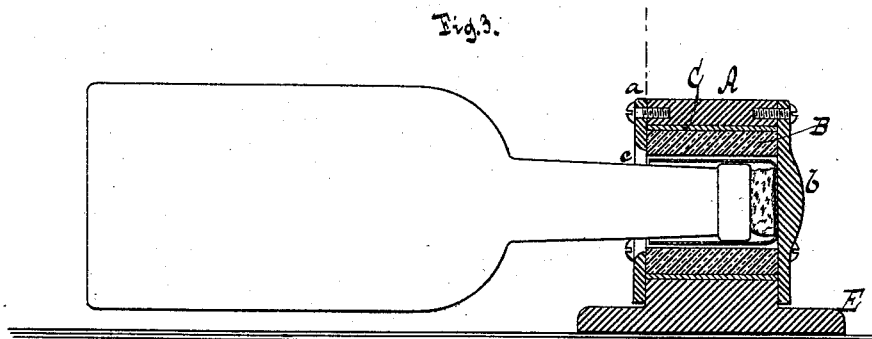
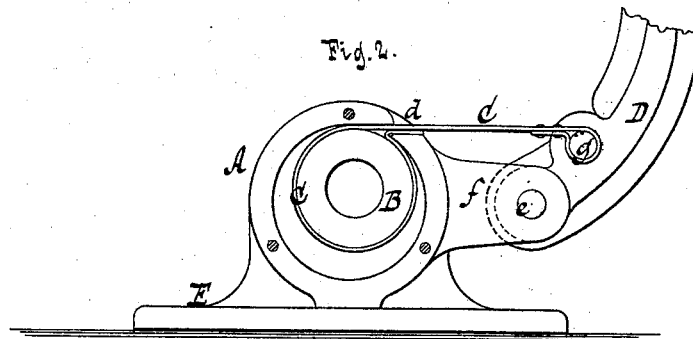
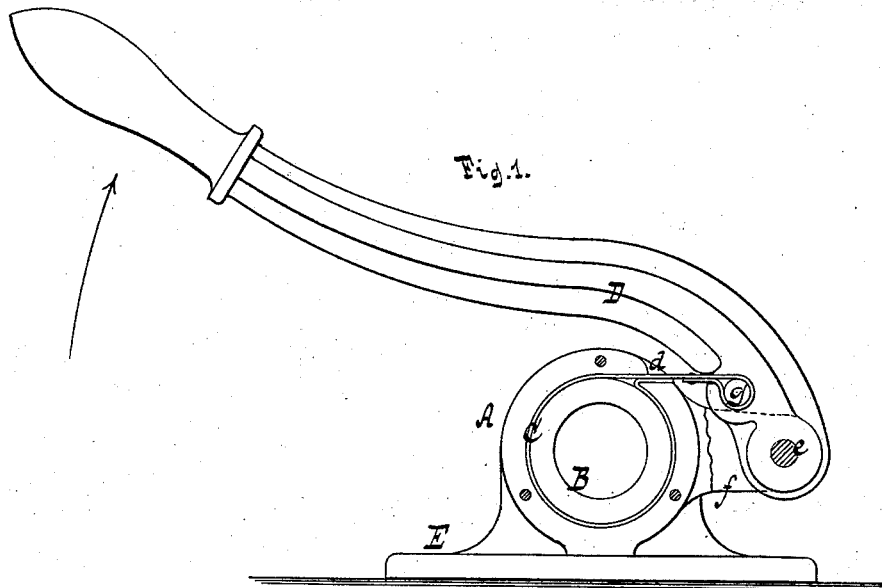


B. BUDDE.
Bottle-Capping Machine.

No. 218,926.

Patented Aug. 26, 1879.



Witnesses
Otto Shupeland
William Keller

Inventor
Bernhard Budde
by Van Gentswood & Hauff
his attorneys.

UNITED STATES PATENT OFFICE.

BERNHARD BUDDE, OF NEW YORK, N. Y.

IMPROVEMENT IN BOTTLE-CAPPING MACHINES.

Specification forming part of Letters Patent No. **218,926**, dated August 26, 1879; application filed February 5, 1879.

To all whom it may concern:

Be it known that I, BERNHARD BUDDE, of the city, county, and State of New York, have invented a new and useful Improvement in Bottle-Capping Machines, which invention is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my machine when the face-plate is removed, showing the positions of the parts when the elastic collar is in an expanded condition. Fig. 2 is a like view thereof when the collar is compressed. Fig. 3 is a vertical longitudinal section of the same.

Similar letters indicate corresponding parts.

My invention relates to machines for applying metallic caps or capsules to bottles, its object being to furnish a machine practically adapted to this purpose at low cost; and it consists in a cylinder inclosing an elastic tube or collar adapted to receive the neck of a bottle, and a flexible band for compressing the elastic tube or collar, which is attached to the cylinder at one end, and thence passes around the tube or collar and through the side of the cylinder, the same being connected at its outer end to a hand-lever or other like device adapted to operate the band, as hereinafter more fully set forth.

In the drawings, the letter A designates a cylinder. B is an elastic tube or collar. C is a flexible band, and D is a hand-lever, combined according to my invention.

The cylinder A is cast on a bed-plate, E, and is closed at each end by means of a head, *a* or *b*, in one of which, however, is formed a central opening, *c*, for the introduction of a bottle-neck into the tube or collar B. This tube or collar B is made of a piece of india-rubber tubing, or of other elastic material, and its diameter is such that a bottle-neck may be introduced into the same, and that the band C may surround the same within the cylinder.

The band C is made of sheet-brass or other flexible metal or material, and it is attached to the cylinder A by being bent around the inner edge of a slot, *d*, formed in the upper part of the cylinder; but the band can be attached also in other ways. From the point of its attachment to the cylinder A the band C

is drawn around the elastic tube or collar B, and thence passes out of the cylinder through the slot *d*.

The hand-lever D is hung on a pivot, *e*, having its bearings in lugs *f*, cast on the cylinder A, and it is provided with a pin, *g*, whereby the band C is connected thereto.

The function of the lever D is to move the band C out and inward, and in lieu thereof a treadle or other similar device may be used.

The neck of the bottle to be capped, with a cap placed loosely thereon, is inserted in the elastic tube or collar B, and the band C is then drawn outward, whereby the tube or collar is compressed and the cap is fixed on the bottle.

I am aware that a machine in which an elastic collar is adapted to be compressed around the neck of a bottle for securing the cap has been heretofore invented; but in this machine one end of the compressing-band is fixed, while the other is secured to a rocking annular head, which surrounds the elastic collar and moves within an outer inclosing-case, its movement being limited, and an adjusting device being necessary, therefore, to vary the degree to which the collar may be compressed. By passing one end of my compressing-band out through a slot in the inclosing-case I dispense with the revolving head and adjusting device, thus greatly simplifying the apparatus and reducing its cost.

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

1. In a machine for capping bottles, the combination of an inclosing-cylinder, an elastic tube or collar to receive the bottle-neck situated in said cylinder, a flexible band for compressing the tube or collar, attached to the cylinder at one end, and thence passing around the tube or collar and through the side of the cylinder, and a hand-lever or other similar device for operating the flexible band, all adapted to operate substantially as herein described.

2. The combination of the inclosing-cylinder A, having a slot or opening in its wall, the elastic collar arranged within said cylinder and adapted to receive a bottle-neck, the flexible band surrounding said collar, having one end attached to the cylinder and the other extending outward through the opening therein, and a suitable tension device connected to said

outward-extending end, substantially as described.

3. The combination of cylinder A, having opening *d*, elastic collar B, arranged within said cylinder, flexible band C, surrounding said collar, having one end secured to one wall of said opening and the other extending through the same, and the lever D, connected to the outward-extending end of said band.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 4th day of February, 1879.

BERNHARD BUDDE. [L. S.]

Witnesses:

E. F. KASTENHUBER,
CHAS. WAHLERS.