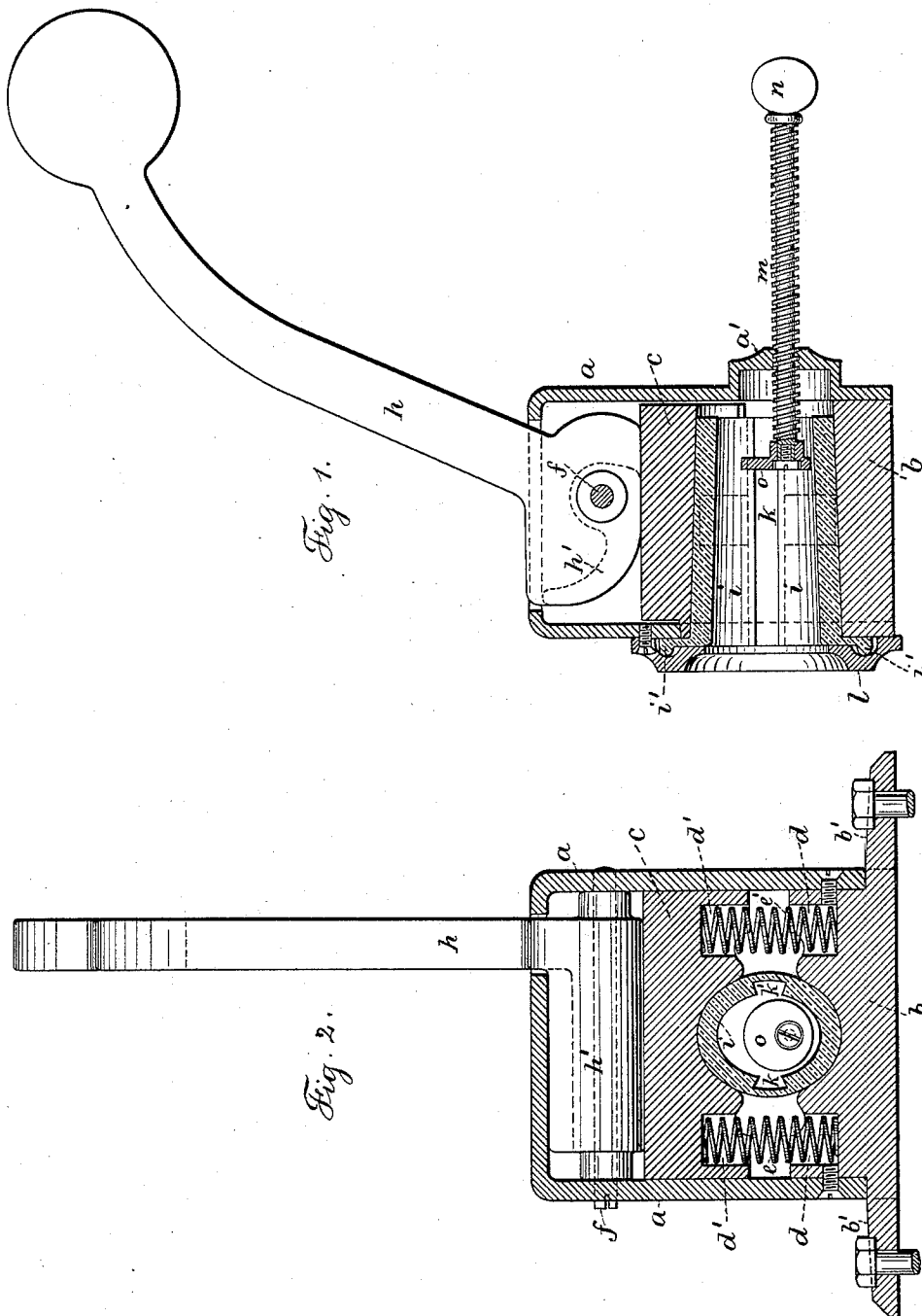


(No Model.)

P. TUTTO.
CAPSULING MACHINE.

No. 460,321.

Patented Sept. 29, 1891.



Witnesses:

J. Stait
Chas. H. Smith

Inventor:

Peter Tutto
per Lemuel W. Perrell atty.

UNITED STATES PATENT OFFICE.

PETER DUTTO, OF BROOKLYN, NEW YORK.

CAPSULING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 460,321, dated September 29, 1891.

Application filed February 2, 1891. Serial No. 379,909. (No model.) Patented in France January 7, 1889, No. 195,268.

To all whom it may concern:

Be it known that I, PETER DUTTO, a citizen of the Republic of France, residing at Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Capsuling-Machines; and the following is declared to be a description of the same.

Letters Patent for this invention have heretofore been granted to me in the Republic of France under date of January 7, 1889, No. 195,268.

My invention relates to a device for capsuling or covering the stoppered ends of bottles, jars, &c., with soft metallic caps.

My improved machine consists of a case having two channeled jaws, one of which is acted upon by a compression-lever having a cam-shaped end, and between said jaws is a rubber sleeve forming a matrix, into which is placed the end of a bottle and its loosely-surrounding metal cap, and there is an adjustable disk which limits the position of the capped bottle. The rubber matrix is compressed around the cap by the action of the jaws and lever, consolidating the metallic cap upon the neck of the bottle, jar, &c., and the elasticity of the rubber returns the matrix to its normal condition when the pressure is relieved.

In the drawings, Figure 1 is a longitudinal section of my improved machine, and Fig. 2 is a cross-section of the same. In both figures the lever and cam are shown in elevation.

a represents the case, made, preferably, of cast metal.

b represents the lower channeled jaw, with flanges *b' b'*, by which it is securely fastened to a bench or table. The case *a* fits over this jaw *b* and is securely fastened thereto, and said case incloses the upper jaw *c*, also channeled, and which is capable of moving vertically therein. There are holes at *d d'* in the opposing faces of the jaws *b c* which receive the helical springs *e e'*, by which the weight of the upper jaw *c* is carried and the jaw lifted.

h represents the lever or operating-handle, and *h'* its cam-shaped portion. This cam-shaped portion *h'* is pivoted to the case by the pin *f*, which passes horizontally through it. The cam-shaped portion bears upon and across the top of the upper jaw *c*.

i represents the rubber sleeve or matrix which I form tapering and open-ended with side grooves or channels *k k'*. This rubber matrix *i* rests within the channeled portions of the jaws and extends through from front to back of the case, and is provided with a flanged edge *i'*, and a ring-plate *l* fits over the flanged edge *i'* and face of the matrix *i* and is secured to the case *a*. This matrix *i* is elliptical in cross-section in its normal condition and of circular form when compressed, so as to take an equal bearing upon the capsule.

There are spaces between the opposing faces of the jaws *b c*, and on line with these are the grooves *k k'* of the matrix, and the object of this construction is to provide for the compression of the matrix around the neck of a bottle or jar in consolidating and securing the soft metal cap in place. As the jaw *c* is forced down in the capping operation by the lever and its cam and the matrix is powerfully pressed against the capsule, the edges of the matrix at the grooves *k k'* approach each other and come together, and the thinner side portions of the matrix expand outwardly into the space between the jaws, the parts returning to their normal position when the pressure is released.

On the back of the case is a boss *a'*, and passing through the same is the screw-stem *m*, that may be rotated by the button *n*. This screw-stem *m* has connected to it a disk *o*, adjustable in position throughout the length of the matrix to form a stop for the capped bottle neck and cork when inserted into the matrix. This disk *o* is eccentrically secured on the end of the stem *m* and is free to turn to accommodate itself to the compressed position of the parts or to any slight inequalities of alignment, &c., in the construction of the parts, and in consequence of the matrix being conical it is adapted to different sizes of bottle-necks, the disk *o* forming a stop for the capped bottle-neck at the place where the matrix will apply the proper pressure for the size of the neck and capsule.

I claim as my invention—

1. The combination, with the case and stationary jaw, of the movable jaw within the case and the cam-lever for actuating the same, the helical springs for separating the jaws,

the rubber sleeve or matrix between the jaws grooved longitudinally at opposite sides, and an adjustable stop within said matrix, substantially as set forth.

5 2. The combination, with the case and stationary channeled jaw having attaching flanges, of the movable channeled jaw within the case and the pivoted cam-lever for actuating the same, the helical springs *e e'*,
10 received in holes in the jaws and separating said jaws, the rubber sleeve or matrix between the jaws grooved longitudinally at opposite sides and on line with the spaces between the jaws, the screw *m*, its eccentric disk
15 *o*, and the ring-plate *l*, substantially as set forth.

3. In a capsuling-machine, the rubber sleeve or matrix made in one piece of oval cross-section and tapering lengthwise, and provided

with a flange *i'* at the larger end and grooved 20 longitudinally upon opposite sides at *k k'*, substantially as set forth.

4. The combination, with the inclosing case, the stationary and movable jaws, and the cam-lever for actuating the parts, of the rubber sleeve or matrix between the jaws grooved 25 longitudinally and having a flanged edge *i'* at the larger end, and the ring-plate *l*, fitting over the flanged edge *i'*, and means for securing the plate to the case, substantially as 30 set forth.

Signed by me this 28th day of January, A. D. 1891.

PETER DUTTO.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.