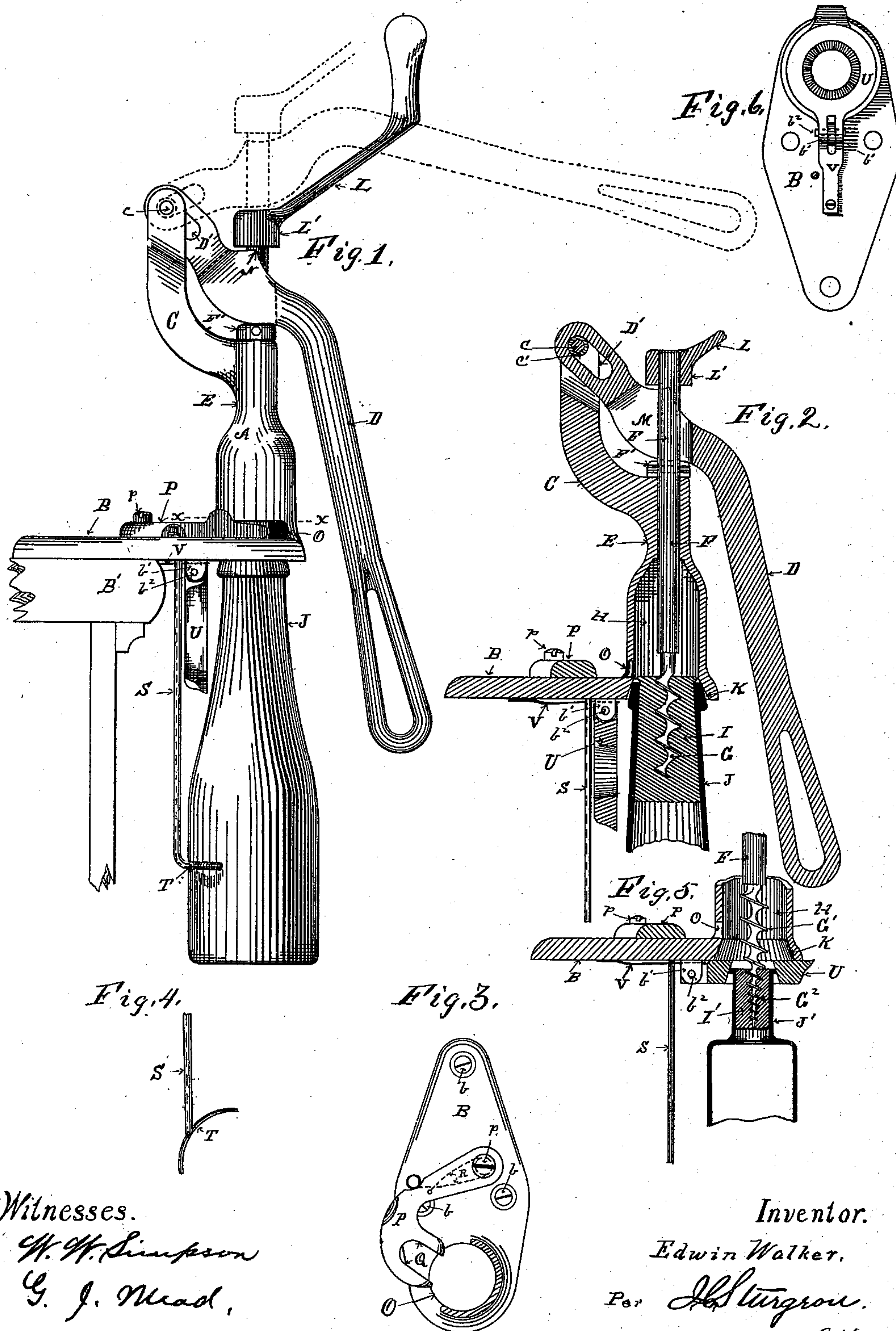


(No Model.)

E. WALKER.  
CORK EXTRACTOR.

No. 377,790.

Patented Feb. 14, 1888.



Witnesses.

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# UNITED STATES PATENT OFFICE.

EDWIN WALKER, OF ERIE, PENNSYLVANIA, ASSIGNOR TO THE E. WALKER  
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## CORK-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 377,790, dated February 14, 1888.

Application filed May 27, 1887. Serial No. 239,585. (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 Cork-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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention consists in the improvements in cork-extractors hereinafter set forth and explained in the specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows my improved cork-extractor with a bottle in place for extracting a cork therefrom. Fig. 2 shows a vertical central section of the same. Fig. 3 shows a horizontal section of the same on the line *xx* in Fig. 4. Fig. 4 shows a section of the bottle-support of my improved cork-extractor. Fig. 5 shows a vertical central section with a modified construction of the extractor-screw. Fig. 6 shows a view of the same from the under side thereof.

Like letters refer to like parts in all the figures.

In the construction of my improved cork-extractor I construct the frame A with a projection or foot, B, which extends laterally from one side of the lower end thereof, and is adapted to form a support for the frame A, which may be secured to the counter or table by means of the screws *b*.

To the upper part or neck of the frame A an arm, C, is secured, which extends outward and upward and forms a bearing or fulcrum for the extracting-lever D, which is pivoted on a pintle, *c*, in the end of the arm C. This pintle *c* is also provided with a friction-roller, *c'*, as and for the purpose hereinafter set forth.

The upper part of the frame A is bored out at E, to receive and fit the shank F of the cork-screw G, so that the shank F will turn and also move up and down therein. The lower section of the frame A is provided with a chamber, H, to receive the cork I when drawn from the neck J of the bottle, and the lower end of

this chamber H is beveled outward at K, to receive the end of the bottle-neck, substantially as illustrated in Fig. 2.

The screw G is of ordinary and usual construction. On the upper end of the shank F of the screw G, I secure a crank-arm, L, which extends outward and upward at an oblique angle, so that when the screw G is inserted into a cork, as illustrated in Fig. 2, the crank-arm L will pass over the upper end of the arm C and not interfere therewith.

The end of the lever D is provided with a slot, D', which fits on the friction-roller *c'* and the pintle *c* and operates thereon. Below the slot D', I make a vertical slot, M, through the lever D, of suitable size and shape to embrace and operate on the screw-shank F, as illustrated by the full and dotted lines in Fig. 1.

On the upper side of the lever D, opposite the central portion of the slot M, I make a V-shaped projection, N, which engages with the under side of the collar L' on the crank-lever L, for raising the screw G up, as illustrated by the dotted lines in Fig. 1, the shape of this bearing N being such that the lever lifts on the collar L' without any perceptible side strain thereon. From the slot M the handle of the lever D is curved downward in such a shape as to occupy a position adjacent to the frame A when down and not in operation. On the shank F, below the slot M, I place a collar, F', so that the lever D operates between the collars L' and F' in raising and lowering the screw G.

In one side of the chamber H, on a level with the upper surface of the foot B, I make a slot or opening, O, and on the top of the foot B, I pivot a curved arm, P, by means of a pintle, *p*. The free end of the arm P is provided with a slot, Q, of suitable size to pass over the screw G when the slotted end of the arm P is inserted into the opening O. The arm P is also provided with a spring, R, (shown in dotted lines in Fig. 3,) which spring operates to retain the arm P normally in the position shown in Fig. 3 when not in use.

To the under side of the foot or support B, I secure a bottle-guide, S, this guide being preferably formed of a small rod having a curved piece, T, secured to the lower end thereof and adapted to form a rest for the side



of the bottle; and when the neck of the bottle is inserted into the flaring mouth K of the chamber H and the body of the bottle placed in contact with the curved piece T on the rod S, by means whereof the cork I is always presented to the screw G in a right line therewith, the screw passes down through the center of the cork and prevents the breaking of the neck of the bottle.

On the under side of the foot or support B, I also provide ears  $b'$ , in which I hinge a reducer, U, by means of a pintle,  $b^2$ . I also secure a spring, V, to the under side of the foot or support B, which operates upon the end of the reducer U, so as to retain it in place whether up and in use, as shown in Fig. 5, or down and not in use, as shown in Figs. 1 and 2. The object of this reducer is to decrease the size of the mouth K of the chamber H enough to catch the neck of small bottles, as illustrated in Fig. 5, when desired, or to be thrown down out of the way, as shown in Figs. 1 and 2, when large bottles are being operated upon. In Fig. 5 I also show a modified form of an extracting-screw, the lower section,  $G^2$ , whereof being made considerably smaller than the upper section,  $G'$ , thereof, by means whereof it is adapted to be used with very small corks by only inserting the screw therein for a short distance, and also with large corks by inserting the screw farther therein. I do not, however, deem this to be an essential feature of my invention, as the device operates well when the screw is all of the same size, as shown in Fig. 2.

In operation the frame A is secured to a table or counter,  $B'$ , by means of the foot B, the body A and the bottle-guide S being beyond the edge of the table or counter. The neck of the bottle is then inserted into the flaring mouth K of the chamber H and the body of the bottle brought into contact with the guide S. This operation raises the screw up into the chamber H and the lever D up into the position shown in dotted lines in Fig. 1. The operator then turns the screw into the cork by means of the crank L, which brings it and the lever L into the position shown in Fig. 2.

Then by grasping the lever D and lifting it up the cork is withdrawn and the bottle removed, the lever is allowed to fall back into the position shown in Figs. 1 and 2, when the arm P is pressed into the opening O, whereby the slot Q is pressed over the shank F of the screw above the top of the cork, when by raising the lever D again the cork is thereby stripped off of the screw, and the arm P, being released, is forced back by the spring R out of the way. When, however, the operator desires to draw corks from bottles the necks whereof are too small to catch the mouth K of the chamber H, the operator turns up the reducer U into the position shown in Figs. 5 and 6, when small-necked bottles  $I'$  can be inserted and the corks pulled therefrom with like facility as from the larger bottles I. (Shown in Figs. 1 and 2.)

Having thus fully described my invention, so as to enable others to construct and operate the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, in a cork-extractor, of the upright frame A, having the corkscrew G therein, and crank and lever mechanism for operating said screw, and a horizontal slot, O, in the base of the cork-chamber H, with the hinged slotted cork-stripper P and its retracting-spring R, substantially as and for the purpose set forth.

2. The combination, in a cork-extractor, of the cork-extractor frame A, having the base B and upwardly-projecting arm C thereon, with the corkscrew G, having the crank L thereon, and the lever D, embracing the shank F of the screw G, and having the slotted bearing  $D'$ , operating on the friction-roller  $c'$  in the end of the arm C, substantially as and for the purpose set forth.

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

EDWIN WALKER.

Witnesses:

W. W. SIMPSON,  
JOHN DAVIS.