

(No Model.)

E. BOENING. MEASURING FAUCET.

No. 603,983.

Patented May 10, 1898.

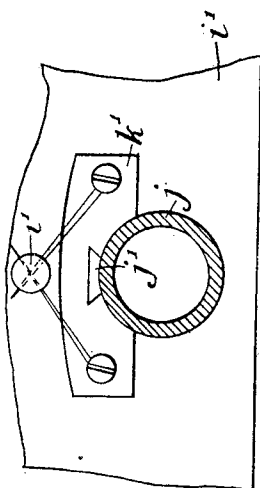


Fig. 4.

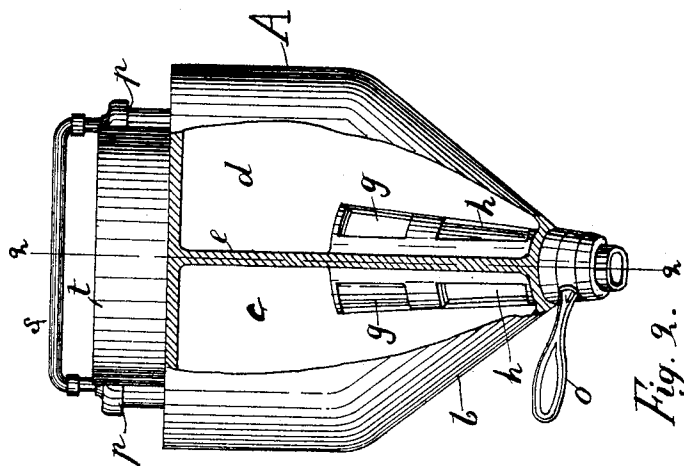


Fig. 2.

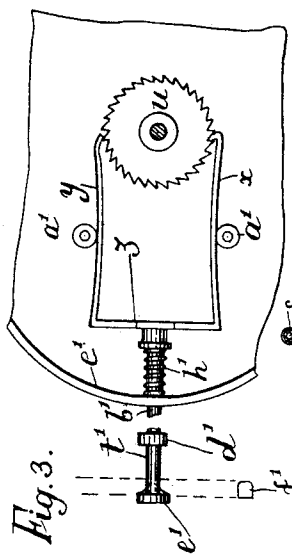


Fig. 3.

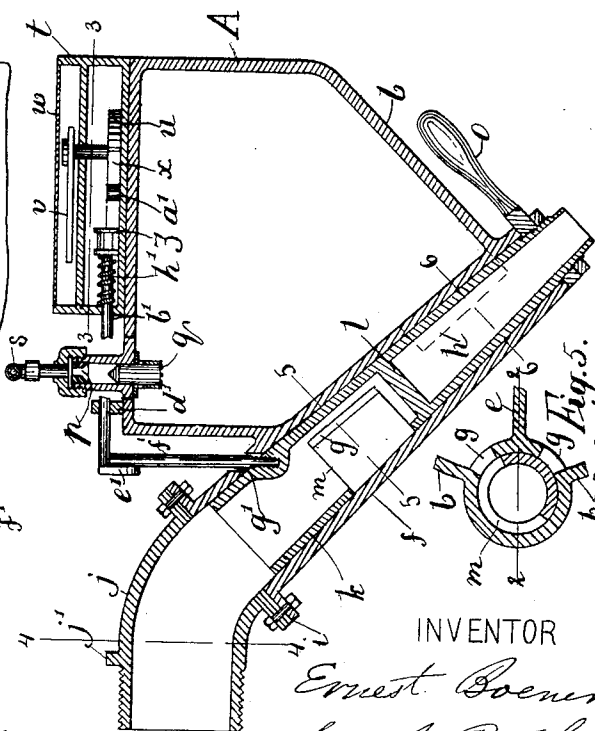


Fig. 1.

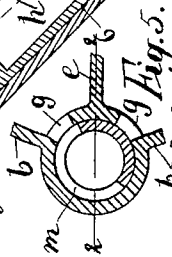


Fig. 5.



Fig. 6.

WITNESSES

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UNITED STATES PATENT OFFICE.

ERNEST BOENING, OF YONKERS, NEW YORK, ASSIGNOR OF THREE-FOURTHS
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MEASURING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 603,983, dated May 10, 1898.

Application filed March 3, 1897. Serial No. 625,838. (No model.)

To all whom it may concern:

Be it known that I, ERNEST BOENING, a citizen of the United States, residing at Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Measuring-Faucets; 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 consists of improvements in duplex measuring-faucets and registering apparatus therefor, as hereinafter described, reference being made to the accompanying drawings, in which—

Figure 1 is a sectional elevation of my improved faucet, the section being taken on line 2 2 of Figs. 2, 5, and 6. Fig. 2 is a front elevation with a part broken out. Fig. 3 is a detail in horizontal section on line 3 3, Fig. 1. Fig. 4 is a detail in transverse section on line 4 4, Fig. 1. Fig. 5 is a transverse section of the valve on line 5 5, Fig. 1; and Fig. 6 is a transverse section of the valve on line 6 6 of Fig. 1.

I provide a suitable shell A for the measuring-chambers, preferably of round form, with a conical bottom *b*; but it may be of other form, with a taper of the bottom from back to front, and divided into two equal chambers *c* and *d* by a partition *e*, with a taper tubular valve-case *f* formed on one side of the bottom, with its longitudinal axis co-incident with the plane of the partition *e*, and with two ports *g* and *h* connecting with the chambers *c* and *d*, respectively. The upper end of the valve-case projects a little beyond the shell A for clearance and is coupled at *i* to a faucet-tube *j* of suitable form to connect with the barrel or tank by screwing into the tap-hole and so as to support the shell upright. A hollow taper-valve *k*, partitioned at the middle *l*, is fitted in said case for reception of the liquid into its upper end and is provided with ports *m* and *n* for inlet and discharge of the liquid to and from the measuring-chambers, respectively, according as

the valve is shifted from one position to another by the lever *o*, attached to its lower end, which projects out of the valve-case for connection of the lever at the front side of the shell and for a nozzle for the discharge of the liquid thereat, the ports of the valve being so arranged that the liquid discharges from one chamber while the other is filling.

Each measuring-chamber has a vent-orifice *p* at the top and a float-valve *q* for closing it to prevent waste of the liquid when full, and the vents are connected by a pipe *s* for venting one into the other to protect the chambers from dust, which would collect if vented directly to the atmosphere.

In the use of faucets of this character it is desirable to register the draft in a way to insure making the register before the draft is drawn, as a means of protection against drawing without counting, which is possible where the drawing and counting or registering are simultaneous. For this purpose I have provided the register-inclosing case *t* on the top of the shell with a ratchet-wheel *u*, which may carry a pointer *v* under the dial *w*, as the complete registering apparatus, or it may be the first mover of any approved form of more complex counting apparatus, which ratchet is pivoted on a vertical axis and with which a hook-pawl *x* is arranged to actuate it and a stop-pawl *y* to prevent the hook-pawl from forcing the wheel backward, said pawls consisting of spring-prongs of a cross-head *z* and arranged between guiding-studs *a'* and engaging the ratchet-wheel on opposite sides respectively, said cross-head having a staff *b'* projecting through the rim *c'* of the registering-case and a guide-bearing *d'* and having a cam-head *e'* at its outer extremity, on which the extremity of an arm *f'*, connected to valve *k* through a slot *g'* of the case, so as to vibrate when the valve is shifted, takes effect when passing the cam-head to retract the hook-pawl and actuate the register midway of the movement of the valve from one position to the other and before the opening of the ports, which, it will be seen in Figs. 5 and 6, does not occur until the latter part of

the valve movement. The coiled spring *h'* on the staff of the cross-head shifts the pawls back preparatory for next action.

To secure against unscrewing the faucet 5 from the barrel or tank *i'* for fraudulently drawing the liquid, I have provided a lug *j'* on the tube *j*, that occupies a position in close proximity to the barrel or tank where the faucet is screwed in, with a locking-plate *k'* 10 having a notch for engaging said lug and being adapted to be screwed onto the barrel or tank with screws or bolts protected by a lead and wire or other seal, as *l'*, against removal without detection.

15 In the above-described construction of duplex faucets a very simple, cheap, and efficient measuring-faucet is provided with but a single valve. It is also symmetrical and affords large capacity for the space occupied. 20 The registering-gear is also very simple and cheap.

25 The valve being placed on the rear side of the taper-bottom and being extended so as to project under the front side of said taper-bottom, so that the valve-operating lever projects upward along the front side of said bottom, affords a better and more convenient arrangement for application of the hand to the

lever for operating the valve, especially in large faucets for measuring five-gallon drafts 30 out of wagon-tanks.

I claim—

The combination in a measuring-faucet of the upright shell having the taper-bottom, the taper cylindrical valve-case on the side 35 of the taper-bottom sloping from the back forward and having inlet and discharge ports communicating with the measuring-chambers through said bottom, the valve in said case 40 controlling said ports, the registering ratchet-wheel located in an inclosing case on the top of the shell, reciprocating hook-pawl for shifting said wheel cam-headed staff of the pawl, and the laterally-projecting rocking arm of 45 the valve adapted to actuate said staff, said valve-actuating arm and staff of the pawl adapted for registering prior to opening the discharge-port, and the pawl-retracting spring substantially as described.

In testimony whereof I affix my signature 50 in presence of two witnesses.

ERNEST BOENING.

Witnesses:

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A. P. THAYER.