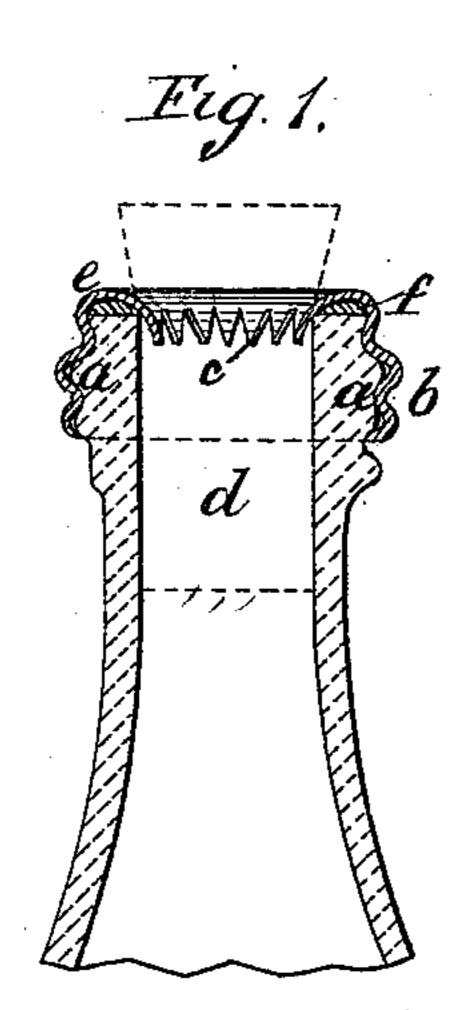
(No Model.)

## E. WOODHAM & P. OCKENDEN.

BOTTLE STOPPER.

No. 359,373.

Patented Mar. 15, 1887.



Erg. 3.

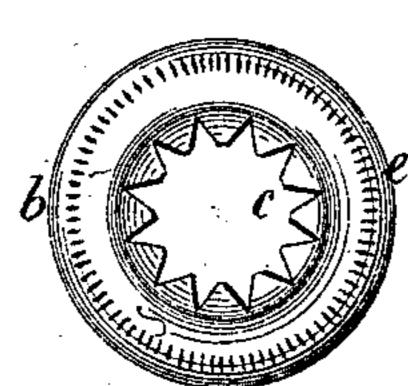
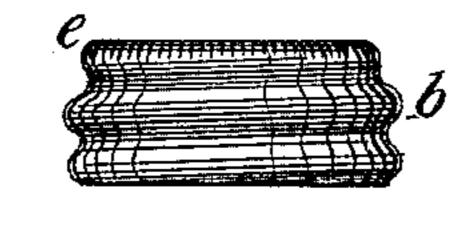


Fig. 2



Witnesses. Jakutherford

Ahrt Graetts

Inventors,
Edwin Woodham
Pierce Ockenden,
By Janus L Norns.

## United States Patent Office.

EDWIN WOODHAM, OF HANBURY STREET, MILE END, AND PIERCE OCKENDEN, OF LONDON WALL, COUNTY OF MIDDLESEX, ASSIGNORS TO ROBERTS & SON, OF LONDON, ENGLAND.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 359,373, dated March 15, 1887.

Application filed January 20, 1887. Serial No. 224,898. (No model.) Patented in Eng'and December 7, 1885, No. 15,015.

To all whom it may concern:

Be it known that we, EDWIN WOODHAM and PIERCE OCKENDEN, citizens of England, residing, respectively, at Hanbury Street, Mile 5 End and London Wall, both in the county of Middlesex, England, have invented a new and useful Improvement in Stoppers for Bottles, (for which we have obtained a patent in Great Britain, dated December 7, 1885, No. 15,015,) of which the following is a specification.

This invention relates to means of stoppering bottles, particularly such as contain aerated liquor, by applying a cork in combination with a cap so arranged as to retain the cork in its place notwithstanding internal pressure acting on it, and to facilitate the extraction of the cork without requiring a corkscrew, as will be explained with reference to the accompanying drawings.

Figure 1 is a vertical section of a bottle-neck stoppered according to our invention. Fig. 2 is a side view, and Fig. 3 is a plan of the cap.

The top of the bottle-neck has formed on it a screw-thread, a, preferably of rounded form, as shown. The cap, which may be of thin metal, is made with a corresponding thread, b, and with a central hole, which has its edge serrated or toothed, as shown at c, the inwardly-projecting teeth or serrations being bentalittledownward. The cap being screwed

on the bottle-mouth, a cork (indicated by the

dotted lines d in Fig. 1) is driven in. In entering it freely passes the bent-down teeth c; 35 but these act as barbs, preventing the cork from being forced out again by internal pressure. When it is desired to open the bottle, the cap is unscrewed, the cork coming with it. The upper edge, e, of the cap is preferably milled 40 to give better hold for screwing and unscrewing. A cork washer, f, may be placed under the cover of the cap.

Having thus described the nature of this invention and the best means we know for car- 45 rying it out in practice, we claim—

A bottle-stopper consisting of a cork and cap, the cap being made with a screw-thread to fit a thread on the exterior of the bottle-mouth, and with a central serrated hole through 50 which the cork is forced, substantially as and for the purposes herein set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 6th day of Jan- 55 uary, A. D. 1887.

EDWIN WOODHAM. PIERCE OCKENDEN.

Witnesses:

OLIVER IMRAY,

Patent Agent, 28 Southampton Buildings, W. C. JNO. P. MILLARD.

Clerk to Messrs. Abel & Imray, Consulting Engineers and Patent Agents, 28 Southampton Buildings, London, W. C.