

(No Model.)

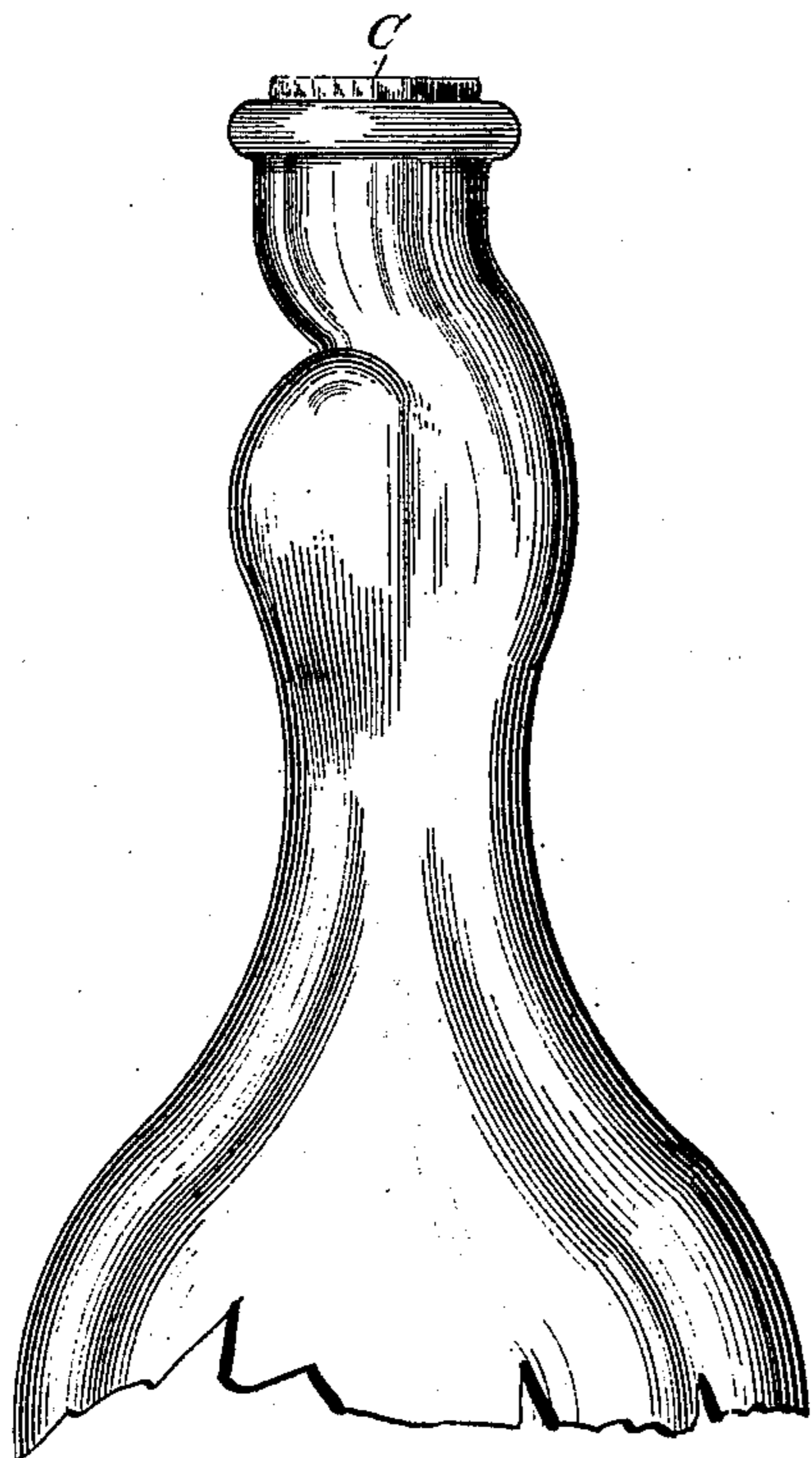
P. ENGLAND.

BOTTLE.

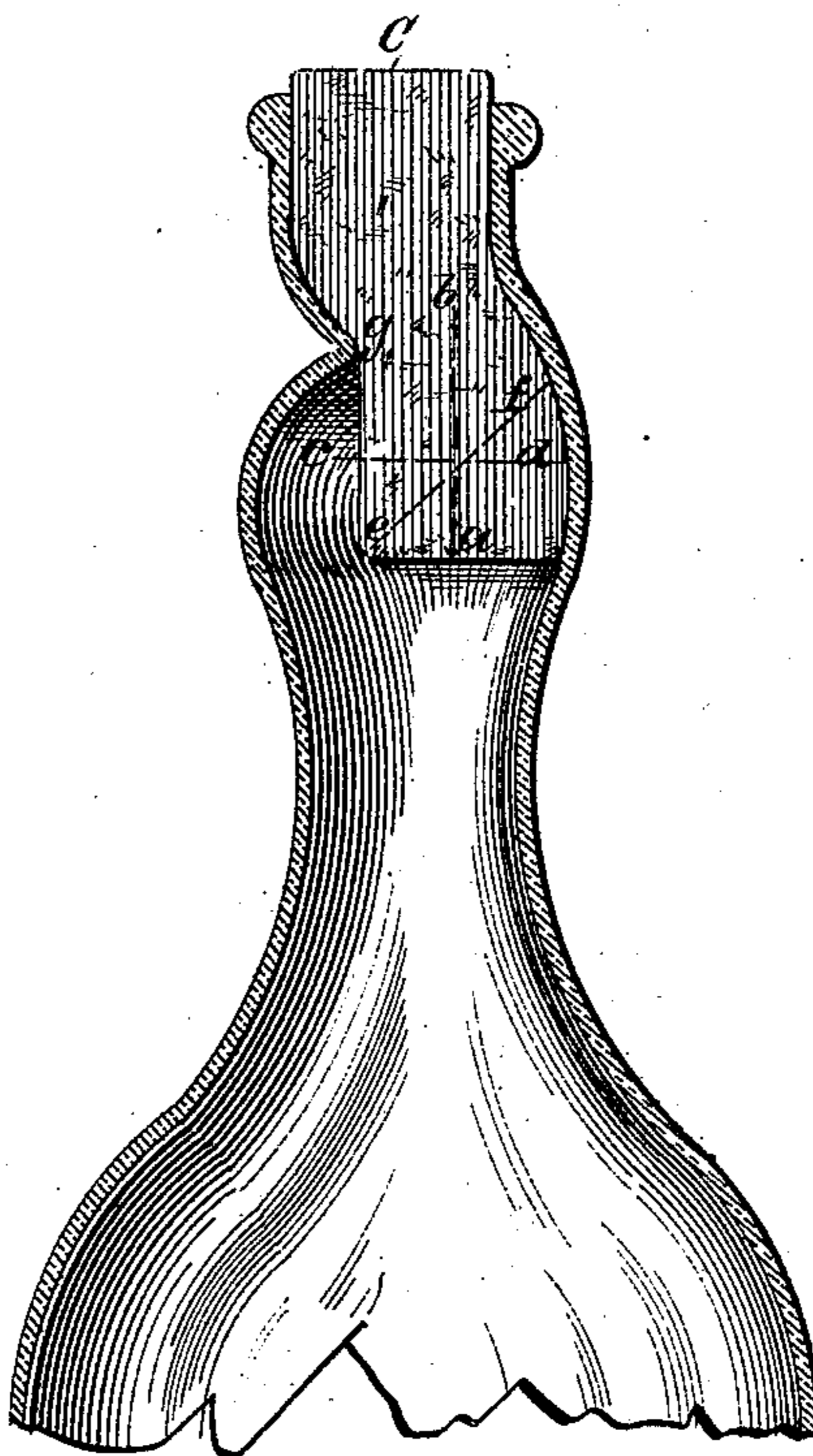
No. 357,073.

Patented Feb. 1, 1887.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*Fred G. Dieterich*  
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# UNITED STATES PATENT OFFICE.

PAREN ENGLAND, OF ASPEN, COLORADO.

## BOTTLE.

SPECIFICATION forming part of Letters Patent No. 357,073, dated February 1, 1887.

Application filed December 2, 1886. Serial No. 220,487. (No model.)

*To all whom it may concern:*

Be it known that I, PAREN ENGLAND, of Aspen, in the county of Pitkin and State of Colorado, have invented a new and useful Improvement in Bottles, of which the following is a specification.

My invention relates to certain improvements in bottles designed, mainly, to hold the cork in more securely against the expulsive force of gases within without the employment of wires, caps, bails, or other fastenings.

It consists in the peculiar construction of the neck of the bottle, whereby the expulsive force of the gases in the bottle is made to act upon the cork in a direction in which it has little or no tendency to force the cork out.

I will now proceed to describe my invention with reference to the accompanying drawings, in which—

Figure 1 is a side view of the bottle-neck, and Fig. 2 a central longitudinal section of the same.

In forming the bottle its neck is constructed with a bend or swell, *d f*, on one side, and just opposite this bend or swell on the other side is formed a sharp inward bend, *g*, and a bulge, *e*, which bulge increases the transverse dimensions of the neck to a greater width than is filled by the cork.

*C* is the cork, which is of the usual construction, but preferably rendered tough and elastic by soaking or otherwise, so as to enable it to easily follow the curves of the throat in which it is seated. This cork, when inserted, passes throughout its entire length in contact with the side of the bottle-neck on the right, while on the left said cork is in contact with the bottle-neck only from the point *g* to the mouth of the bottle, so that below the point *g* the side of the cork is exposed to the pressure of gases within the bottle for nearly half its length.

The merit of my invention is as follows: When the cork is inserted, the pressure of gases in the bottle acting upon the end *a* of the cork tends to force the cork out in the direction of line *a b*. The pressure on the exposed side of the cork tends to force it in the direction of the line *c d*, and these two directions of pressure give the resultant line of pressure *e f*, which, it will be seen, bears such a relation to the curved side of the bent neck at *f* as to have little or no effect in forcing the cork out on account of friction and the change in the direction of pressure. With this form of bottle-neck and the ordinary form of cork fermentable or malt liquors may be bottled and retained without special forms of stoppers or stopper-fastenings. The bottle-neck is also easily blown into this shape, and, as the mouth is in alignment with the neck, no difficulty is experienced in cleaning the bottles or in packing the same.

That crooked portion of the bottle-neck which receives the cork I call the "cork-seat," and when the cork is inserted it is deflected or distorted from a true axial line in conforming to its seat.

Having thus described my invention, what I claim as new is—

1. A bottle having a bend or swell in its neck on one side and upon the other an inward projection, *g*, with a bulged or enlarged chamber beneath it, substantially as and for the purpose described.

2. The combination of a bottle having a crooked cork-seat and a cork inserted therein and bent or distorted out of its straight axial line to conform to said seat, substantially as shown and described.

PAREN ENGLAND.

Witnesses:

W. W. COOLEY,

E. STUART WHITEHEAD.