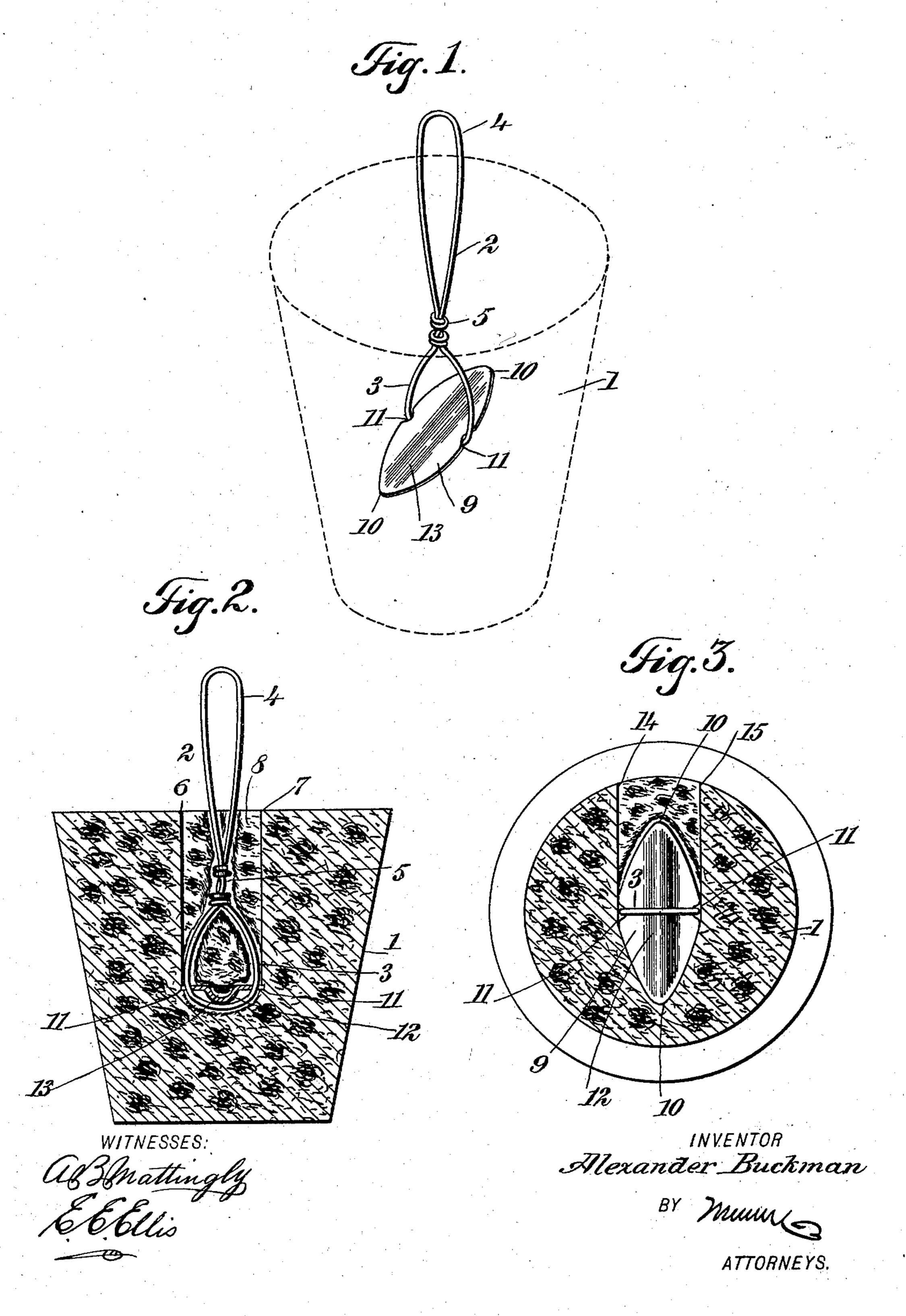
## A. BUCKMAN. BOTTLE STOPPER. APPLICATION FILED MAY 9, 1903.

NO MODEL.



## United States Patent Office.

ALEXANDER BUCKMAN, OF BROOKVIEW, NEW YORK, ASSIGNOR OF TWO-THIRDS TO HARRY E. COLE AND FRANK H. MCKNIGHT, OF NEW YORK, N. Y.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 748,161, dated December 29, 1903. Application filed May 9, 1903. Serial No. 156,486. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER BUCKMAN, a citizen of the United States, and a resident of Brookview, in the county of Rensselaer 5 and State of New York, have invented a new and Improved Bottle-Stopper, of which the following is a full, clear, and exact description.

This invention relates to bottle-stoppers; and it consists, substantially, in certain parts 10 and details and combinations thereof, as hereinafter particularly described and claimed.

Though applicable to nearly all forms of bottles employing a cork or similar stopper, my improvements are intended more espe-15 cially for use in connection with beer and similar bottles, as well as medicine-bottles and the like; and one of the principal objects of my invention is to provide a cork or similar bottle stopper with means perma-20 nently applied thereto by which the stopper may be readily extracted from the mouth of the bottle or other vessel without the use or aid of a corkscrew for that purpose.

A further object of the invention is to pro-25 vide a bottle-stopper of the character referred to which is simple in its general construction or embodiment, as well as comparatively inexpensive to manufacture, besides being effective and reliable in operation and also possess-30 ing the capacity for long and repeated service.

A still further object is to provide a device of this kind which is not liable to get out of order and one also which is easily applied and which comprises but few parts, of compact or-35 ganization.

The above and additional objects are attained by means substantially such as are illustrated in the accompanying drawings, in which similar characters of reference indicate 40 corresponding parts in all the views.

Figure 1 is a view in perspective of my improved extracting device for a cork or similar bottle stopper, the stopper to which the said device is applied being shown in dotted 45 lines in said figure. Fig. 2 is a vertical sectional view of an ordinary cork stopper for bottles, showing my improved extracting device for the stopper as secured in place within the cork by means of my improved anchor 50 or locking device for the said extracting de-

vice; and Fig. 3 is a sectional bottom plan view illustrating the anchor or locking device for the extracting device from the under side thereof, showing more clearly the form or construction of the said anchor or locking 55

device.

Before proceeding with a more detailed description it may be stated that in the form or embodiment of my improvements herein shown I preferably employ a cork stopper, al- 60 though I may use a rubber stopper, if desired, and in connection with the stopper I employ an extracting device or "pull" for the stopper, which is inserted vertically within the body of the latter to a suitable depth, the said 65 extracting device or pull being of special construction, and combined therewith is an anchor or locking device, also of special construction, which securely maintains the said extracting device or pull in the intended re- 7c lationship thereof with the stopper. The embodiment is such that in the use of my improved stopper it is impossible for the contents of the bottle to be contaminated or spoiled by contact with metallic portions of 75 the device, as will be apparent, and while I have herein represented my improvements in a certain preferred embodiment it should be understood, of course, that I am not limited to the precise details thereof in practice, 80 since immaterial changes therein may be resorted to coming within the scope of my invention.

Specific reference being had to the accompanying drawings by the designating char- 85 acters marked thereon, 1 represents an ordinary cork stopper for a bottle or other similar vessel, and 2 designates my improved extracting device or pull for the stopper in entirety. The said device may be constructed in differ- 90 entways; but I prefer to form the same of practically a single piece of wire of suitable length or dimensions, which is so twisted or bent as to form an eye or loop 3 and a bail or handle 4, these two elements being connected by an 95 intermediate twisted section 5, which imparts considerable strength of resistance to the device in the application of a sufficient amount. of force necessary to extract the stopper from the bottle. As thus constructed I apply the 100

extracting device to the stopper by inserting the eye or loop 3 within the stopper to a suitable depth from the upper end of the latter, this depth also being preferably such as to 5 cause the twisted section 5 of the device, as well as the inner portion of the bail or handle 4 thereof, to be also contained within the body of the cork, substantially as indicated in Fig. 2, since in this way considerable pur-10 chase is obtained, as is apparent. To thus insert the said eye or loop within the stopper, I may employ any suitable means, such insertion in the present instance having been effected by a suitable implement, (not shown,) 15 the parallel lines 6 and 7, (see Fig. 2,) shown as extending partly through the cork vertically, indicating substantially the width of the incision formed by the implement; but on withdrawal of the latter after insertion of · 20 the said eye or loop the material of the stopper immediately closes together, substantially as indicated at 8, and due to this circumstance alone the extracting device or pull is made quite fast to the stopper.

25 To absolutely guard against the extracting device pulling out or separating from the stopper, I preferably employ an anchor or locking device 9 for engaging the eye or loop 3 within the body of the stopper, such anchor or lock-30 ing device in the present instance being constituted of substantially an elliptical plate having each of its ends tapered at 10, by which to facilitate the insertion of the anchor within the body of the cork or other stopper from 35 either side thereof in such manner as to pass through the eye or loop 3 of the extracting device proper, and thereby prevent this device from being separated from the cork, as is apparent. In order to secure an effective 40 coöperative relationship between the extracting device proper and the said anchor or locking device 9, I preferably form a notch 11 in each edge of the latter at substantially the longitudinal center thereof, the sides of which 45 notches are engaged by opposite portions of the said eye or loop 3, as is clearly indicated in Figs. 3 and 4, such engagement being accomplished by first inserting the anchor or locking device through the side of the stopper 50 at somewhat of an inclination or angle and then turning the same to substantially a true horizontal position. To overcome any liability to separation of the anchor or locking device from its described engagement with 55 the eye or loop 3, such as might happen in the event of the anchor or locking device turning within the body of the cork relatively to said eye or loop, I preferably construct the anchor or locking device with a longitudinal

the anchor at 13, substantially as shown in 65 Figs. 2 and 3. This anchor or locking device is inserted within the body of the cork or rubber stopper from either side thereof,

60 rib 12 on the under side thereof, which rib

may be a simple projection from the under

surface of the anchor, but, as herein shown,

is formed by depressing the upper surface of

as already mentioned, and in substantially the same manner as the said extracting device proper is inserted. In this connection 70 the parallel lines 14 and 15, (shown in Fig. 3,) indicate the width of the incision made by the inserting implement, the material of the body of the cork again expanding, however, and filling up the incision or space formed by 75 the implement after the latter is withdrawn.

From the foregoing it will be seen that I have constructed a combined stopper and extracting device for bottles possessing advantages over former devices heretofore devised 80 for a similar purpose, and it is thought the construction and organization of parts, as well as the operation thereof, will be fully understood without further explanation. It will also be seen that, due to the resilient nature 85 of the cork or material constituting the body of the stopper, both the eye or loop 3 and the said anchor or locking device therefor become firmly embedded within the stopper, the depression in the upper surface of the anchor 90 or locking device becoming so filled with the said cork or material of the stopper as to form interlocking engagement therewith, and thus prevent this device from turning or rocking in either direction.

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

1. A bottle-stopper of cork or the like, comprising a permanently-applied extracting device therefor, constructed with an eye or loop inserted within the stopper to a suitable depth from its upper end, and an anchor device for said loop, inserted in the body of the stopper from the side and constructed in its upper surface with a longitudinal depression, forming a longitudinal rib on its under surface.

2. A bottle-stopper of cork or the like, comprising a permanently-applied extracting device therefor, constructed with an eye or loop inserted within the stopper to a suitable depth from its upper end, an anchor device for said loop, inserted in the body of the stopper from the side, and constructed in its upper surface with a longitudinal depression, forming is a longitudinal rib on its under surface, said extracting device being formed with a bail or handle, and a twisted connecting portion between the latter and the said loop.

3. A bottle-stopper of cork or the like, comprising a permanently-applied extracting device therefor, constructed with an eye or loop inserted within the stopper, to a suitable depth from the upper end thereof, and an anchor device for said loop, formed in opposite edges 125 thereof with notches which are engaged by portions of the loop.

4. A bottle-stopper of cork or the like, comprising a permanently-applied extracting device therefor, constructed with an eye or loop 130 inserted within the stopper to a suitable depth from the upper end thereof, and an anchor device inserted in the body of the stopper from the side and entering and engaging the loop,

said anchor device being provided with means for preventing the same rocking or turning in the body of the stopper on applying force

to extract the latter from a bottle.

5. A bottle-stopper of cork or the like, comprising a permanently-applied extracting device therefor, constructed with an eye or loop inserted within the stopper to a suitable depth from the upper end thereof, and an anchor deto vice inserted in the body of the stopper from the side and entering and engaging the loop,

said device being tapered at the ends and formed on its upper and lower sides, respectively, with a longitudinal depression and a longitudinal rib or projection.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

ALEXANDER BUCKMAN.

Witnesses:

JOHN W. McKnight, JOHN SEE.