J. A. HICKS.

MEANS FOR INTRODUCING LIQUID INTO VESSELS THROUGH A CLOSED CHAMBER BY AN ADJUSTABLE NOZZLE.

APPLICATION FILED OCT. 22, 1908.

949,479.

Patented Feb. 15, 1910.

Fig. 1.

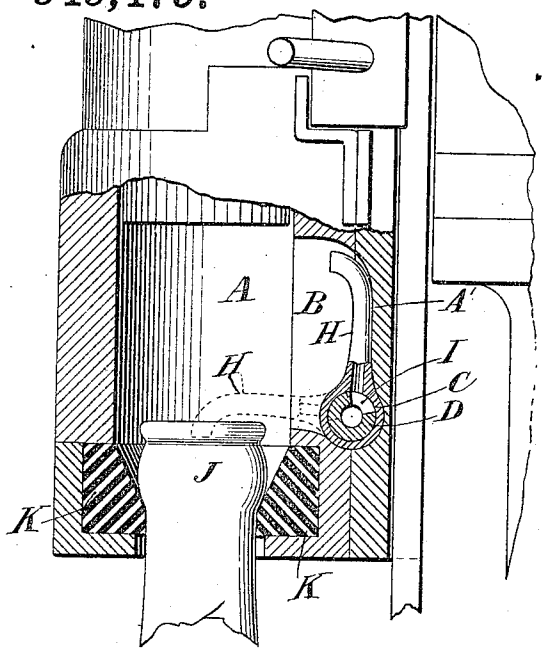


Fig. 2.

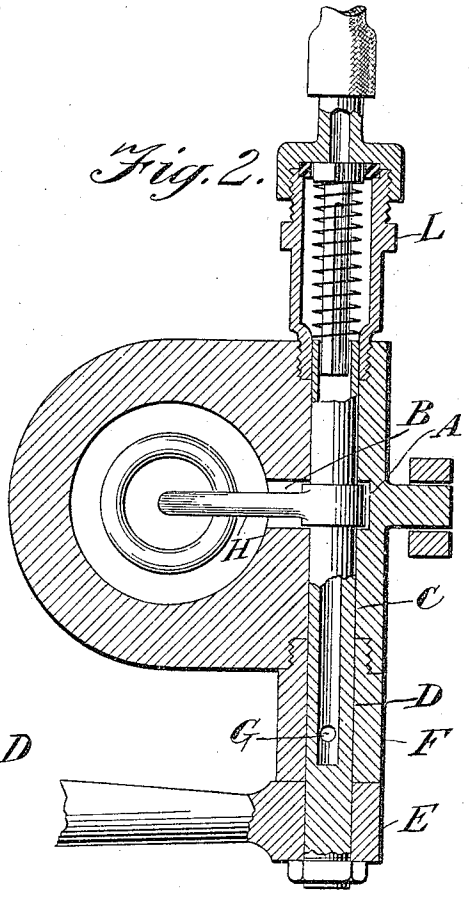
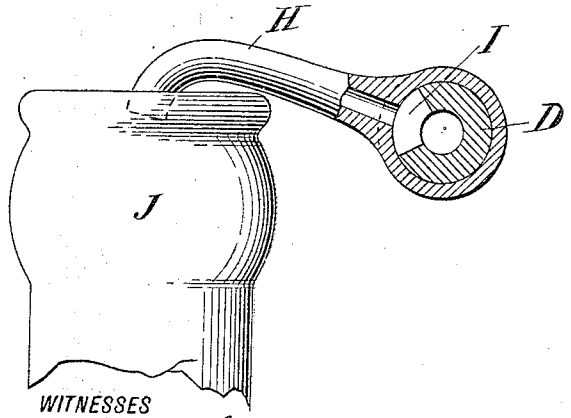


Fig. 3.



WITNESSES

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MEANS FOR INTRODUCING LIQUID INTO VESSELS THROUGH A CLOSED CHAMBER BY AN ADJUSTABLE NOZZLE.

949,479. Specification of Letters Patent. Patented Feb. 15, 1910.

Application filed October 22, 1908. Serial No. 458,943.

To all whom it may concern:

Be it known that I, JOHN AUGUSTUS HICKS, a citizen of the United States, residing at Summit, Union county, New Jersey, have invented certain new and useful Improvements in Means for Introducing Liquid into Vessels Through a Closed Chamber by an Adjustable Nozzle, of which the following is a specification.

My invention relates to "means for introducing liquid into vessels through a closed chamber."

The object of my invention is to provide means to prevent injury to the goose neck of a filling pipe adapted to a filling chamber of a pressure filling and capping machine which would result from turning the valve pipe to which the goose neck is attached so far, that the goose neck strikes the vessel before the operating lever has come to a stop, which striking would be liable to break the goose neck. It is designed as an improvement on the invention of James M. Hicks set out in his specification and drawings for the introduction of liquid into vessels, filed Sept. 2d. 1908 Serial Number 451,290.

My invention consists in certain elements and combinations fully disclosed and claimed in the following specification.

In order that those skilled in the art to which my invention appertains may understand, construct, and use my invention, I will proceed to describe it, referring to the accompanying drawings forming part of this specification in which—

Figure 1, shows a part central vertical section of a filling chamber to a vessel filling machine; a vessel in its correct position, partially in said filling chamber, in sealed contact therewith; a valve pipe located in the walls of said filling chamber; and a goose neck pipe movably attached to said valve pipe and arranged to project into the said filling chamber to about its center, and into the mouth of a vessel located therein, as shown by dotted lines, and when in its normal position, located in a recess in the vertical wall of the filling chamber. Fig. 2, shows a part horizontal section through the center line of the valve pipe, but an outside view of the goose neck where it is attached to the said valve pipe and entering the vessel mouth. It also shows a check valve on one end for admitting liquid to the goose neck from that end, but this does not concern my present invention. Fig. 3, shows a vessel and goose neck on the valve pipe in position, with the vessel mouth higher in relation to the horizontal center line of the valve pipe and in position higher than it should be; the goose neck having been checked in its movement by sticking the vessel mouth, and of course it has shifted its position on the valve pipe without damaging the goose neck, but when the valve pipe is turned back to its normal position as shown at Fig. 1, the goose neck is moved on the valve pipe to its normal position by striking the wall A^1 of the recess in the filling chamber, shown in full lines in Fig. 1.

A shows the filling chamber of a pressure filling and capping machine.

A^1 shows the chamber wall.

B shows a recess in one side of the chamber wall A^1.

C shows a hole bored through the wall of the chamber A^1.

D shows a pipe entered in C to fit the hole C closely.

E shows a handle secured on the outer end of pipe D.

F shows a nipple screwed into the chamber wall A^1 and G shows valve port in valve pipe D, matching an opening in nipple F, to admit liquid to pipe D from a source of supply not shown.

H shows a movable goose neck pipe on valve pipe D held frictionally thereon.

I shows the opening in pipe D through which liquid passes from pipe D to the goose neck.

J shows a vessel in proper position in the filling chamber A Fig. 1 for being filled from goose neck H.

K shows packing pieces pressing the neck of the vessel J to make a tight joint.

L shows a check valve attachment at the opposite end of pipe D to handle E for the purpose of admitting liquid into pipe D from a pump when syrup is to be passed therethrough.

The operation of my invention will be apparent from the foregoing description. A vessel and all the operating parts being in position as shown in full lines Fig. 1, no liquid will flow from the source of supply to the vessel, but when the valve pipe D is

turned as shown in Fig. 2 and in dotted lines Fig. 1, liquid will pass through port G to valve pipe D and thence to goose neck H and into the vessel J without changing the relation of goose neck H to valve pipe D, but if the vessel is placed higher up in the chamber A as shown in Fig. 3, the goose neck will strike the mouth of the vessel J, and the goose neck H will change its position on valve pipe D as shown at Fig. 3, the goose neck turning on valve pipe D to accommodate itself to the higher position of the vessel and the filling of the vessel will proceed properly. When the vessel is filled the operator turns the valve pipe D by handle E until the port G is closed, the goose neck H will then strike the wall A^1 of the recess B and turn on pipe D to bring itself to its former normal position, to right itself. In other words goose neck H turns on pipe D to correct position for filling the vessel by striking the vessel mouth and to its normal position as shown in Fig. 1 in full lines by striking the wall A^1.

Having now fully described my invention and the manner in which I have embodied it what I claim as new and as my invention and desire to secure by Letters Patent is—

In a machine for filling and capping vessels having a filling chamber, the combination of a filling pipe located in the wall of the filling chamber and arranged to turn circumferentially to make and break connection with the source of supply, of a nozzle pivotally and frictionally mounted upon said pipe and adapted to be projected into and out of said filling chamber by revolving said pipe in its seat, whereby said nozzle may be moved by striking the vessel mouth in its forward throw and be returned to its normal position by striking the wall of the recess in the filling chamber on its backward throw.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this 21st day of October 1908.

JOHN AUGUSTUS HICKS.

Witnesses:

LINCOLN A. STUART,

N. P. BARR.