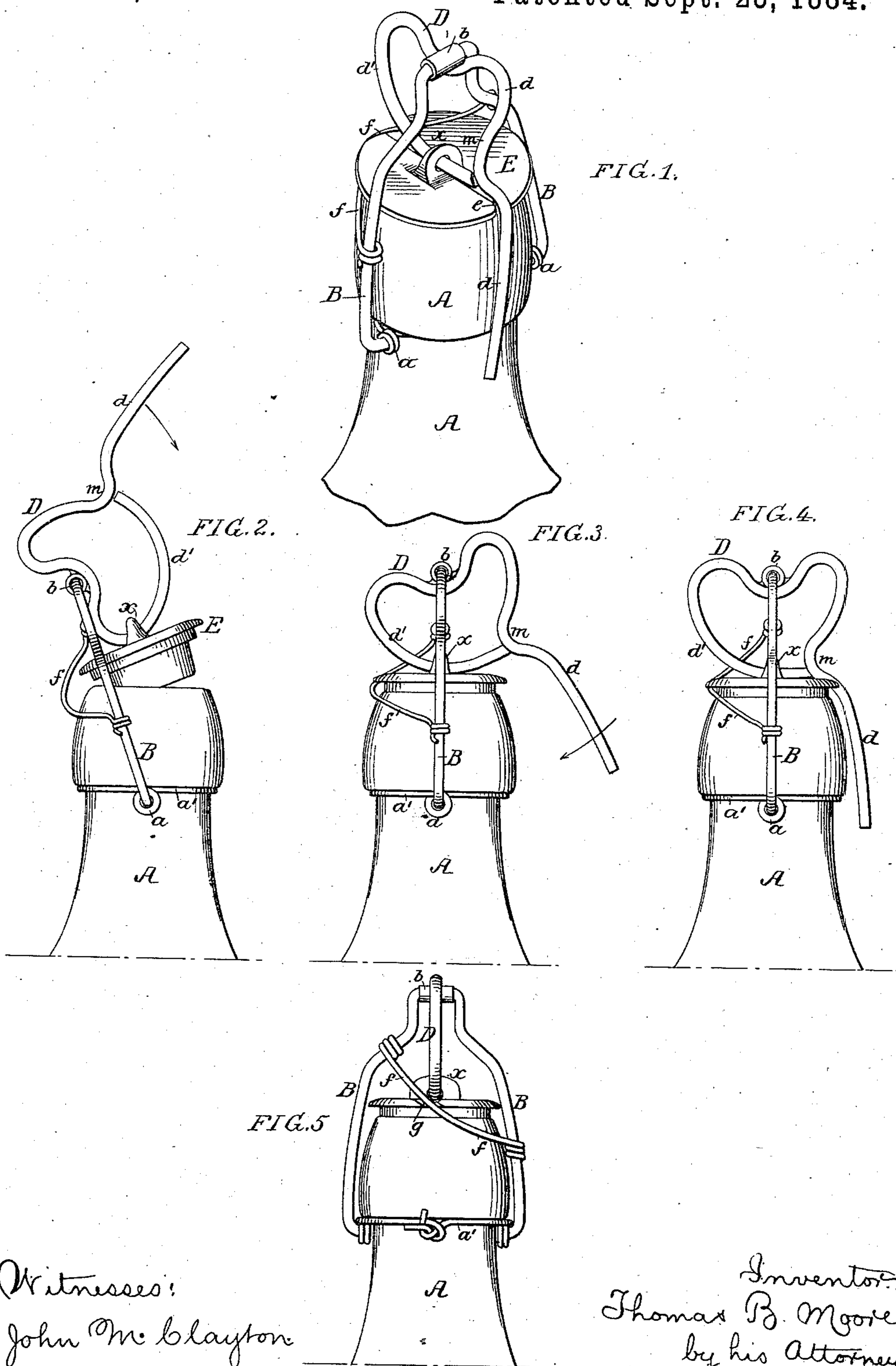


(No Model.)

T. B. MOORE.
BOTTLE STOPPER.

No. 305,704.

Patented Sept. 23, 1884.



Witnesses:
John McBlayton
James J. Tobin

Inventor:
Thomas B. Moore
by his Attorneys
Howen and Co

UNITED STATES PATENT OFFICE.

THOMAS B. MOORE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO W. HORACE BROADBENT, OF SAME PLACE.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 305,704, dated September 23, 1884.

Application filed July 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. MOORE, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Bottle-Stoppers, of which the following is a specification.

The object of my invention is to construct a bottle-stopper having a pressure-lever formed of a single wire, my invention comprising certain details in the construction of the stopper and lever, all as fully described and claimed hereinafter.

In the accompanying drawings, Figure 1 is a perspective view of part of the neck of a bottle with a stopper made in accordance with my invention; Figs. 2, 3, and 4, side views, showing the fastener in different positions; and Fig. 5 a front view of the stopper and fastener.

A represents the mouth and part of the neck of the bottle; E, the stopper adapted to the mouth, and B a yoke consisting of the usual bent wire hung to eyes *a* on the wire ring *a'*, which is confined to the neck below the shoulder formed by the mouth. To this yoke is adapted an eye, *b*, consisting of a bent plate soldered or otherwise secured to the compression-lever D, one arm, *d*, of which forms an operating-handle, the other arm, *d'*, being bent to form a cam, and being adapted to an opening in a lug, *x*, on the stopper E.

The lever D consists of a single wire; hence it must be heavy enough to resist the strains to which it is subjected in depressing the stopper, and wire of this thickness cannot be readily bent to form a pivot-eye. Therefore I adopt the plan of making the eye *b* of a separate plate and securing it to the lever.

In closing the bottle, the parts are first adjusted to the positions shown in Fig. 2, the stopper resting loosely in the mouth of the bottle. On depressing the arm *d* of the lever, as shown by the arrow, the yoke B will first be drawn into the vertical position shown in Fig. 3, further movement of the yoke being then arrested by the stop-wire *f*, which extends diagonally from one leg of the yoke to the other, and when said yoke assumes the vertical position shown in Fig. 3, enters a

notch, *g*, in the edge of the stopper. On continuing the movement of the lever, the cam-arm *d'* acts upon the stopper and forces the same tightly into the mouth of the bottle, the pivot-eye *b* now occupying a fixed position directly above the center of the stopper, so as to insure the proper action of the cam thereon. During the compressing movement the end of the arm *d'* bears upon the bent portion *m* of the arm *d*, which thus prevents the arm *d'* from springing by providing a rigid brace therefor. (See Fig. 3.)

When the bottle is closed, as shown in Fig. 4, the arm *d* of the lever D enters a notch, *e*, in the edge of the stopper, so that said arm *d* lies close to the mouth of the bottle, and is not liable to be struck and displaced by the handling of the bottle during transportation.

I claim as my invention—

1. The combination of the bottle, the stopper E, and the pivoted yoke B, with the eye *b* hung to said yoke, and the compressing-lever D, consisting of a bent wire secured to said eye *b*, as set forth.

2. The combination of the stopper, the pivoted yoke, and the compressing-lever D, having an eye, *b*, hung to the yoke, said lever being composed of wire bent to form an operating-arm, *d*, and cam *d'*, the latter having an end bearing on said arm *d*, as set forth.

3. The combination of the stopper, the pivoted yoke B, the compressing-lever D, hung thereto, and the stop-wire *f*, connected to the yoke and serving by contact with the stopper to limit the movement of said yoke, as specified.

4. The combination of the stopper having a notch, *e*, the pivoted yoke B, and the compressing-lever D, hung to the yoke and having an arm, *d*, which, when the bottle is closed, enters the notch *e* of the stopper, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS B. MOORE.

Witnesses:

JOHN M. CLAYTON,
HARRY SMITH.