

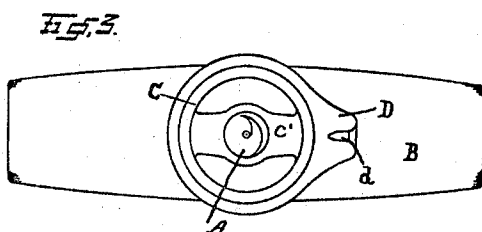
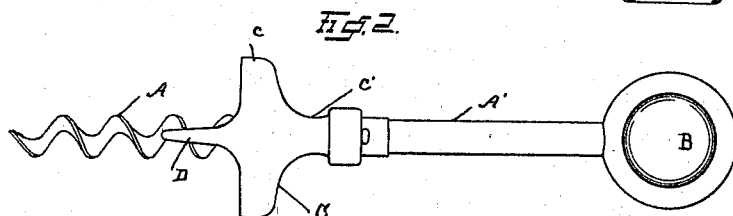
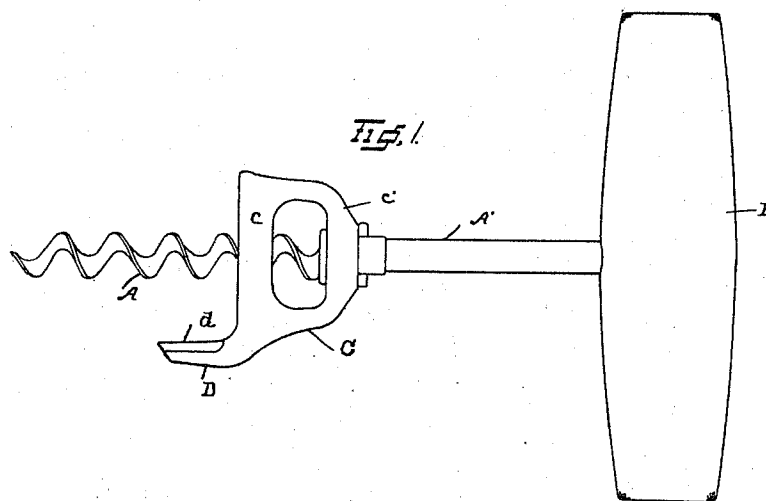
(No Model.)

3 Sheets—Sheet 1.

E. WALKER.
STOPPER EXTRACTOR.

No. 579,200.

Patented Mar. 23, 1897.



WITNESSES:

James Brady,
Sam Prager

INVENTOR

Edwin Walker

BY

Hallock & Lund

ATTORNEYS.

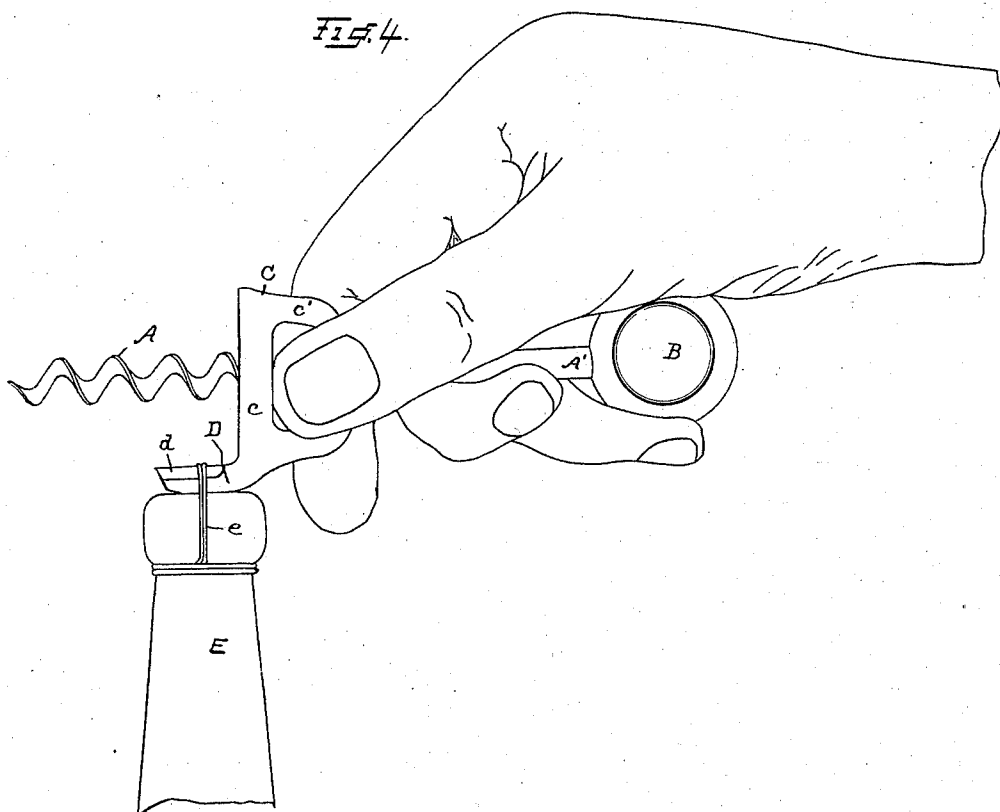
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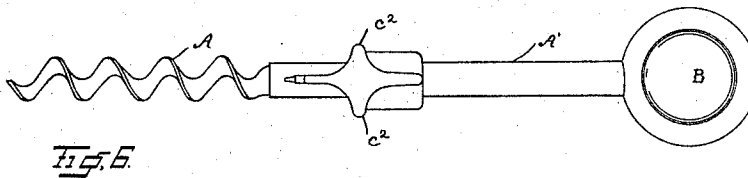
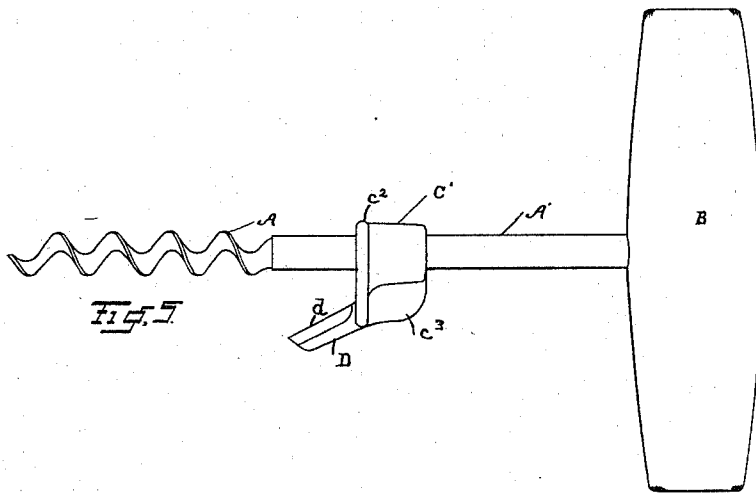
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WITNESSES:

Jaynes Brady.
Sam Prager

INVENTOR

Edwin Walker
BY
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ATTORNEY.

UNITED STATES PATENT OFFICE.

EDWIN WALKER, OF ERIE, PENNSYLVANIA.

STOPPER-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 579,200, dated March 23, 1897.

Application filed November 4, 1896. Serial No. 611,014. (No model.)

To all whom it may concern:

Be it known that I, EDWIN WALKER, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Stopper-Extractors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to stopper-extractors; and it consists in certain improvements in the construction thereof, as will be hereinafter fully described, and pointed out in the claims.

The invention is illustrated in the accompanying drawings, as follows:

Figure 1 shows a side elevation of the device. Fig. 2 is a view from the bottom of Fig. 1. Fig. 3 is a view from the left of Fig. 2. Fig. 4 shows the device in operation. Fig. 5 shows an extractor without the head C. Fig. 6 is a view of the same extractor from the bottom of Fig. 5.

A marks the screw, A' the screw-shank, and B the handle. The shank is journaled (or it may be fixed or stationary) in a head C, which comprises the ring *c* and a yoke *c'*, which bridges the ring and carries the shank.

In operation the ring *c* rests on the top of the bottle-neck, and as the screw is turned the cork or stopper is drawn up into the ring as far as the yoke, from which point the cork is easily twisted or drawn out. This part of the mechanism shown is old, and consequently does not require a more extended description for a full understanding of my improvement.

Attached to the head and extending, preferably, forward from it along the screw is a blade D, having its cutting edge *d* preferably faced toward the screw. The purpose of this blade is made apparent by Fig. 4, where it is shown in operation—*i. e.*, cutting or loosening the retaining-wires *e*, here shown as in place on a bottle E, as commonly used.

Blades have been heretofore attached to hand-pullers, usually to an end of the handle B; but these are objectionable, because a convenient and sufficient leverage is not afforded to insert the blade, and pry up and cut the

wires, and as the point and edge of the blade are exposed they are inconvenient to carry and require careful handling when used.

By my arrangement of blade the shank A' and handle B form a convenient and sufficient lever to easily and readily operate the blade. The head C forms an abutment for the fingers of the operator when forcing the blade under the wires. By making the edge of the blade face another part of the puller (as shown, the screw) the part faced forms a guard for the blade, and by extending along the screw it is out of harm's way when the puller is operated.

The head C, as before stated, is journaled on the shank. In order that the blade may be conveniently under the control of the operator, the yoke *c'* is formed of greater length than breadth, or, as shown, in the form of a narrow bridge. This affords a means which is grasped between the thumb and finger. This prevents the turning of the head and places it readily under the control of the operator. I prefer the arrangement of yoke and blade shown—namely, with the blade in line with the yoke—as I find this the most convenient arrangement.

In the alternative construction shown in Figs. 5 and 6 the cutting-blade is shown secured to the shank by means of the head C'. This head is provided with a rib *c²* to form an abutment for the fingers and has an ear *c³* to better form a finger-grip. This construction has the abutment for the fingers and the edge of the blade facing the shank, in common with the constructions shown in the other figures.

What I claim as new is—

1. In a stopper-extractor, the combination of the head; a shank and screw carried by said head; a cutting-blade carried by said head, said blade and shank being so arranged relatively to each other that the said shank forms a lever by means of which the blade is operated, and said blade having its edge facing said shank or screw.

2. In a stopper-extractor, the combination of the head arranged to operate on the top of the bottle and against the screw; a shank and screw carried by said head; and a cutting-blade carried by said head, said blade and

shank being so arranged relatively to each other that the said shank forms a lever by means of which the blade is operated, and said blade having its edge facing said shank
5 or screw.

3. In a stopper-extractor, the combination of the head having the ring *c* and yoke *c'*; the screw; the screw-shank journaled in said head; and a cutting-blade carried by said
10 head; said head, blade, yoke and shank being so arranged relatively to each other that the said shank forms a lever by means of which the blade is operated, the yoke *c'* a fin-

ger-grip for positioning the blade and the ring *c* an abutment for the fingers. 15

4. In a stopper-extractor, the combination of the head *C* having the ring *c* and yoke *c'*; the screw *A* and shank *A'*; and the blade *D* projecting from the head along the screw with the edge *d* facing the screw. 20

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

EDWIN WALKER.

Witnesses:

CLINTON D. HIGBY,
H. C. LORD.