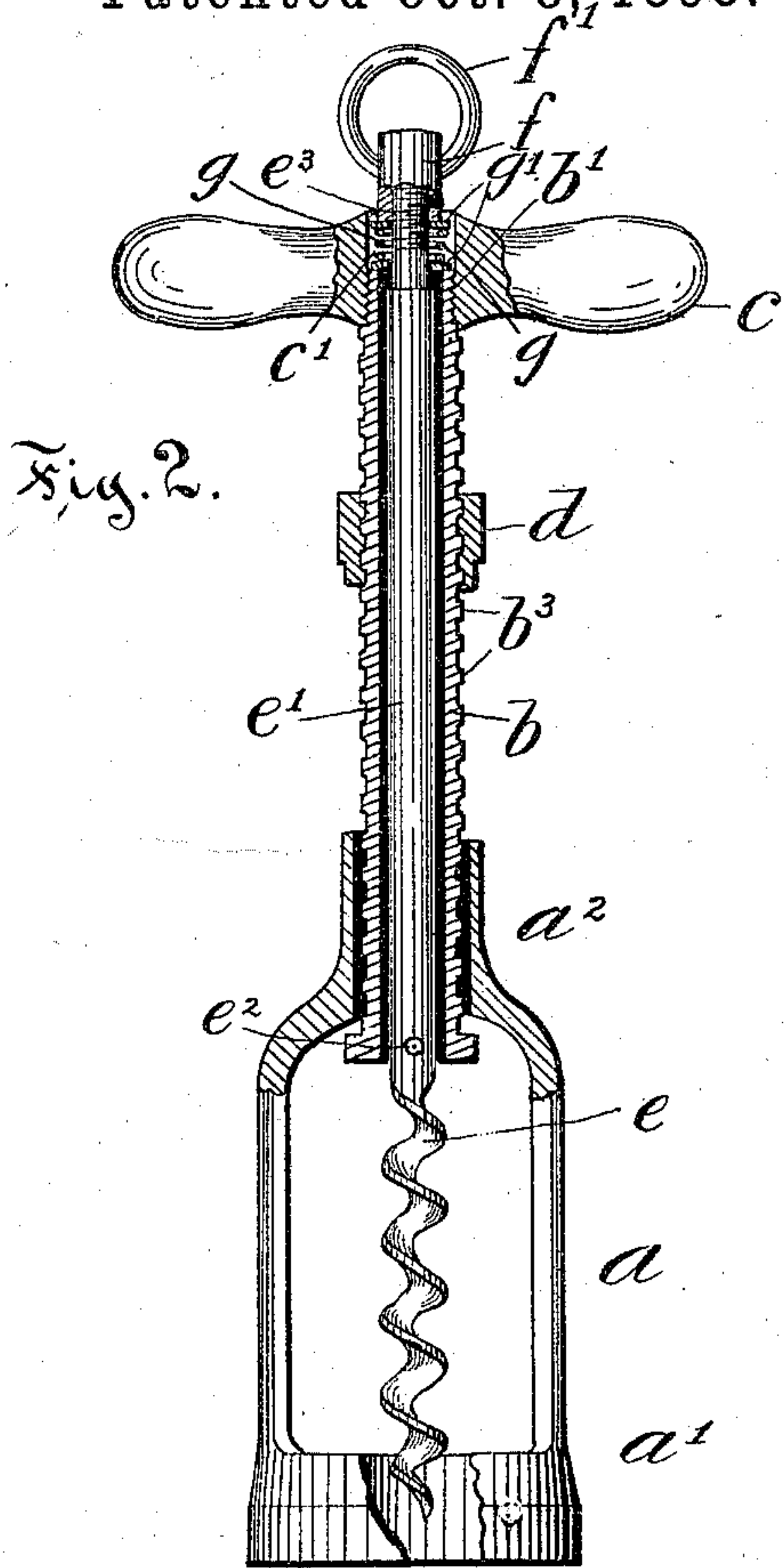
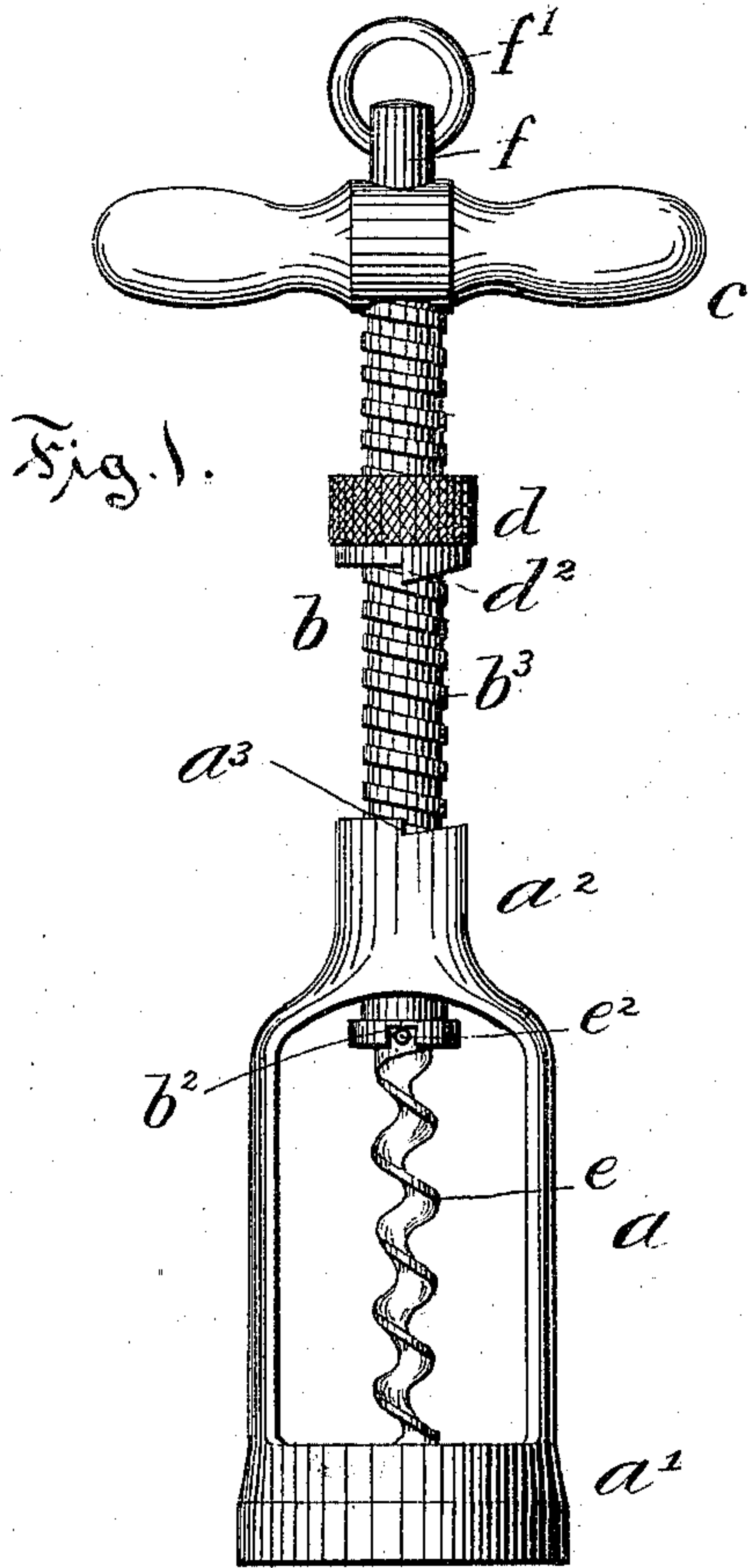


(No Model.)

E. E. BROWN.  
CORK PULLER.

No. 547,478.

Patented Oct. 8, 1895.



Witnesses:

Joseph Arthur Cantin.  
Julia Stern.

Inventor:

Edward E. Brown,  
by Chas. L. Burdett,  
Attorney



# UNITED STATES PATENT OFFICE.

EDWARD E. BROWN, OF WINSTED, CONNECTICUT.

## CORK-PULLER.

SPECIFICATION forming part of Letters Patent No. 547,478, dated October 8, 1895.

Application filed September 1, 1893. Serial No. 484,577. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD E. BROWN, of Winsted, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Cork-Pullers, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

My invention relates to the class of devices used for removing a cork from a bottle; and the object of my invention is to provide such a device by which the distance to which the screw shall penetrate the cork may be predetermined and the mutilation of the cork prevented.

To this end my invention consists in the details of the several parts making up the device as a whole, and in their combination, as more particularly hereinafter described, and pointed out in the claim.

Referring to the drawings, Figure 1 is a view in elevation of a cork-puller embodying my improvement. Fig. 2 is a view, partly in lengthwise section, through the device with the lower part of the frame broken away.

In the accompanying drawings, the letter *a* denotes a frame the lower end *a'* of which is preferably made round in order to fit upon the mouth of a bottle. The sides of the frame are cut away between the part *a'* and the upper end for the purpose of securing lightness, and in the upper end *a<sup>2</sup>* is provided a socket. The upper edge of the frame *a* is also provided with a catch *a<sup>3</sup>*, as shown in Fig. 1 of the drawings. A raising-screw *b*, provided with an exterior thread *b<sup>3</sup>*, is located in the socket *a<sup>2</sup>*, the socket being of such size as to allow a freelengthwise movement of the screw therein, this raising-screw being tubular in form and the upper end *b'* being provided with a smaller screw-thread upon which is secured the handle *c*. The lower end of this raising-screw *b* is provided with a crosswise slot *b<sup>2</sup>*. (See Fig. 1 of the drawings.) Upon the raising-screw *b* is placed a sleeve *d*, that is threaded on its interior surface to fit the thread on the raising-screw, and the lower edge of this sleeve bears a lock *d<sup>2</sup>*, (see Fig. 1 of the drawings,) oppositely arranged to the lock *a<sup>3</sup>* on the upper edge of the frame *a*. Within the raising-screw *b* is located the shank *e'* of the corkscrew *e*, the lower end of

the shank being provided with a locking-pin *e<sup>2</sup>* of a size and length to fit the slot *b<sup>2</sup>* in the end of the raising-screw *b*. The upper end of the shank *e'* is screw-threaded, as at *e<sup>3</sup>*, and upon this end is secured a tension-cap *f*, having an interior thread fitting the thread *e<sup>3</sup>*. This tension-cap may be provided with a hole extending crosswise therethrough, in which may be located the ring *f'*, that may be used for the purpose of suspending the device as a whole or as an aid in unscrewing the tension-cap.

Within the handle *c* is provided a recess *c'*, and in this recess is located a spiral spring *g*, the lower end of the spring resting upon the upper end of the raising-screw *b* and the upper end of the spring pressing against the under side of the tension-cap *f*. In the present device the opening through the raising-screw *b* is shown somewhat larger than the shank *e'* of the corkscrew *e*, and to provide a suitable rest for the spring *c'* the washers *g'* are provided on the upper and lower sides of said spring to prevent it from being forced into the recess between the shank *e'* and the raising-screw *b* at its lower end or from interfering with the operation of the screw-thread *e<sup>3</sup>* at its upper end.

In the device as illustrated herein the upper part of the socket on the frame is shown as having a locking-catch and an oppositely-arranged locking-catch located on the lower edge of the collar, and although this form is preferred it is obvious that other forms of catch may be used, or the catch may be dispensed with entirely and provide an operative device, and I do not limit my invention to the catch as herein shown and described.

The device is assembled as follows: The raising-screw *b* is inserted through the socket *a<sup>2</sup>* from the lower end and the sleeve *d* screwed thereon. The shank *e'* of the corkscrew *e* is then inserted within the raising-screw *b* from the lower end, and the handle *c<sup>3</sup>* then turned downward to place upon the upper end of the raising-screw. The lower washer *g'* is then placed within the socket *c'* and the spiral spring seated upon the washer and the upper washer *g'* secured in place, the shank *e'* being held in place during this operation by pressure from the lower end. The tension-cap *f* is then turned to place upon the upper



end of the shank  $e'$ , placing the spring under tension.

The operation of the device is as follows: The raising-screw  $b$  being at the upper limit of its play the collar  $d$  is placed at a distance 5 above the upper edge of the socket  $a^2$  equal to the distance to which it is desired to insert the corkscrew within the cork, the lower end of the corkscrew at this time resting upon the 10 top of the cork. By rotating the handle  $c$  the corkscrew is screwed into the cork, the whole of the device, with the exception of the frame  $a$ , moving downward until the collar  $d$  upon the raising-screw comes in contact with the 15 edge of the socket  $a^2$ . As soon as this contact is made between the edges of the collar  $d$  and socket  $a^2$  the turning of the corkscrew into the cork pulls the pin  $e^2$  out of the socket  $b^2$ , and as soon as this pin is freed from the 20 socket the raising-screw  $b$  is free to turn independently of the corkscrew and the oppositely-arranged thread  $b^3$ , bearing within the

collar  $d$ , causes the device as a whole, with the exception of the frame  $a$ , to be raised, and the consequent removal of the cork without a 25 further insertion of the corkscrew into the cork.

I claim as my invention—

In combination in a cork puller, a frame adapted to fit upon the mouth of a bottle, a raising screw loosely supported within the frame 30 and having an exterior thread, a collar having an interior thread fitting the screw thread on the raising screw, a cork screw supported within the raising screw, a locking slot located in the bottom of the raising screw, a 35 locking pin borne in the cork screw to engage the locking slot, and a spring tending to hold the pin normally in engagement with said slot, all substantially as described.

EDWARD E. BROWN.

Witnesses:

LYMAN R. NORTON,  
WARHAM H. WILLIAMS.