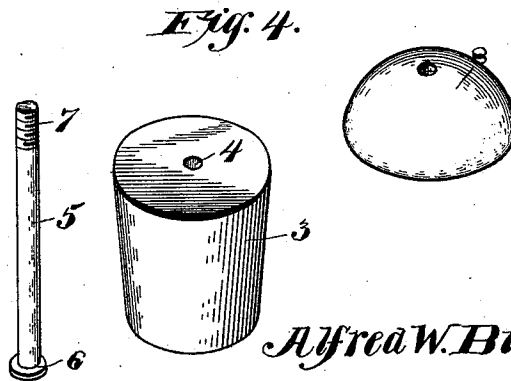
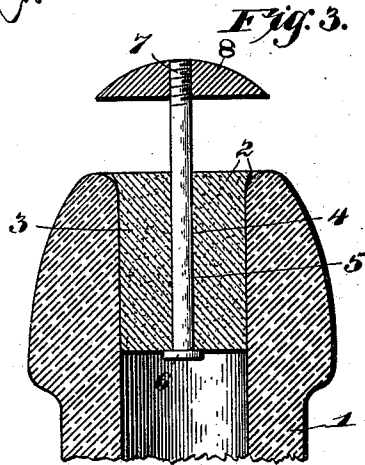
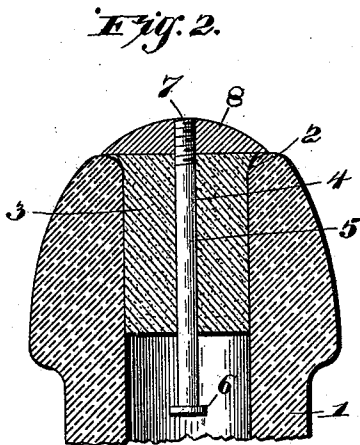
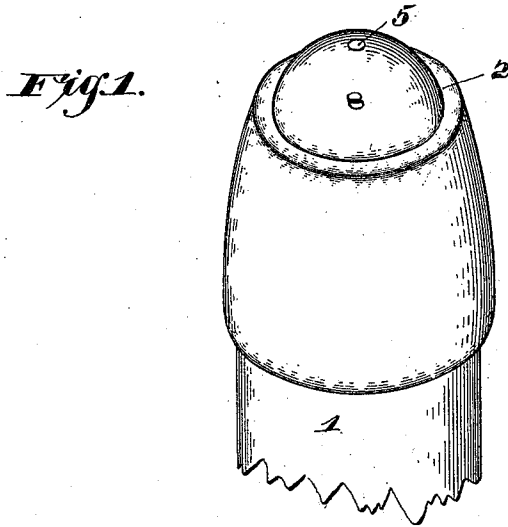


(No Model.)

A. W. BUTTERFIELD.  
STOPPER PULLER.

No. 523,972.

Patented Aug. 7, 1894.



Witnesses

*W. Doyle*  
*W. Powers*

By *nis* Attorneys.

Inventor

*Alfred W. Butterfield.*

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# UNITED STATES PATENT OFFICE.

ALFRED WOOD BUTTERFIELD, OF BOZEMAN, MONTANA.

## STOPPER-PULLER.

SPECIFICATION forming part of Letters Patent No. 523,972, dated August 7, 1894.

Application filed April 18, 1894. Serial No. 508,032. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED WOOD BUTTERFIELD, a citizen of the United States, residing at Bozeman, in the county of Gallatin and State of Montana, have invented a new and useful Stopper-Puller, of which the following is a specification.

My invention relates to an improvement in that class of stopper or cork pullers wherein the cork is provided with a rod adapted to furnish a means for grasping the cork; and the invention consists in a peculiar construction of this rod whereby it is made to perform the double function of furnishing a means for grasping the cork and of assisting in closing, both the mouth of the bottle and the opening which it is necessary to form in the cork for the reception of the rod.

In the drawings:—Figure 1 represents a perspective view of the neck and mouth of a bottle or jar having my improvements applied. Fig. 2 is a vertical section of the same. Fig. 3 is a similar view showing the rod in a second position. Fig. 4 is a perspective view showing the rod and its attachments dissociated and standing alone.

The reference numeral 1, indicates the neck of the bottle and 2, the mouth, both of which may be of any form.

3, indicates the cork or stopper, and this is shown to fill the orifice comprising the mouth of the bottle, and operates as usual, to close the same. Formed longitudinally and centrally in the stopper 3, is the opening 4, which extends from end to end thereof, and which is adapted to snugly receive the rod 5. The rod 5, fits snugly within opening, 4, and is of a length greater than that of the cork. Formed at the lower extremity of the rod 5, or at that end which is normally within the bottle, is the head or enlargement 6, which operates to prevent the rod from passing through the cork when the rod is drawn out. The upper end of the rod 5, is formed with the screw threads 7, thereon, which are adapted to screw into the threaded opening of the cap 8, which opening is centrally located and formed for the reception of the upper end of rod 5. These means may be substituted by any other if so preferred. The cap 8, is circular in shape and plano-convex in cross section, it being so arranged that its plane surface will lie flush with the upper surface of the cork 3, and with the convex face on the upper side. The diam-

eter of the cap 8, is nearly equal to the outer diameter of the mouth of the bottle, and is adapted to lie snugly against the same and against the upper end or face of the cork 3. Thus it will be seen that the cap 8, serves a two-fold function: By its means the rod 5, may be drawn through the opening 4, until the head 6, engages the lower end of the cork 3, which operation will place the cap 8, quite a distance beyond the cork, and make it possible for the operator to insert two of his fingers under the cap, and one on each side of the rod, and by moving the cap 8, as far down as possible and so that it will snugly engage the mouth of the bottle and the cork, the cork will be assisted in the performance of its function, and any possible orifice which would occur owing to the existence of opening 4, will be effectively closed.

The manner of using my invention will be apparent from the foregoing; it being only necessary to draw out rod 5, as far as head 6, will allow, and grasp the cap 8, whereupon the cork can be readily withdrawn.

The normal position of the parts is, of course, that shown by Figs. 1 and 3, while Fig. 3 illustrates the position which they assume prior to the removal of the cork.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

In a device of the class described, the combination with a cork having a central longitudinal opening therein; of a pull rod arranged to snugly work in the central opening of said cork and provided with a stop head at its inner end and with a threaded outer end, and a pull cap provided with a central threaded opening removably engaging the outer threaded end of said pull rod, said cap being of a greater diameter than the outer end of the cork over which it works and provided with a flat under face adapted to snugly contact with the outer end of the cork and the mouth of the bottle or the like in which the cork is fitted, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALFRED WOOD BUTTERFIELD.

Witnesses:

ALFRED G. HEMPHILL,  
JOHN MCLEOD.