Wolff & Numsen,

Bottle Corker.

No. 107,582. Patented Sept. 20. 1870.

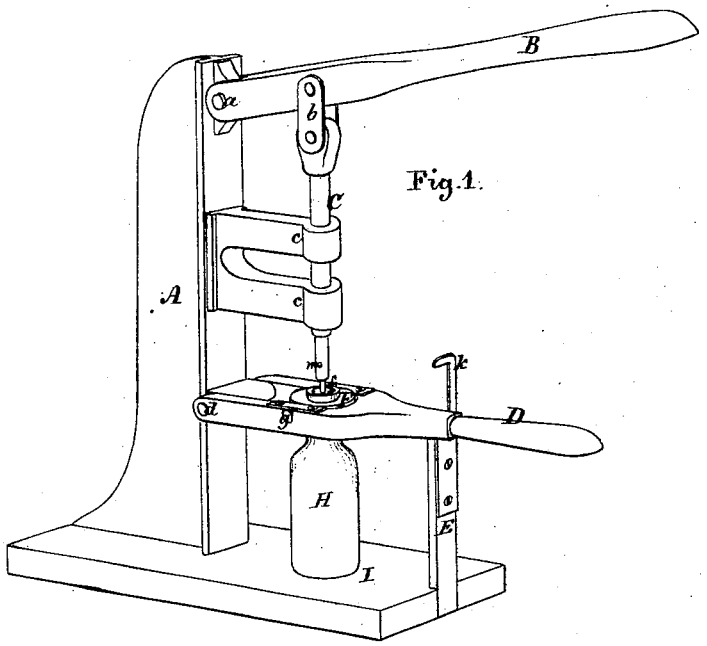
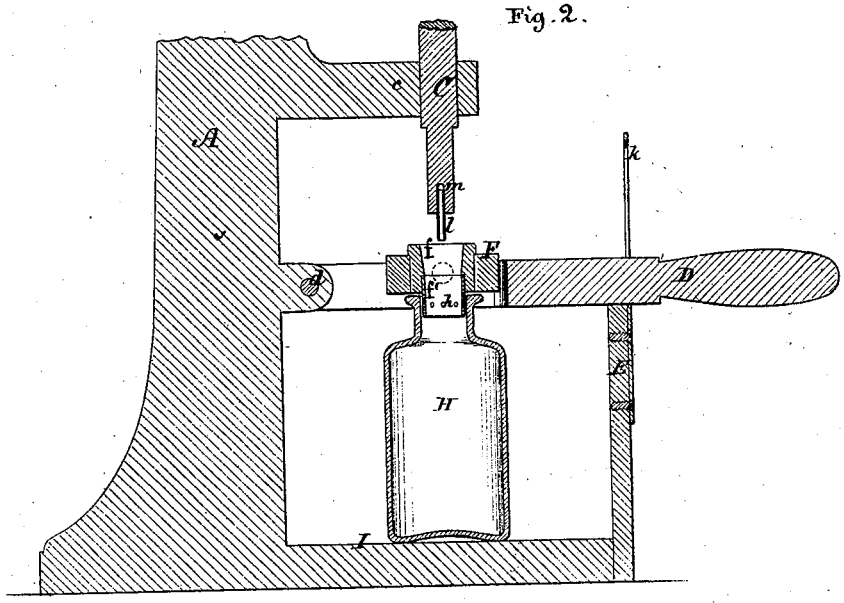


Fig. 1.

Fig. 2.



Witnesses

Edmund Masson

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By attorney A. B. Stoughton.

United States Patent Office.

JULIUS WOLFF, OF NEW YORK, N. Y., AND WILLIAM N. NUMSEN, OF BALTIMORE, MARYLAND.

Letters Patent No. 107,582, *dated September* 20, 1870.

IMPROVEMENT IN BOTTLE-CORKING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that we, JULIUS WOLFF, of New York city, in the county and State of New York, and WILLIAM N. NUMSEN, of Baltimore, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Machines for Corking Bottles; and that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 represents a perspective view of our machine.

Figure 2 represents a vertical section through a portion of the machine, showing the main parts on an enlarged scale.

Similar letters of reference, where they occur, denote like parts in all the figures.

Our invention relates, first, to the funnel or mouth-piece used for introducing a cork into the neck of a bottle or jar, which funnel is formed with perforations, to allow the air contained in the bottle to escape when the cork is driven in, as, otherwise, the air would be inclosed in, and, in many cases, the contents of the bottle or jar would be spoiled by the presence of this compressed air.

Our invention further relates to the manner in which the mouth-piece is supported by a lever, above the neck of the bottle, so as to relieve the bottle of the pressure exerted by the plunger in forcing the cork down in the mouth-piece, and to prevent the breaking of the bottle, which happens occasionally when using the ordinary method.

Our invention further relates to the manner in which the cork is finally introduced into the neck of the bottle or jar, by lifting the mouth-piece, and lever connected with it, off the neck of the bottle, and forcing the cork against the plunger, which is held stationary, which operation also releases the bottle from the apparatus at the same time that the cork is driven into the mouth of the bottle.

Our invention further relates to the combination of the hinged lever and swivel-piece, for carrying the funnel and pipe, through which the cork is driven, for the purpose of maintaining the horizontality of the funnel as the lever swings on its hinge.

To enable others skilled in the art to make and use our invention, we will proceed to describe the same with reference to the drawings.

Near the top of a standard, A, is pivoted, at *a*, a hand-lever, B, which has hinged to its under side, at *b*, the plunger C.

This plunger passes through suitable bearings *c*, attached to the standard A, allowing it to move up and down in a direct line.

To the standard A is also pivoted, at *d*, the lever D, which is supported near its free end by a rest, E.

This lever D carries a funnel or mouth-piece, *f*, supported by a swivel-piece, F, which has bearings *g*, passing through the lever D, allowing the mouth-piece *f* to have a rocking motion, and remain in a horizontal, or nearly so, position, when the lever D is lifted off its rest E.

The mouth-piece has, extending downward, a thin pipe, *f'*, which enters and fits loosely into the neck of the bottle or jar H.

This pipe *f'* is perforated with small holes *h*, to allow the air contained in the bottle to escape more readily when a cork is introduced into its upper portion.

The rest E has attached to it a stop, *k*, to arrest the motion of the lever D, when it is raised with too much force.

The operation of corking a bottle or jar with this machine is as follows:

The bottle H being filled with any desired substance, the lever D is lifted up, and the bottle H brought on the platform I, the central portion of which could be made adjustable, to adapt the machine to bottles of different heights. Then the lever D is brought down, so as to bear on the rest E; at the same time the thin pipe *f'* enters the neck of the bottle, fitting it loosely. A cork is then introduced into the mouth-piece *f*, and pressed down, by means of the plunger C and lever B, to near the bottom of the thin pipe *f'*, the air escaping in front of it through the small perforations *h*, and between the neck of the bottle and the pipe *f'*; the plunger C is held down rigidly, and the lever D is lifted up, which forces the cork down through the funnel or pipe *f'*, and into the neck of the bottle. The plunger C may then be raised, and the corked bottle removed.

The plunger C can also be supplied with a hollow perforating pin, *l*, to pierce through the cork when the plunger is brought down, thus allowing the air to escape from under the cork through the hollow pin *l* and holes *m*, drilled through the end of the plunger.

Having thus fully described the construction and operation of our invention,

What we claim therein as new, and desire to secure by Letters Patent, is—

1. In combination with the funnel or mouth-piece *f* of a machine for corking bottles, the perforated pipe *f'*, fitting loosely in the neck of the bottle, to.

allow the air in the bottle to escape during the operation of forcing the cork therethrough, substantially as described.

2. The lever D, carrying the mouth-piece *f*, when hinged to the frame, in combination with the support E, to relieve the bottle of the pressure when the cork is driven down, substantially as and for the purpose set forth.

3. In a machine for corking bottles, the lever D, as described, in combination with the mouth-piece *f* and perforated pipe *f'*, so that the cork is introduced into the neck of the bottle by lifting the lever D and holding down the plunger C, substantially as and for the purpose set forth.

4. In combination with the hinged and controlled lever D, the hinged or swivel-piece F, for carrying the funnel and pipe, as and for the purpose described.

JULIUS WOLFF.
WM. N. NUMSEN.

Witnesses:
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