

(Model.)

G. EDWARDS.
CORK EXTRACTOR.

No. 395,618.

Patented Jan. 1, 1889.

Fig. 1.

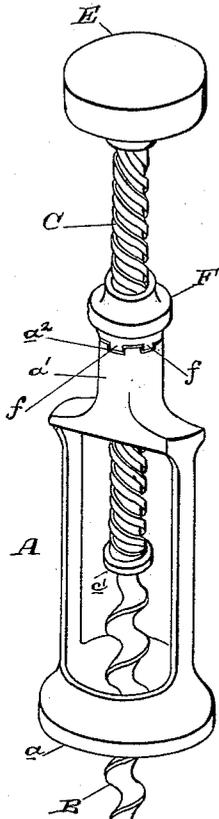


Fig. 2.

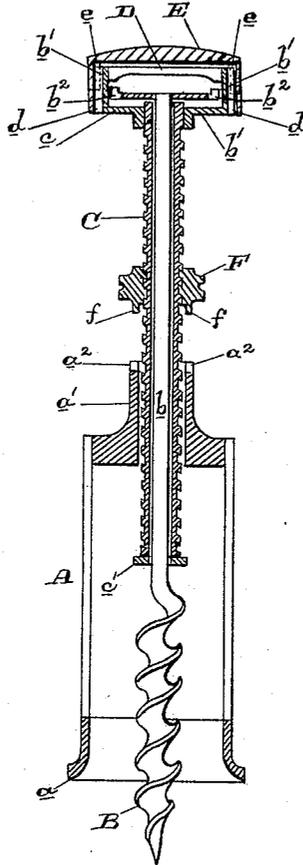


Fig. 3.

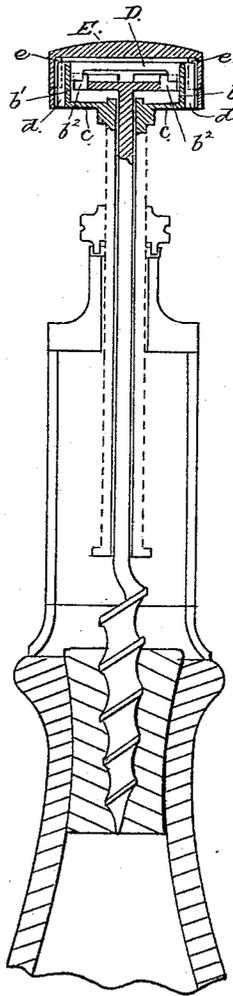
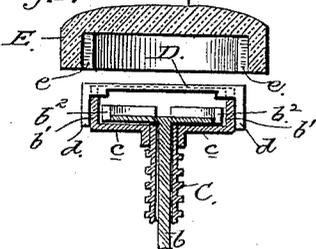


Fig. 4.



Witnesses,
Geo. H. Strong,
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Inventor,
Geo. Edwards,
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attys

UNITED STATES PATENT OFFICE.

GEORGE EDWARDS, OF BERKELEY, CALIFORNIA.

CORK-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 395,618, dated January 1, 1889.

Application filed May 12, 1888. Serial No. 273,722. (Model.)

To all whom it may concern:

Be it known that I, GEORGE EDWARDS, of Berkeley, Alameda county, State of California, have invented an Improvement in Cork-Extractors; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of cork-extractors in which a frame or stock rests on the top of the bottle and the corkscrew is guided down through the foot of the frame into the cork; and my invention consists in the construction and combination of devices which I shall hereinafter fully describe and specifically claim.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my cork-extractor. Fig. 2 is a vertical section of same. Fig. 3 is a diagram section showing the corkscrew in the cork about to be pulled out, the engagement of the nut F and frame having taken place and the disengagement of the corkscrew, head-flange, and disk of the power-screw being about to take place. Fig. 4 is an enlarged sectional view of the cap E and the head of the power-screw, the cap being removed.

A is the frame or stock, having an annular bearing-foot, *a*, and a tubular top, *a'*, with notches *a*².

B is the corkscrew, having a right-hand thread and a stem, *b*, the top of which has a head-flange, *b'*, with notches *b*² in its rim.

C is a hollow or tubular power-screw having a left-hand thread. On its top is a cup-shaped or hollow disk, *c*, and on its lower end is a stop-flange, *c'*.

The power-screw C passes and plays loosely through the tubular top *a'* of the stock, the interior of said top having no threads, so that said screw may move lineally therein freely, the bottom flange limiting its upward movement. The stem *b* of the corkscrew passes freely through the tubular power-screw, its head-flange *b'* fitting freely within the top disk, *c*, of said screw. Across the top of said disk is fixed a bar, D, which forms a catch or pawl for engaging with the notches *b*² in the rim of the head-flange *b'* of the corkscrew stem. The disk *c* might be used as the handle; but I prefer to fit over it a cap, E, which

may be conveniently secured to the disk by means of the engagement of the projecting ends *d* of the catch-bar or pawl D with small grooves *e* on the interior surface of the cap-rim.

Upon the screw C is seated a nut, F, the base of which is provided with small teeth or projections *f*, which are adapted to engage the notches *a*² in the top *a'* of the main stock.

The operation of the device is as follows: The annular foot of the stock A is placed on the neck-rim or top of the bottle and the nut F is run up on the screw a distance above the frame or stock sufficient to insure the proper penetration of the corkscrew into or through the cork. Then, grasping the cap E, a downward pressure is applied until the point of the corkscrew meets with the cork, whereupon the resistance causes an upward bearing of the corkscrew, so that the notched head-flange *b'* of its stem comes into engagement with the catch bar or pawl D, thereby connecting said head with the disk *c* of the power-screw, and to which the cap F is attached. Therefore by rotating said cap a rotary movement is imparted to the corkscrew. This movement being the ordinary right-hand movement and the pressure being continued, the corkscrew penetrates and works through the cork in a direct ordinary manner. This continues until the corkscrew, having passed into or through the cork sufficiently, the nut F (which has been moving down with the power-screw C) comes upon the top *a'* of the stock, and its projections *f* drop into engagement with the notches *a*² of said top. This stops the nut, and by holding it so that it cannot rotate, the screw C is called into action. The same direction of rotation is maintained, however, just as if the corkscrew were still being forced down; but the thread of screw C being left-handed said screw now begins to work up or out through the stationary nut F, and because of the head-flange *b'* of the corkscrew-stem being fitted in the disk *c* of the power-screw the corkscrew is pulled up or out with it and the cork is drawn; but it is obvious that the corkscrew in thus pulling the cork should cease to rotate, and this it does, because as soon as the strain of pulling is felt the head-flange *b'* of its stem is pulled down and released from its engagement with the catch-bar or pawl D of the disk *c* of the power-screw, and as a consequence

said disk and screw can rotate without rotating the corkscrew, which therefore pulls directly out without turning.

To have as little friction as possible, I project the upper end of the tubular power-screw into the disk *c*, so that it forms a bearing for the head-flange *b'* to rest upon when the power-screw is rotating and the corkscrew is not.

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

An improved cork-extractor consisting of a frame or stock having an annular foot and a tubular top with notches, a tubular power-screw carried in the top and having a free lineal movement therein, said screw having a top disk, a corkscrew the twist or thread of which is the reverse of that of the power-screw, said corkscrew having a stem passing

freely through the tubular power-screw and provided with a head-flange fitting in the top disk of said power-screw, the pawl or catch-bar in the top disk and having projecting ends, and the notches in the stem-head flange, the handle-cap fitting over the top disk and engaging the projecting ends of the catch-bar, and the nut seated on the power-screw and having projections or teeth, whereby it is detachably connected with the notched top of the frame or stock, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

GEORGE EDWARDS.

Witnesses:

S. H. NOURSE,
J. H. BLOOD.