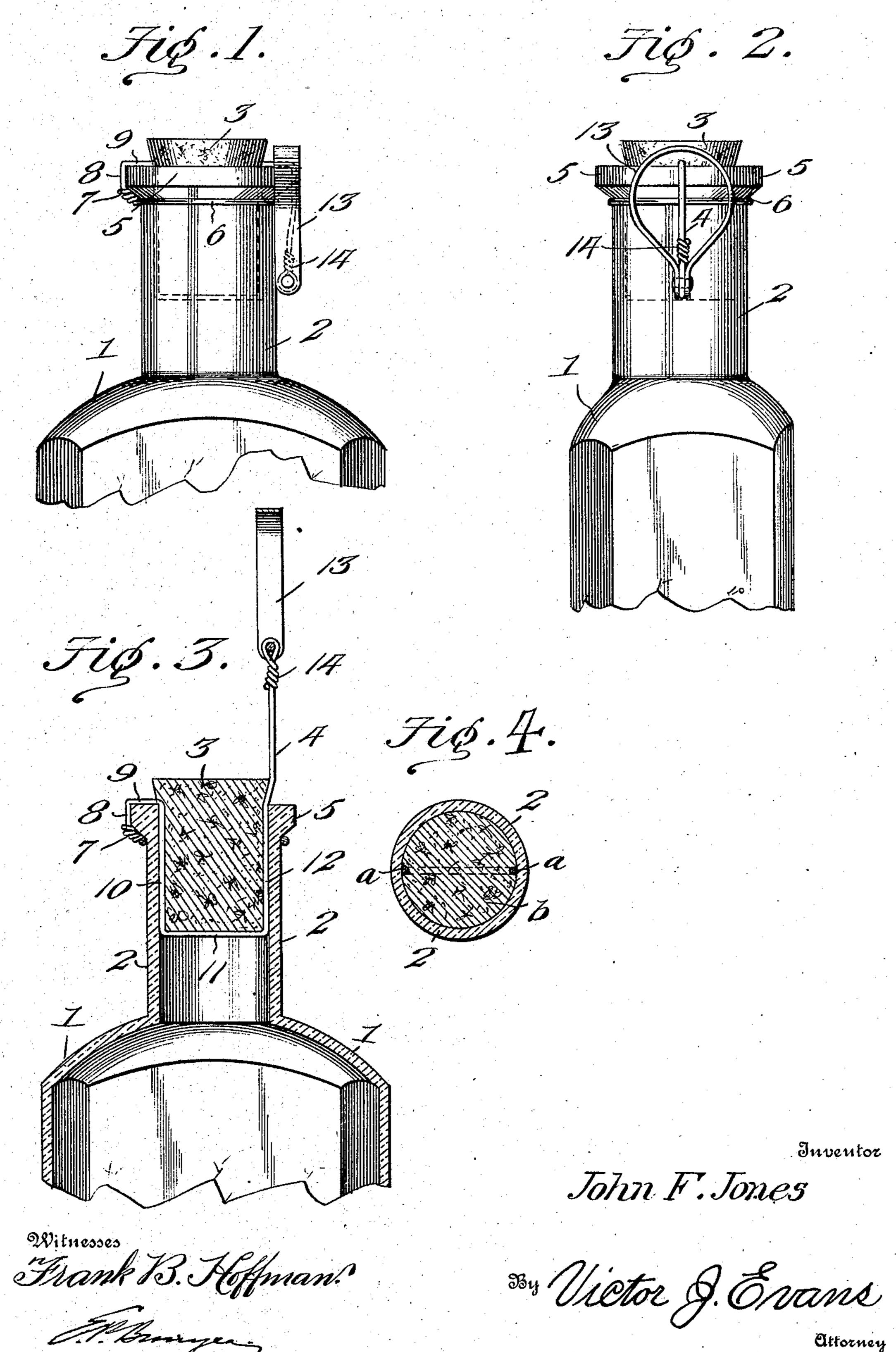
## J. F. JONES. BOTTLE STOPPER EXTRACTOR.

APPLICATION FILED DEC. 12, 1906.



## UNITED STATES PATENT OFFICE.

JOHN F. JONES, OF WILMINGTON, NORTH CAROLINA, ASSIGNOR OF ONE-FOURTH TO WILLIAM J. MURRAY AND ONE-FOURTH TO WILLIAM A. COLEMAN, OF COLUMBIA, SOUTH CAROLINA.

BOTTLE-STOPPER EXTRACTOR.

No. 894,657.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed December 12, 1906. Serial No. 347,537.

To all whom it may concern:

Be it known that I, John F. Jones, a citizen of the United States of America, residing at Wilmington, in the county of New Hansover and State of North Carolina, have invented new and useful Improvements in Bottle-Stopper Extractors, of which the following in the county of the state of North Carolina, have instantian according to the state of the state of

lowing is a specification.

This invention relates to bottle stopper extractors, and one of the principal objects of the same is to provide simple means for extracting a bottle stopper, said means being secured to the bottle neck and adapted to be folded within the area of the bottle, or to lie 15 in a supported position at the top of the bottle.

Another object of the invention is to provide a stopper extractor which when operated will draw upon the cork equally upon two diametrically opposite sides of said cork in withdrawing the same from the bottle.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing, in which:

Figure I is a side elevation of the upper portion of a bottle provided with a stopper extractor made in accordance with my invention. Fig. 2 is a similar view taken at right angles to Fig. 1. Fig. 3 is a central vertical section showing the extractor in position to withdraw the cork from the bottle. Fig. 4 is a transverse section through the bottle neck, the stopper and the extractor.

Referring to the drawing for a more particular description of my invention, the numeral 1 designates the bottle body which may be of any suitable contour, and 2 is the neck of the bottle which may also be of any desired size or contour. Fitted in the bottle 40 neck is a stopper 3 composed of cork or other suitable material.

As shown in the drawing my improved stopper extractor comprises a single strand of flexible wire or cord 4, said strand extending around under the flange 5 of the bottle mouth and forming a ring 6 which is connected at 7 by twisting the wire or tying the cord. The strand continues from the point 7 up-

ward, as at 8, and inward at 9 to a point in line with the inner wall of the bottle neck. 50 From this point the strand extends downward as at 10, and under the cork or stopper as at 11, and up at the opposite side of the cork, as at 12, said strand continuing for a sufficient distance to permit the strand to be 55 bent down at the side of the bottle, as shown in Fig. 2, and at the terminal end of the strand, a metal finger loop 13 is secured by twisting the wire as at 14, or tying a knot in the cord.

It is to be noted that the strand of wire or cord will readily embed itself in the sides of the cork or stopper when the latter is pushed downward in the bottle neck. When it is desired to extract the stopper the finger loop 13 65 is drawn upward from the position shown in Figs. 1 and 2, to that shown in Fig. 3, and by drawing upward upon the loop 13 the strand will move with the cork owing to its flexibility and will thus pull equally upon the diamet- 70 rically opposite sides of the cork. When the stopper extractor is folded down at the side of the neck as shown in Figs. 1 and 2, the extractor does not interfere with the packing and shipping of the bottle without requiring 75 extra space for the extractor.

From the foregoing it will be obvious that a stopper extractor made in accordance with my invention may be connected to a bottle prior to the corking operation, and when the 80 stoppers are to be applied to the bottles the cork is pushed down into the bottle with the transverse portion 11 of the strand disposed centrally to the cork, when the device shown in Figs. 1, 2 and 3 is employed. When the 85 construction shown in Figs. 4 and 5 is utilized the corks are separately equipped with the extractor before they are applied to the bottles.

Having thus described the invention, what 90 I claim is:

The combination of a bottle provided with a neck, a stopper in said neck, and a stopper extractor, the latter comprising a single strand of flexible material secured around the bottle 95 neck and extending into the mouth of the bottle, down one side of the stopper and under the bottom thereof, said extractor extending at the opposite side of said stopper and out through the mouth of the bottle, said extractor having an extension, and a finger loop secured at the terminal end of said extension, whereby said extension may be bent down at the side of the bottle to dis-

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pose the finger loop below the top of said stopper.

In testimony whereof, I affix my signature in presence of two witnesses.

JOHN F. JONES

Witnesses:

C. C. HINES, D. W. GOULD.