

A. E. RICH & C. S. SAWYER.
BOTTLE-STOPPER.

No. 175,759.

Patented April 4, 1876.

Fig. 1

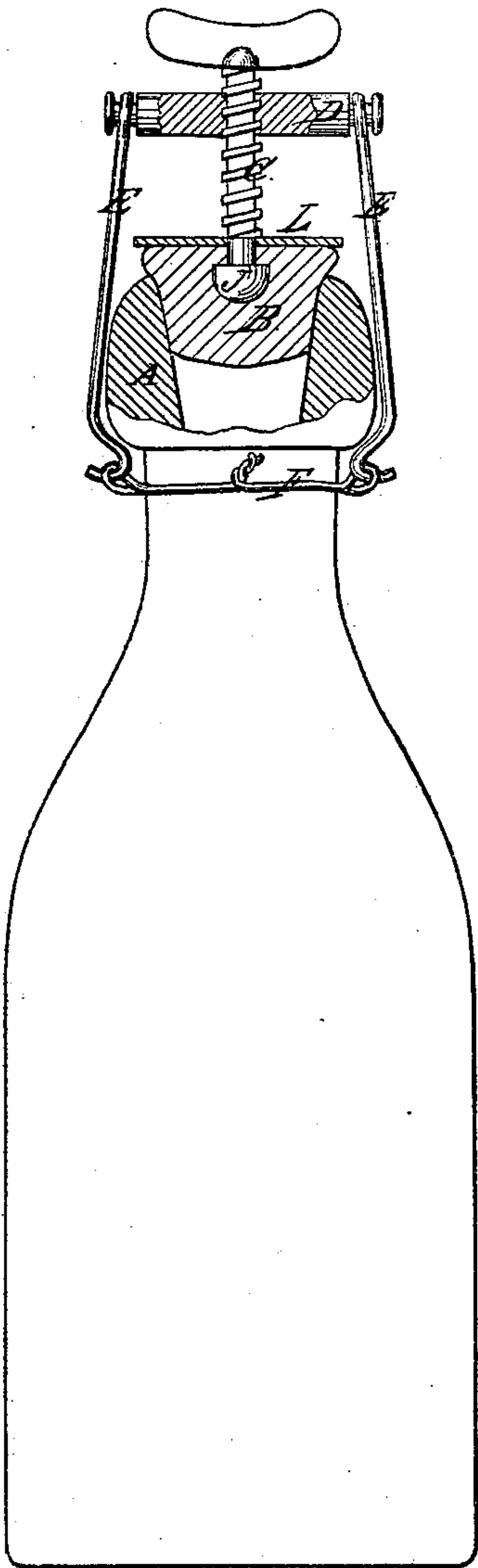


Fig. 2.

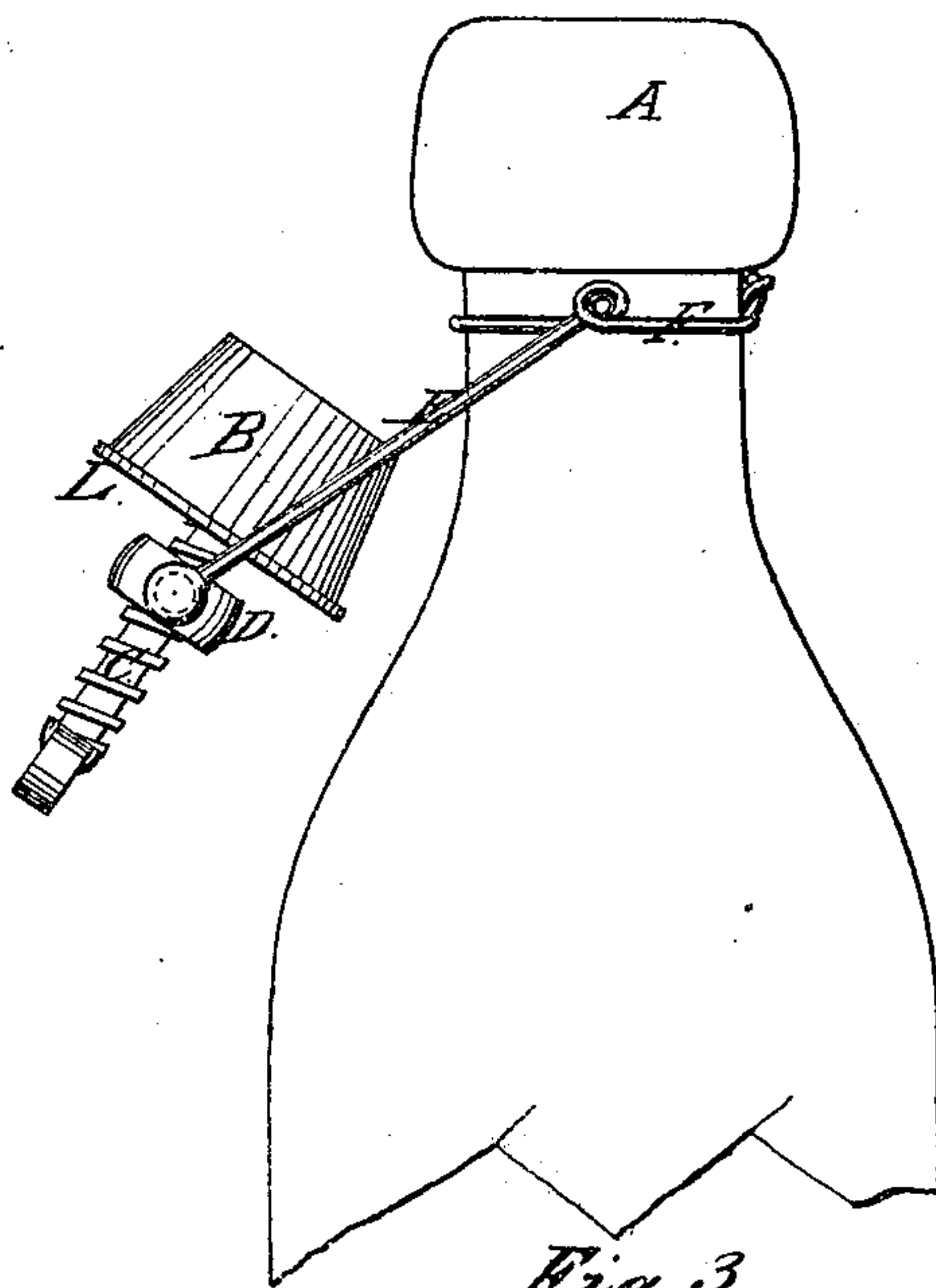
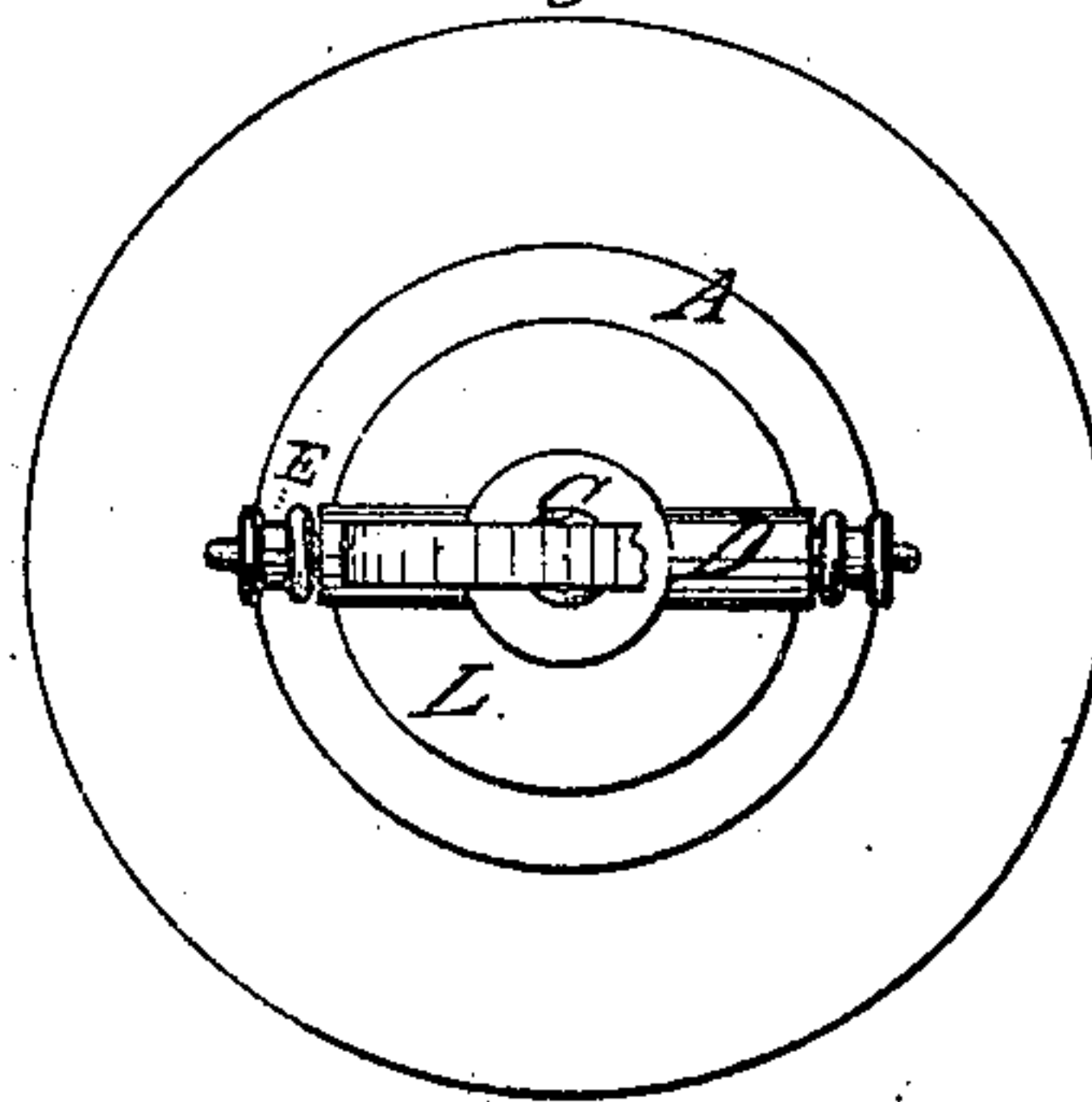


Fig. 3.



WITNESSES:

H. Rydquist.
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INVENTOR:

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BY *mm*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

AUGUSTUS E. RICH AND CHARLES S. SAWYER, OF FALL RIVER, MASS.,
ASSIGNORS TO THEMSELVES AND JAMES H. CRITTENDEN, OF SAME
PLACE.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **175,759**, dated April 4, 1876; application filed
March 6, 1876.

To all whom it may concern:

Be it known that we, AUGUSTUS E. RICH and CHARLES S. SAWYER, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and Improved Bottle-Stopper, of which the following is a specification:

Our invention consists of a yoke hinged to a ring or band of wire fixed around the neck of the bottle, in which yoke a nut is pivoted, which has a thumb-screw for screwing down on the stopper of a soda-water or other bottle after it has been pressed in to secure the stopper. The screw is preferably swiveled to the stopper, so as to keep it in connection with the bottle; and the stopper is made of rubber, in order that the neck of the socket will spring over the head of the screw to connect and disconnect, and also because it will compress to be forced into the bottle, and afterward expand and fill the neck better than other material.

Figure 1 is a section of the nozzle of a bottle and stopper contrived according to our invention. Fig. 2 is a side elevation with the stopper hanging down one side, and Fig. 3 is a top view.

Similar letters of reference indicate corresponding parts.

A is the nozzle of the bottle; B, the rubber stopper; C, the thumb-screw, to which the stopper is swiveled; D, the nut, in which the thumb-screw works; E, the wires holding the nut, and F the band or ring of wire around the neck of the bottle, with the wires E attached.

The nut is pivoted in the wires so that it can turn suitably for adjusting the nut to the bottle, and the wires E are hooked into the ring F so that they can swing up and down

freely. By this plan the stoppers will not be lost, as they are so attached to the bottle that they may be used as long as they last.

It is designed, in practice, to use rubber stoppers which can be readily connected to or disconnected from the screw by stretching over the head J, so that the screw will keep the stopper with the bottle, and at the same time allow it to be detached readily, to be inserted by the machines used in filling and corking soda-water bottles. To this end the stopper has a little socket in the top for the head of the screw, the mouth of which is contracted, so as to hold the stopper on the screw, the screw-head being pressed down into the socket, when it is screwed down to secure the stopper.

L is a washer to distribute the pressure over the head of the stopper.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The stopper B, swiveled to a thumb-screw, C, working in a nut, D, pivoted in rods E connected to a ring or band, F, to the neck of the bottle, substantially as specified.

2. The combination of a clamp-screw, C, nut D, yoke E, and ring F with a bottle and bottle-stopper, the nut being pivoted in the yoke E, substantially as specified.

3. The combination of a rubber stopper, B, having a socket in the top, with the fastening-screw C, having a head, J, and being pivoted to the yoke E, substantially as specified.

AUGUSTUS E. RICH.
CHARLES S. SAWYER.

Witnesses:

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B. J. HANDY.