

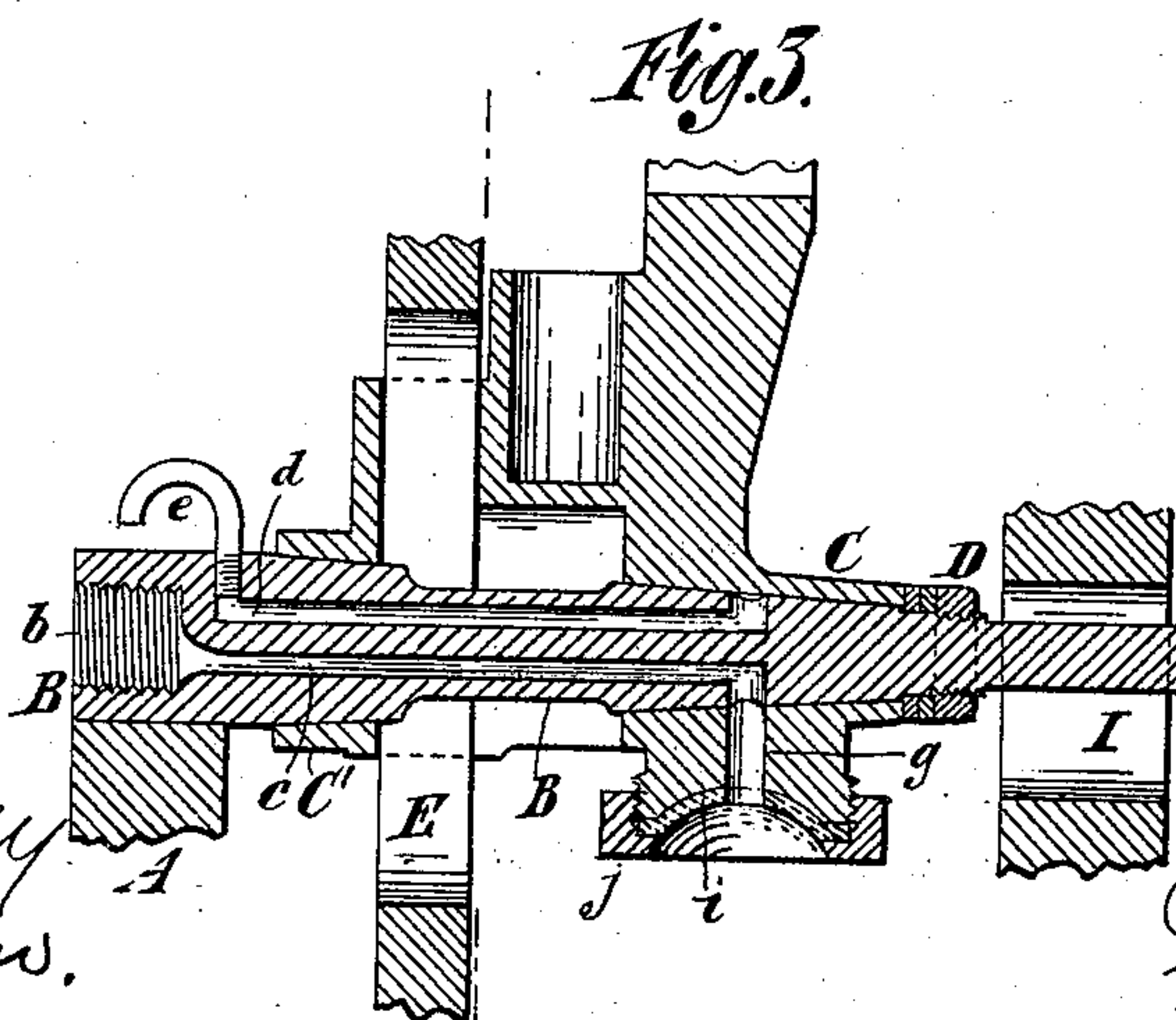
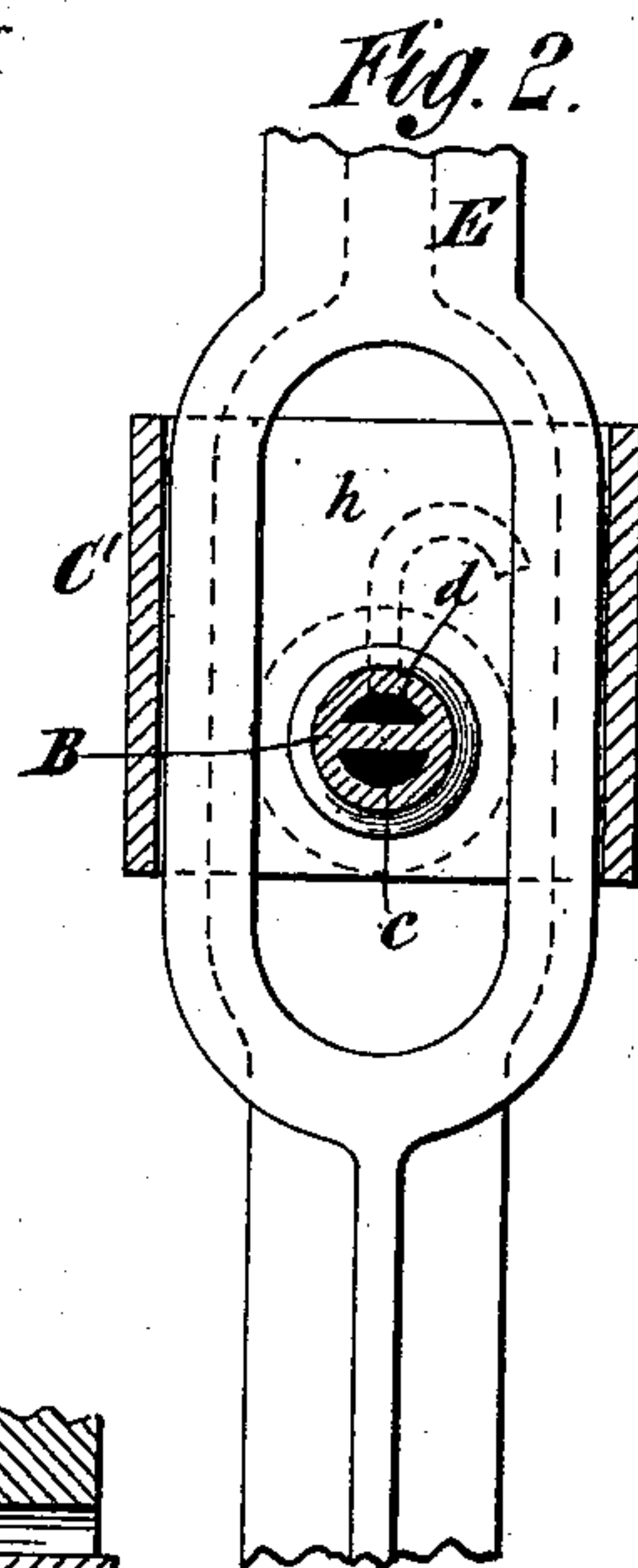
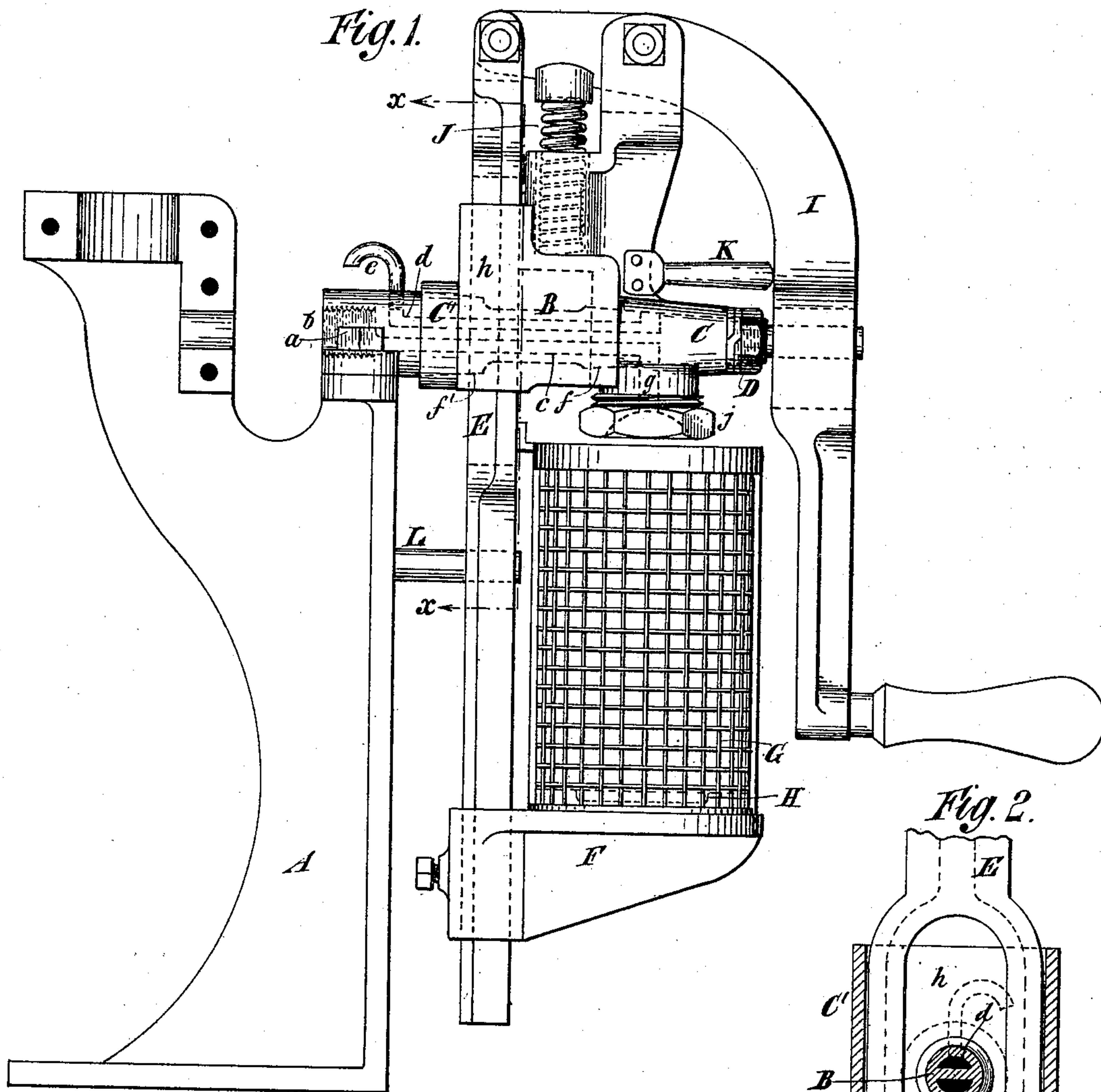
(No Model.)

2 Sheets—Sheet 1.

J. A. BROWN.  
BOTTLING MACHINE.

No. 322,576.

Patented July 21, 1885.



Witnesses  
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James Bowen.

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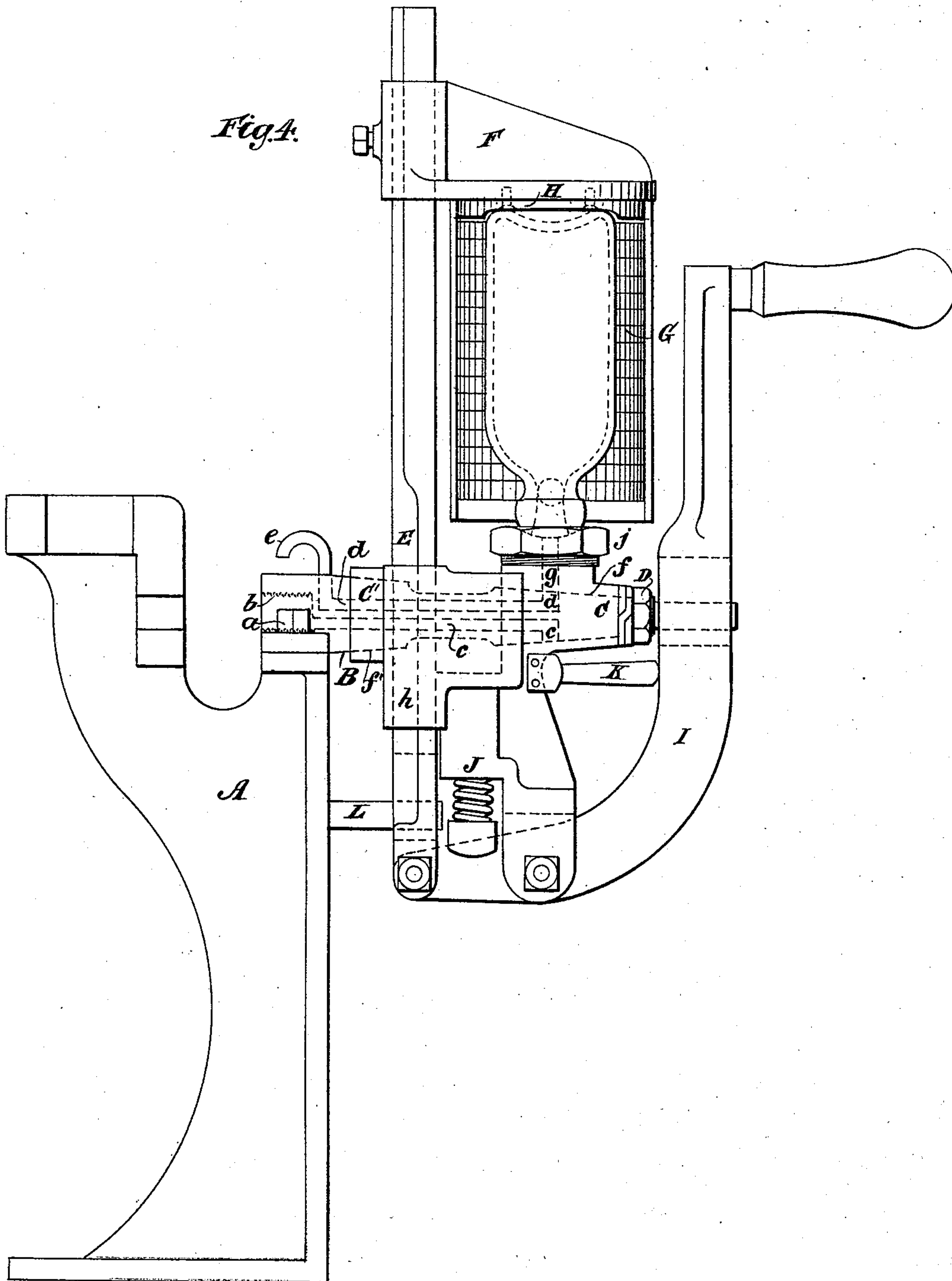
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2 Sheets—Sheet 2.

J. A. BROWN.  
BOTTLING MACHINE.

No. 322,576.

Patented July 21, 1885.



*Witnesses*  
*William G. Lipsey*  
*James R. Bowe*

*Inventor*  
*John A. Brown,*  
*by his attys,*  
*Gifford & Brown*



# UNITED STATES PATENT OFFICE.

JOHN A. BROWN, OF BLOOMFIELD, NEW JERSEY, ASSIGNOR OF TWO-THIRDS TO WILLIAM F. DORFLINGER, OF NEW YORK, N. Y.

## BOTTLING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 322,576, dated July 21, 1885.

Application filed December 27, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. BROWN, of Bloomfield, in the county of Essex and State of New Jersey, have invented a certain new and useful Improvement in Bottling-Machines, of which the following is a specification.

I will describe a bottling-machine embodying my improvement, and then point out the various features in claims.

In the accompanying drawings, Figure 1 is a side view of a bottling-machine embodying my improvement. Fig. 2 is a section of the same taken at the plane indicated by the dotted line *x x*, Fig. 1, and looking in the direction indicated by the arrow-heads at the ends of the said line. Fig. 3 is a central vertical section of certain parts, and Fig. 4 is a side view of the machine, certain of the parts being shown in a different position from that in Fig. 1.

Similar letters of reference designate corresponding parts in all the figures.

A designates a bracket, which may be made of any suitable form, and will be preferably made of metal. It may be secured by screws or other suitable means to a pump, by which sirups and mineral or other effervescent water may be conveyed to it.

To the bracket A the plug B of a cock is affixed in any suitable manner—as, for instance, by screws *a* passing through flanges extending from the said plug and entering tapped holes in corresponding flanges extending from the bracket. This plug will preferably be made of metal. It is shown as extending horizontally. In one end is a screw-threaded socket, *b*, to which a pipe leading from the pump is to be connected. From the socket *b* a port or passage, *c*, extends, its outer end being turned downward. Another port, *d*, having its outer end turned upward, extends toward the socket *b* and communicates with a pipe, *e*, leading to the atmosphere. The upwardly-extending outer end of the port *d* is in line with the downwardly-extending outer end of the port *c*. The exterior of the plug B is circular.

The shell C of the cock fits a tapering portion, *f*, and an extension, *C'*, of the shell C, fits another tapering portion, *f'*. A nut, D,

screwed onto the outer end of the plug keeps the shell C and its extension *C'* in place. The shell C and its extension *C'* are formed integral, and are free to turn together upon the plug. They will preferably be made of metal.

The shell C is provided with a port, *g*, which, by turning the shell, may be brought into line with the outer end of the port *c* or the outer end of the port *d* of the plug B at pleasure.

In a slide way, *h*, formed in the extension *C'* of the shell C of the cock, a slider-bar, E, fits and is capable of moving longitudinally. This slider-bar has an open or slotted portion extending around the plug B of the cock; hence the plug of the cock does not interfere with the movement of the slider-bar. The slider-bar may advantageously be made of metal.

F designates an arm capable of being secured by a set-screw in different positions upon the slider-bar, according to the length of the bottles for filling which the machine is employed. On this arm is fastened a semi-cylindric cage, G. Within this cage upon the arm F is a facing, H, preferably made of wood, and having a cavity arranged concentrically with the cage and adapted to receive the bottom portion of a bottle.

The part *g* of the shell C is also concentric with the cage G. At the mouth or open end of this port *g* is a packing or facing, *i*, of india-rubber or analogous material secured in place by a clamping-nut, *j*, and adapted to receive the mouth of a bottle in contact with it.

The upper end of the slider-bar E is pivotally connected to one end of a lever, I, which is fulcrumed to a portion of the extension *C'* of the shell C of the cock, and at the other end extends close to the cage G. A handle projects transversely from the lever at the end last mentioned.

A spring, J, fitting in a cavity in the extension *C'* of the shell C of the cock, bears against the lever I, and actuates it and the slider-bar E in such way as to cause the arm F to be drawn toward the shell C of the cock. Thus the mouth of a bottle supported on the arm F may be forced to the port *g*. By pulling the lever I farther away from the cage G, the arm F will be caused to move away from the



shell C of the cock, and then a bottle resting against the arm F may be released and another one substituted for it.

K designates a stop, whereby the lever I will be prevented from being moved too far toward the shell C and nut D. The lever I is not only capable of operating as described; it may also be used for turning the shell C of the cock, the slider-bar E and the appurtenances of the latter upon the plug B of the cock to invert a bottle arranged between the arm F of the slider-bar E and the shell C of the cock. To prevent the lever I from bending in performing this operation it has an open portion into which extends a pin-like portion of the plug B of the cock.

A stop-pin, L, extending from the bracket A, acts in conjunction with the slider-bar E to prevent it and the shell C of the cock from being turned more than a half-revolution upon the plug B of the cock.

To fill a bottle, the lever I is manipulated to turn the parts which derive motion from it in the reverse position to that in which they are shown in Fig. 1. The bottle is then placed in an inverted position in the cavity of the facing H of the arm F. The arm F is then forced down to bring the mouth of the bottle in contact with the facing i of the shell C contiguous to the port g. The lever I is then manipulated to adjust the parts into the position in which they are shown in Fig. 1. The pump is then operated and the liquid flows into the bottle. Meanwhile the lever I is, from time to time, vibrated to "snift" or allow the air to escape from the bottle. When the bottle is filled, the shell of the cock, the slider-bar E, and the appurtenances of these parts are turned upside down by manipulating the lever I. The stopper of the bottle, which is inside, then closes, the surplus liquid running

off through the port d, to allow the stopper to come to its place. By thus turning over the parts the port c of the plug B of the cock will be closed, and the port g of the shell C of the cock will be made to communicate with the port d of the plug.

It will be understood that the bottles will be filled while in an upright position, will subsequently be inverted, and will be ultimately released by manipulating the lever.

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

1. In a bottling-machine, the combination of the plug of a cock provided with a socket, a rotary shell surrounding the plug, a slider-bar extending past said plug and having a connection with the shell, a cage or bottle-holder, an arm on the slider-bar for supporting a bottle, a lever fulcrumed on the shell or an appurtenance thereof for operating the slider-bar, and a bracket affording a common support to all said parts, and to which a pump may be connected at pleasure, substantially as specified.

2. In a bottling-machine, the combination of the plug of a cock having an induction-port, a rotary shell mounted on the plug and containing a port terminating at one end in the same plane as one end of the said induction-port, a slider-bar extending past said plug and having a connection with the shell, a cage or bottle-holder, an arm on the slider-bar for supporting a bottle with its mouth in line with the said port in the shell, and a lever fulcrumed on the shell or an appurtenance thereof for operating the slider-bar and rotating said shell, substantially as specified.

JOHN A. BROWN.

Witnesses:

T. J. KEANE,  
WM. G. LIPSEY.