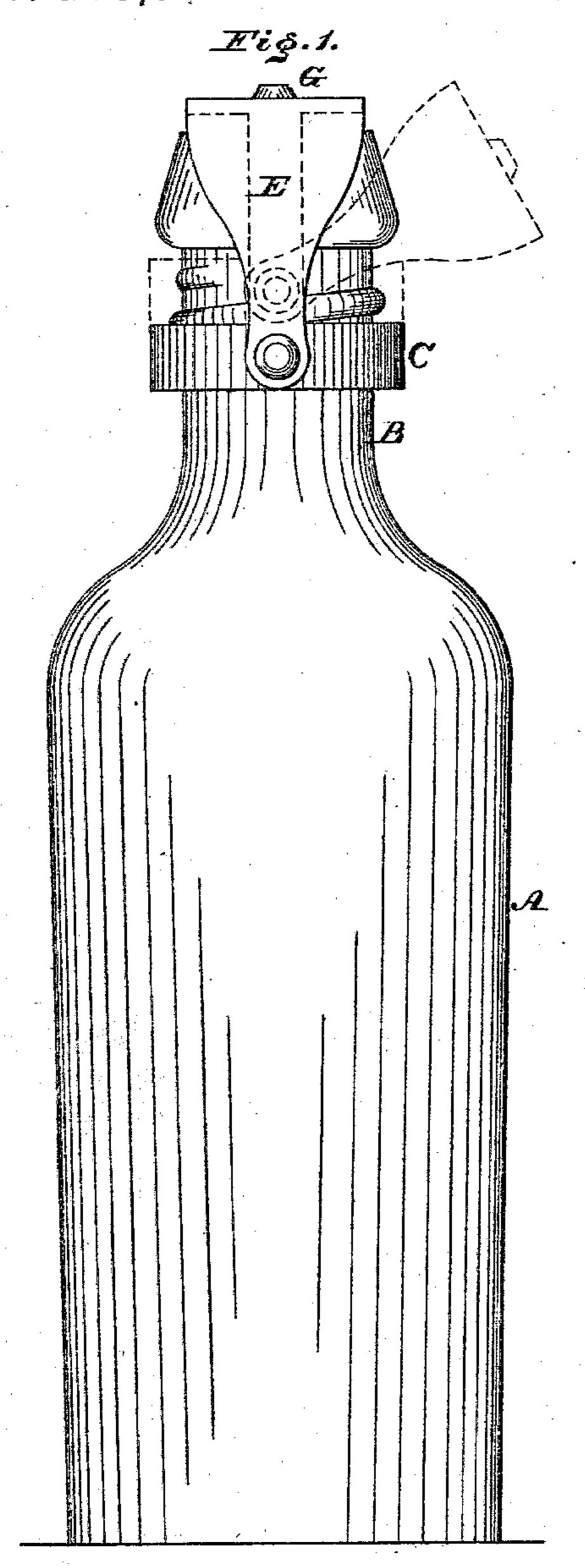
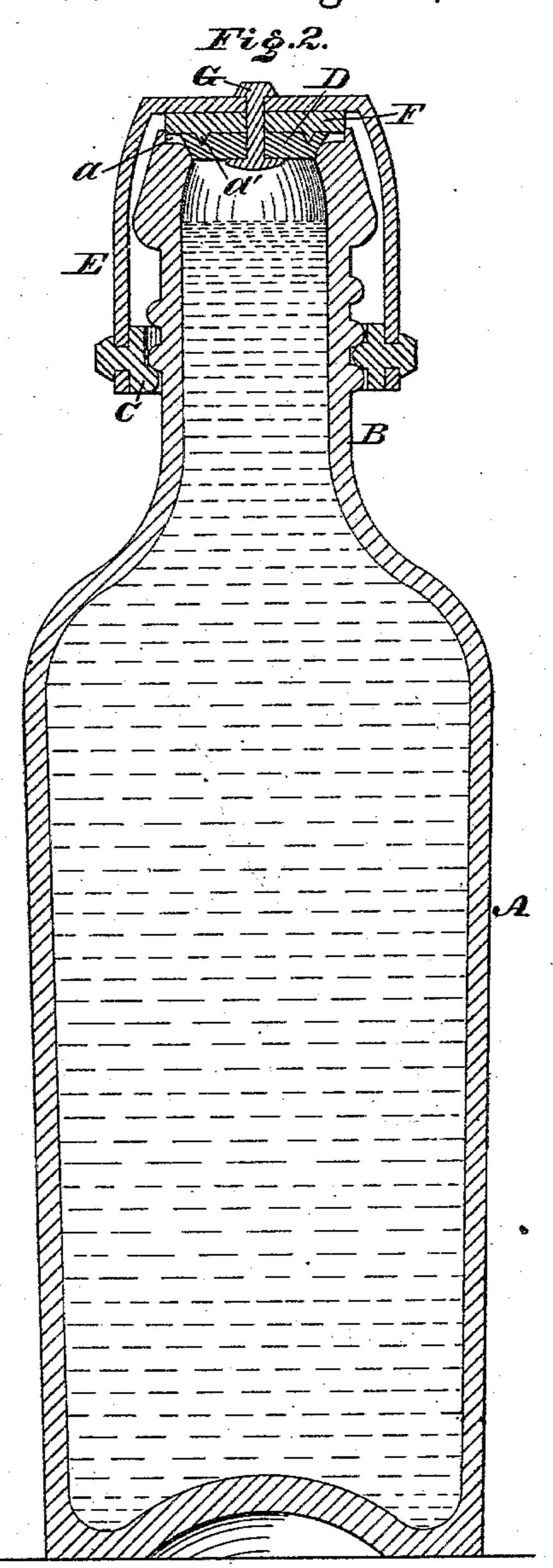
J. J. CHRISTIE.

BOTTLE STOPPER.

No. 283,569.

Patented Aug. 21, 1883.





WITNESSES: A. P. Grant, the F. Kirches James J. Christie,

By John arthedoro heurs

Attorney

United States Patent Office.

JAMES J. CHRISTIE, OF CAMDEN, NEW JERSEY, ASSIGNOR OF ONE-HALF TO ANDREW J. CHRISTIE, OF SAME PLACE.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 283,569, dated August 21, 1883.

Application filed April 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, James J. Christie, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Bottle-Stoppers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of a bottle and to stopper embodying my invention. Fig. 2 is a

vertical section thereof.

Similar letters of reference indicate corre-

sponding parts in the two figures.

My invention consists of a stopper connected with a rising and falling sleeve which engages with threads on the neck of a bottle, whereby the stopper may be securely and conveniently engaged with the mouth of the bottle and readily disengaged therefrom.

Referring to the drawings, A represents a bottle, the neck B of which is exteriorly screw-

threaded.

C represents a sleeve which is fitted on the neck B, and its inner face is threaded to en-

25 gage with the threads of said neck.

D represents a stopper, which, formed of elastic or flexible material, is connected with the top of a bail, E, the lower ends of the latter being pivotally attached to the sleeve C.

by rotating the sleeve, whereby the bail is raised and the stopper lifted from the mouth of the bottle. The bail is then swung outwardly, whereby the stopper is entirely removed from said mouth and the bottle may be overturned for discharging its contents. By returning the bail to an upright position and rotating the sleeve in reverse direction, said sleeve descends and presses the stopper forcibly on its seat on the mouth of the bottle, thus securely closing the bottle and preventing displacement of the stopper, it being noticed that

the operation of applying and removing the stopper is accomplished in a rapid and expeditious manner.

In order to increase the closing action of the stopper on the mouth of the bottle, the top edge thereof is recessed, as at a, and the stopper is secured to a plate or disk, F, to which the bail is attached. The under side of the 50 disk F has a V-shaped rib, a', which enters the upper face of the stopper, whereby when the stopper is compressed it is expanded laterally and forced into the recess a, whereby a tight and secure joint is produced.

In order to prevent rotation of the stopper and twisting action thereon, I connect the same with the bail by a pivot, G, the opposite ends whereof are headed to secure the parts, the shank of the pivot also passing through 60. the disk F. By this provision, when the stopper reaches its seat the subsequent rotation of the sleeve and bail does not cause rotation of the stopper.

Having thus described my invention, what I 65 claim as new, and desire to secure by Letters Patent, is—

1. A bottle with screw-threads on the exterior of its neck, a rising and falling sleeve with screw-threads on its interior engaging with 70 said threads of the neck, a swinging bail pivoted to said sleeve, and a stopper connected with said bail, combined and operating substantially as and for the purpose set forth.

2. A stopper of elastic or flexible material, 75 in combination with an attached disk having a rib, a', and the bottle formed on its top edge with a recess, a, substantially as and for the purpose set forth.

JAMES J. CHRISTIE.

Witnesses:
John A. Wiedersheim,

A. P. GRANT.