

W. G. WHITMAN.
Bottle Stopper.

No. 202,320.

Patented April 9, 1878.

Fig. 1

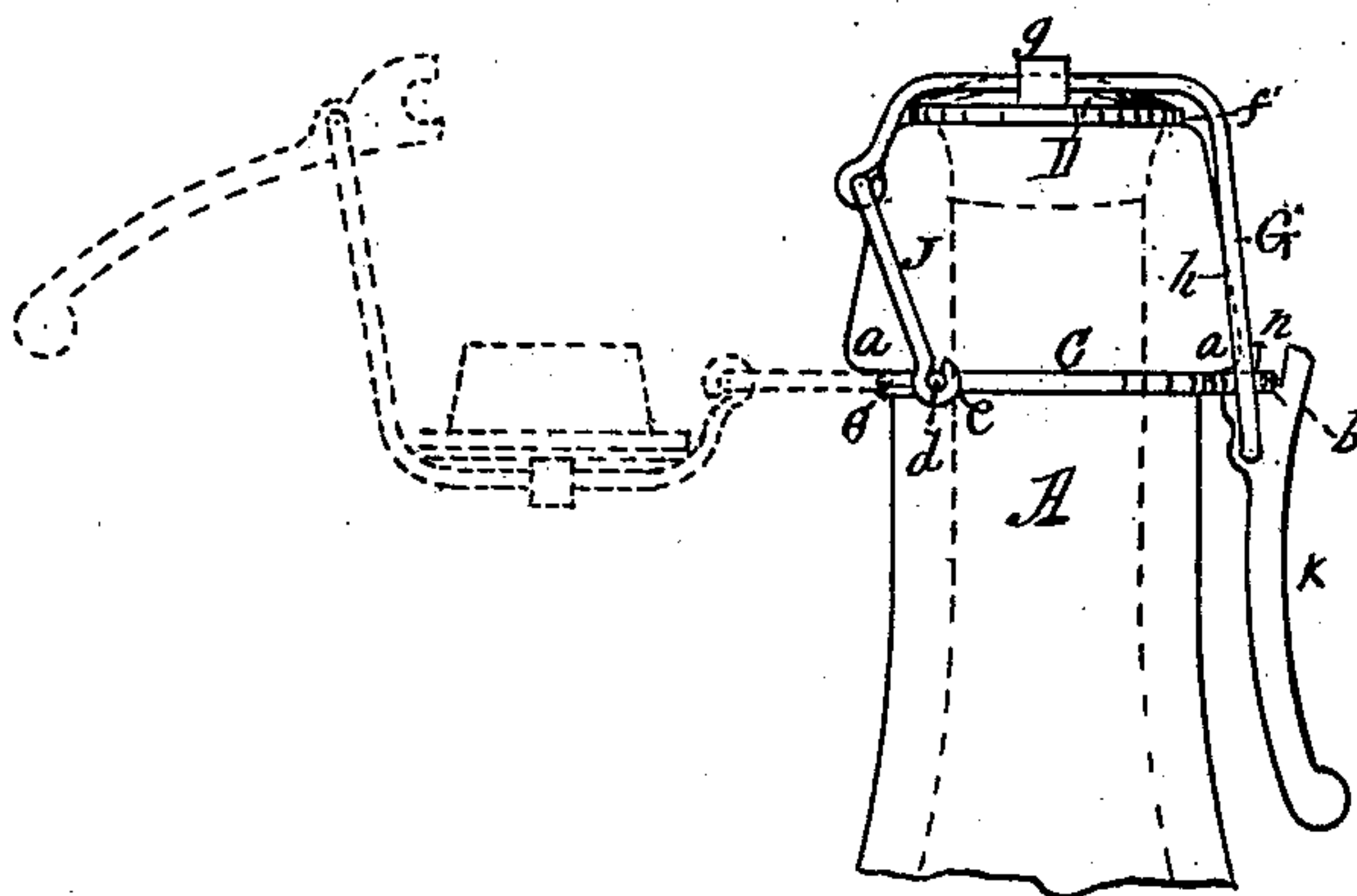


Fig. 2

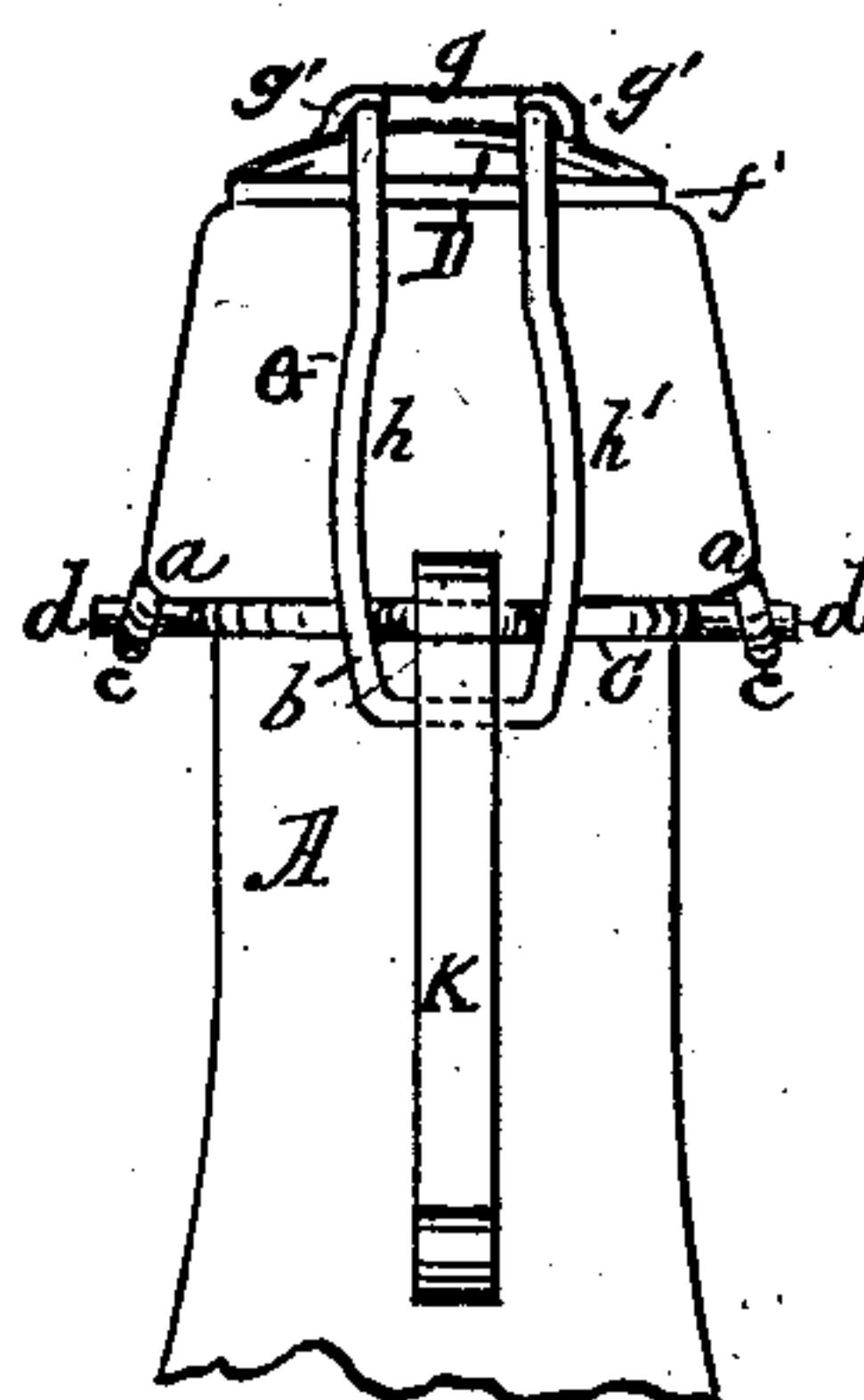


Fig. 3

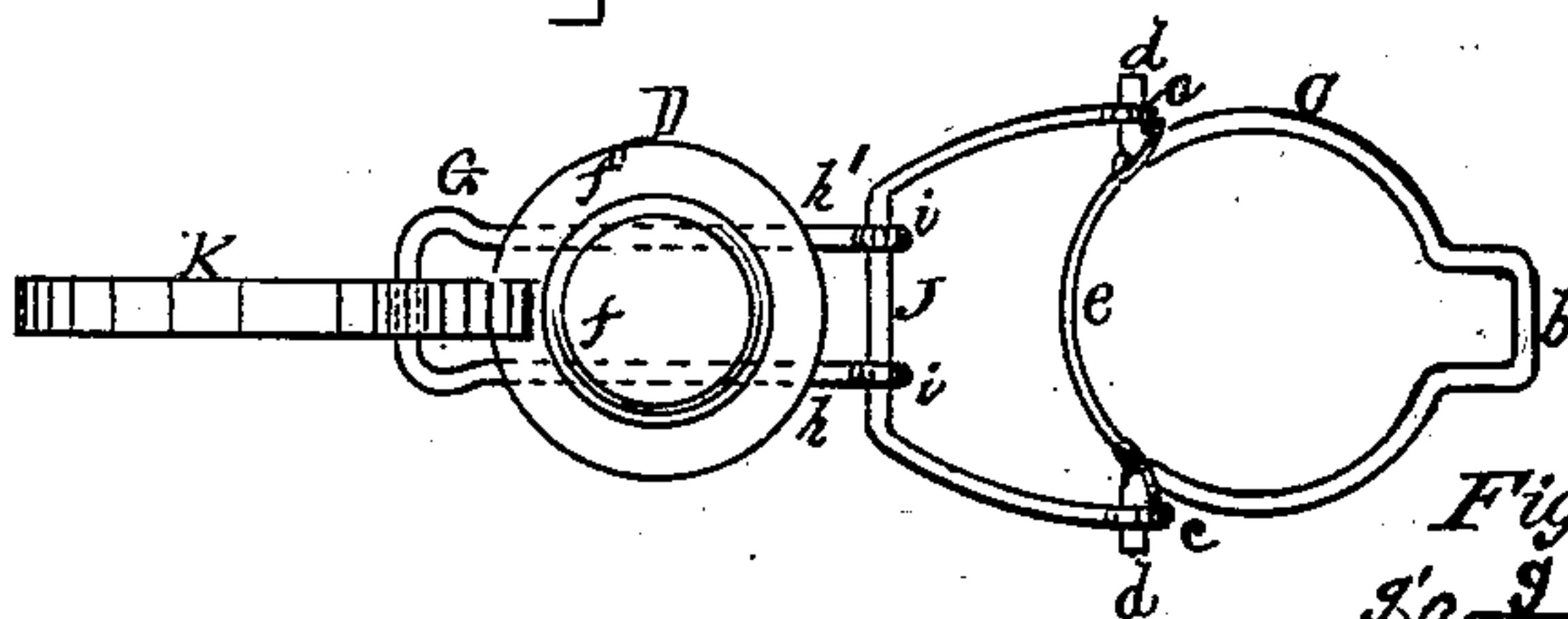
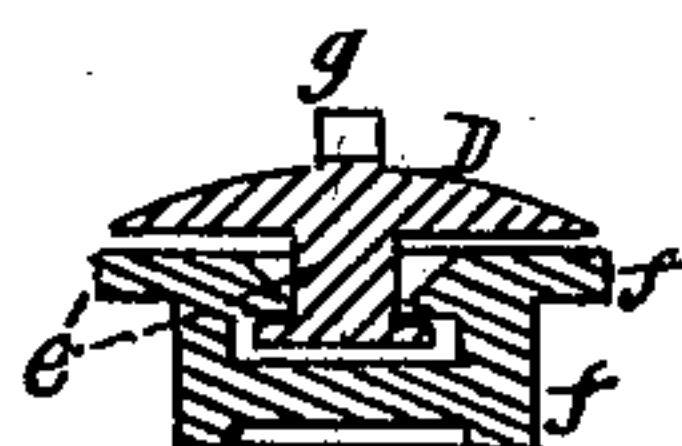


Fig. 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM G. WHITMAN, OF CHICAGO, ILLINOIS, ASSIGNOR OF A PART OF HIS RIGHT TO JOHN A. LOMAX AND MARTIN I. WHITMAN, OF SAME PLACE.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **202,320**, dated April 9, 1878; application filed May 25, 1877.

To all whom it may concern:

Be it known that I, WILLIAM G. WHITMAN, of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements on Bottle-Stoppers; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents the neck of a bottle with a bottle-stopper embodying my invention attached thereto, and showing a side elevation of the parts employed in adjusting the stopper. Fig. 2 represents an end elevation of the same. Fig. 3 represents an inverted plan of the stopper and parts employed in adjusting the stopper detached from the bottle. Fig. 4 represents a central section of the stopper detached from the bottle; and Fig. 5 represents a side view and construction of the metal stopper.

Like letters of reference indicate like parts.

The object of my invention is to simplify the construction of bottle-stoppers, and so as to render their adjustment to and from bottles quick and easy; and to that end my invention consists in the construction and arrangement of the several parts, as hereinafter more fully described and claimed.

In the drawing, A represents the neck of a bottle, which is provided at its upper end with a shoulder, *a*, of the ordinary construction. C is a wire loop or clasp of the proper size and shape to fit the neck of a bottle immediately under the shoulder *a*, and is bent at its ends so as to form lugs *d d*, which project laterally from the neck of the bottle, and is secured to the neck of the bottle by a wire link, *e*, attached at its ends to the lugs *d d*, as shown in Fig. 3.

The clasp C is bent on the side opposite to the link *e*, so as to form a stirrup, *b*, which projects laterally from the bottle.

D represents the stopper, which is made of metal, and provided on its lower surface with a depending lug, *e'*, and projecting button *e''*,

around which is secured a soft-rubber gasket, *f*, of proper diameter to closely fit the orifice in the bottle.

The gasket is provided at its upper end with a flange, *f'*, which rests upon the end of the bottle, as shown in Fig. 1, and so as to tightly close the orifice in the bottle.

The metal portion of the stopper is provided on its upper surface and at the center thereof with an upward-projecting rib, *g*, extending across the same, as shown in Fig. 2, and with upwardly-projecting lugs *g'* at a little distance from each end of rib *g*, or far enough to receive the side wire of the bail that passes over the stopper D; and when the wires of the bail are inserted in the space, the lugs *g'* are bent down over and upon the wires of the bail, and secures the bail in its proper position over and to the stopper, thus securing all the strength of the wire forming the bail to hold the stopper closed, without the expense of casting hinges or open holes in the stopper to hinge it to the stirrup.

G is an arc-shaped wire bail, made from a single piece of wire, and bent so as to form two parts, *h h'*, which pass through the rib *g*, and are permanently attached thereto on opposite sides of the center of the stopper, as shown in Fig. 2.

J is a connecting-link, which is also made from a single piece of wire bent in the form shown in Fig. 3, and passes through loops or eyes *i i* formed in the ends of the parts *h h'* of the bail, and is bent at each end to form an eye, *c*, through which the respective lugs *d d* of the clasp C loosely pass, as shown in Figs. 1 and 3.

K is the adjusting-lever, which is fulcrumed to the depending end of the bail G opposite the link J, as shown in Fig. 1, and is provided with a slot, *n*, formed in its upper end, and of the proper size to receive the stirrup *b* of the clasp.

The operation of my said improved bottle-stopper is as follows: The stopper proper is inserted within the orifice of the bottle when the lever is brought to a horizontal position to permit the stirrup to enter the slot *n*; the lever is then forced downward so as to rest

against the neck of the bottle, which causes the bail to be drawn firmly against the stopper, and so as to hold the stopper within the orifice of the bottle until the lever is raised sufficiently to disengage the stirrup from the slot.

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

In a bottle-stopper, the combination of the

metal stopper D, bail G passing and returning over the stopper and secured thereto, hinged at *i i* to link J, the opposite end passing through slotted lever K, the clasp C having stirrup *b*, and the connecting-link *e*, all constructed and operating as shown and described.

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Witnesses:

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