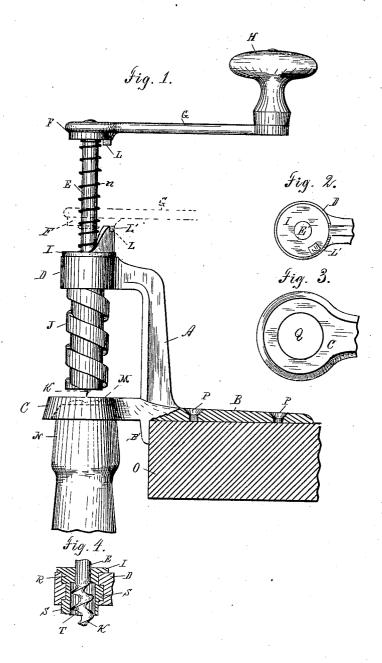
(No Model.)

## H. WAHLER.

CORK EXTRACTOR.

No. 337,465.

Patented Mar. 9, 1886.



WITNESSES:

Louis Ahunderff

INVENTOR Herry Wahler

Wils Pleene

## United States Patent Office.

HENRY WAHLER, OF FREEPORT, ILLINOIS, ASSIGNOR OF ONE HALF TO LOUIS AHSENDORFF, OF SAME PLACE.

## CORK-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 337,465, dated March 9, 1886.

Application filed October 9, 1885. Serial No. 179,391. (No model.)

To all whom it may concern:

Be it known that I, HENRY WAHLER, a resident of Freeport, in the county of Stephenson and State of Illinois, 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 pertains to make and use the same.

In the accompanying drawings, to which reference is had in this specification, Figure 1 is a side elevation of my device, a small portion being shown in section to illustrate a means of attaching it to a support. Figs. 2, 3, and 4 are detail views hereinafter explained.

In Fig. 1, A is a standard having a vertical flange, B', and a horizontal flange, B, provided with screw-holes PP, for attaching it to a sup-20 port, O.

Integrally formed with the standard A is a stop of ordinary form for holding the neck of a bottle from which the cork is to be drawn.

Above the stop C, at a distance a little greater than the length of any ordinary cork, is an internally-threaded nut, D, formed integrally with the standard A, and having its center vertically over the center of the stop C. A hollow externally-threaded screw, J, pro-30 vided with an integrally-formed or rigidly-attached cap, I, rotates in the nut D, rising or falling according to the direction of rotation, and in this screw rotates freely and slides longitudinally the corkscrew K E. 35 crank, G, having a handle, H, boss F, and lug L thereon, is rigidly joined to the upper extremity of the corkscrew shaft or shank E, and this lug L is adapted to firmly engage with the lug L' on the cap I whenever the 40 crank assumes the position shown by the dotted lines of the figure, the direction of rotation of the crank being toward the observer.

Fig. 2 shows in plan the position of the lug L' upon the cap I, E' being the aperture for the shaft. E

Fig. 3 is a plan of the stop C, Q being a central opening through which the cork, but not the neck of the bottle, may pass, and the sides of this opening curve outward and downward, so as shown by dotted lines in Fig. 1.

Fig. 4 shows a central vertical section of the

nut D and screw J, the corkscrew E K being in position, as shown in Fig. 1, E being the shaft, and K the spiral portion thereof.

T is a cylindrical cavity in the screw J, and 55 therein the spiral portion K of the corkscrew slides and rotates. The cavity T ends below the cap I, leaving a solid portion, R, to fit closely and form a bearing for the shaft E.

SS are sections of one of the threads of the 60 screw J, lying in the internal threads of the nut D.

The normal position of the crank G, when not in use, is that shown in full lines in Fig. 1, the upper end of the spiral part of the cork-65 screw being in contact with the top of the cylindrical cavity T. To hold the crank and corkscrew in this elevated position, a light spring, n, is placed about the shaft E, and this tends to separate the cap I and crank-boss F; 70 but as this spring, when compressed by downward pressure upon the crank, still requires a considerable vertical space, the lug L' is of a height equal to that of the spring when so compressed, in order that the lug L may en-75 gage it at the proper time.

In operation a bottle, N, Fig. 1, is placed in position against the stop C. By means of the crank G the corkscrew is then rotated and pressed gently downward, causing it to pene- 80 trate the cork, when by simply rotating the crank the screw automatically moves downward till the lugs L L' engage. This engagement forces the screw J into action, and, as this is a left-handed screw, rotation of the crank in 85 the same direction as before rapidly lifts corkscrew and cork out of the bottle, which is restrained from following their motion by the stop C. Evidently so long as the spirals of the corkscrew and lifting screw are opposite 90 it is immaterial which is left handed, and if it be desired to use both right or both left spirals it may be done by modifying the means for engaging them; but in this case the motion of the crank must be reversed in raising the 95 cork, and the arrangement is comparatively  $\mathbf{worthless}.$ 

I am aware that it is old in cork-extractors to combine an internally-threaded nut, a hollow screw engaging said nut, and a reverselyspiral corkscrew lying within said hollow screw and adapted to rotate and move longi337,465

tudinally therein and to rotate the hollow screw on reaching a given position therein. So far as I know, however, the parts enumerated have never been combined with a cork-5 screw retracting-spring such as I have shown in this application, or with a base adapted to be screwed or otherwise rigidly fastened to a table or other stationary support.

What I claim is-

the purpose set forth.

1. The combination, with a suitable frame, of a screw set in a nut in said frame and adapted, when rotated, to move longitudinally therein, a corkscrew journaled in a bearing in said frame and susceptible of rotary and lon-15 gitudinal motion in said bearing, coacting lugs on said screw and corkscrew adapted, when in engagement, to insure the simulfaneous rotation of said parts, and a spring interposed between said coacting lugs and adapted to hold 20 them in the position of greatest separation. substantially as shown and described, and for

2. In a cork-extractor, the combination of a suitable frame, a hollow screw set in a nut 25 in said frame and adapted to move longitudinally therein when rotated, a corkscrew journaled in said hollow screw and susceptible of rotary and longitudinal motion therein, co-

acting lugson the screw and corkscrew adapted. when in engagement, to insure the simulta- 30 neous rotation of said parts, and thus to insure their simultaneous longitudinal movement, and a spring interposed between said lugs and tending to prevent their engagement, substantially as shown and described, and for 35

the purpose set forth.

3. The combination of the frame A B C and nut D, the hollow screw J, set in said nut, the corkscrew E K, journaled in said screw and having the crank G, the lugs L L', formed 40 on said crank and screw, respectively, and adapted, when in engagement, to insure the rotation of the screw with the crank, whereby the screw and corkscrew are raised or lowered together, and the spring n, coiled about the 45 shank of the corkscrew and tending to raise the corkscrew and separate the lugs LL', substantially as shown and described, and for the purpose set forth.

In testimony whereof I have signed this 50 specification in the presence of two subscrib-

ing witnesses.

HENRY WAHLER.

Witnesses:

Louis Ahsendorff, O. E. HEARD.