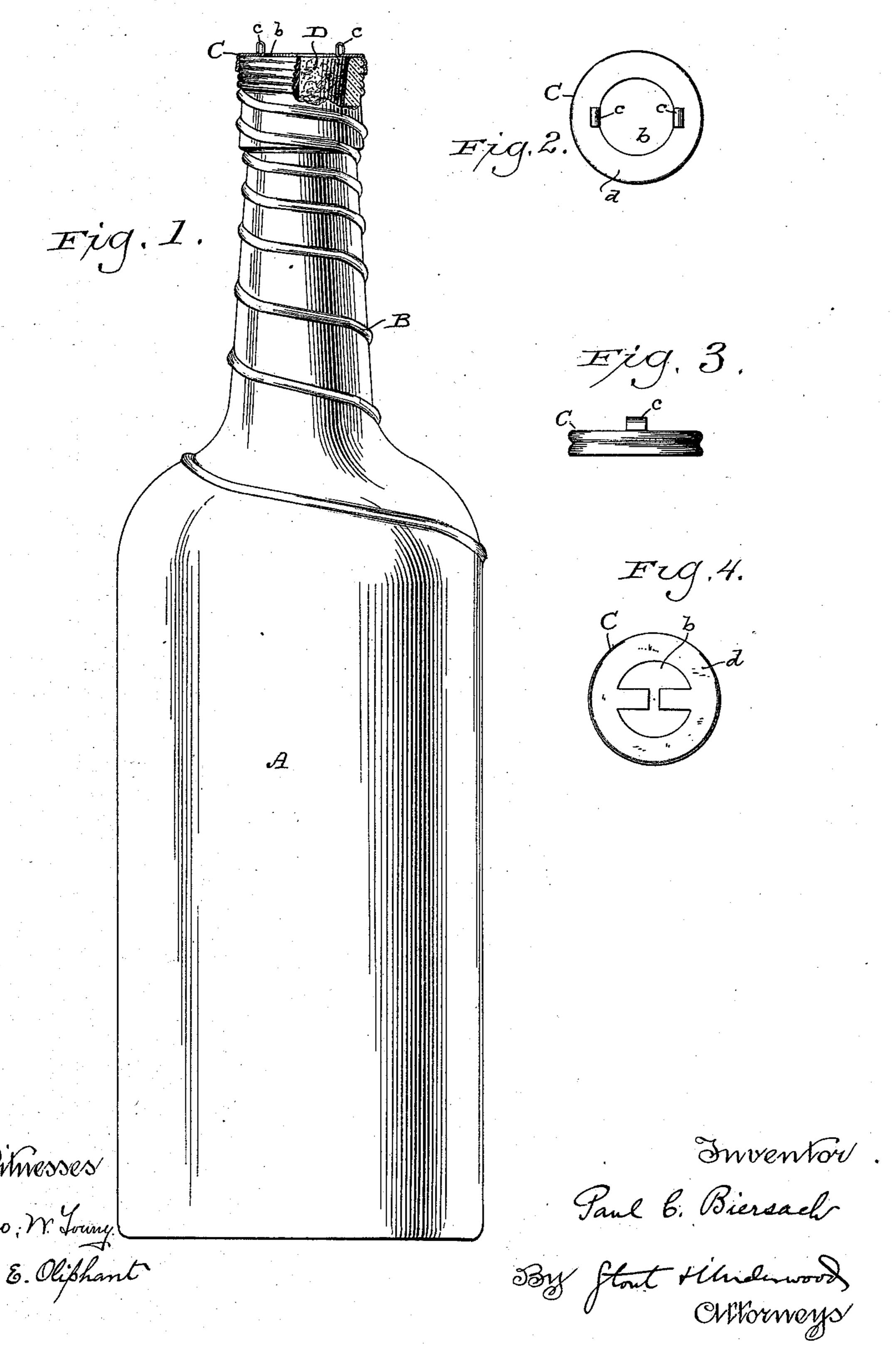
(No Model.)

## P. C. BIERSACH. COMBINED BOTTLE AND CORK CAP.

No. 413,892.

Patented Oct. 29, 1889.



## United States Patent Office.

PAUL C. BIERSACH, OF MILWAUKEE, WISCONSIN.

## COMBINED BOTTLE AND CORK-CAP.

SPECIFICATION forming part of Letters Patent No. 413,892, dated October 29, 1889.

Application filed July 1, 1889. Serial No. 316,222. (No model.)

To all whom it may concern:

Be it known that I, PAUL C. BIERSACH, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented cer-5 tain new and useful Improvements in a Combined Bottle and Cork-Cap; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to a combined bottle to and cork-cap; and it consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings and sub-

sequently claimed.

In the drawings, Figure 1 represents an elevation of the bottle partly broken away and surmounted by the cork-cap, the latter being in section; Figs. 2 and 4, plan views of the cap, and Fig. 3 a side elevation of the latter.

Referring by letter to the drawings, A represents a bottle having the neck thereof exteriorly provided with a spiral ridge B, that preferably begins at the shoulder of the bottle and winds upward, the coils of this spiral 25 ridge gradually contracting until, at the extreme upper end of said bottle, they lie close enough to one another to form a thread for engagement with a screw-cap C, the latter being preferably made from a single piece of 30 sheet metal and provided with just sufficient thread to permit of its making but one revolution with relation to the thread on the bottle-neck.

The top of the cap C is cut away to leave a 35 central opening b and diametrically-opposed tongues, as shown in Fig. 4, each of the latter being approximately equal in length to onehalf the diameter of said opening, the tongues being bent up and over to form open lugs c, 40 that serve to assist in the placing or removal of said cap. By cutting away the central portion of the cap-top an annular flange d is left, and this flange is of sufficient width to extend in for a certain distance over a cork 45 D, whereby the latter is firmly retained in place against any pressure that may come thereon from within the bottle.

The circular opening b in the cap C admits of a corkscrew being driven directly into the 50 cork, and in case the corkscrew is provided with lateral lugs at the upper terminus of the

screw portion thereof, as is frequently the case, these lugs will come against those on said cap to disengage the latter from the bottle and withdraw it with said cork. Other- 55 wise the cap can be readily removed by hand or by a suitable tool inserted in either or both

of said lugs.

The construction above described is particularly designed for bottles employed for 60 the purpose of containing fermented beverages, spirits, and other liquids that are corked under pressure or steamed, or both, the spiral ridge on the bottle-necks serving to strengthen the latter against the strain that comes thereon 65 during the process of corking and steaming, while at the same time the screw-caps serve to hold the corks in the bottles on a level with the upper ends of the latter, making it impossible for the heated fluids to drive said 70 corks out of their fixed position or to allow the escape of any gases from said bottles.

In addition to the advantages above described in connection with the spiral ridge on the bottle-neck, this ridge has the additional 75 advantage of preventing a bottle from slipping from the grasp when being handled, especially during the operation of drawing a cork, and while I have only shown said ridge as applied to the neck of a bottle, it may be 80 extended the entire length thereof should the latter construction be found desirable.

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

1. A bottle exteriorly provided with a spiral ridge contracted at the upper end of the bottle to form a thread and a screw-cap engaged by the thread, substantially as set forth.

2. A bottle having a screw-threaded neck 90 and a cap for engagement with said neck cut away to leave a central opening and diametrically-opposed tongues, the latter being bent up to form lugs, substantially as set forth.

3. A bottle having a screw-threaded neck 95 and a cap for engagement with said neck cut away to leave a central opening and diametrically-opposed tongues, the latter being bent up and over to form open lugs, substantially as set forth.

4. A bottle having an exterior spiral ridge contracted at the upper end of the bottle to

100

form a thread and a screw-cap having the top thereof cut away to leave a central opening and diametrically-opposed tongues, the latter being bent up and over to form open lugs, 5 substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in

the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

PAUL C. BIERSACH.

Witnesses:

N. E. OLIPHANT, WM. KLUG.