

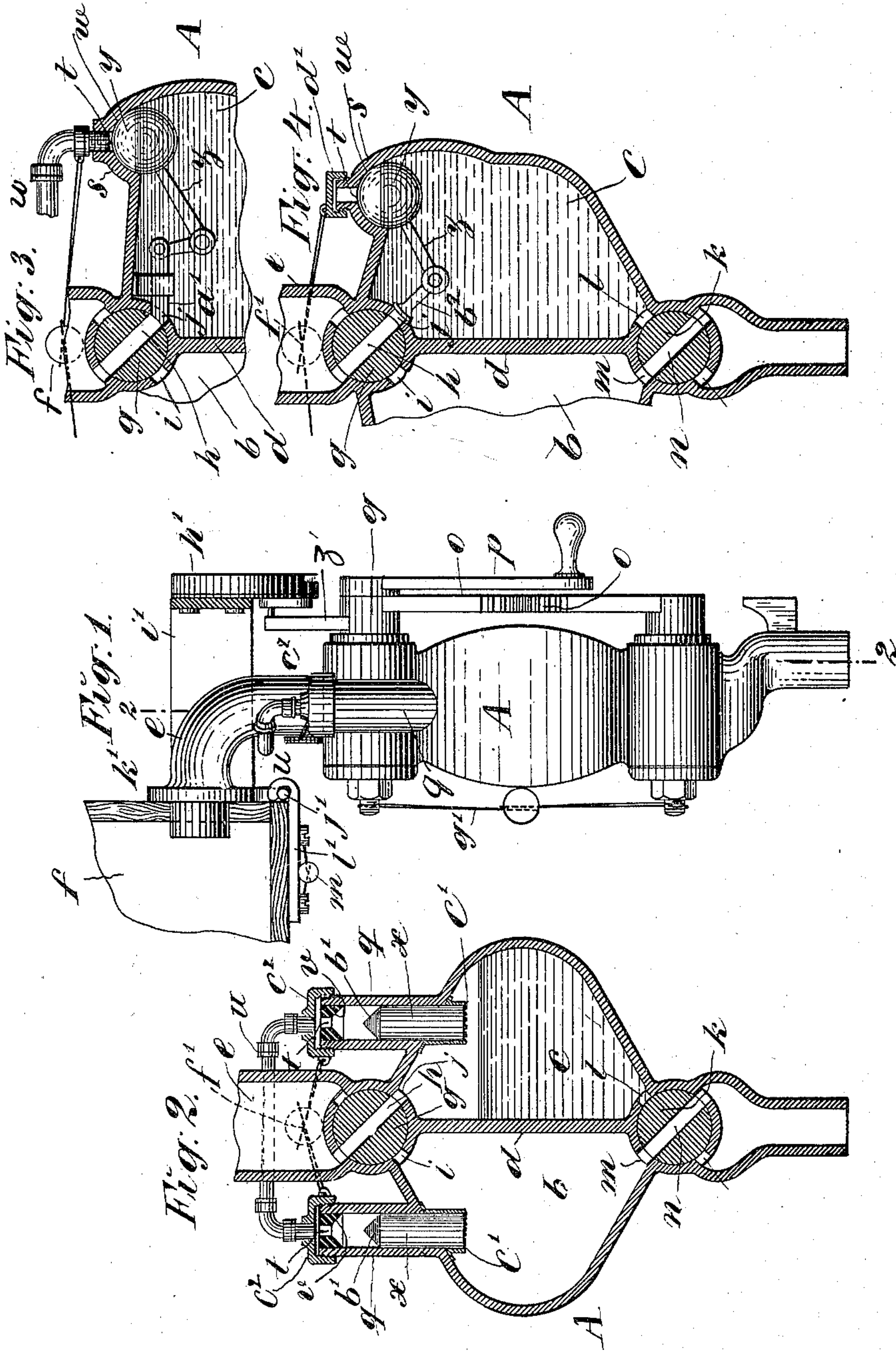
No. 612,658.

Patented Oct. 18, 1898.

E. BOENING.
MEASURING FAUCET.

(Application filed Mar. 3, 1897.)

(No Model.)



WITNESSES:

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MEASURING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 612,658, dated October 18, 1898.

Application filed March 3, 1897. Serial No. 625,836. (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.

This invention relates to duplex measuring-faucets such as are used on wagon-tanks for dispensing illuminating-oil and for drawing and measuring liquors and other fluids from barrels, tanks, and the like; and it consists in means for securing the faucet to the tank or cask in a way to prevent it from being detached without detection for drawing through the tap-hole, as hereinafter described, reference being made to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved measuring-faucet and a part of a barrel to which it is attached, the said part of the barrel being in section. Fig. 2 is a sectional elevation of the same, taken on line 2 2 of Fig. 1. Figs. 3 and 4 are details in the same section as Fig. 2, showing modifications of the venting apparatus.

A represents a hollow metallic body structure the interior of which is divided into two equal measuring-chambers *b* and *c* by the partition *d*, and on the top is a tubular neck *e* for connection with the tank or barrel *f* in the tap-hole. At the top of the body is a plug-valve *g*, controlling the flow of the liquid into the measuring-chambers or shutting it off entirely, according as the valve is set, said valve having a passage *h* through it, which is made to register with either of the admission-ports *i* or *j* and is in either position in communication with the neck *e* above. Another similar valve *k* at the bottom of the body controls the discharge of the liquid from the measuring-chambers in like manner, the chambers being formed with discharge-ports *l m*, with which the passage *n* through the valve is made to register, and the two valves are geared together by the toothed segments *o* in such relation that when one valve opens

a chamber for reception of its charge it closes the inlet-port to the other chamber, and the other valve closes the discharge from the chamber to be filled and opens the discharge-passage from the chamber to be emptied, and vice versa. A lever *p* is attached to one of the segments for operating the valves by hand.

What I do claim in this case consists, essentially, of automatic venting apparatus for the chambers, as follows: On the top of each measuring-chamber is a valve-chamber of any approved form, as *q* or *s*, from the top of which is a vent-opening *t*, either into the atmosphere or into a pipe *u*, connecting the vents of the two chambers, preferably the latter, with a valve-seat, as *v* or *w*, under each vent-opening, and a float-valve for closing the vents when the chambers fill to the proper limit to prevent escape of the liquid after having permitted the air to escape and for opening the vents to admit air when the chambers are opened for discharge.

In Fig. 2 I represent piston-valves *x*, preferably of hollow glass, but suitably tipped at *b'* with any yielding substance—as cork, rubber, or the like—said valves fitted in cylindrical chambers *q* and having any suitable stops, as *c'*, to limit their descent.

In Figs. 3 and 4 ball-valves *y* are shown on pivoted elbow-levers *z*, which are also made to close the inlet-ports *i j* at the same time that they close the vent, the one being made to actuate the sliding plug *a'*, the end of which is thrust into the port when the vent is closed, and the other swings the end of the short arm *b²* over the mouth of the port. This is desirable to check excessive inflow when the valve *g* may be left open for some time after filling, in which case there would be somewhat more compression of air remaining in the chamber after the vent is closed and the chamber would be flooded to a greater extent than normally.

The advantage of the connection of the two vents for venting from one chamber to another is the exclusion of dust that would flow in directly from the atmosphere and any foul or deleterious matter that might be wrongfully inserted through the vent-openings.

Both of these contingencies may, however, be overcome to a considerable extent, at least while venting to the atmosphere directly, by fitting caps, as *d'*, Fig. 4, over the vent-openings with slack threads through which the air may flow, said caps and the others *c*² being sealed with the common lead or other seals, as at *f'*, to prevent being opened without showing evidence thereof. The valves *g* and *k* are also sealed, as at *g'*, to prevent removal of them. This mode of venting is advantageous as compared with venting back through the inlet-valve into the barrel when filling, which obstructs the inflow and causes objectionable gurgling noises.

In my prior application, a registering device is illustrated for indicating the quantities drawn, the said register being suitably connected with the valve-actuating apparatus to register the movements of the valves. Such a register is intended to be used in this case also, as indicated at *h'*, where it is mounted on a spur *i'* of the neck *e* in suitable relation to the valve-gear for being so operated, as by an arm *z'* of valve *g*; but it is not necessary to represent the particular means whereby it is so operated, as that forms no part of the matter claimed herein, the register being only indicated for better understanding of the purpose of the seals, and another means is employed to prevent evasion of the register which consists of laterally-projecting spurs *j'* of the collar *k'* on the neck *e*, that clamps

against the barrel-head, and the hook-plates *l'*, engaging said spurs and being bolted to the under side of the barrel with bolts coupled by a seal *m*, whereby the faucet may not be detached for wrongful drawing without showing by the register and be replaced again. Said clamp also constitutes a reinforcement to the connection of the faucet with the barrel or other vessel.

The arrangement of two chambers and valve mechanism herein shown for filling one chamber while emptying the other is claimed in an application filed, together with this, for renewal of a prior application, Serial No. 585,544, and is not, therefore, claimed in this case.

I claim—

In a measuring-faucet, the combination with the tap-neck of said faucet, of a sealing attachment to prevent detachment of the faucet which also forms a reinforcement to the faucet connection to the barrel or other reservoir and consists of the spurs of the tap-neck collar, and the hook-plates engaging said spurs and bolted to the under side of the barrel, said bolts protected with a seal, substantially as described.

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

ERNEST BOENING.

Witnesses:

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