

Oct. 25, 1949.

J. H. IRVING

2,486,286

CORK PULLER

Filed June 20, 1947

FIG. 1.

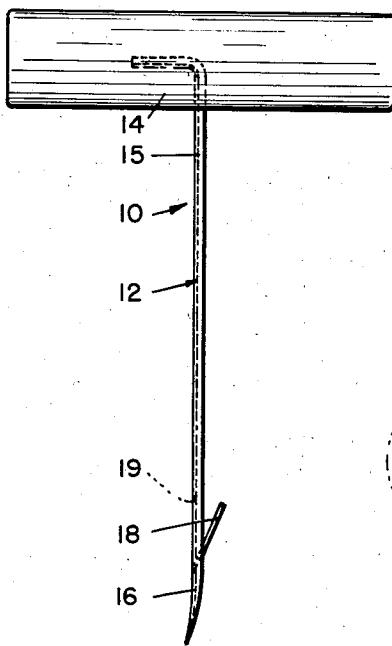


FIG. 2.

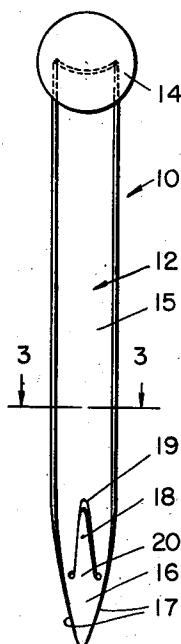


FIG. 3.

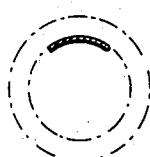


FIG. 4.

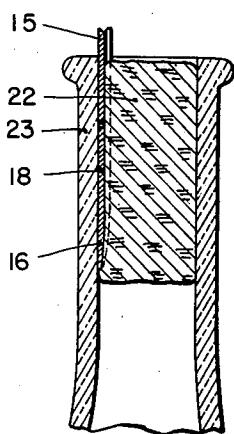


FIG. 5.

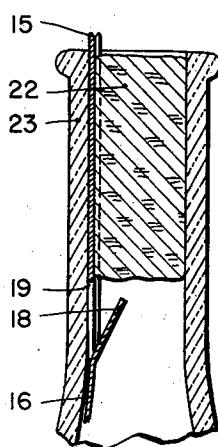
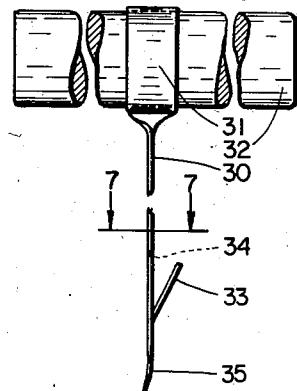


FIG. 6.



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FIG. 7.



UNITED STATES PATENT OFFICE

2,486,286

CORK PULLER

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Application June 20, 1947, Serial No. 756,021

1 Claim. (Cl. 81—3.49)

1

This invention relates generally to devices for pulling corks.

I am aware that there are many types of cork pullers in use including the regular cork screw type of puller and other less known devices such for example as the type having a barbed stem which is forced into the bottle along the side of the cork and rotated to bring the barb underneath the inner end of the cork into a cork-engaging position. All of these earlier devices with which I am familiar have serious disadvantages in that they mar or damage the cork, rendering it unsuitable for re-use and often causing particles of the cork to fall into the contents of the bottle. It is also true that such devices often fail to function properly with the result that the cork may be broken off and/or pushed into the bottle.

It is an object of this invention to provide a novel, improved, efficient cork puller which does not mar or damage the cork to render it unsuitable for re-use.

It is also an object to provide a cork puller which is easy to use, may be quickly and easily inserted in the neck of a bottle without turning or twisting and which removes the cork with a single pull.

It is a further object to provide a cork puller having an elongated stem provided with a laterally projecting cork-engaging member which is automatically deflected into an opening in the stem as the stem is inserted in the neck of a bottle past a cork therein and which automatically springs out to its normal position when it has passed the cork whereby it engages the inner end of the cork as the stem is pulled out of the bottle.

It is also an object to provide a cork puller device of simple construction which may be readily manufactured.

These and other objects will be apparent from the drawing and the following description thereof.

Referring to the drawing, which is for illustrative purposes only:

Fig. 1 is a side elevation of a cork puller embodying the invention;

Fig. 2 is an end elevation of the device of Fig. 1;

Fig. 3 is a section on line 3—3 of Fig. 2;

Fig. 4 is an enlarged fragmentary sectional ele-

2

vation showing the device being inserted in the neck of a bottle;

Fig. 5 is a view similar to Fig. 4 but showing the device completely inserted;

Fig. 6 is an elevation of another form of the invention; and

Fig. 7 is a section on line 7—7 of Fig. 6.

More particularly describing the invention, reference numeral 10 indicates one form of cork puller device embodying the invention. The device includes a stem generally indicated by 12 on which is mounted a suitable handle 14. The handle may be of any desired material and the stem attached thereto in any conventional manner.

The stem is preferably made of metal, the main portion 15 thereof being arcuate in cross-section to correspond to the curvature of a cork. The concave side of the main portion of the stem 20 may be considered as the inner side thereof and the convex side the outer side. The lower end portion 16 of the stem is inclined or curved outwardly at a slight angle to the longitudinal axis of the main body 15 of the stem. This end portion 25 16 is preferably provided with tapered edge margins 17 to facilitate insertion of the device in a bottle.

The stem is provided with an inwardly projecting cork-engaging member or prong 18 which 30 may be stamped from the stem during manufacture, leaving an opening 19 substantially corresponding in size and shape to the prong. The prong is attached to the stem at its lower end in the region 20 and normally projects laterally inward of the stem, being inclined thereto at an acute angle and extending upwardly from its region of attachment.

The stem as a whole should be sufficiently stiff and strong that it will withstand being forced 40 into the neck of a bottle alongside a cork without bending materially or breaking. The stem in the region 20 and the prong itself should be of spring quality so that the prong may be deflected by the cork to a position in which it lies substantially 45 within the plane of the stem in the opening 19. The prong should be of a length not less than the radius of the cork so that it will tend to enter the cork diagonally at a point sufficiently removed from the peripheral surface against which 50 the stem engages to provide a bite which insures

a pull on the cork rather than the prong merely cutting a groove along the side of the cork and pulling out without bringing the cork.

In operation, the device (see Figs. 4 and 5) is readily inserted between the cork 22 and the wall of the neck 23 of the bottle and as it is forced down the prong 18 is deflected by the cork into the opening 19 in the stem (Fig. 4). After the stem has been forced down to the position in which it is shown in Fig. 5, the prong will spring out from the body of the stem into position underneath the inner end of the cork. Although it is not essential, preferably the end of the prong is sufficiently sharp so that as the cork puller is pulled out of the bottle the end of the prong initially pierces the end of the cork and is supported by the cork against undue deflection. With this construction less bending of the prong results in the region 20, thereby prolonging the life of the device.

It will be obvious that by pulling the cork puller outwardly of the bottle from the position in which it is shown in Fig. 5, the cork can be readily pulled. It will also be apparent that by reason of the shape of the stem and the deflectable nature of the prong, the device may be inserted readily without damaging the cork. In this connection, the outwardly inclined lower end of the stem naturally rides down the neck of the bottle without digging into the side of the cork.

In Figs. 6 and 7 there is shown another form of the invention wherein the stem, indicated by 30, is flat. At its upper end 31 the stem may be looped around the handle 32 to secure the parts together. The stem has a prong 33 and a prong-receiving opening 34 similar to those previously described, the lower end 35 of the stem being tapered for easy entrance and turned out to prevent damage to the cork.

Although the invention has been particularly shown and described, it is contemplated that various changes and modifications can be made without departing from the scope thereof as defined in the claim.

I claim:

A device for pulling a cork from a bottle neck

comprising an elongated smooth surfaced stem of resilient material thin enough from end to end to enable it to slide axially between said cork and said bottle neck without pushing said cork inwardly of the neck and being of a length greater than the length of said cork and being of uniform arched cross section from end to end whereby to conform to the peripheral surface of said cork; said stem being further characterized by being of uniform thickness from end to end, by having a substantially inverted V-shaped slit adjacent but spaced from its lower end and partially severing therefrom a resilient straight, unobstructed, prong of a length not less than the radius of said cork and bent out of the plane of the stem so as to be normally disposed upwardly and outwardly therefrom to engage a substantial portion of the inner end of said cork when the stem is pulled upwardly from said bottle neck but being deflectable by said cork completely into said slit and into the plane of said stem when the stem is pushed downwardly between the said cork and the said bottle neck whereby not to present any lateral obstruction on the stem which could interfere with free sliding movement of the stem relative to said cork; by the lower end portion of said stem below said slit being tapered and curved in longitudinal section in a direction opposite the prong; and a pull element on the top end of said stem.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
601,380	Phillips	Mar. 29, 1898
1,332,043	Keith	Feb. 24, 1920
1,752,227	Briggs	Mar. 25, 1930
2,004,974	Bordener	June 18, 1935

FOREIGN PATENTS

Number	Country	Date
395,255	France	Feb. 18, 1909