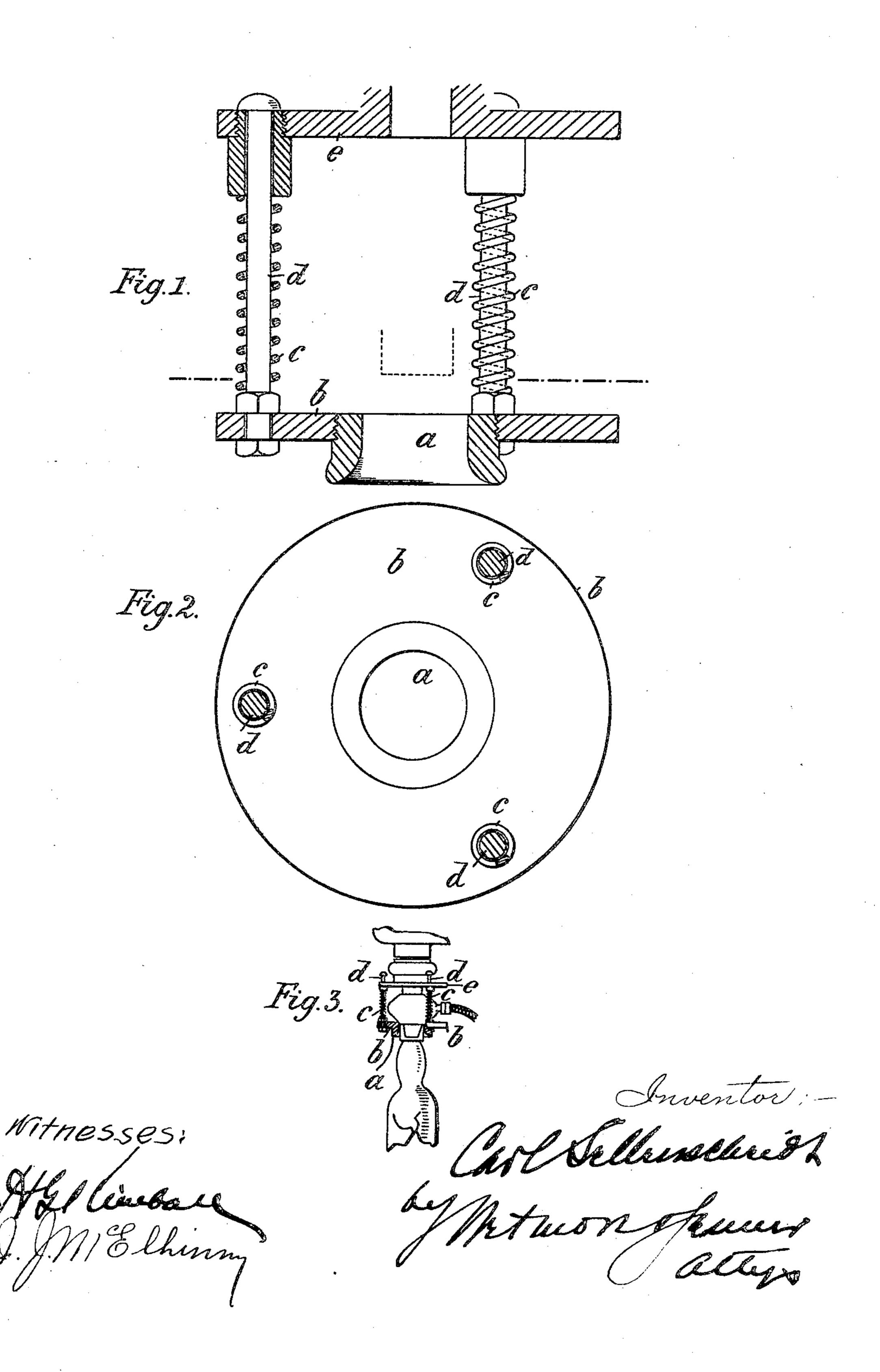
## C. SELLENSCHEIDT. BOTTLING AND LIKE APPARATUS. APPLICATION FILED JUNE 9, 1904.



## UNITED STATES PATENT OFFICE.

CARL SELLENSCHEIDT, OF BERLIN, GERMANY, ASSIGNOR TO FILTER & BRAUTECHNISCHE MASCHINEN-FABRIK AKT. GES. VORMALS L. A. ENZINGER, OF BERLIN, GERMANY.

## BOTTLING AND LIKE APPARATUS.

No. 807,507.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed June 9, 1904. Serial No. 211,748.

To all whom it may concern:

Be it known that I, Carl Sellenscheidt, of 82 Belle-Alliancestrasse, Berlin, Germany, have invented certain new and useful Improvements in Bottling and Like Apparatus, of which the following is a full, clear, and exact specification.

This invention relates to bottling and like apparatus; and it consists in the provision of a guide means of novel construction and operation for directing the mouth of the bottle to be filled into proper engagement with the filling-head of the apparatus regardless of variations in the size or shape of the said bottles.

The invention as illustrated in the following description is more particularly applicable to a certain form of bottling apparatus which is fully shown and described in a copending application filed by me on the 16th day of March, 1904, serially numbered 198,369; but it will be observed from the following that the invention is also capable of use with other kinds of apparatus.

Referring to the accompanying drawings, Figure 1 is a vertical section, and Fig. 2 a horizontal section, of a bottle-guide involving my invention. Fig. 3 is a reduced elevation view with parts in section of a bottle-guide in position upon the machine and illustrating the action thereof.

In the bottling apparatus described in my application above referred to the filling-head comprises an inflatable cushion with a nozzle 35 adapted to protrude into the bottle-mouth and the bottle and head are required to approach relatively toward each other but a very slight distance in order to effect their union, the joint itself being effected by the subsequent 40 inflation of the cushion. The present invention resides in the provision of a guide having a more or less conical or flared aperture and secured to the machine by means of springs or in like resilient manner, so that the neck 45 of the bottle may enter the aperture or socket and be guided by it. On the ascent of the bottle the said guide is adapted first to direct the bottle-mouth over the end of the nozzle, the latter yielding until the bottle comes to 5° rest, and then the air-pressure or other means is applied to expand the nozzle within the mouth. On the removal of the bottle the en-

ergy stored up in the compressed springs l

pushes the bottle down and greatly facilitates the release of the latter from the nozzle of the 55 filling-head.

The form of the invention shown in the drawings herewith consists of a yielding member or plate b, supported below the fillinghead in any convenient manner, so that it may yield toward the head against spring-pressure. The plate is supported by means of three bolts d, properly secured to the plate b and passing through suitable apertures in the part e, spiral compression-springs being coiled 65 around the bolts between the two movable parts. The plate b is apertured in line with the nozzle of the filling-head, and a bushing a, having a flaring mouth on its bottom side, is screwed or otherwise attached within the 70 aperture.

If the mouth of the bottle is inserted from below into the socket a, as shown in Fig. 3, and slight pressure exercised against the plate b by the bottle being elevated, the bolts d will 75 retreat through the holes in the part e and the springs c will be compressed, allowing the plate b to rise. In this manner the bottle will be directed into the proper position over the nozzle of the air-cushion on the filling-head, 80 which cushion for the purpose of insuring a perfect joint and producing a partial counterpressure in the bottle must now be inflated by means of compressed air or the like, whereby it is pressed tightly from within and from 85 above upon the mouth of the bottle. After completion of the filling process the bottle must be removed from the air-cushion, and this is often rendered difficult owing to the nozzle sitting firmly by suction in the bottle- 90 mouth, so that it is not sufficient simply to pull the bottle downward. Under such conditions the operation is rendered easy by the energy stored up in the compressed springs c, whereby, with the aid of the plate b and 95 socket a, the bottle is forced away from the nozzle.

The new device is especially adapted for those machines in which a great number of bottles are filled simultaneously, so that the 100 adjustment of the bottles must take place automatically.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a bottle-filling machine, a filling-head hav-

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ing an inflatable cushion with a nozzle adapted to protrude within the mouth of the bottle, in combination with a guide device comprising a spring-pressed member supported below the filling-head and having a flared aperture which receives the nozzle of the inflatable cushion on one side and the mouth of the bottle on the other.

In testimony that I claim the foregoing as my invention have signed my name in presence of two subscribing witnesses.

## CARL SELLENSCHEIDT.

Witnesses:
HANS HEIMANN,
HENRY HASPER.