N. OAK.

Cork-Screw and Extractor Combined.

No. 196,761. Patented Nov. 6, 1877.

Fig 1

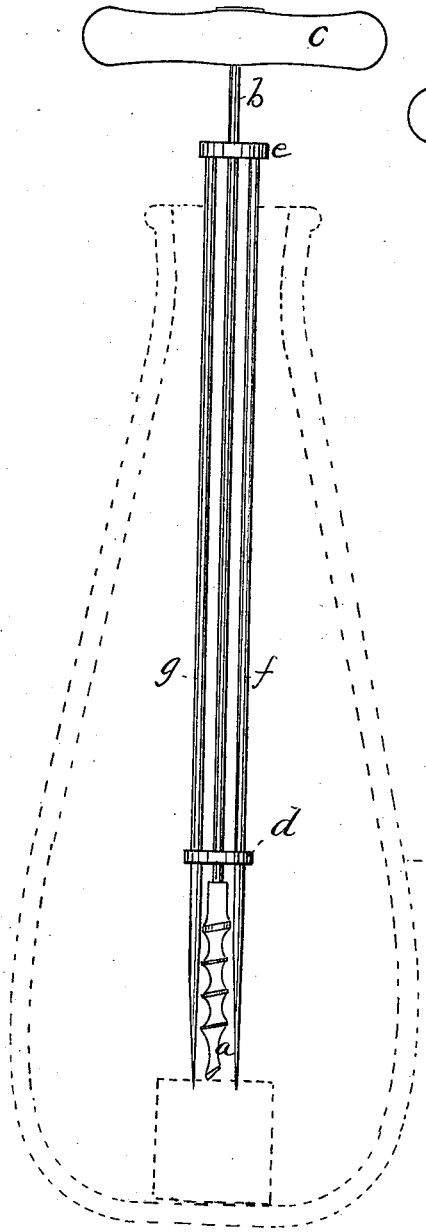


Fig 2

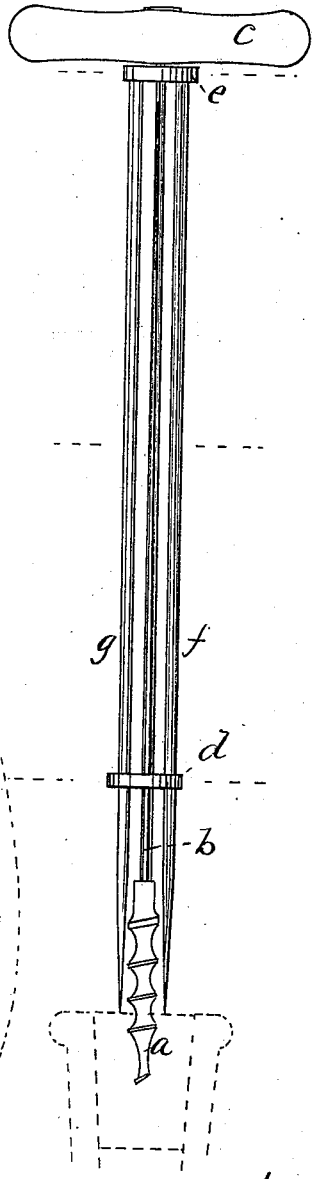


Fig 3

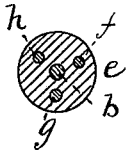


Fig 4

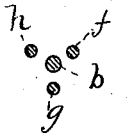
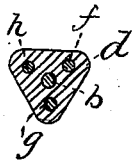


Fig 5



Witnesses

Samuel D. Kelley

Eugene Humphrey

Inventor.

Nathaniel Oak

By Porter & Hutchinson

Attys

UNITED STATES PATENT OFFICE.

NATHANIEL OAK, OF EXETER, MAINE.

IMPROVEMENT IN CORKSCREW AND EXTRACTOR COMBINED.

Specification forming part of Letters Patent No. **196,761**, dated November 6, 1877; application filed September 12, 1877.

To all whom it may concern:

Be it known that I, NATHANIEL OAK, of Exeter, State of Maine, have invented a new and useful Corkscrew and Cork-Extractor Combined, of which the following is a specification:

This invention relates both to the class of instruments which are especially designed to be used in extracting corks from the necks of bottles or vials, in order to gain access to the liquid contents of such vessels, and to the class of instruments which are designed to be used in extracting corks from the body of the vessel, and which have been inadvertently forced through the neck or narrow passage of the bottle, and which cannot be withdrawn without an instrument peculiarly adapted to such office.

And my invention consists, essentially, in a corkscrew, the spiral portion of which is formed in any desired manner, and provided with a shank or shaft of sufficient length to reach the cork at the bottom of the vessel in which the instrument is to be used; an ordinary cross-head or handle being affixed to the shank, two disks of metal of a size to pass freely through the bottle-neck being mounted to slide freely on the shank, and a plurality of pointed wires being secured rigidly in such disks at equal distances from the shank or center, all being so constructed and arranged that said disks and the wires secured therein shall have a limited range of lineal adjustment relatively to the central shaft or shank, so that when the instrument is employed as a corkscrew proper, the spiral point may enter the cork to a limited extent before the points of the surrounding wires are in contact therewith, and are then forced into the cork by the action of the screw; but when used as a cork-extractor the points may be first forced into the cork at the bottom of the bottle for the purpose of holding it in position and preventing it from rotating while the spiral portion is being forced therein by actuating the handle, all as will, by aid of the accompanying drawings, be hereinafter fully described.

In said drawings, Figure 1 is a side elevation, showing the instrument as being used to extract a cork from the interior of a bottle, the cork and bottle being shown in dotted lines. Fig. 2 is a similar elevation of the instrument, but showing it as being used as a corkscrew proper, the cork and bottle-neck being shown in dotted lines. Figs. 3, 4, and 5 are transverse sections taken, respectively, on the lines opposite to each.

In these views, *a* represents the spiral portion, and *b* is the shank or shaft of the same. *c* is the cross-head or handle affixed to shank *b*. *d* and *e* are disks, formed with a central hole of such size as to allow a free movement of shank *b* therein. *f g h* are wires similar to *b*, which are pointed at their lower extremities, and are rigidly secured in disks *d e*. Thus the disks, with their pointed wires, have an end adjustment relatively to shank *b* equal to the difference between the distance from head *c* to the shoulder of screw *a* as compared with the distance from one disk to the other, while the shaft *b*, with its point and handle, revolves freely, independent of the disks and their wires.

When the instrument is to be used to extract a cork from the interior of a bottle, the pointed wires are first inserted into the cork by force exerted on the disk *e*. Then, by means of handle *c*, the screw is turned into the body of the cork, when it may be readily extracted.

When used as a corkscrew, the part *a* is turned directly into the cork, as shown in Fig. 3, and by its advanced position and hold of the cork it readily draws the points along with its subsequent penetration.

For convenience of manufacture part *a* may be formed as a separate portion from shank *b*, which is inserted into the larger body of *a* and brazed or soldered therein, thus forming a shoulder for the lower disk to rest upon.

Any desired number of outer wires may be employed. These wires not only serve to hold the cork in position for penetration, but prevent it from splitting, and give to the screw a firmer hold therein.

By forming the shank *b* and the surround-

ing wires of steel, the instrument can be made light, effective, and durable.

I claim as my invention—

A combined corkscrew and extractor, formed with a central shaft with a spiral point and handle, with surrounding pointed wires mounted in disks, and provided with limited lineal adjustment relative to the central shaft, and to revolve thereon, all substantially as described and shown.

NATHANIEL OAK.

Witnesses:
A. P. BAKER,
EL. CROWELL.