(No Model.)

H. WEBER.

Apparatus for Drawing off Liquids.

No. 234,735. Patented Nov. 23, 1880.

FIG. 3.

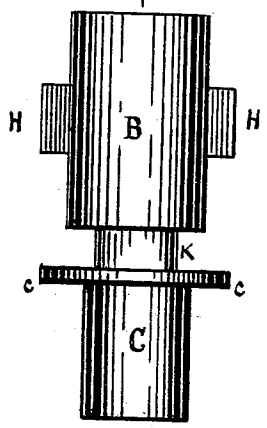


FIG. 4.

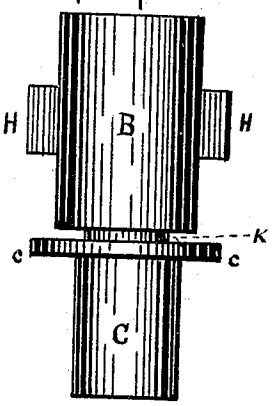


FIG. 1.

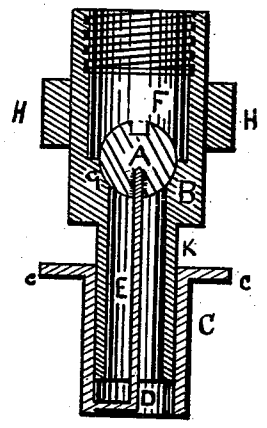
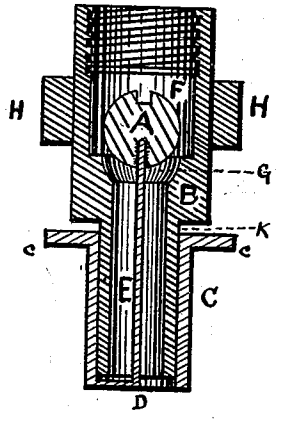


FIG. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY WEBER, OF PARIS, FRANCE, ASSIGNOR TO ANDREW VEIGEL, OF PHILADELPHIA, PENNSYLVANIA.

APPARATUS FOR DRAWING OFF LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 234,735, dated November 23, 1880.

Application filed July 17, 1880. (No model.) Patented in France February 27, 1878.

To all whom it may concern:

Be it known that I, HENRY WEBER, a citizen of the Republic of Switzerland, residing in the city of Paris, France, have invented a new and useful Apparatus for Drawing Off Liquids, (for which I have obtained a patent in France, No. 122,877, bearing date February 27, 1878, Class 14,) of which the following is a specification.

My invention relates to that class of devices which are used to assist in the drawing off of limited quantities of liquid from a reservoir or receiver. It provides a cheap, simple, durable, and sensitive attachment, with but few parts, and readily adjusted and fixed to any nozzle, faucet, or tap, or directly to the reservoir itself, and is appropriately applied in bottling liquids and to similar uses.

My invention consists of an apparatus for drawing off liquids in which there is seated a direct-acting stop-valve controlled from the exterior of the nozzle or discharge-pipe by means of a valve plunger or rod which passes through the interior of the discharge-pipe, and is attached to the lower projecting edge of an annular flange collar or movable nozzle, which slides on the fixed nozzle or discharge-pipe in the direction of its length, and which by its action governs and controls the stop-valve.

The following is a detailed description of my invention, its several parts, and their relation to each other, together with a statement of the action of the apparatus when applied to the uses for which it is designed.

In the accompanying drawings, which form a part of this specification, similar letters of reference indicate like parts in all the views.

Figure 1 is a vertical-section view drawn on a plane passing through the central axis, and showing the bearing and relation of the several parts to each other when the valve is closed. Fig. 2 is a similar section view, showing the bearing and relation of the several parts to each other when the valve is open; Fig. 3, a general view of the device when in the position represented in Fig. 1; Fig. 4, a similar view relating to Fig. 2.

The tap B, with its lugs H H and discharge-pipe K, is cast of metal in one piece, of the general form indicated in Figs. 1 and 2. The tap is so constructed as to form a valve-chamber, F, with a valve-seat, G, and is furnished with either an external or internal screw-thread or other simple mechanical device for attachment.

C indicates the sliding annular collar, on which is constructed a flange, *c c*, on its upper edge, the lower edge projecting at all times beyond the lower extremity of the fixed nozzle or discharge-pipe K. To the lower edge or interior rim of the sliding collar C is rigidly secured the plunger or valve-rod E, (which is shaped substantially as shown in Figs. 1 and 2,) which passes through the center or axis of the discharge-pipe K, and at its upper extremity is fitted into the valve A by a screw-thread or similar device, or made to press against the ball-valve.

As will be seen by reference to the drawings, the fixed portions of my device are all formed of one piece of suitable material, and the movable portions of the apparatus are formed of three separate parts firmly connected together and capable only of the same kind of motion both in direction and extent. The valve A, therefore, being one of these parts, is completely controlled with reference to its position by the action of the movable collar C in the line of its motion. The tap B must be secured to the receiver, either directly or indirectly, in such a manner that there shall be free and unobstructed communication between the valve-chamber F and the receiver, so that at all times the liquid may flow freely into the valve-chamber and upon the upper surface of the valve.

The valve is fitted with a slot, so that it may be readily unscrewed from the valve-rod, by which means the apparatus can be taken apart for cleaning or repairs.

The action of the apparatus when in use is extremely simple—as, for instance, in bottling liquids: The sliding collar C is inserted into the neck of the bottle to be filled until the upper edge of the neck presses against the flange *c c*. The apparatus and bottle are then in proper position for drawing off any stated quantity of the liquid in the receiver. The least upward pressure on the bottle while its neck is in contact with the flange *c c* will, by moving

the sliding collar C in the direction of its axis, cause the valve-rod E to lift the valve A from its valve-seat G and allow the free flow of the liquid around the valve through the discharge-pipe K into the bottle to which it is to be transferred. When the desired quantity of the liquid has been drawn off the act of removing the bottle relieves the upward pressure on the flanges *c c*, and the sliding collar and valve-rod fall of their own weight, carrying with them the valve A until it rests on the valve-seat G and stops the flow of the liquid. The pressure of the liquid on the head of the valve assists the closing of the valve independently of the action of gravity on the moving parts.

The arrangement of parts indicated in substantially the form as shown and in suitable proportions provides a cheap, simple, compact, durable, and prompt automatic device for drawing off liquids, which I desire to secure by Letters Patent of the United States, and in which I claim as my invention—

1. An apparatus for drawing off liquids, and similar uses, in which a stop-valve is controlled from the exterior of the fixed discharge-pipe by a sliding collar moving in the same direction as the valve in opening and closing the same, connected by means of a valve-rod, E, constructed and attached substantially in the manner described.

2. The combination of the valve-chamber F, valve A, and its valve-seat G with the valve-rod E, attached to the lower projecting edge of the sliding collar C, and controlled by it, in the manner described.

3. The tap B, with its lugs H H, valve-chamber F, and fixed nozzle or discharge-pipe K, in combination with the moving parts A, E, and C, substantially as described.

4. In an apparatus for drawing off liquids, a flanged sliding collar, C and *c c*, having a free motion on a fixed nozzle or discharge-pipe, K, in the direction of its length, so connected with a valve at the head of the discharge-pipe through its interior, and moving in the same direction therewith, that the flow of liquid through the apparatus is controlled by the positive action of said collar, discharging the liquid through the valve when it is raised and closing the valve when allowed to fall of its own weight, all in the manner and for the purpose set forth in the foregoing specification.

HENRY WEBER.

Witnesses:
BLOUIN,
GUIBO.