(No Model.)

T. CRELLIN.

CORKSCREW.

No. 515,658. Patented Feb. 27, 1894.

FIG. 1.

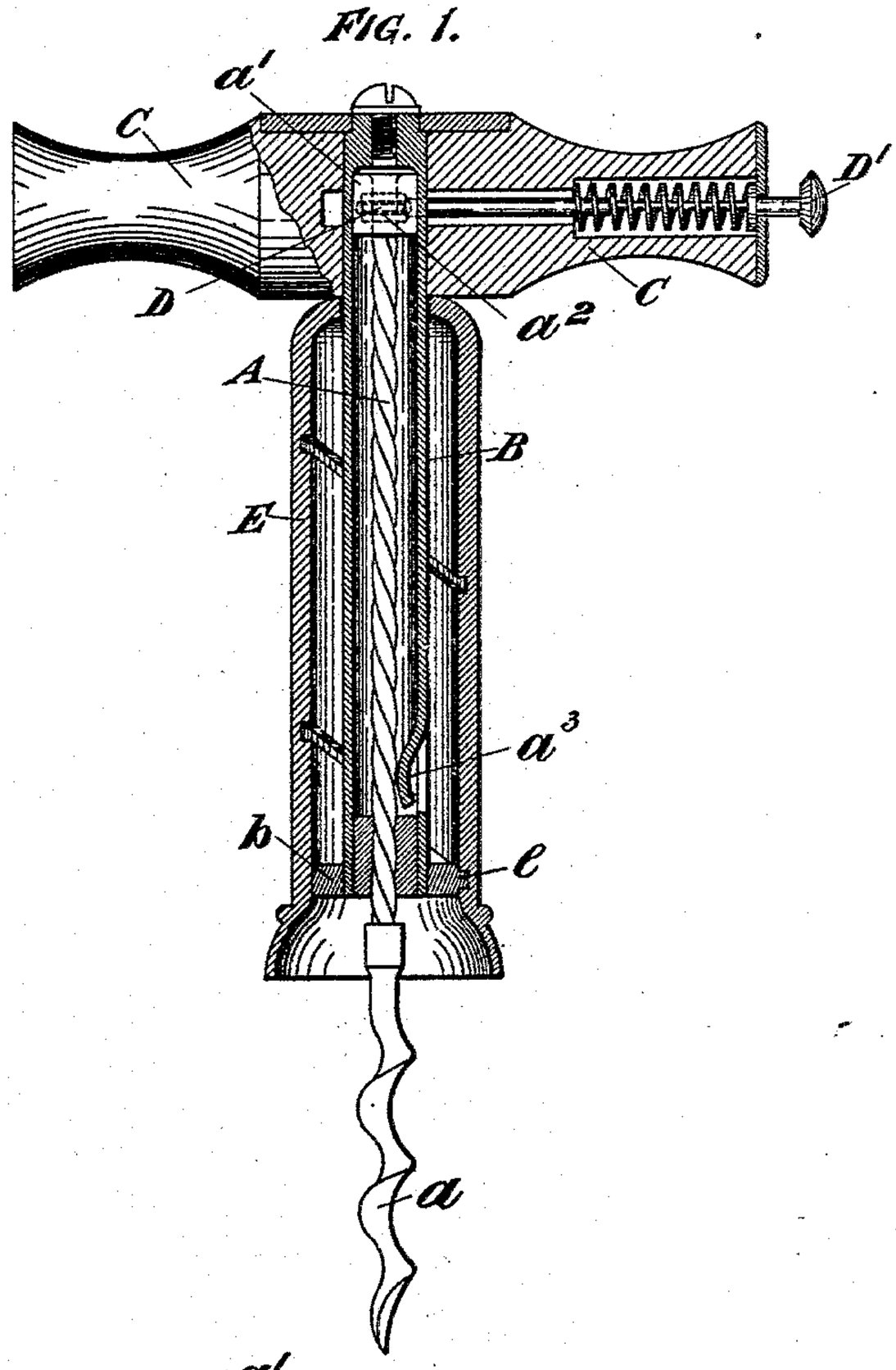
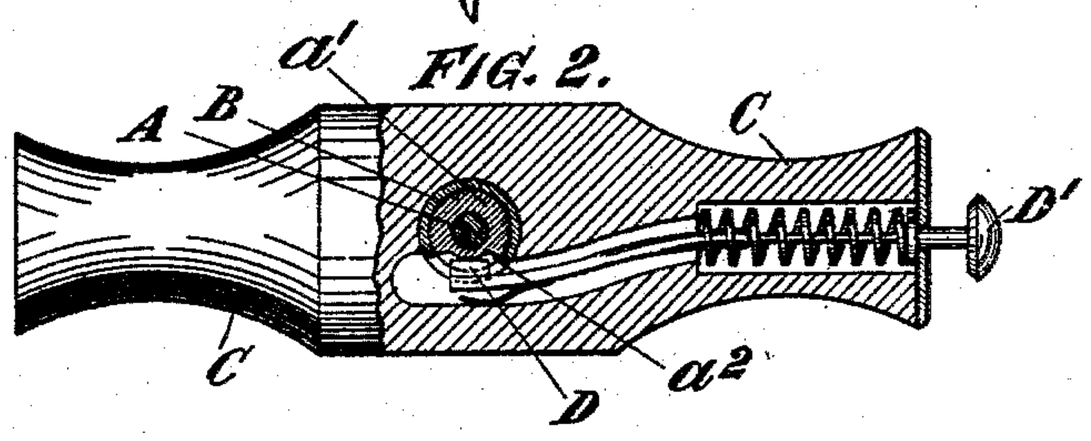


FIG. 2.



Witnesses.
G. W. Rea.
J. A. Saul.

Inventor.
Thomas Crellin,
By James L. Norris.
Atty.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS CRELLIN, OF LIVERPOOL, ENGLAND.

CORKSCREW.

SPECIFICATION forming part of Letters Patent No. 515,658, dated February 27, 1894.

Application filed November 9, 1893. Serial No. 490,448. (No model.) Patented in England December 18, 1890, No. 20,709.

To all whom it may concern:

Be it known that I, THOMAS CRELLIN, a subject of the Queen of Great Britain and Ireland, residing at Liverpool, in the county of Lancaster, England, have invented new and useful Improvements in Corkscrews, of which the following is a specification, and for which I have obtained Letters Patent in Great Britain, No. 20,709, dated December 18, 1890.

This invention relates to certain improvements in devices for withdrawing corks from bottles. By this invention the corkscrew is enabled to enter the cork while in the bottle without having to rotate the handle, and the cork is withdrawn from the bottle by screwing instead of having to give a direct pull. The removal of the cork from the screw after the cork has been drawn out of the bottle is also greatly facilitated.

The invention is best described by aid of the accompanying drawings, in which—

Figure 1 is a sectional elevation; and Fig. 2 a transverse section through the handle.

In the drawings, A is a spindle having a screw running a considerable part of its length formed with two, three, or more threads, so as to travel rapidly.

a is a corkscrew at the end of the spindle. The spindle A is mounted in the sleeve B, which is secured at the end to a handle C of convenient shape. The length of the said sleeve B is such that the corkscrew *a* projects when in the position shown in the drawings.

In the lower portion of the sleeve B is placed a nut *b* for the multiple threaded screw spindle A aforesaid, the remainder of its length is of larger bore so as to provide clearance for the said spindle A, and enable the spindle under certain conditions to rotate independently of the handle C and sleeve B. The end of the spindle A has a boss a' in which is cut a tooth or cavity a^2; this is normally engaged by a spring controlled pawl or detent D preventing the screw from being rotated, which however can be released by depressing the button D′, thereby moving the detent D out of engagement with the boss.

To enable a slight pressure to be applied when inserting the corkscrew *a* into the cork and thereby insure the quick entering of the corkscrew into the cork there is provided a spring a^3 which presses upon the spindle A with sufficient pressure to prevent the corkscrew turning until its point has entered the cork the pressure required to pierce the cork overcomes the retarding pressure of the spring a^3.

E is an outer thimble to sleeve B having an open bell mouth at one end, adapted to receive the mouth of the bottle. The interior of said sleeve E is of rather larger diameter than the corks the apparatus is required to withdraw, and has a thread into which the sleeve B is screwed at *e*.

The mode of action is as follows:—The spindle A is screwed out of the sleeve B to its fullest extent and the point of the corkscrew *a* is then driven into or pressed against the cork. The apparatus is then pressed with some force against the cork, causing the screw spindle A with its corkscrew *a* to revolve and causing at the same time the corkscrew to be forced through the cork without rotating the handle, the screw spindle A rotating as the corkscrew passes through. The length of the spindle A and pitch of screw is such that when the corkscrew *a* has been pressed through the cork, the position is that shown in Fig. 1, and the spindle is locked in that position by means of the detent D. The handle C is then rotated pressing down the bell mouthed sleeve E onto the mouth of the bottle, and screwing the sleeve B together with the spindle A upward, thus drawing the cork from the bottle up into the interior of the sleeve E. The force thus brought to bear on pulling out the cork is by the above means very great.

To remove the cork from the screw after the cork is drawn out of the bottle, the handle is rotated in the reverse way until the apparatus again assumes the position shown in Fig. 1, the button D′ is then depressed, thereby releasing the detent D from engagement with the spindle A and enabling it to revolve independently of the sleeve B. By holding the cork stationary, it can be drawn off by simply pulling, the spindle A rotating as it comes off.

I declare that what is claimed in respect of the herein-described invention is—

In a device for withdrawing corks from bottles, the combination with a multiple-threaded

spindle A, of an interior sleeve B, having a nut *b* at its lower end with which the multiple-threaded spindle engages, an exterior sleeve E having an interior thread surrounding and concentric with the interior sleeve B, and means for engaging the latter with said interior thread, substantially as described.

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

THOMAS CRELLIN.

Witnesses:

FREDERICK J. CHEESBROUGH,

JAMES A. COUBROUGH,

Both of 15 *Water Street, Liverpool.*