(No Model.)

W. L. AMES.

CORK EXTRACTOR.

No. 345,822. Patented July 20, 1886.

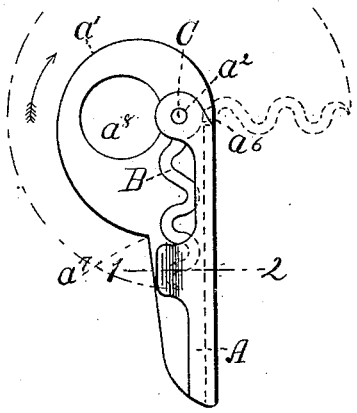

Fig. 1.

Fig. 3.

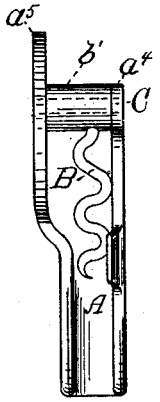

Fig. 2.

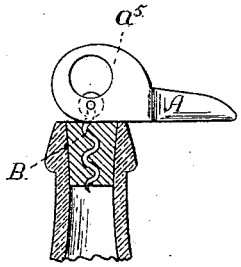

Fig. 4

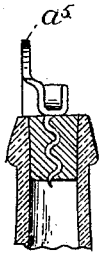

Fig. 5.

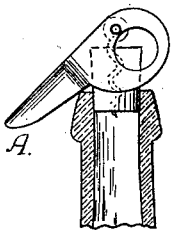

Fig. 6.

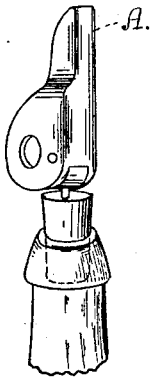

Fig. 7.

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CORK-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 345,822, dated July 20, 1886.

Application filed September 17, 1885. Serial No. 177,400. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. AMES, of Terre Haute, in the county of Vigo and State of Indiana, have invented new and useful Improvements in Cork-Extractors; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of the specification.

It is the object of my invention to provide a cork-extractor which shall be at once simple in construction, convenient and effective in use, and which may be employed in extracting corks from bottles of any size. These objects I accomplish by the invention hereinafter described, and subsequently pointed out in the claims.

In the drawings, Figure 1 represents a side elevation of the extractor with the screw closed in the handle; Fig. 2, a front elevation of same; Fig. 3, a section of handle A at 1 2; Fig. 4, a side elevation of the extractor with screw inserted in cork and ready for use; Fig. 5, an end elevation of same; Fig. 6, a side elevation of extractor with cork partially withdrawn from a bottle; Fig. 7, an elevation of extractor and bottle in the case of a very long cork.

Similar letters of reference indicate corresponding parts.

A represents a concave handle, which partially incloses the screw when extractor is not in use, as shown in Fig. 1. Somewhere on the side of the handle A, as at a^3, is a spring which presses against the screw when closed in the handle, and holds it in that position. The spring a^3 may be made a part of the handle or a separate piece of metal, and attached to the handle. There is a screw, B, having at one end a cylindrical head, b', through the center of which the screw B is pivoted to the handle A. At one end of the handle A are two ears, a^4 a^5, between which the screw B is pivoted at a^2 to the handle by means of the pin C. The ear a^5 is of cam-shape, the distance between the surface a' and the center of the pin C constantly increasing from a^6 to a^7. The cam-ear a^5 is of skeleton form, having the hole a^8, as shown in Fig. 1.

To use the extractor, turn the screw from the position shown in Fig. 1 in the direction of the arrow in same figure, through about two hundred and seventy degrees, as shown in dotted lines, and insert it in the cork with the cam resting at a^6 upon the end of the neck of the bottle, as shown in Figs. 4 and 5. Now turn the handle from the position shown in Fig. 1 in the direction of the arrow in same figure, and the screw being firmly inserted in the cork and the surface resting upon the end of the neck of the bottle, it imparts to the cork in a vertical direction the power of a wedge, which forces the cork upward and out of the neck of the bottle. Should the cork be of such unusual length that the cam does not entirely withdraw it, then by inserting the finger in the hole a^8 the cork can easily be withdrawn the remainder of the distance.

It will be understood that the screw is always inserted in the cork at a point which will insure bringing the cam to bear upon the neck of the bottle—that is, it is necessary only to insert the screw in the center of the cork, when by so doing it will bring the cam of the extractor into such position as to have it, in the operation of withdrawing the cork, bear upon the top of the neck of the bottle. In this way my cork-extractor is adapted for use on bottles of various sizes.

I am aware that cork-extractors have heretofore been constructed employing a barrel or hollow support adapted to bear on the bottle-neck, and a screw attached to a shank arranged to pass through the end of the barrel or support, and a lever or cam-handle pivoted to the shank and fulcrumed on a roll or rolls on the barrel or support, whereby by moving said cam-handle it will operate to withdraw said shank through the opening in the barrel, and with it the cork from the mouth of the bottle; but in constructions of this character three essential parts are employed, the barrel, the screw, and the lever. In my invention, however, I make use of but two essential parts, the handle with its cam-shaped ear adapted to bear directly on the neck of the bottle, and the screw pivoted to the handle, and by inserting the screw into the cork at such position, either in the center or at one side thereof, as to insure bringing the cam to rest upon the top of the neck of the bottle, my extractor is made very simple in construction and adapted

to be used as before stated on bottles of varying sizes.

What I claim as new, and which I desire to secure by Letters Patent, is—

1. A cork-extractor composed of the lever or handle A, having at one end the cam-shaped ear a^5, integral with the handle, and a cork-penetrating screw, B, pivoted to said lever or handle at one side of the cam-shaped ear, the arrangement being such that when the screw is inserted in the cork of a bottle the cam-shaped ear will bear on the end of the neck of the bottle at one side of the screw, so that by a swinging movement of the lever the cork will be withdrawn from the bottle, as set forth.

2. In a cork-extractor, the combination of the lever or handle A, composed of a single piece of metal having at one side a cam shaped ear, a^5, and at the opposite side a smaller ear, a^4, and a cork-penetrating screw pivoted between said ears at one end of the handle, as set forth.

3. In a cork-extractor, the combination of the lever or handle composed of a single piece of metal, having at one side a cam-shaped ear, a^5, and at the opposite side a smaller ear, a^4, a cork-penetrating screw pivoted between said ears at one end of the handle, and a spring, a^3, attached to or formed on said handle to engage with the outer end of the screw and hold it turned back against the handle, as set forth.

4. The combination, with the cork-extracting screw of the handle or lever A, having at one end the ears a^4 a^5, between which said screw is pivoted, one of said ears being cam-shaped, so that it will act as described on the bottle-neck, and provided with a hole, a^8, for the insertion of a finger, as set forth.

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Witnesses:
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