

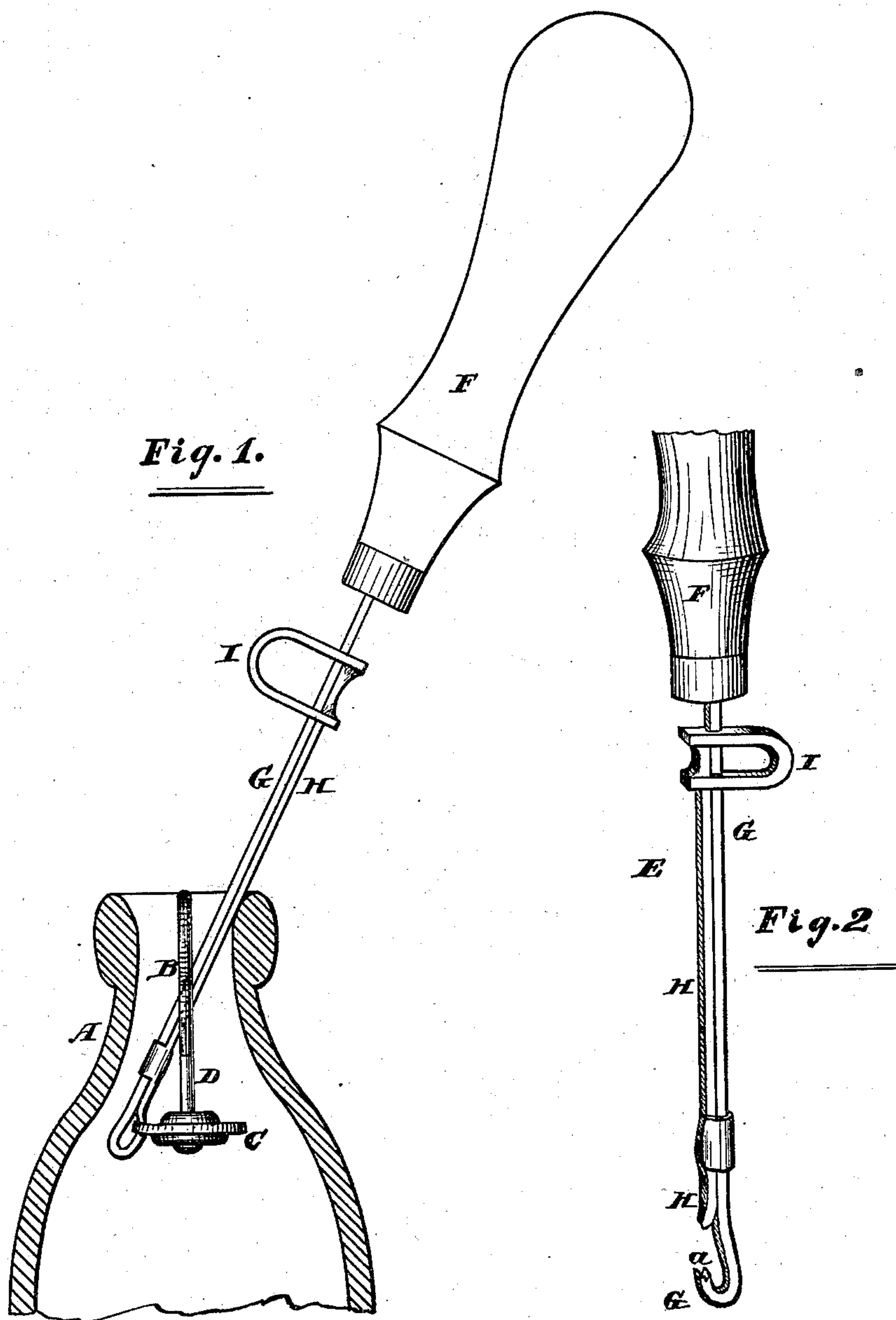
(No Model.)

R. OTTEN.

Tool for Removing Rubber Disks from Internal  
Bottle Stoppers.

No. 238,958.

Patented March 15, 1881.



Attest:

*W. L. Baker*  
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INVENTOR:

*Richard Otten.*

By *F. F. Warner, his*  
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# UNITED STATES PATENT OFFICE.

RICHARD OTTEN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
CHARLES G. HUTCHINSON, OF SAME PLACE.

TOOL FOR REMOVING RUBBER DISKS FROM INTERNAL BOTTLE-STOPPERS.

SPECIFICATION forming part of Letters Patent No. 238,958, dated March 15, 1881.

Application filed August 12, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD OTTEN, of Chicago, in the county of Cook and State of Illinois, have invented a new, useful, and Improved Tool for Removing the Rubber Disks or Valves from the Stems of Internal Bottle-Stoppers, of which the following, in connection with the accompanying drawings, is a specification.

In the drawings, Figure 1 is a representation of an implement embodying my invention, showing the position of the tool with relation to the disk or valve of the stopper when the tool is in position for the use for which it is intended, and Fig. 2 is a perspective of the tool.

Like letters of reference indicate like parts.

A large class of bottle-stoppers contain a rubber disk or valve confined between metallic disks on or near the lower end of a stem, the lower of the metallic disks being the larger, so that the stopper may be easily arranged in the neck of the bottle, but prevented from being withdrawn except by being wholly pushed into the bottle and turned over or reversed in position. These rubber disks or valves frequently become worn or injured, while the remaining part of the stopper continues perfect, and hence it is often desirable to remove the old rubber disk or valve and apply a new one. Also, when the rubber disk or valve is removed the stopper may be easily drawn up out of the neck of the bottle without being first wholly thrust into the bottle and then turned over or reversed for that purpose.

The object of my invention is to furnish a simple and convenient tool whereby the rubber disk or valve may be removed with facility from the class of stoppers referred to while the stopper is in its proper position in the neck of the bottle; and to that end my invention consists of a tool or implement substantially such as hereinafter described, and adapted to the purpose set forth.

A represents the neck or upper part of a bottle, and B is a bottle-stopper of the class referred to. C is the rubber disk or valve, and D is the stem. E is the tool which embodies my invention. F is the stock or handle of the tool. G is a shank or slender metallic bar made hook-shaped on its lower end, the extreme end having thereon, by preference, the small spurs *a a*. H is a sliding bar applied to the bar G, and carrying on its upper end or portion the projection I. The lower end of the bar H sets out slightly from the bar G, as shown, and may also be spurred.

In order to use this tool for the purpose for which it is intended, I insert it into the neck of the bottle and arrange the end of the hook against the under side of the disk or valve C, and then push the slide H down firmly against the upper side of the said disk, as indicated in Fig. 1. The slide H may be very easily manipulated and controlled by placing the thumb on the part I while the tool is held in the hand. When the tool is thus applied to the disk or valve C the latter, as will be perceived, will be very firmly grasped or seized near its edge, and a quick or sudden jerk or twitch will draw the disk or valve from between the metallic disks on the stem. The valve may then be entirely withdrawn with ease, after which the remaining part of the stopper may be drawn up out of the neck of the bottle with facility.

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

The tool E, containing the fixed jaw or nippers G, and the sliding jaw H, having thereon an extension or thumb-piece, all adapted and arranged for operation together substantially as and for the purposes specified.

RICHARD OTTEN.

Witnesses:

J. B. RYAN,  
OTTO E. LE GROS.