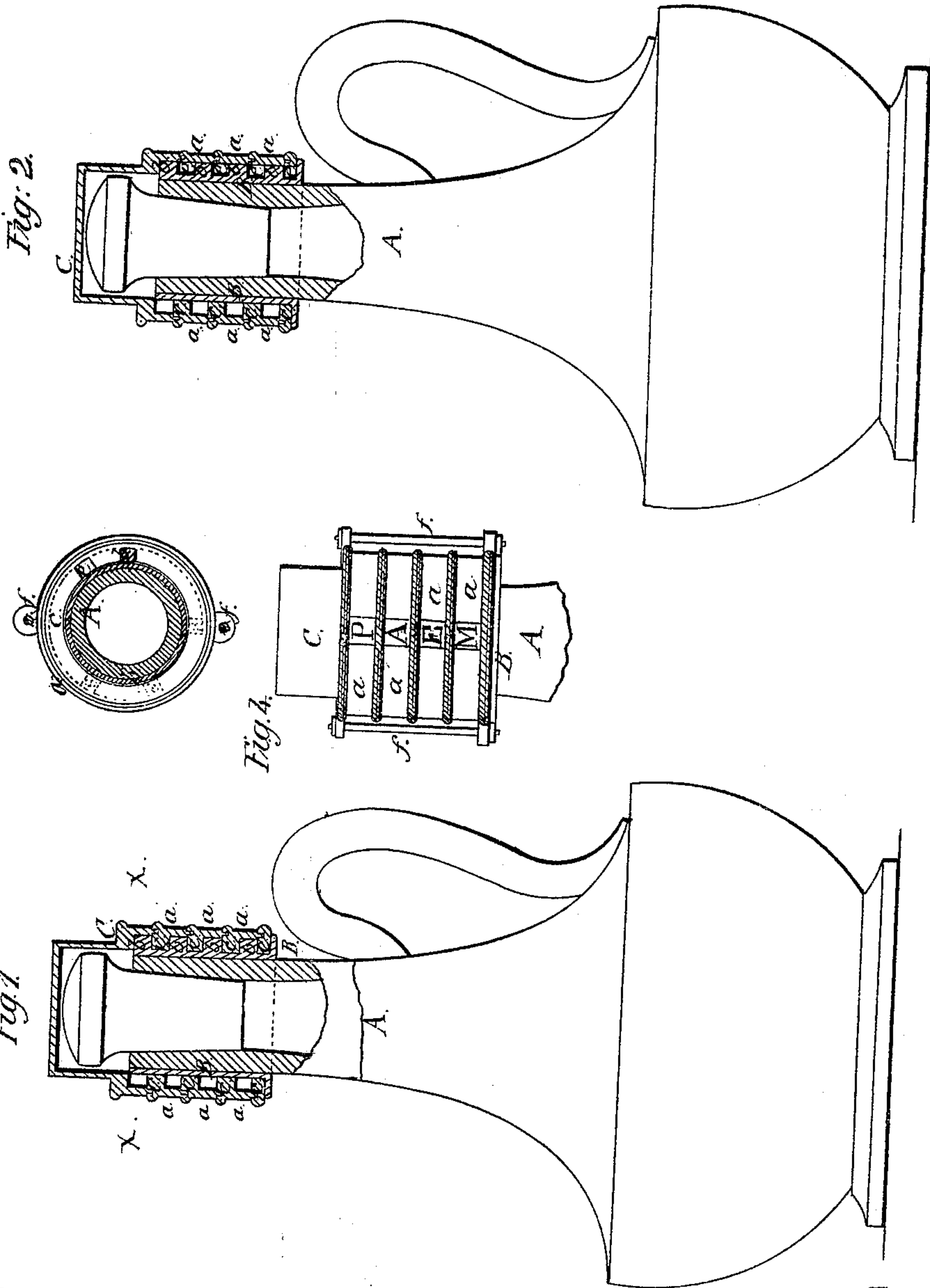


L. M. Ballera.

Locking Cap for Bottles.

N^o 99,221.

Patented May 18, 1869.



Witnesses:
Fred Hayes
J. M. Coombs

Inventor:

L. M. Ballera

United States Patent Office.

LEWIS M. BALLARD, OF NEW YORK, N. Y.

Letters Patent No. 90,221, dated May 18, 1869.

IMPROVED LOCKING-CAP FOR BOTTLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LEWIS M. BALLARD, of the city, county, and State of New York, have invented a new and improved Locking-Cap for Bottles, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form part of this specification.

This invention consists in a locking-cap, constructed upon the principle of what is known as a combination or permutation-lock, in part of a series of internally-flanged and notched movable rings, operating in combination with a series of fixed lugs upon the neck, or upon a collar permanently attached thereto, so that by the turning of said adjustable rings, after the cap has been placed upon the neck, the relative position of the notches with that of the fixed lugs is so changed as to effect the locking of the cap upon the neck, thereby preventing its removal until said relative position of the parts has been again established.

Referring to the accompanying drawings—

Figure 1 represents a vertical section of my improved cap applied to the neck of a bottle, and locked thereon;

Figure 2 represents a similar view of the same, but unlocked;

Figure 3 represents a horizontal section thereof, taken in the line *x x*; and

Figure 4 represents an exterior view of said cap while unlocked, taken at right angles to the other figures.

Similar letters of reference indicate corresponding parts in the several figures.

A represents a bottle, upon the neck of which is firmly secured a cylindrical sleeve, or collar B.

Said collar B is provided with a series of fixed lugs, *b*, arranged, one above another, at regular distances apart, and preferably in a perpendicular line.

Fitted over this collar B, and its lugs *b*, is a cylindrical cap C, having its upper and lower parts connected to each other by means of bolts *f f*, or otherwise.

Intervening between said upper and lower parts are

arranged adjustable rings *a*, fitted to each other and to the said upper and lower parts, as shown, and provided with inwardly-projecting flanges *c*, which fit easily around the said collar B.

Said flanges *c* have each formed in them a notch, *e*, large enough to pass over the lugs *b*, so as, by the passage of said notches over said lugs, to allow of the cap being passed over the stopper, and upon the said collar B.

When the cap C has been thus placed upon the said collar, it may be locked thereto, somewhat after the permutation-lock principle, or, in other words, by so turning the rings *a* as to cause the removal of the notches *e* from under the lugs, thereby bringing the solid portions of the flanges under the said lugs.

For unlocking the cap, or for rearranging the notches *e* under their respective lugs, the rings *a* are turned to the positions in which they were first arranged. For this, secret signs may be used, such as the combination of certain letters on the outside, forming, by the proper arrangement of the rings, some mystical word or words, as shown in fig. 4.

Any number and variety of letters or characters may be used in connection with the said combination, to serve as a blind to the uninitiated.

The lugs *b* may, when practicable, be formed on the neck of the bottle itself, thereby dispensing with the necessity of using the said collar B.

What I claim as my invention, and desire to secure by Letters Patent, is—

The locking-cap C, composed in part of or provided with a series of notched internally-flanged rings, operating on the principle of a combination or permutation-lock, in combination with lugs on the neck of a bottle, or other vessel, or upon a collar permanently attached thereto, substantially as and for the purpose herein described.

L. M. BALLARD.

Witnesses:

FRED. HAYNES,
J. W. COOMBS.