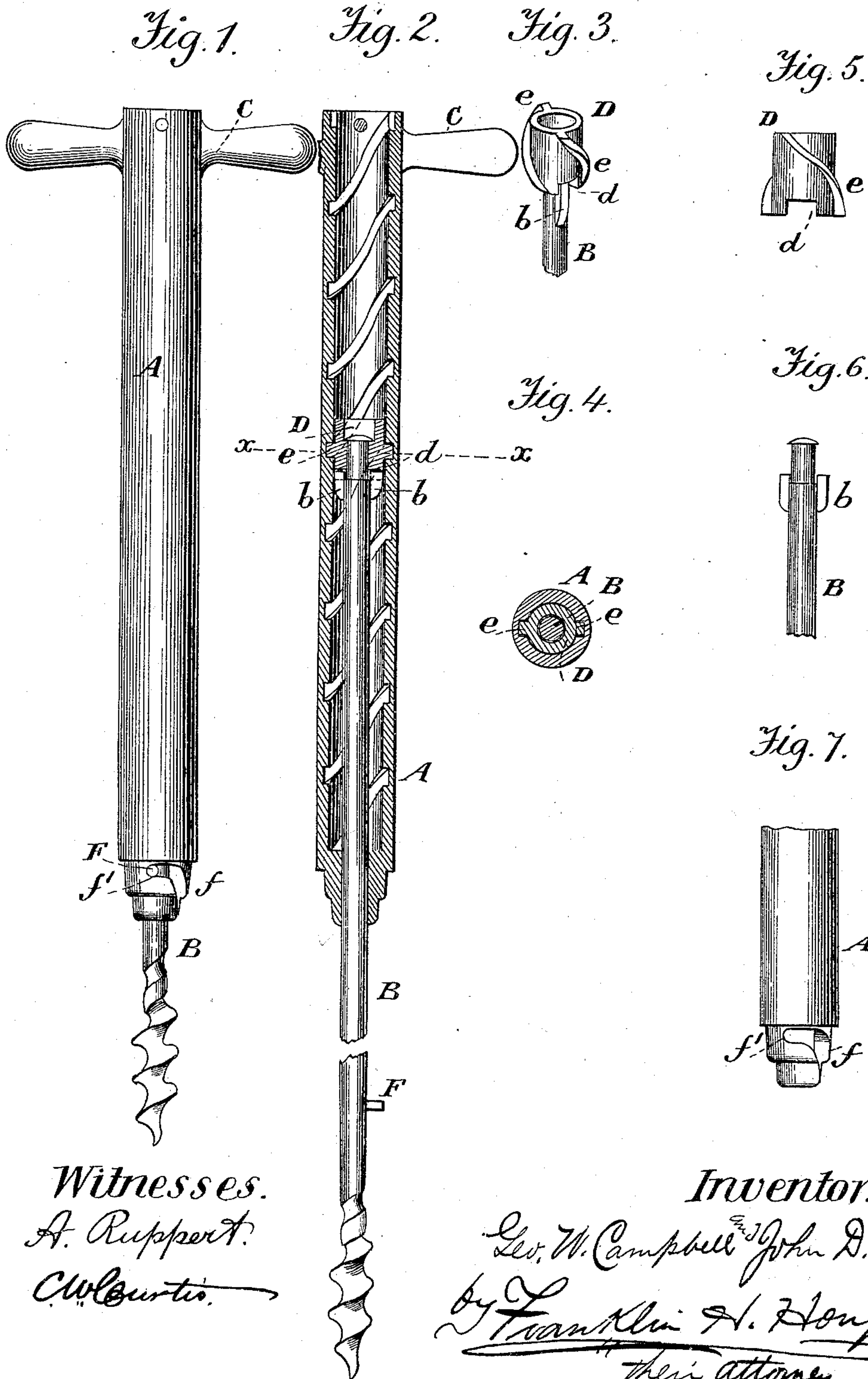


(No Model.)

G. W. CAMPBELL & J. D. HOUGH.
CORKSCREW.

No. 445,539.

Patented Feb. 3, 1891.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE W. CAMPBELL AND JOHN D. HOUGH, OF LOWVILLE, NEW YORK.

CORKSCREW.

SPECIFICATION forming part of Letters Patent No. 445,539, dated February 3, 1891.

Application filed April 17, 1890. Serial No. 348,344. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. CAMPBELL and JOHN D. HOUGH, citizens of the United States, residing at Lowville, in the county of Lewis and State of New York, have invented certain new and useful Improvements in Corkscrews; and we do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to corkscrews; and it has for its purpose to devise a tool for extracting corks in a rapid manner, and which will facilitate the disengagement therefrom of the extracted corks, the operation of disengagement being effected by drawing the screw out of its case preparatory to using the tool for extracting another cork.

The improvement consists, essentially, of a case, a screw having a spiral connection with the case, whereby a relative movement of the screw within the case effects a rotary movement of the said screw, and an interlocking mechanism between the said screw and case to hold them in a fixed relation when exerting force to extract the cork after the screw has been fastened therein.

The improvement also consists in the provisions whereby the screw is permitted a limited rotary movement independent of the spiral connection with the case to effect an interlocking of the same with the case prior to applying force for extracting the cork, which will be more fully hereinafter described and claimed.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters of reference indicating like parts throughout the several views, and in which drawings—

Figure 1 is a side view of a corkscrew embodying my invention. Fig. 2 is a longitudinal central section of the same. Fig. 3 is a detail view of the traveling head and the upper end of the screw-shank. Fig. 4 is a detail section of the tool on the line $x-x$ of Fig. 2. Fig. 5 is a detail view of the traveling

head. Fig. 6 is a detail view of the upper end of the screw-shank. Fig. 7 is a detail view of the lower end of the case, showing the spiral slot therein forming a continuation of the spiral groove and the lateral notch which receives the arm on the screw-shank.

The tool comprises the case A, which is provided at its upper end with the ordinary cross-handle C, and the screw B, which has a spiral connection with the said case, of usual construction. The traveling head D at the upper end of the screw-shank is connected with the said shank, so as to have a limited rotary movement thereon, but which will cause the screw to turn therewith when the limit of the said movement is reached in either direction. The head and the screw move together in and out of the case. The upper end of the screw-shank is reduced and passed through a central opening in the head D and upset to prevent its withdrawal. The lower edge of the head is provided with one or more notches d , and the screw-shank has a corresponding number of lateral projections b , which are adapted to engage with the sides of the notches and limit the relative movement of the said head and screw. This traveling head D is provided with spiral ribs e , which enter corresponding spiral grooves in the inner sides of the case and effect a rotary movement of the screw when the latter is passed within the case. The slot f at the lower end of the case forms a prolongation of one of the spiral grooves and has a notch f' extending laterally therefrom at its upper end. The arm or projection F on the side of the screw-shank is adapted to enter the slot f and the notch f' to lock the screw and case together.

The operation of the device is as follows: The screw is drawn out from the case the required distance and is placed on a cork to be extracted. Pressure on the case causes the screw to revolve and enter the cork. The pressure on the case is not removed until the arm or projection F enters the slot f and reaches the upper end thereof, when the case is given a slight turn to cause the said arm or projection to enter the notch f' . Force is now applied to remove the cork. To disengage the extracted cork from the screw, grasp the cork in one hand and the handle or case

in the other hand and turn the case so that the arm F will be disengaged from the notch f' and pull the screw and case in opposite directions, when the screw will withdraw from the cork.

What we claim as new is—

1. The combination, with the case having the slot f at its lower end and the traveling head having a spiral-thread connection with the said case, of the screw connected with the said head and having a limited independent rotary movement and the interlocking projection or arm adapted to engage the slot in the lower end of the case, as and for the purpose described.

2. The combination, with the case and the traveling head having spiral-thread connection with the said case and having notches in its lower edge, of the screw having a loose

connection with the said head and having lateral projections to work in the said notches and limit the movements of the said screw, substantially as described.

3. The hereinbefore-described corkscrew, composed of the case having spiral slot f and lateral notch f' , the head D, having spiral-thread connection with the said case, the screw having a loose connection with the said head and an independent rotary movement, and the interlocking projection or arm, substantially as and for the purpose described.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE W. CAMPBELL.

JOHN D. HOUGH.

Witnesses:

CHAS. T. PEASE,

HORACE BUSH.