H. MARTIN.

Attachment to Bottling Machine.

No. 203,748. Patented May 14, 1878.

Fig. 1.

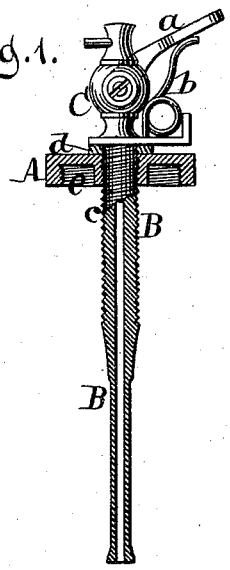


Fig. 3.

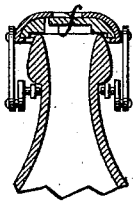
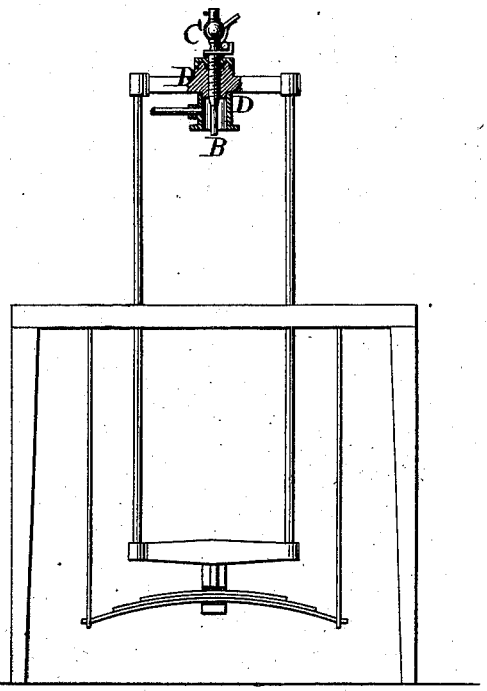


Fig. 2.



Witnesses.
Chas. Wahlers.
Aug. Dreggemann

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by his attys
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UNITED STATES PATENT OFFICE.

HENRY MARTIN, OF NEW YORK, N. Y.

IMPROVEMENT IN ATTACHMENTS TO BOTTLING-MACHINES.

Specification forming part of Letters Patent No. **203,748**, dated May 14, 1878; application filed April 25, 1878.

To all whom it may concern:

Be it known that I, HENRY MARTIN, of the city, county, and State of New York, have invented a new and Improved Attachment to Bottling-Machines, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a longitudinal section of my attachment. Fig. 2 shows a sectional side view of the same as applied to a bottling-machine. Fig. 3 is a sectional view of a bottle of that class for which my attachment is to be used.

Similar letters indicate corresponding parts.

This invention consists in the combination of a tubular stem and of a vent-valve with the filling-cap of a bottling-machine, said stem being made to extend through the filling-cap, and to be applied in connection with a bottle-stopper provided with a valve which closes from the inside, in such a manner that when the filling-cap is brought down upon the bottle the valve of the bottle-stopper is thrown open by the tubular stem to give access to the liquid, and if the bottle is partially filled the air inclosed in the bottle can be made to escape by opening the vent-valve.

In the drawing, the letter A represents a screw-plate, through which extends a tubular stem, B, to the upper end of which is firmly secured a vent-valve, C.

In the example shown in the drawing the vent-valve is made in the form of a stop-cock, which is adapted to be opened by a finger-lever, *a*, and which is closed by the action of a spring, *b*. Any other suitable valve may, however, be substituted for the stop-cock.

The tubular stem B is provided with a screw-thread, *c*, which engages with a corresponding thread cut into the plate A; and suitable packing-pieces *d*, interposed between the outer surface of said plate and the lower surface of the body of the vent-valve C, serve to produce a tight joint between the stem and the plate.

The plate A is provided with an internal screw-thread, *e*, to engage with a corresponding thread on the upper end of the filling-cap D, Fig. 2, of a bottling-machine.

In bottling-machines of the ordinary construction the filling-caps are provided with a screw-thread to receive a top plate, which forms the guide for the stopper-driving plunger. The screw-plate A and its tubular stem B take the place of said top plate and of the stopper-driving plunger, with this difference, however, that the tubular stem B is firmly secured in the screw-plate A, and consequently the mechanism required for imparting motion to the stopper-driving plunger can be dispensed with.

My attachment is intended to be used for filling bottles the stoppers of which consist of valves *f*, Fig. 3, which close from the inside out by the pressure of the fluid or gases in the bottle, and as the filling-cap D is brought down upon a bottle of this class (see Fig. 2) the tubular stem B forces the valve of the bottle-stopper inward, and the liquid from the fountain is permitted to flow into the bottle. When the bottle has been partially filled, the air inclosed therein is allowed to escape by opening the vent-valve C; and after the compressed air has blown out, the bottle can be readily filled clear up. When this has been accomplished the filling-cap is raised, and as the tubular stem is withdrawn the valve of the bottle-stopper closes immediately by the internal pressure of the gases contained in the liquid.

My attachment can be readily attached to all bottling-machines containing a filling-cap of the nature shown in Fig. 2.

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

The combination, with screw-plate A and externally screw-threaded stem B, of the vent-valve C, the finger-lever *a*, and the spring *b*, the whole constructed and arranged to operate substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 23d day of April, 1878.

HENRY MARTIN. [L. S.]

Witnesses:
W. HAUFF,
E. F. KASTENHUBER.