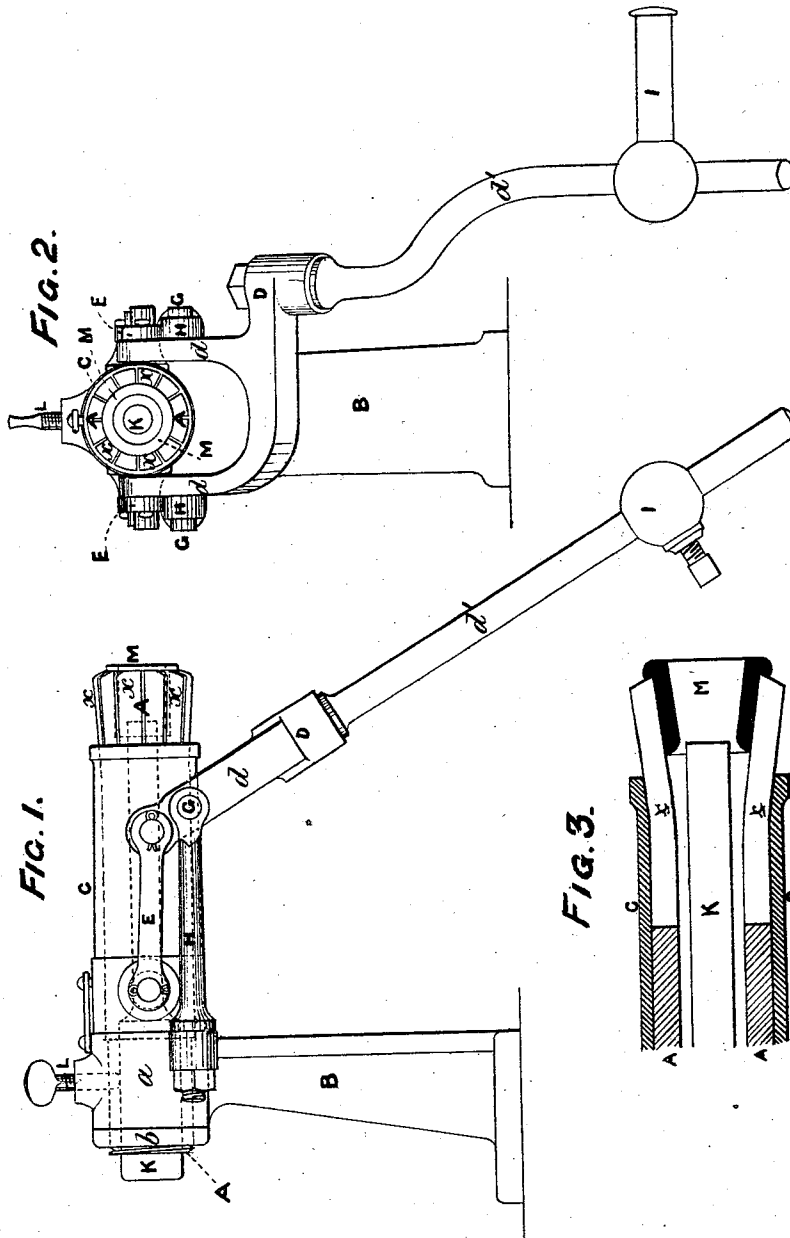


J. PATERSON.

Machine for Capsuling Bottles.

No. 159,707.

Patented Feb. 9, 1875.



Witnesses, Harry Smith
Thomas McIlwain

James Paterson
by his Atty
Horsman and Son

UNITED STATES PATENT OFFICE.

JAMES PATERSON, OF LEYTONSTONE, ENGLAND.

IMPROVEMENT IN MACHINES FOR CAPSULING BOTTLES.

Specification forming part of Letters Patent No. **159,707**, dated February 9, 1875; application filed September 23, 1874.

To all whom it may concern:

Be it known that I, JAMES PATERSON, of Leytonstone, in the county of Essex, England, have invented Improvements in Machinery or Apparatus for Capsuling Bottles and other vessels, of which the following is a specification:

The object of my invention is to rapidly and effectually affix capsules to the necks of bottles or other vessels, and this object I attain by the mechanism which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a side view, Fig. 2 an end view, of my improved capsuling-machine, and Fig. 3 a sectional view of part of the machine.

B is a standard, which may be attached to any-suitable bench or table, and to this standard is secured a tube, A, by means of a nut, b. The tube A is slightly flared at and near its outer end, and this flared portion is so slotted as to form a series of elastic inclined arms, *x*. A sleeve, *c*, is arranged to slide on the tube A, this sleeve being connected by links E E to the forked short arm *d* of a lever, D, hung to rods H secured to the frame of the machine, the long arm *d'* of the lever being provided with an adjustable handle, I. A gage-stud, K, is arranged centrally within the tube A, and may be adjusted longitudinally, and secured after adjustment by a set-screw, L. To the interior of the said tube A, at the outer end of the same, is also adapted a short tube, M, of rubber or other elastic material, for a purpose rendered apparent hereafter.

The operation of the machine is as follows: The gage-stud having been first adjusted and secured in the proper position, the bottle

with a capsule placed loosely over its mouth is inserted within the elastic tube M, in the outer end of the tube A, the proper position of the bottle being determined by the gage-pin K. The sleeve *c* is now moved forward, and until its end passes over and compresses the elastic inclined arms *x x* of the tube A, this pressure causing the elastic tube M to press the capsule tightly to the mouth and neck of the bottle, the said tube adapting itself to the irregular form of the neck, so as bring the metal closely in contact with the neck at all points without undue pressure upon the bottle. The sleeve *c* being now moved back, the elastic tube M and elastic arms *x* will resume their former expanded condition.

If desired, instead of forming the strips or arms *x* on a tube, as described, they may be attached to a disk or block, secured to or forming part of the standard B.

I claim as my invention—

1. In a machine for capsuling bottles the combination, substantially as described, of inclined elastic arms *x*, an elastic tube, M, within the arms, and a movable sleeve, *c*, by which the said arms may be forced against and caused to contract the said elastic tube, all as set forth.

2. The combination of the inclined elastic arms *x x*, elastic tube M, and sleeve *c*, with the adjustable stop K.

In witness whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES PATERSON.

Witnesses:

J. W. FRIGOT,
CHAS. MILLS.