A. WERNER.

CORK-FASTENING MACHINE.

No. 195,734. Patented Oct. 2, 1877.

Fig: 1

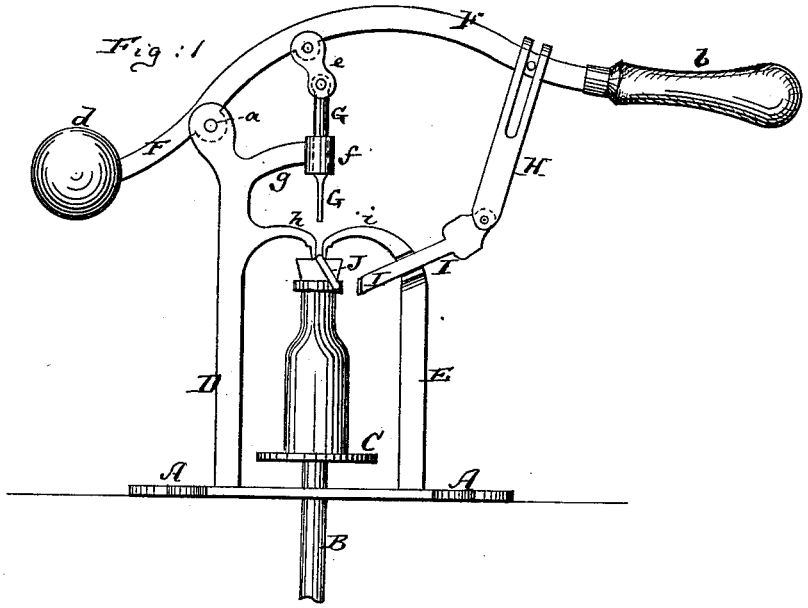


Fig: 2

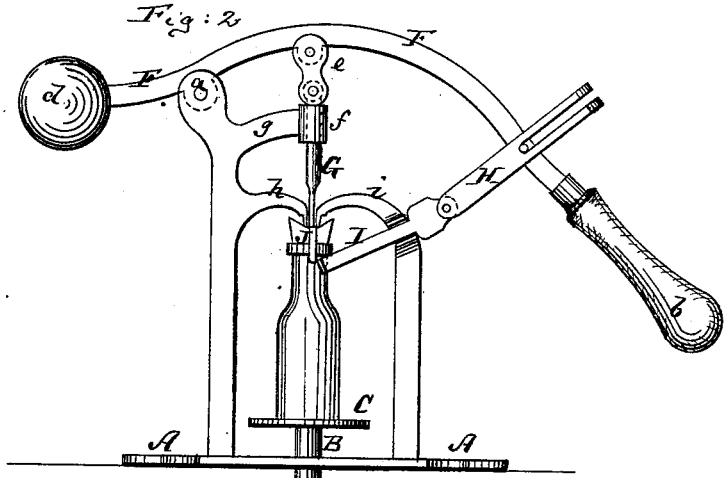
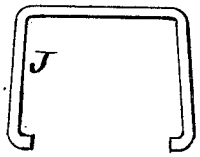


Fig: 3



Witnesses:

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UNITED STATES PATENT OFFICE.

AUGUST WERNER, OF NEW YORK, N. Y.

IMPROVEMENT IN CORK-FASTENING MACHINES.

Specification forming part of Letters Patent No. **195,734**, dated October 2, 1877; application filed July 18, 1877.

To all whom it may concern:

Be it known that I, AUGUST WERNER, of the city of New York, county and State of New York, have invented an Improved Cork-Fastening Machine, of which the following is a specification:

Figures 1 and 2 are side views of my improved cork-fastening machine, showing the same in different positions. Fig. 3 is a detailed side view of the agraffe used for fastening the cork.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new machine for applying agraffes or bent-wire fasteners to the corks of bottles containing effervescent or other liquors, and for holding the said agraffes in place on the bottles.

The invention consists in various new combinations of the parts which constitute said machine, as hereinafter more fully described.

In the drawing, the letter A represents the platform or frame of the machine, which I propose to secure upon a table or other support. Through this platform extends the shank B of a disk or plate, C, which disk is attached to the upper end of said shank, the shank being at its lower part in communication with a treadle or other means for raising it through the platform A.

D and E are two posts which project upwardly from the frame or platform A. The upper end of the post D constitutes the bearing for a pin, *a*, which is the fulcrum of a lever, F, said lever having a handle, *b*, at one end, and preferably a weight, *d*, at the other end.

By a link, *e*, the lever is joined to a plunger, G, which is vertically suspended above the axis of the shank B, and which is guided in a tubular guide, *f*, that is formed on a projecting arm, *g*, of the post D or E. The post D also carries a projecting finger, *h*, which extends toward the post E, and downwardly, as clearly shown in the drawing. The post E also carries a projecting finger, *i*, which extends toward the post D and downwardly, as shown.

Between the tips of the fingers *h i* a space is left of sufficient size to admit the descending plunger G.

By a slotted link, H, the lever F is also united to a sliding fork, I, which embraces the upper portion of the post E, and is guided thereon in a groove, or otherwise, so as to have a certain specific direction of movement.

The operation is as follows: The bottle, after the cork has been put into it, is placed centrally upon the disk C, and said disk then raised until the cork reaches the tips of the fingers *h i*, as shown in Fig. 1. The agraffe J, which is to secure the cork, is then let down from above between said fingers *h* and *i*, so that it will straddle the cork, but hang in an inclined position approaching the fork I, as also shown in Fig. 1. The handle of the lever F is thereupon moved down to bring the plunger upon the middle portion of the agraffe, and press the same down into the cork, and at the same time the fork I is moved against the lower part of the agraffe, and pushes the same into a vertical position and over the neck-rim of the bottle, as shown in Fig. 2. The agraffe now holds the cork firmly in place, and the bottle can be readily removed by first raising the lever and then lowering the disk C.

When effervescent liquors are contained in the bottle, such as champagne, it will be necessary, while applying the bottle to the machine, to hold the cork fast to the bottle by quadruplex tongs, such as are already used by bottle-corkers. Two of the prongs or jaws of said tongs will straddle the bottle at the neck, and the other two will rest on the cork. For the accommodation of these upper two jaws of the tongs, the fingers *h i* of the machine are notched on their lower parts, as indicated in Figs. 1 and 2. After the disk C has been raised to bring the cork against these fingers, the tongs may be removed, as the fingers will prevent the cork from being thrown out by the liquid while the bottle is held against them by the raised disk C.

I claim as my invention—

1. The combination of the posts D and E, having fingers *h i*, with the plunger G and sliding fork I, substantially as herein shown and described.

2. The combination of the lever F and its

links *c* and H with the sliding fork I and plunger G, all arranged to operate substantially as herein shown and described.

3. The vertically-movable disk C, combined with the fingers *h i*, plunger G, sliding fork I, and operating-lever F, substantially as herein shown and described.

4. The combination of the vertically-movable disk C with the fixed fingers *h i*, and with the movable plunger G, which is suspended in line with the space between said fingers, substantially as herein shown and described.

AUGUST WERNER.

Witnesses:
F. v. BRIESEN,
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