(No Model.)

A. A. PINDSTOFTE.

BOTTLE WASHER.

No. 541,054. Patented June 11, 1895.

Fig. 1.

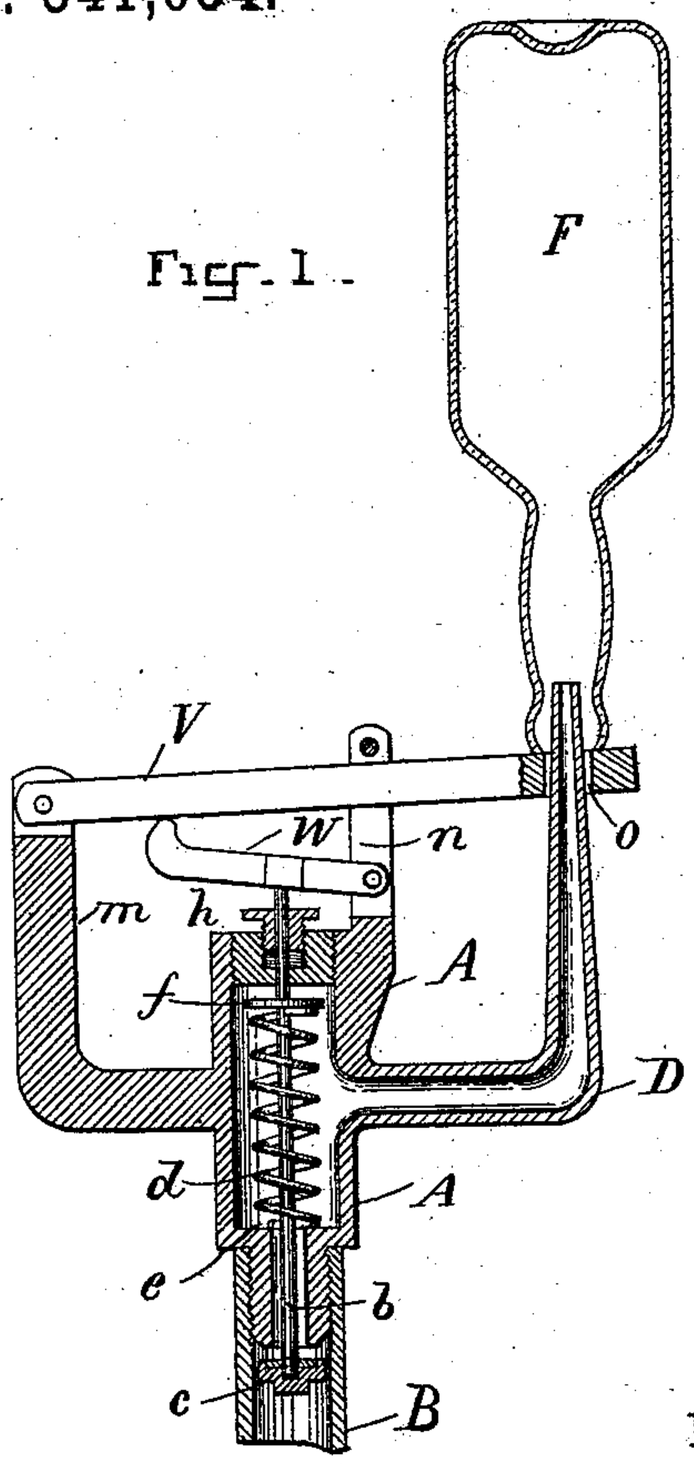
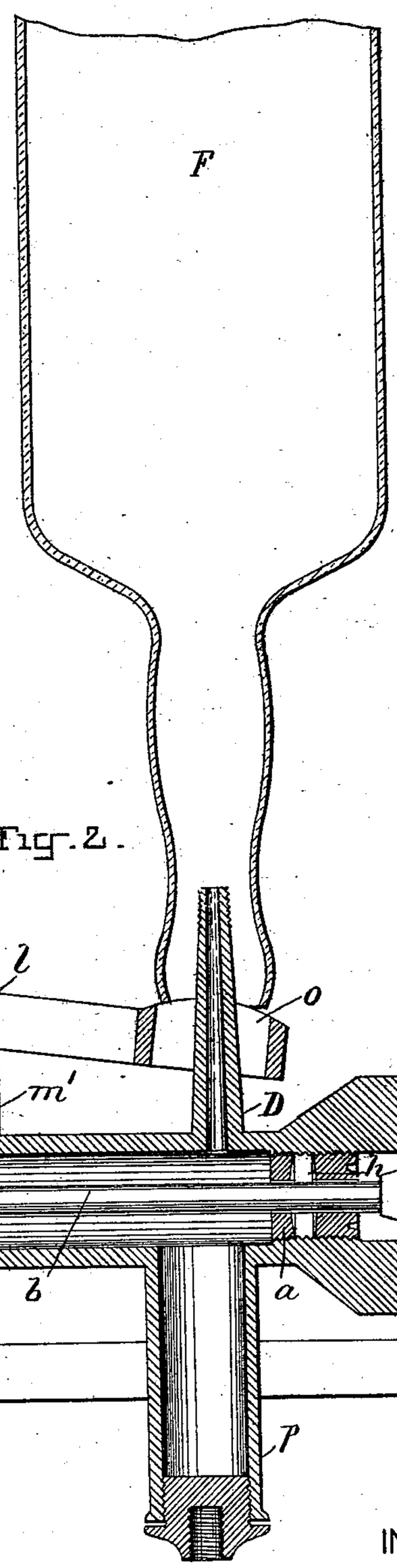


Fig. 2.



WITNESSES.

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ANDERS ANDERSEN PINDSTOFTE, OF COPENHAGEN, DENMARK.

BOTTLE-WASHER.

SPECIFICATION forming part of Letters Patent No. 541,054, dated June 11, 1895.

Application filed July 5, 1893. Serial No. 479,671. (No model.)

To all whom it may concern:

Be it known that I, ANDERS ANDERSEN PINDSTOFTE, manufacturer, subject to the King of Denmark, residing at Copenhagen, in the Kingdom of Denmark, have invented certain new and useful Improvements in Apparatus for Rinsing Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to apparatus for rinsing bottles and consists in improved and simple means of automatically opening and closing the valve of the water jet through the effect of applying and removing the bottles to be rinsed, by the attendant, and whereby the operation is calculated to facilitate rapid work, all as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is a sectional elevation of my improved apparatus as arranged with a vertical supply-pipe for the water-jet, with a sectional elevation of an inverted bottle in the position for being rinsed. Fig. 2 is a sectional elevation of my said improved apparatus with a horizontal supply-pipe for the water-jet, and also with a sectional elevation of a bottle in the position for being rinsed.

A represents a vertical valve case in Fig. 1, and A′ represents a horizontal valve case in Fig. 2, each having a vertical jet nozzle D branching out of one side, and both adapted to connect at the receiving end with a water supply pipe B. *c* represents the valves each fitted on the end of a rod *b*, extending through a stuffing box *h* in the head of the valve case.

In Fig. 1 the rod is connected to the short lever *w*, having its fulcrum pivot in the standard *n*, supported on the head of the valve case and its free end bearing under and against the lever V, which is pivoted in another standard *m*, also supported on the head of the valve case. Inside of the vertical valve case A, is a coiled spring *d*, seated at *e*, and compressed under and by the disk *f*, secured to the valve rod in the upper part of case A so as to raise the rod and close the valve when relieved of overpowering down pressure of the levers.

In Fig. 2, the valve rod *b*, is connected at *g* to the vertical arm of the elbow lever V^3 having its fulcrum pivot at *k* in the head of its valve case, and having the weight K′ at the extremity of its horizontal arm. Lever V^3 is connected by links V^2, with lever V′, which has its fulcrum at *l*, in the standard *m*′. The levers V and V′ both have their free ends perforated vertically as at *o*, and said ends are arranged in the relation to the nozzles D, whereby they project upward through these perforations suitably for entering the mouths of the bottles F inverted and placed over them so as to rest on the levers as shown in the drawings.

The perforations *o* are sufficiently larger than the nozzles to allow the levers to fall and rise sufficiently for opening and closing the valves.

It will be seen that with the spring or weight adjusted to slightly overbalance the bottle, a bottle placed on the lever V or V′ as shown in the drawings and held so that its weight tends to press the lever down, and being also slightly pressed thereon by the one holding it, the valve will be opened and a jet of water will be projected into the bottle to rinse it and when the bottle is lifted the valve will be closed. With the spring or weight thus adjusted the work of the attendant amounts to but little more than placing and removing the bottles and is thus rendered very easy and expeditious.

The valve case A′ is provided with a drop tube *p* plugged at the lower end suitably for the collection and removal of any sediment that may be precipitated in the water.

I claim—

The combination with the valve case and the automatic closing valve therein, of the vertical jet nozzle having communication with said case above the valve, the lever having the perforated free end embracing the nozzle suitably for forming a seat for the mouth of the inverted bottle having the nozzle entered in it, and the intermediate lever, said levers adapted to open the valve by pressure on the main lever substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ANDERS ANDERSEN PINDSTOFTE.

Witnesses:

LAURITZ NIELSEN,

CHRISTIAN LARSEN.