W. REDLICH.

CORKSCREW. No. 303,400. Patented Aug. 12, 1884.

United States Patent Office.

WILLIAM REDLICH, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO HENRY REDLICH, OF SAME PLACE.

CORKSCREW.

SPECIFICATION forming part of Letters Patent No. 303,400, dated August 12, 1884.

Application filed July 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM REDLICH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Corkscrew, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to corkscrews specially adapted to be used in large bottling establishments and the like; and it has for its object to provide a device of this character, which may be fastened to a table or bench in proper position, and which requires less skill and works with more convenience and efficiency than those now in use.

A further object of the invention is to provide a corkscrew operating, in the manner hereinafter described, by boring or setting the screw in the cork, and when properly adjusted withdrawing the screw from the bottle by the operation of a lever, so as to carry the cork along with it.

With these and other objects in view the said invention consists in certain details of construction and combination of parts, as hereinafter set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved corkscrew applied to a table and in position for operation, the screw being shown adjusted down in the cork. Fig. 2 is a vertical longitudinal sectional view of the same, the lever being shown as lowered and the cork extracted. Fig. 3 is a side view of a modification, the cork being shown as extracted.

Like letters refer to corresponding parts in the several figures.

Referring to the drawings, A designates the base of the machine, adapted to rest on the table or bench, and provided with a downwardly-extending angular arm, B, through which is passed a thumb-screw, C, the inner end of which is provided with a head, D, arranged to bear against the under side of the table or bench below the base A, to hold the machine in upright position. Said base A is formed with a forwardly-extending ring, E, on a horizontal line with the same, the opening of said ring receiving a circular extension, F, of

a collar, G, which fits flush against the under side of the ring, the collar being constructed with a tapering central opening, H, flaring outwardly at the lower end, as shown, so as 55 to receive the neck of the bottle.

I designates a standard erected upon the base A, and provided with forwardly-extending lugs J J', the perforations a of which are aligned with each other, the shank K of the 60 corkscrew passing through the aligned perforations and working vertically in the same, the upper end of the shank being provided with a crank-arm, L, and the lower end, carrying the screw M, working through the central opening, H, of the collar.

N designates a lever pivoted in a recess, O, formed in one side of the standard I, and provided at its inner end with a toothed segment, P, meshing with thread Q, formed on the 70 shank about the central portion thereof, the operation of the lever causing the segment to engage with the threads to draw the shank upward.

The operation of my invention will be read-75 ily understood from the foregoing description, taken in connection with the annexed drawings. The machine is attached to the table or bench in the manner shown, the base A resting on the table, the angular arm B fitting 80 around the edge thereof, and the thumb-screw C engaging with the under side of the table, and thus the machine is held securely in position while in use, and may be readily detached and put up in another place, as found desir- 85 able. The neck of the bottle is then fitted in the tapering opening H of the collar G, so as to allow the cork to come on a line with the screw M, and then by operating the crank-arm L the screw is caused to enter the cork to the 90 required depth, the downward movement of the shank K causing the threads Q to engage with the teeth of the segment P and throw the outer end of the lever N upward, as shown in Fig. 1. Then, by drawing the lever downward, 95 the segment engages with the threads in the shank K, to cause the upward movement of the latter through the perforated lugs J J', so as to carry the screw M along with it and withdraw the cork from the bottle, as shown in 100 Fig. 2. In the modification shown in Fig. 3 I dis-

pense with the use of the angular arm B by forming the base A flat and provided with holes to receive a suitable number of screws d, which enter the table or bench, and thus 5 secure the machine in position. This construction may be found desirable in some cases; but for all practical purposes I prefer to use the angular arm with the binding-screw shown in Figs. 1 and 2. I also substitute in place of 10 the lever with segment engaging with threads on the shank shown in Figs. 1 and 2 a lever, N, pivoted to a bar, R, connecting a pair of lugs, SS', extending rearwardly from the standard I, the inner end of said lever N being dis-15 posed between two curved lugs or projections, TT', formed on one side of a rigid collar, U, secured to the shank K. The operation of this corkscrew is essentially the same as that above described, the crank L causing the screw to 20 enter the cork, and the lever N being operated to draw the shank upward, and thus withdraw the cork from the bottle.

The advantages of my invention will be readily appreciated. The apparatus is held to the 25 bench or table in a very convenient and substantial manner, and may be operated with ease by any ordinary workman to extract the cork quickly and efficiently. It requires no skill to work the machine, since the screw is 30 worked down through the cork, and the lever is readily operated to draw the screw upward and carry the cork along with it. The collar G, having the tapering opening H to center or receive the neck of the bottle, not only brings 35 the neck into the center, but also prevents breakage, since it forms a soft lining between the iron ring E of the base and the glass rim of bottle. Said collar may be lined with india-rubber, as shown at V, Fig. 3, or padded 40 with any other suitable material, or made of such material, though wood is sufficiently soft to answer the purposes.

The lever corkscrews which are in the market at the present time, by reason of their 45 construction, have to depend upon the strength of bottles, so that imperfect, light, or common bottles are easily broken by the use of the machine, the metal part of the same coming directly in contact with the rim or neck of the 50 bottle. This causes breakage of the bottles which have weak necks, the entire weight of the machine and the strain of drawing the cork coming upon this weak part of the bottle. My corkscrew obviates these disadvan-55 tages in the manner shown, the machine being attached to the table, so that the strain and weight are upon the table, while the wooden collar forms a soft lining to prevent breakage.

My improved corkscrew is simple in con-60 struction, inexpensive to manufacture, and is specially designed for large establishments, where it will prove of great utility for the purposes intended.

Having described my invention, I claim— 1. In a corkscrew, the combination of the standard, erected on a suitable base, with the shank carrying the screw, a lever for operating I the shank, and a crank for turning the same, as set forth.

2. In a corkscrew, the combination of the 70 standard, erected on a suitable base, with the shank carrying the screw, a lever for operating the shank, a crank for turning the same, and a ring projecting forwardly from the base and lined with a suitable collar, as set forth.

3. In a corkscrew, the combination of the standard, erected upon a suitable base, with the shank carrying the screw, a crank for turning the shank, and means, substantially as described, for drawing the shank in an upward 80 direction to extract the cork, as set forth.

4. In a corkscrew, the combination of the standard, erected upon a suitable base, with the shank carrying the screw, a crank for turning the shank, means, substantially as de- 85 scribed, for drawing the shank in an upward direction, and a collar carried by the base and formed of some soft material, to fit around the neck of the bottle, as set forth.

5. In a corkscrew, the combination of the 90 standard, erected upon a suitable base, with the shank carrying the screw, a crank for turning the shank, means for drawing the shank upward, and an angular arm projecting downwardly from the base, and carrying a thumb- 95 screw for holding the machine to a table, as set forth.

6. In a corkscrew, the combination of the standard, erected upon a suitable base, with the shank carrying the screw, a crank for turn- 100 ing the shank, means for drawing the shank upward, and devices, substantially as described, for attaching the machine to a table or bench, as set forth.

7. In a corkscrew, the combination of the 105 standard, erected on a suitable base, with the shank carrying the screw, a crank for turning the shank, a lever for operating the shank, devices for attaching the machine to a table or bench, and a collar carried by the base and 110 arranged to center the neck of the bottle, as set forth.

8. In a corkscrew, the combination of the standard, erected on a suitable base, with the shank carrying the screw, a crank for turning 115 the shank, means for operating the same, and a collar carried by the base, provided with a tapering central opening, and constructed of soft material, as set forth.

9. In a corkscrew, the combination of the 120 standard, erected on a suitable base, with the crank carrying the screw, a crank for turning the shank, means for operating said shank, a ring projecting forwardly from the base, and a collar carried by the ring, and padded or 125 otherwise constructed so as to prevent strain on the neck of the bottle, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM REDLICH.

Witnesses:

EMIL R. HAASE, ADOLF BERGER.