which receives the cork or other stopper, commences. Cast or made in-

tegral with the bottle or afterward made upon the outer surface thereof, are two marks, *a b*, to denote the points in the bottle that mark the surface of the liquid when the bottle is being filled preparatory for shipment—as, for instance, if the liquid is a “still” one the bottle should be filled to the upper of the two marks as the bottle stands in an upright position. If the liquid is of the other kind described, the bottle should only be filled to the lower of the two marks.

In practice, after the bottle is filled, as described, and suitably corked, it should be inverted, as shown in Fig. 2, wherein it will be seen that there is a vacancy in the now top, formerly the bottom. Being packed in this position and shipped, or put away for use, if the liquid freezes it expands upwardly into this vacancy, the straight lines of the conical-shaped bottle facilitating this expansion in this direction, and thereby the danger of loss by breakage is reduced to the minimum.

What I claim as my invention is—

The herein-described method of preventing the loss of liquids and the bursting of the containing-vessels caused by the freezing of said liquids, which consists in inclosing said liquids in a vessel having a broad base and a tapering body, then closing said vessel, and afterward inverting the same, whereby room is left for the expansion of the liquids, substantially as described.

EDGAR J. SALISBURY.

Witnesses:

H. S. SPRAGUE,  
CHARLES J. HUNT.