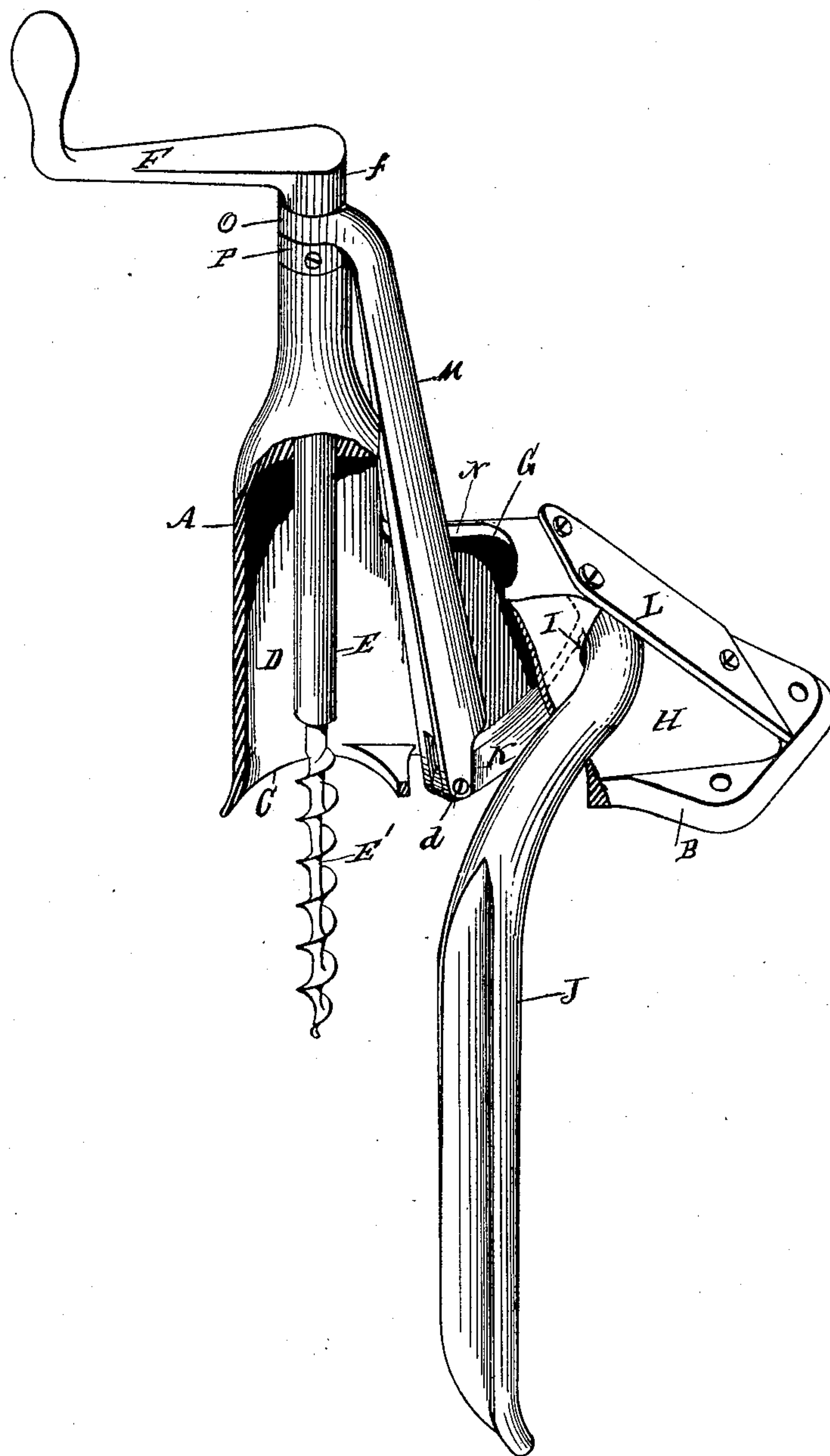


(No Model.)

E. WALKER.
CORK PULLER.

No. 452,625.

Patented May 19, 1891.



Witnesses.

H. M. Sturgeon.
A. L. Jackson

Inventor.

Edwin Walker
Per H. M. Sturgeon
Atty.

UNITED STATES PATENT OFFICE.

EDWIN WALKER, OF ERIE, PENNSYLVANIA.

CORK-PULLER.

SPECIFICATION forming part of Letters Patent No. 452,625, dated May 19, 1891.

Application filed May 1, 1889. Serial No. 309,309. (No model.)

To all whom it may concern:

Be it known that I, EDWIN WALKER, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Cork-Pullers; 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 appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, forming part of this specification.

My invention consists in the improvements in cork-pullers hereinafter set forth and explained, and illustrated in the accompanying drawing, in which the drawing is a perspective view of my improved cork-puller, portions thereof being broken away, so as to show the mechanism thereof.

In the construction of my invention shown, A is the upright part of the frame of the machine, and B the base, by means whereof it may be secured to a table. The lower end C of the upright portion is made of suitable size and shape to engage with the top of a bottle-neck, above which point I make a chamber D, of sufficient size and height to receive a cork after it is extracted. Above the chamber D the frame is contracted to a sufficient size to admit of a vertical opening being bored therein to fit the stem E of the corkscrew E'. On the upper end of the stem E a crank F is secured for operating the screw E'.

Above the base B, I make an oblong chamber G. In the sides H of this chamber I make slots I, which form the bearings for a bell-crank lever J K, this lever being secured in place, preferably, by means of a removable inclined plate L, which also serves as a cover for a portion of the chamber G and as a name-plate. The short arm K of the bell-crank lever is within the chamber G when the lever is in place, and the long arm J thereof extends downward on the outside of one of the sides H of the chamber G and serves as an operating-handle. To the end of the short arm K of the bell-crank-lever I pivot a vertically-inclined push-bar M, which extends through an opening N in the top of the chamber G upward to the upper end of the corkscrew-stem E, where it is provided with a lateral extension O, having an elongated opening therein adapted to pass over the upper end of the corkscrew-stem to allow for the upward and lateral movement of the push-bar M when raised, where it is secured between a collar P, secured on the stem E, and the hub of the crank F, so that the raising and lowering of the push-bar M moves the corkscrew E with it.

In operation the neck of a bottle is placed against the lower end C of the chamber D. The screw E' is then inserted into the cork a sufficient distance by turning the crank F. The operator then grasps the long arm J of the bell-crank lever and raises it, which causes the push-bar M to raise the stem E and the corkscrew E' with the crank thereon up into the chamber D, thus drawing the cork from the bottle.

I am aware of the patents of Hurley, Nos. 348,743 and 348,911, dated September 7, 1886, in which constructions bell-crank levers are used. In both these cases, however, bell-crank levers are coupled to sleeves in which the corkscrew-stems operate, while my bell-crank lever is connected with the corkscrew-stem by means of a link or push-bar connected directly to the upper end of the corkscrew-stem, the lower end of said link or push-bar M having an oscillating movement, which entirely does away with the long sliding sleeves surrounding the corkscrew-stem and the slotted arms or gears thereon, with which the operating-lever connects for moving the same, and also doing away with moving parts liable to become fouled from the overflow of bottles being uncorked therewith.

Having thus described my invention so as to enable others to make and use the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, in a cork-puller, of a corkscrew-stem mounted in a frame so as to slide vertically therein and having a crank on the upper end thereof, and a bell-crank lever mounted in the base of said frame, with a link provided with an elongated slot or hole in its upper end, having a vertical and lateral movement extending from one of the arms of the bell-crank lever to and engaging with the upper end of the corkscrew-stem by means of said elongated hole in the upper end of the

1. The combination, in a cork-puller, of a corkscrew-stem mounted in a frame so as to slide vertically therein and having a crank on the upper end thereof, and a bell-crank lever mounted in the base of said frame, with a link provided with an elongated slot or hole in its upper end, having a vertical and lateral movement extending from one of the arms of the bell-crank lever to and engaging with the upper end of the corkscrew-stem by means of said elongated hole in the upper end of the

said link, substantially as and for the purpose set forth.

2. The combination, in a cork-puller, of a supporting-frame A B, a corkscrew-stem E,
5 mounted in the upright portion A thereof, and a chamber G in the base B of the frame, having slots I I in the sides thereof, with a bell-crank lever J K, mounted in said slots I I, and a link M, having a vertical and lateral
10 movement, the lower end of which link is pivoted to the short arm K of said bell-crank lever and having its upper end connected with

the corkscrew-stem E, which passes through an elongated hole in the upper end of said link M to allow for the movement of the link 15 M thereon, substantially as and for the purpose set forth.

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

EDWIN WALKER.

Witnesses:

T. A. THOMAS,

H. J. CURTZE.