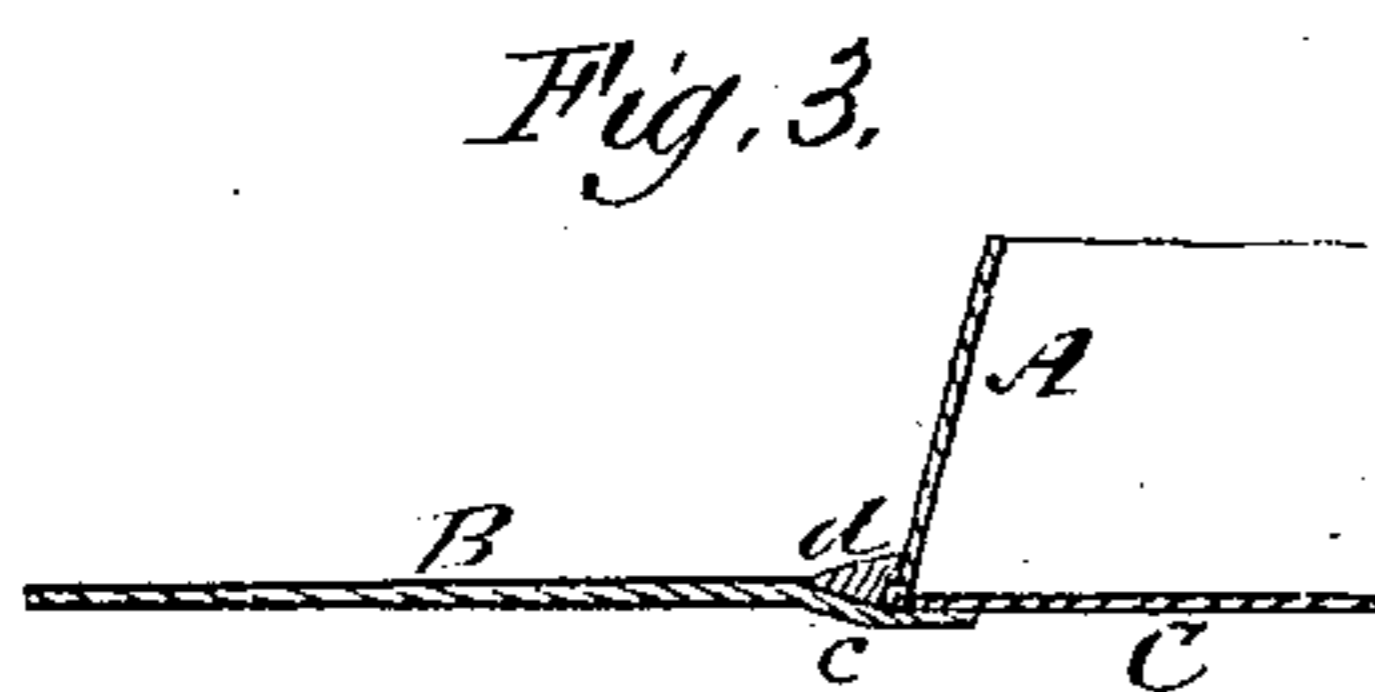
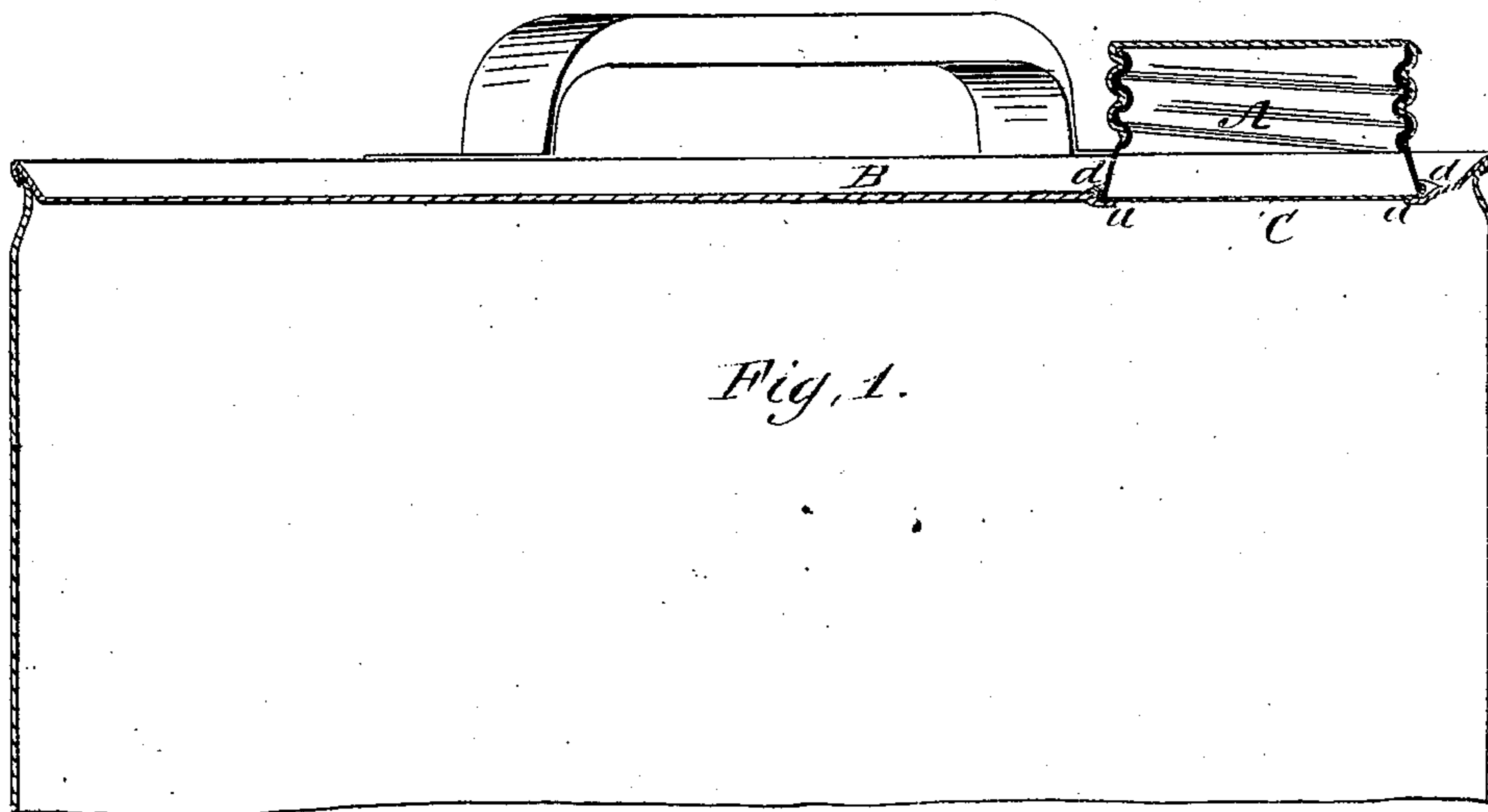


F. W. Devor,
Metal Can.
N^o 83,140. Patented Oct. 20, 1868.



Inventor.

Witnesses.
A. J. Clark,
E. P. Tracy.

F. W. Devor
per Brown & Coombs
Attys

UNITED STATES PATENT OFFICE.

FREDERICK W. DEVOE, OF NEW YORK, N. Y.

IMPROVEMENT IN NOZZLES FOR CANS.

Specification forming part of Letters Patent No. 83,140, dated October 20, 1868.

To all whom it may concern:

Be it known that I, FREDERICK W. DEVOE, of the city, county, and State of New York, have invented a new and useful Improvement in Nozzles for Cans and other 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, forming part of this specification, in which—

Figure 1 is a vertical section of a head of a can with a screw-nozzle having my improvement applied. Fig. 2 is a vertical sectional view, representing the nozzle with the improvement applied before it is attached to the can or vessel. Fig. 3 is a vertical sectional view on a larger scale, representing the joint between the nozzle and the can.

Similar letters of reference indicate corresponding parts in the several figures.

The principal objects of this invention are to obtain absolute tightness of the nozzle of the can or other vessel until it is desired to take out the contents, to afford facility for its being opened without injury, and to provide for the vessel being afterward closed with a tolerable degree of tightness.

The invention consists in hermetically sealing the bottom of the nozzle by a plate of metal made separate from the nozzle, but soldered with it to the can or vessel, such plate being made of such thickness, irrespective of the nozzle, that, while it may be strong enough for the protection of the contents of the vessel, it may, when it is desired to open the can or vessel, be easily cut out with a pocket-knife or other simple cutting instrument without injuring the nozzle, and thereby preventing the future closing of the vessel by a cap or stopper.

When the cap or stopper is put on or in the nozzle thus closed at the bottom there is formed within the nozzle a box, within which may be placed a circular or paper of printed directions for the opening of the vessel or for the use of its contents, or anything else which it may be desirable to insert.

This invention, though applied to nozzles other than screw-nozzles, is represented in the accompanying drawing applied to a screw-nozzle, A. This nozzle itself has nothing pe-

culiar in its construction, and is soldered in the head B of the can or other vessel, around the margin of a suitable hole, *a*, provided therein for the purpose of filling the can or vessel; but before it is applied to the vessel it has attached to its bottom the plate or diaphragm C, which constitutes the invention. This plate or diaphragm may be attached in various ways; but the most convenient is to make it with a turned-up rim, *c c*, as shown in Fig. 2, which will fit tightly over the bottom of the nozzle.

The can or vessel is filled through the opening *a* before the nozzle is soldered thereto.

In soldering on the nozzle to the vessel, care must, of course, be taken that the solder *d* is so applied that it entirely covers the rim *c c* and effects the union of the nozzle itself to the vessel.

It will be seen that, when the cap D is put on the nozzle, the latter, being closed at the bottom, forms a closed box for the reception of any small article which it may be desirable to place therein.

When it is desired to open the vessel, the cap D is taken off, and the plate or diaphragm C may be cut out with a pocket-knife or other instrument without in any degree injuring the nozzle, as is likely to be done in cutting out the closed top of a nozzle.

Instead of the plate or diaphragm C being attached to the nozzle before the application of the latter to the can or vessel, it may be applied to the hole in the head of the can or vessel separately from the nozzle, and before the application of the nozzle thereto.

The closed bottom of the nozzle may have stamped upon it any trade-mark or device which would afford protection against the refilling of the vessel with inferior material for the purpose of disposal as the original contents.

The plate C, made in a separate piece from the nozzle, has several advantages over a bottom forming a portion of the nozzle itself, not the least important of which is that it can be made of any thickness irrespective of the nozzle, and hence made so thin as to provide for its being easily cut out with a pocket-knife, while the nozzle may be made so stout that it will not be liable to injury.

The nozzle and plate may also be made of different metals.

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

1. The plate C, made separate from the nozzle and can, in combination with the nozzle and the can, substantially as and for the purpose herein specified.

2. The box formed within the nozzle by the closed bottom C, and the cap or stopper, substantially as herein described.

FRED. W. DEVOE.

Witnesses:

J. SEAVER PAGE,
GEO. W. BETTS.