

(No Model.)

G. W. LEBOLT.
BOTTLE CAPPING MACHINE.

No. 528,329.

Patented Oct. 30, 1894.

FIG. 1

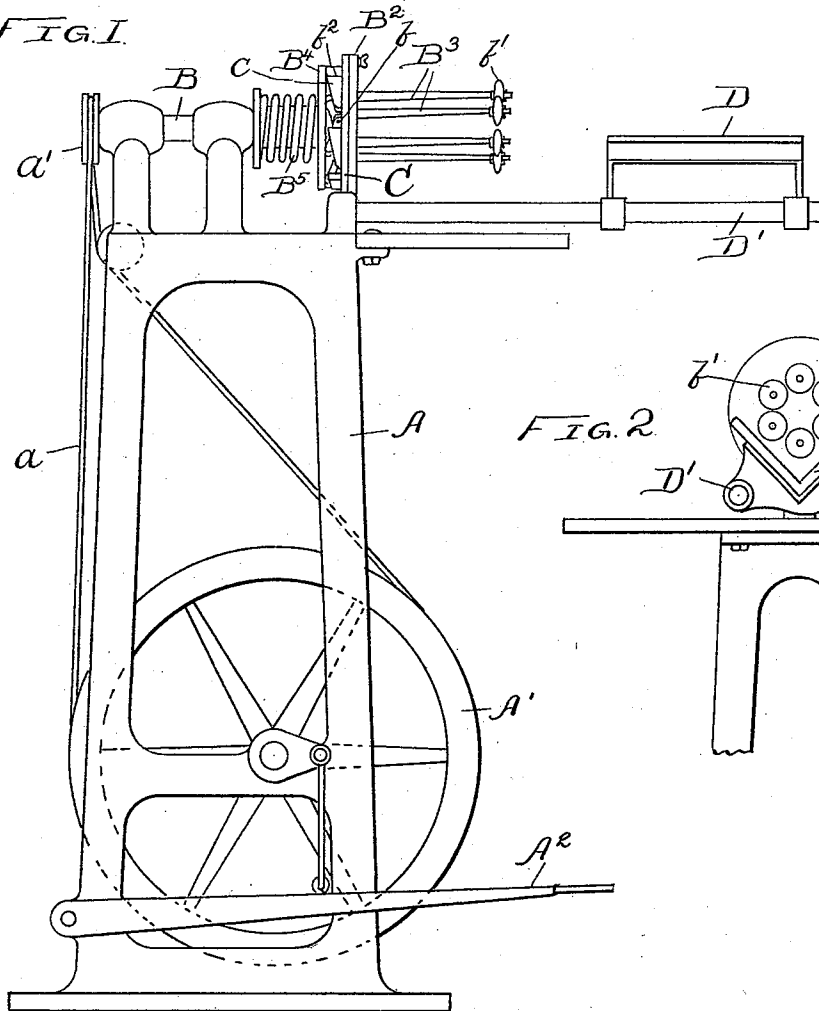


FIG. 2

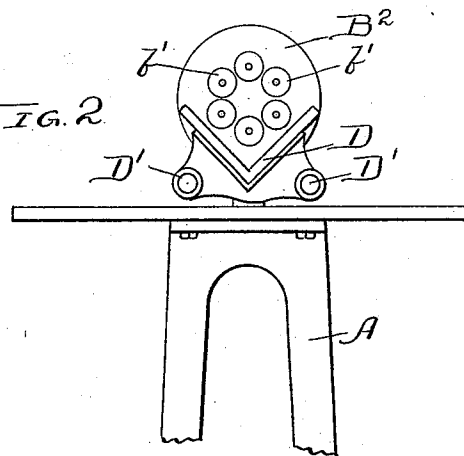
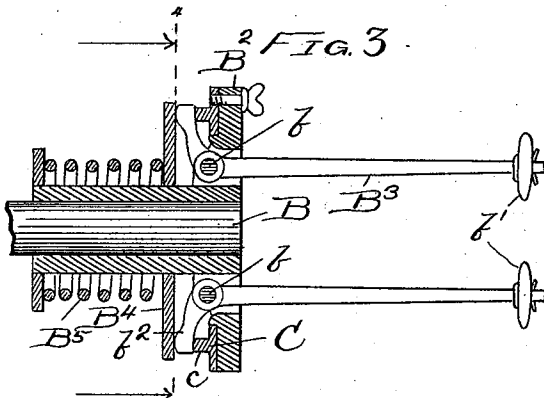


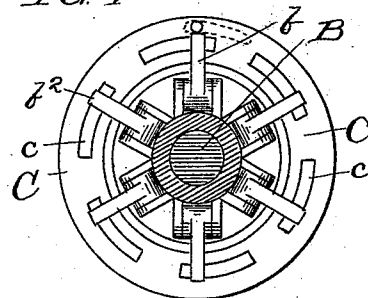
FIG. 3



WITNESSES:

Mack A. Claflin,
Edw. S. Evans

FIG. 4



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UNITED STATES PATENT OFFICE.

GEORGE W. LEBOLT, OF CHICAGO, ILLINOIS, ASSIGNOR TO MACK A. CLAFLIN,
OF SAME PLACE.

BOTTLE-CAPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 528,329, dated October 30, 1894.

Application filed March 29, 1894. Serial No. 505,571. (No model.)

To all whom it may concern:

Be it known that I GEORGE W. LEBOLT, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Bottle - Capping Machines, of which the following is a specification.

This invention relates to machines for capping bottles.

The object of my invention is to produce a simple and efficient machine for applying tin foil caps to bottles so that they will fit or cling closely, smoothly and without folds thereto and give to the capped bottle a finished appearance. I accomplish this object in the following manner: I mount upon a revolving shaft a series of rollers (some of which are preferably soft or folding rollers and some hard or finished rollers) adapted to rotate around the neck of the bottle and press or fold the cap into close contact therewith and said rollers being permitted to yield outward to accommodate the varying form or shape of the bottle neck to be capped.

The invention will be more fully understood by reference to the accompanying drawings and in which similar letters of reference indicate like parts throughout the several figures.

I have shown at Figure 1 a side elevation of a machine embodying my invention, at Fig. 2 a partial front view, at Fig. 3 a central longitudinal section of the capping head and at Fig. 4 a section taken on line 4—4 of Fig. 3.

In the drawings A represents the frame of the machine, A' the drive wheel and A² the foot treadle.

B is the revolving shaft carrying a disk B². In said disk B² are a series of bell crank levers B³ pivoted at b carrying rollers b' at their outer ends adapted to rotate around the neck of the bottle and press or fold the tin foil cap into perfect and smooth contact therewith. The short arm b² of levers B³ extend radially outward and are operated upon on one side by the plate or disk B⁴ which is held in contact therewith by a spring B⁵. This construction allows the rollers to yield out-

ward against a spring pressure, the movement outward of the rollers causing the short arm b² of levers B³ to move the plate B⁴ backward and compress the spring B⁵. Upon the opposite side of the short arms b² I place a movable ring C having a series of cams c, one for each of the arms b², which act as adjustable stops for limiting the inward movement of the rollers.

D is a guide or support for holding and centering the bottle to be capped so that the same may be laid in the support and entered between the capping rollers by sliding the bottle and support forward upon the guide rods D' until the rollers have passed the entire length of the cap. I find that the rollers revolving around the bottle neck while the bottle is brought forward and back again, are generally sufficient to fold or press the cap firmly upon the neck of the bottle.

Motion is given the shaft B from the drive wheel A' by means of the belt a and pulley a' upon the shaft B.

I claim—

1. In a capping machine, the combination with the revolving shaft of capping rollers mounted upon bell crank levers pivoted at right angles to said shaft, and a spring engaging one side of the short arm of said lever to force the rollers inward, and adjustable stops upon the opposite side of said arm to limit the inward movement of the rollers, substantially as specified.

2. In a capping machine, the combination with the revolving shaft of capping rollers mounted upon bell crank levers pivoted at right angles to said shaft, and a spring surrounding said shaft and engaging one side of the short arm of said lever to force the rollers inward, and adjustable stops upon the opposite side of said arm to limit the inward movement of the rollers substantially as specified.

GEORGE W. LEBOLT.

Witnesses:

L. E. CURTIS,
MACK A. CLAFLIN.