

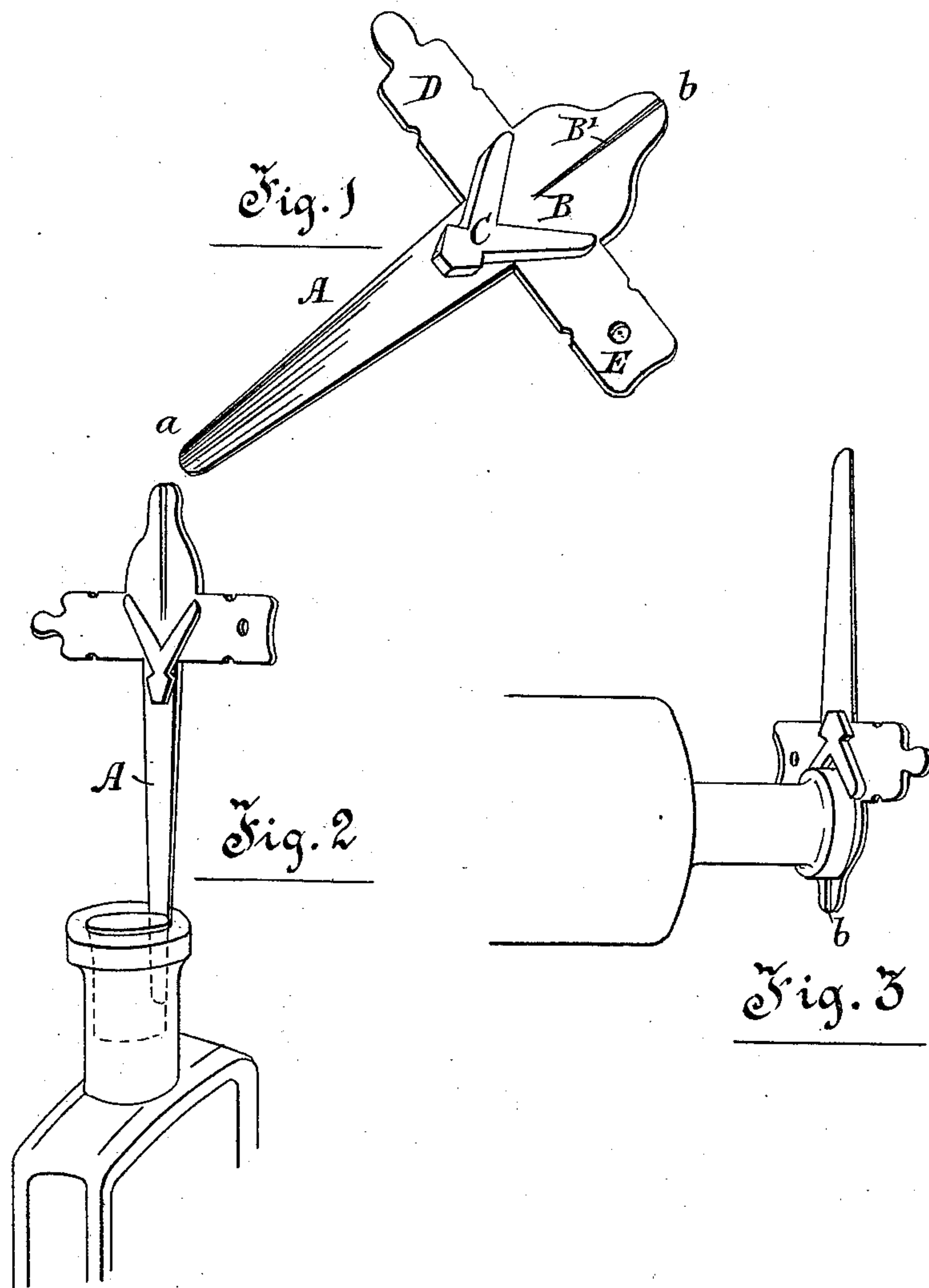
(No Model.)

E. S. RANDALL.

COMBINED BOTTLE OPENER AND LIQUID DROPPER.

No. 384,471.

Patented June 12, 1888.



Witnesses.

*Wm. H. Evans.*

*Wm. M. Heath.*

Inventor.

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By *his* Attorneys

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# UNITED STATES PATENT OFFICE.

EDWARD S. RANDALL, OF DAYTON, OHIO.

## COMBINED BOTTLE-OPENER AND LIQUID-DROPPER.

SPECIFICATION forming part of Letters Patent No. 384,471, dated June 12, 1888.

Application filed May 2, 1888. Serial No. 272,555. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD SIMPSON RANDALL, of the city of Dayton, in the county of Montgomery and State of Ohio, temporarily residing in the town of St. Henri, in the county of Hochelaga and Province of Quebec, Canada, have invented certain new and useful Improved Apparatus for the Administration of Liquid Medicine; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention has special reference to the administration of liquids contained in small bottles or vials, and affords means by which corks can be repeatedly withdrawn without injury to them, and also a certainty and regularity of dropping be attained.

It may be briefly described as a thin bar or strip of metal diminishing in width toward one end for the greater portion of its length, and slightly curved in cross-section, the curve deepening as it nears the end. The other end of this bar is broader and flat, coming nearly to a point, on its face being formed a guide or guides, and in it a longitudinal groove or indentation leading to the point.

For full comprehension of the invention reference must be had to the annexed drawings, forming part of this specification, in which—

Figure 1 is a view of the article; Fig. 2, a view showing its operation in drawing a cork, and Fig. 3 a view showing it in use for regulating the dropping of liquid from a vial.

Similar letters of reference indicate like parts.

A is the arm or end of the device which serves to draw corks, of the shape shown in Fig. 1, and having its end *a* rounded and

thinned down, so as to facilitate its introduction between the cork and the neck of the bottle. Its cross-section is a curve deepest at the end and growing shallower until it dies away into the flat surface of B, the end of which is pointed, or nearly so, as shown at *b*.

Upon the surface of B is formed a guide, C, the sides of which are at an angle to each other, and may be in one piece, as shown, or in two, and formed either by securing the piece or pieces to the surface, or by pressing up the substance of B, or in any other way. A groove, B', acts as a guide for the liquid from the mouth of the bottle to the point *b*.

To extract the cork all that is needed is to introduce the end of A between the cork and the neck of the bottle and then to turn it round, which will raise the cork from its seat. The guide C keeps the device in position over the mouth of the bottle while the liquid is being dropped out.

To give a better hold for the hand in using the device, it may be made with cross-arms D and E, and these may be utilized by rounding the end of D for mixing powders and forming on E an edge to cut the string on medicine-bottles and the like; but it must be understood that these are not essential features of the invention.

What I claim is as follows:

The combination of the arm A, curved in cross-section, and pointed flat end B, provided with guide C and groove B', all as and for the purposes set forth.

E. S. RANDALL.

Witnesses:

FRAS. HY. REYNOLDS,  
OWEN N. EVANS.