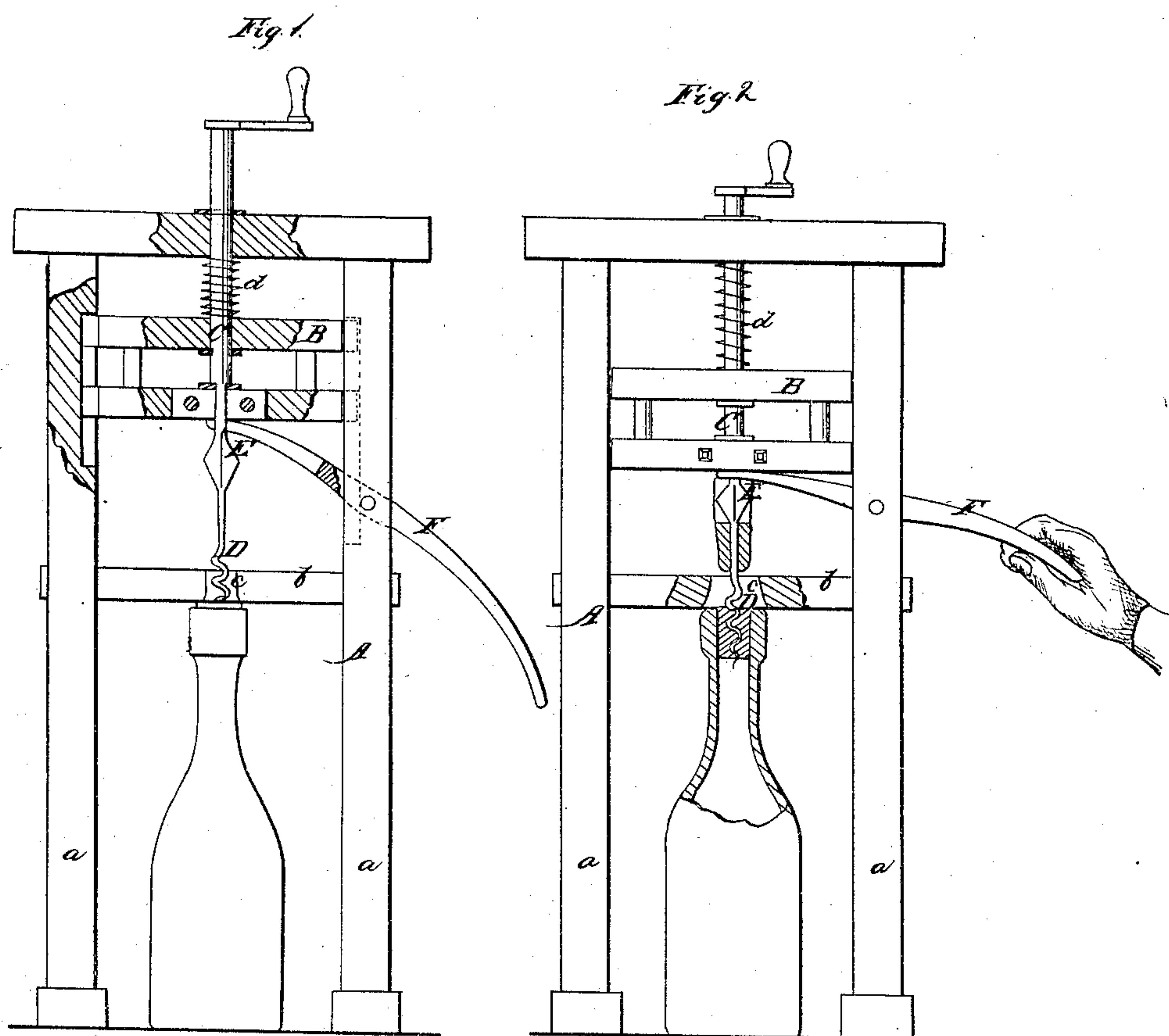


J. P. MIERS & J. GROENDYKE.
CORK EXTRACTOR.

No. 41,385

Patented Jan. 26, 1864.



Witnesses,

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UNITED STATES PATENT OFFICE.

JOSEPH P. MIERS AND JNO. GROENDYKE, OF LEBANON, NEW JERSEY.

IMPROVED CORK-EXTRACTOR

Specification forming part of Letters Patent No 41,385, dated January 26, 1864

To all whom it may concern:

Be it known that we, J. P. MIERS and JOHN GROENDYKE, both of Lebanon, in the county of Hunterdon and State of New Jersey, have invented a new and Improved Machine for Removing Corks from Bottles; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional front elevation of our invention. Fig. 2 is a similar view of the same in a different position.

Similar letters of reference in both views indicate corresponding parts.

This invention consists in a corkscrew attached to a vertically-sliding rotary shaft, which is exposed to the action of a spring or its equivalent, in combination with a hand-lever, in such a manner that by the action of the spring or its equivalent on the shaft the corkscrew is forced up against the cork and caused to enter the same when the shaft is rotated, and after the corkscrew has been screwed in the corks a slight pressure or tap of the hand on the hand-lever causes the same to be drawn out of the bottle with the greatest ease and facility.

The invention consists further in combining with the rotating spring-shaft, corkscrew, and hand-lever a vertically-sliding carriage in such a manner that said shaft has a firm bearing and is prevented from losing its vertical position by the action of the hand-lever.

It consists, finally, in the application of two or more cutting-blades in combination with the corkscrew in such a manner that each cork after it has been withdrawn is split and caused to drop off from the corkscrew spontaneously by being forced up against the cutting-blades through the agency of the succeeding cork into which the corkscrew is caused to enter.

To enable others skilled in the art to make and use our invention, we will proceed to describe it.

A represents a frame, made of wood or other suitable material and provided with two uprights or legs, *a*, of such a shape that they can be readily fastened down upon a counter by means of screws or in any other convenient manner. A cross-bar, *b*, which is

secured between the uprights *a*, is situated at such a height that a bottle of ordinary height can be conveniently placed under it, and this cross-bar is provided with an aperture, *c*, sufficiently large to let the cork pass through, but not large enough for the neck of the bottle.

The upper parts of the uprights are grooved and form the guides for the carriage B, which forms the bearings for the vertical shaft C. The upper end of this shaft passes freely through the upper cross-bar of the frame A, and it is secured in the carriage B in such a manner that it can rotate freely, but is prevented from sliding up and down independent of said carriage. A spring, *d*, which bears on the upper surface of the carriage, forces the same with the arbor down toward the cross-bar *b*. Instead of this spring, a weight or weights might be applied, or the place of the spring might be changed to suit convenience.

D is the corkscrew, which is rigidly attached to or made solid with the shaft C, and the stem or shank of this corkscrew terminates in two or more cutting-blades, E, intended to split the corks after they have been removed from the bottle, and to cause them to drop off from the corkscrew spontaneously and without the aid of the operator. F is a hand-lever, which is pivoted to one of the uprights *a*, and the forked end of which straddles the shaft C and

The operation is as follows: The bottle from bears on the under side of the carriage B, which the cork is to be removed is adjusted under the cross-bar *b*, and the shaft C and the carriage are raised to the position shown in Fig. 1. The point of the corkscrew being depressed by the action of the spring *d* will readily enter the cork as soon as a rotary motion is imparted to the shaft C. A few revolutions of this shaft are sufficient to give to the corkscrew a firm hold in the cork, and a slight pressure or tap of the hand on the lever F causes the cork to fly out, the bottle being retained by the cross-bar *b*. The next cork to be removed forces the first up against the cutting-blades E, so that the same is split and caused to drop off spontaneously and without the aid of the operator.

By this machine the operation of removing corks from bottles can be accomplished with the greatest ease and facility and with very little exertion, and the whole machine is sim-

ple in its construction, and all its parts are so arranged that the same are not liable to get out of order.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The hand-lever F, in combination with the corkscrew D, attached to the vertically-sliding rotary spring-shaft C, in the manner and for the purpose substantially as shown and described.

2. The vertically-sliding carriage B, in combination with the shaft C, corkscrew D, and

hand-lever F, constructed and operating in the manner and for the purpose substantially as set forth.

3. The cutting-blades E, applied in combination with the corkscrew D, substantially as and for the purpose specified.

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Witnesses:

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