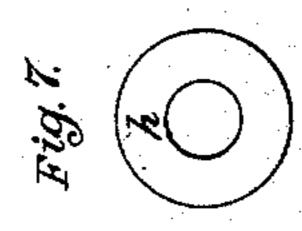
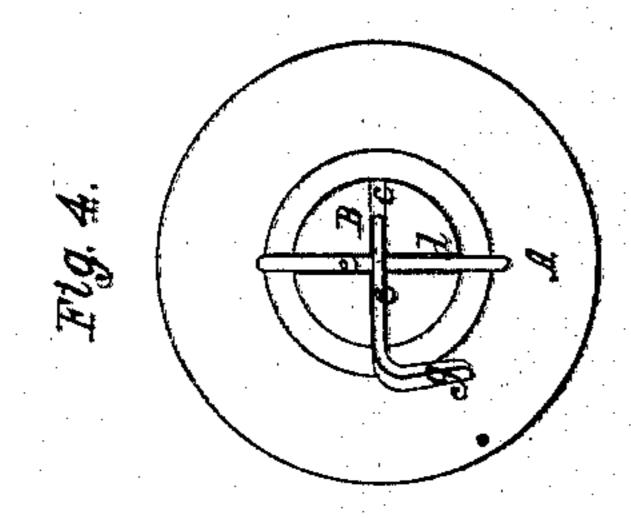
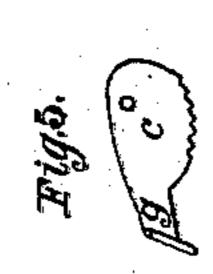
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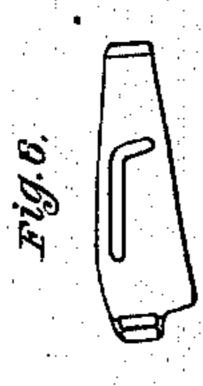
Stopper Fastener. Fatented Dec.11, 1866.

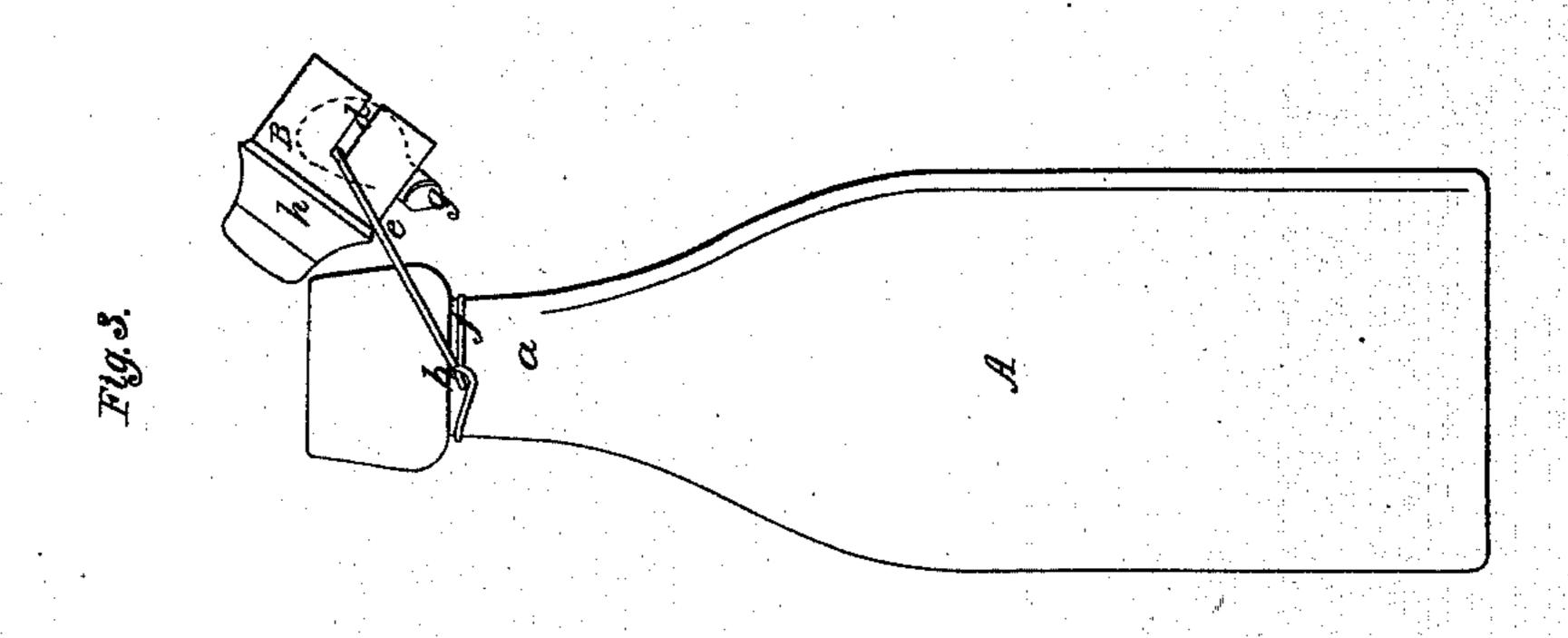
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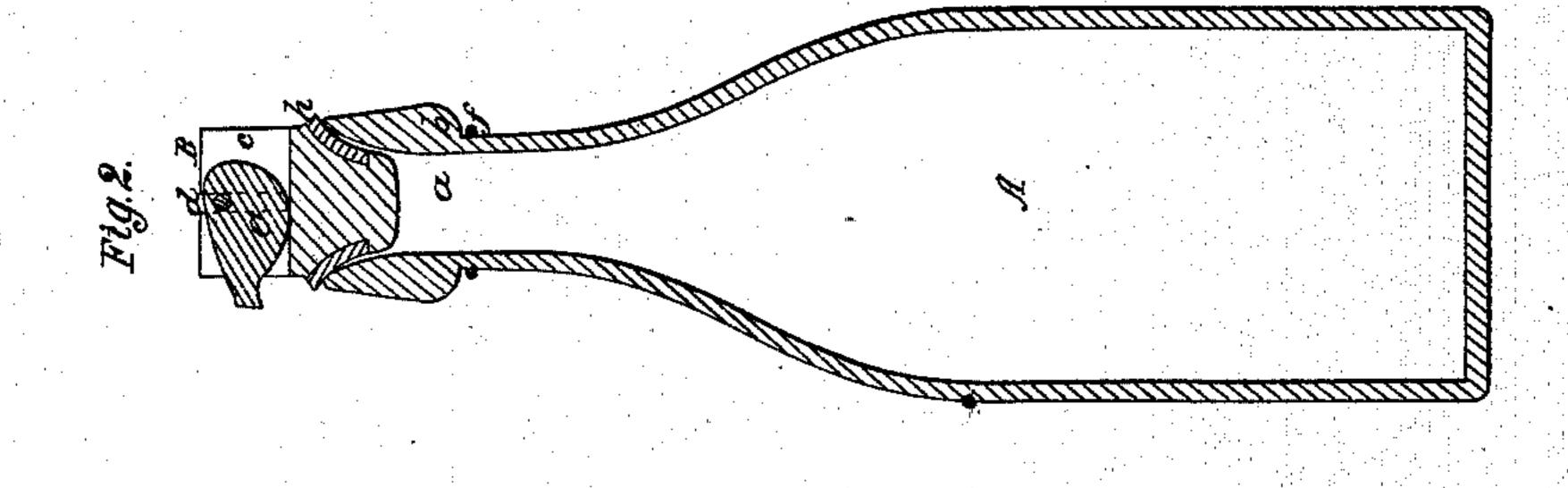


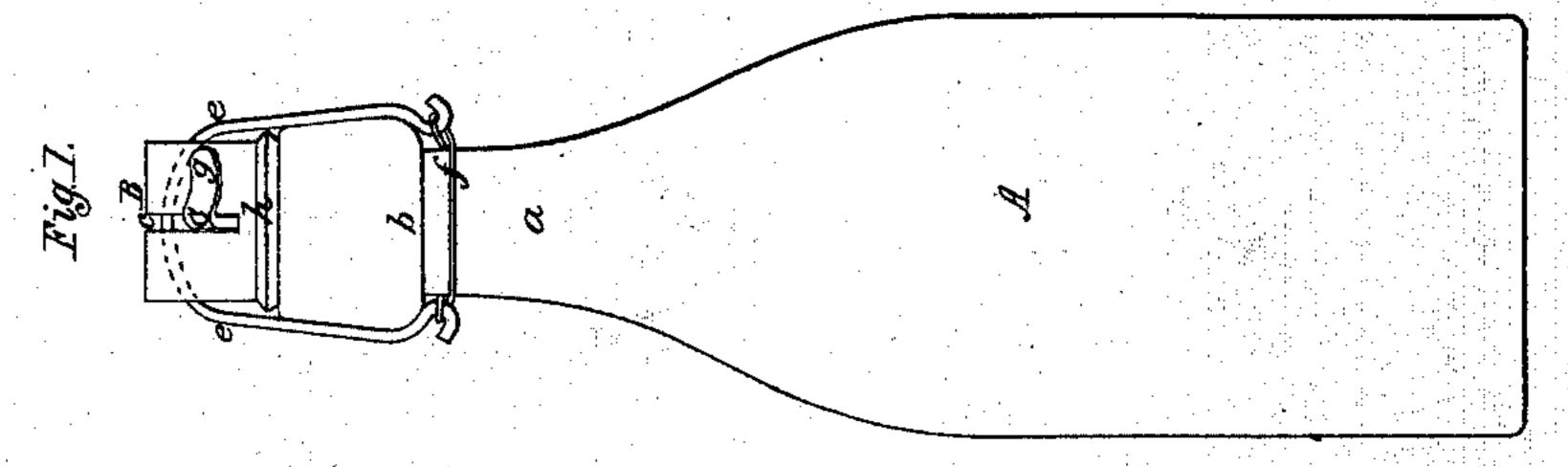












Witnesses: Therry & Parker What trans Farker

Inventor. Csaviel & Relineson

## UNITED STATES PATENT OFFICE.

DANIEL T. ROBINSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIM-SELF AND NATHANIEL JENKINS, OF SAME PLACE.

## IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. 60,424, dated December 11, 1866.

To all whom it may concern:

Be it known that I, Daniel T. Robinson, of Boston, county of Suffolk, and State of Massachusetts, have invented a new and Improved Bottle-Stopper Fastening; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 a vertical section, of a bottle provided with my invention. Fig. 3 is another side elevation, and Fig. 4 a top view, of it. Figs. 5, 6, and 7

are details of the invention.

In the drawings, A denotes the body of a bottle, and a its neck, formed with a shoulder, b, in the usual manner. The stopper is shown at B as composed of a cylinder, of wood or other suitable material, with its lower part of a conical or tapering form, to fit the mouth or interior of the neck of the bottle, and having a rubber washer, h, applied to its conical part, as shown in the drawings, which, as the stopper is forced into the neck of the bottle, by its elastic properties secures a perfectly tight joint therewith. A top view of this washer previous to being applied to the stopper is shown in Fig. 7 of the drawings.

The stopper is grooved transversely with two grooves, c d, crossing each other at right angles, the groove c being for the reception of a cammed lever, C, for forcing the stopper into its place, and the groove d being to receive the wire c, which retains the stopper in connection with the bottle, and which further serves as a fulcrum for the cammed lever. This wire e passes through the groove d, and its ends are bent down on opposite sides of the neck of the bottle, and are secured thereto by another wire, f, encircling the neck below its shoulder b, and passing through eyes formed in the extreme ends of the wire, the whole being as shown in the drawings.

We will suppose the stopper to be in its place within the neck of the bottle. By rais-

ing the arm or handle g of the cammed lever C the said lever will be raised off its seat, and allow the stopper to be tipped or turned out of the mouth of the bottle, and into the position shown in Fig. 3 of the drawings.

When it is desirable to close the bottle, by placing the thumb upon the arm g the stopper will first be turned back into the mouth of the bottle, and the lever or its cam will next be forced down upon its seat within the stopper, and the latter be pressed tightly into place within the neck, and hermetically seal the bottle, the rubber washer contributing in a great degree to accomplish this object.

The under surface of the cammed lever may be indented or roughened, as shown in Fig. 5 of the drawings, to operate in connection with its seat, or with a piece of metal placed therein, the object of the indentation being to prevent any slipping of the lever on its seat.

Instead of the cammed lever, I have contemplated the employment of a wedge or tapering piece of metal, having a groove formed in it for the reception of the wire, this wedge being shown in Fig. 6 of the drawings.

The bottle-stopper fastening made as above described is a very simple and effective means of closing the mouth of a bottle, and hermet-

ically sealing it.

I claim—

1. The improved bottle-stopper fastening as composed of the slotted stopper of plug B, the cammed lever C, or its equivalent, and the wire e, the whole being arranged and combined together in manner and to operate as specified.

2. In combination with the above described arrangement of parts, the rubber washer or covering h, essentially in manner and for the

purpose as described.

## DANIEL T. ROBINSON.

Witnesses:

CHARLES EDWD. PARKER, H. E. PARKER.