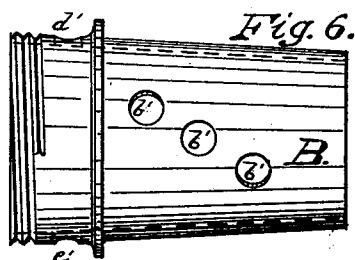
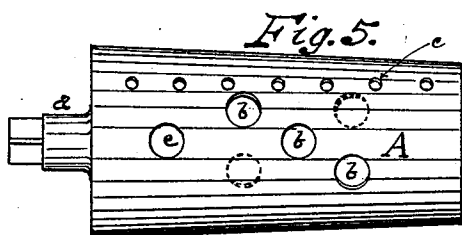
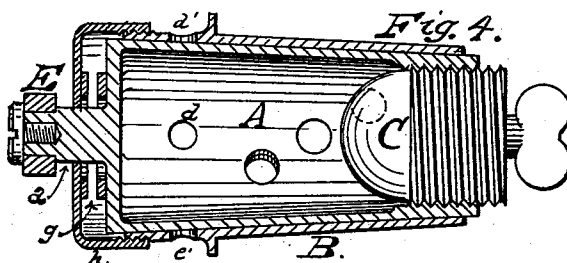
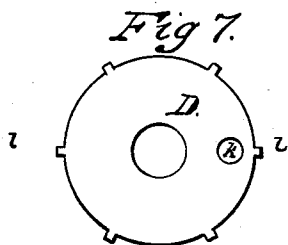
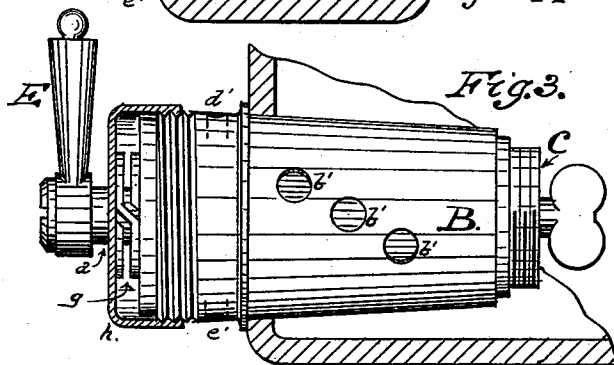
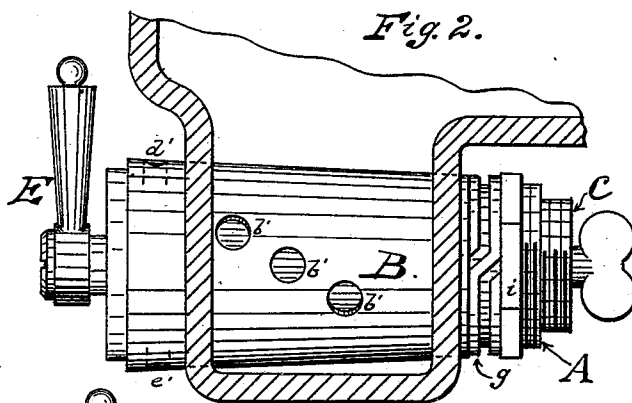
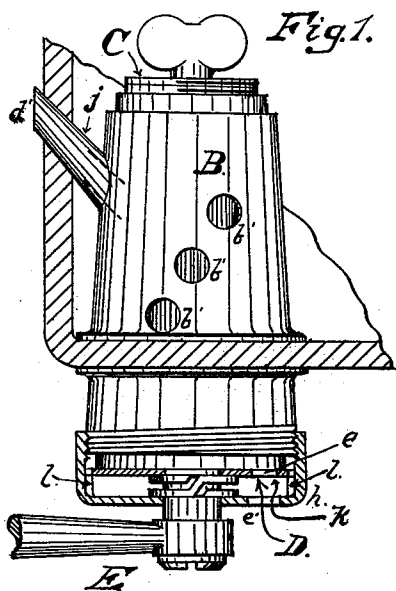


(No Model.)

E. HAAS.
MEASURING FAUCET.

No. 508,014.

Patented Nov. 7, 1893.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWIN HAAS, OF PHILADELPHIA, PENNSYLVANIA.

MEASURING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 508,014, dated November 7, 1893.

Application filed September 8, 1890. Serial No. 364,372. (No model.)

To all whom it may concern:

Be it known that I, EDWIN HAAS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Drafting-Faucets for Soda-Fountains and Bottle-Filling Machines; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in faucets, in which two hollow cones operate in conjunction with a solid regulating plug; and the object of my invention is to provide a faucet for drafting liquids of every description which shall supply a given limited and predetermined amount of liquid at each opening of the faucet. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view of the faucet placed vertically through an opening in the bottom of the vessel containing the liquid. Fig. 2 is a view of the faucet placed horizontally through a neck in the bottom of the vessel containing the liquid. Fig. 3 is a view of the faucet placed horizontally through an opening in the front of the vessel containing the liquid. Fig. 4 is a cross section showing the several parts of the faucet. Fig. 5 is a view of the inside hollow cone. Fig. 6 is a view of the outside hollow cone or sleeve. Fig. 7 is a view of the plate or head used in the construction shown in Fig. 1.

Similar letters refer to similar parts throughout the several views.

The inside hollow cone A. is provided at the larger end thereof with a shaft *a*, to which is affixed the handle E., and has the ports or inlets *b. b. b. b.* for the passage of liquid so drilled that their position on the surface of the cone is oblique to a longitudinal line upon it. Said cone is also provided with the vent *d.* and outlet *e.*, and the recessed surfaces *c. c. c. c.*, to be filled with a suitable lubricant

to reduce the friction. The inside of the smaller end of said cone is threaded to receive the regulating plug C.

The outside hollow cone or sleeve B. has the ports or inlets *b' b' b' b'* for the passage of liquid drilled so as to register with the ports or openings of the inside hollow cone A., for the purpose of allowing the inside cone to be quickly filled with the liquid. The outside cone is also provided with the vent *d'* and outlet *e'*, which register with the vent *d.* and outlet *e.* in the inside cone.

Experience has shown that, where a single or a double port or inlet is used, it is necessary to carry an air vent from the faucet to the top of the liquid in order to allow the escape of the air and the faucet will fill quickly. By the use of the device here shown, wherein the faucet is constructed to be placed in such position that the liquid surrounds said faucet, and the cones are provided with the numerous ports or inlets shown, the number of which is limited only by the size of the faucet, the faucet is filled instantaneously, the liquid entering the ports or inlets which are at the sides and at the bottom and forcing the air out through those at the top, and the use of an air vent is not necessary when filling the faucet. The air vents *d* and *d'* are for the purpose of admitting the air and discharging the liquid through the outlets *e.* and *e'* after the faucet is filled, the handle turned and the ports closed.

The movable regulating plug C. is threaded to fit in the inside of the hollow cone A. By screwing said plug in or out the space to contain the liquid to be drawn can be diminished or enlarged at pleasure, thus regulating to a nicety the holding capacity of the faucet.

In order to keep the inside cone tightly in place against the inside of the outer cone, the spring ring *g.* is placed either at the larger end of the cone, around the shaft *a.*, and kept in place by screwing the cap *h.* on the outer cone B., as shown in Figs. 1 and 3; or, as shown in Fig. 2, at the smaller end, around the cone A., held in place by the choke nut *i*, screwed on the cone A.

When the faucet is placed horizontally, as shown in Figs. 2 and 3, the vents *d.* and *d'* and the outlets *e.* and *e'* are in the sides of the

cones, opposite each other, outside the liquid holder, and the plate D. is unnecessary.

When the faucet is to be inserted vertically, as shown in Fig. 1, the vents *d*. and *d'* are in the sides of the cones, inside the liquid holder, the air being admitted thereto through the tube *j*, which is fastened to the outside of the cone B. and extends through the side of the liquid holder. The outlet *e*. is drilled in the larger end of the cone A. The plate D. is placed between the spring ring *g*. and the end of the cone A. The opening *k*. is drilled to register with the outlet *e*., and therefore serves the purpose of the outlet *e'*. The plate D. is kept from turning by the lugs *l*. *l*., which engage in slots in the outside cone B.

The operation of the faucet is as follows: When the faucet is inserted in the liquid holder, the liquid surrounds the faucet. The outside cone B. is stationary; the inside cone A. is movable by means of the shaft *a*. and the handle E. The ports or inlets *b*. *b*. *b*. *b*. register with the ports or inlets *b'* *b'* *b'* *b'*, so that the liquid immediately enters the inside hollow cone A. The vent *d*. and outlet *e*. do not register with the vent *d'* and the outlet *e'*. Upon turning the handle the inside cone is moved so that the ports no longer register, thus preventing the entry of more liquid, while at the same time the vent *d*. and outlet *e*. are brought to register with the vent *d'* and outlet *e'*, and the liquid in the faucet is discharged, the air entering through the vent, forcing the liquid out through the outlet. By again turning the handle to the first position, the outlet and vent are closed, and the ports are again opened, and the faucet is immediately refilled, the air being expelled therefrom by the force of the liquid surrounding the faucet. No vent is required in filling.

It will be readily seen that, should it be desirable to diminish or increase the amount of liquid to be drawn at each opening of the faucet, the holding capacity can be regulated to a nicety by screwing the regulating plug C. in or out.

The change in the position of the vent *d*. and *d'* and the outlet *e*. and *e'*, as well as in the position of the spring ring, are mere me-

chanical changes, and in no way affect the principle of my invention.

Having thus described my faucet, what I claim as my invention, and desire to secure by Letters Patent, is—

1. In a faucet for drafting liquids, an inside movable hollow cone provided with ports or inlets, a discharging vent and an outlet, and an outside stationary hollow cone or sleeve provided with ports or inlets adapted to register with the ports or inlets of the inside movable hollow cone when the discharging vent and outlet are closed, a discharging vent and an outlet adapted to register with the discharging vent and the outlet of the inside movable hollow cone when the ports are closed, in combination with a solid movable regulating plug, threaded to screw in and out of the smaller end of the inside hollow cone, for the purpose of regulating the capacity of the faucet; substantially as described.

2. In a faucet for drafting liquids, an inside movable hollow cone provided with ports or inlets so drilled that their position on the surface of the cone is oblique to a longitudinal line upon it, a discharging vent and an outlet, and an outside stationary hollow cone, so constructed that when inserted in the liquid holder the liquid shall surround the ports or inlets, and adapted to receive the inside movable hollow cone, having ports or inlets drilled to register with the ports or inlets of said inside movable hollow cone when the discharging vent and outlet are closed, a discharging vent and an outlet adapted to register with the discharging vent and outlet of the inside movable hollow cone when the ports or inlets are closed, in combination with a solid movable plug, threaded to screw in and out of the inside movable hollow cone, for the purpose of regulating the capacity of the faucet; substantially as described.

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

EDWIN HAAS.

Witnesses:

J. H. WILSON,
J. R. MASSEY.