(No Model.)

H. M. NYE.

LIQUID MEASURING FAUCET.

No. 376,254. Patented Jan. 10, 1888.

Fig. 1.

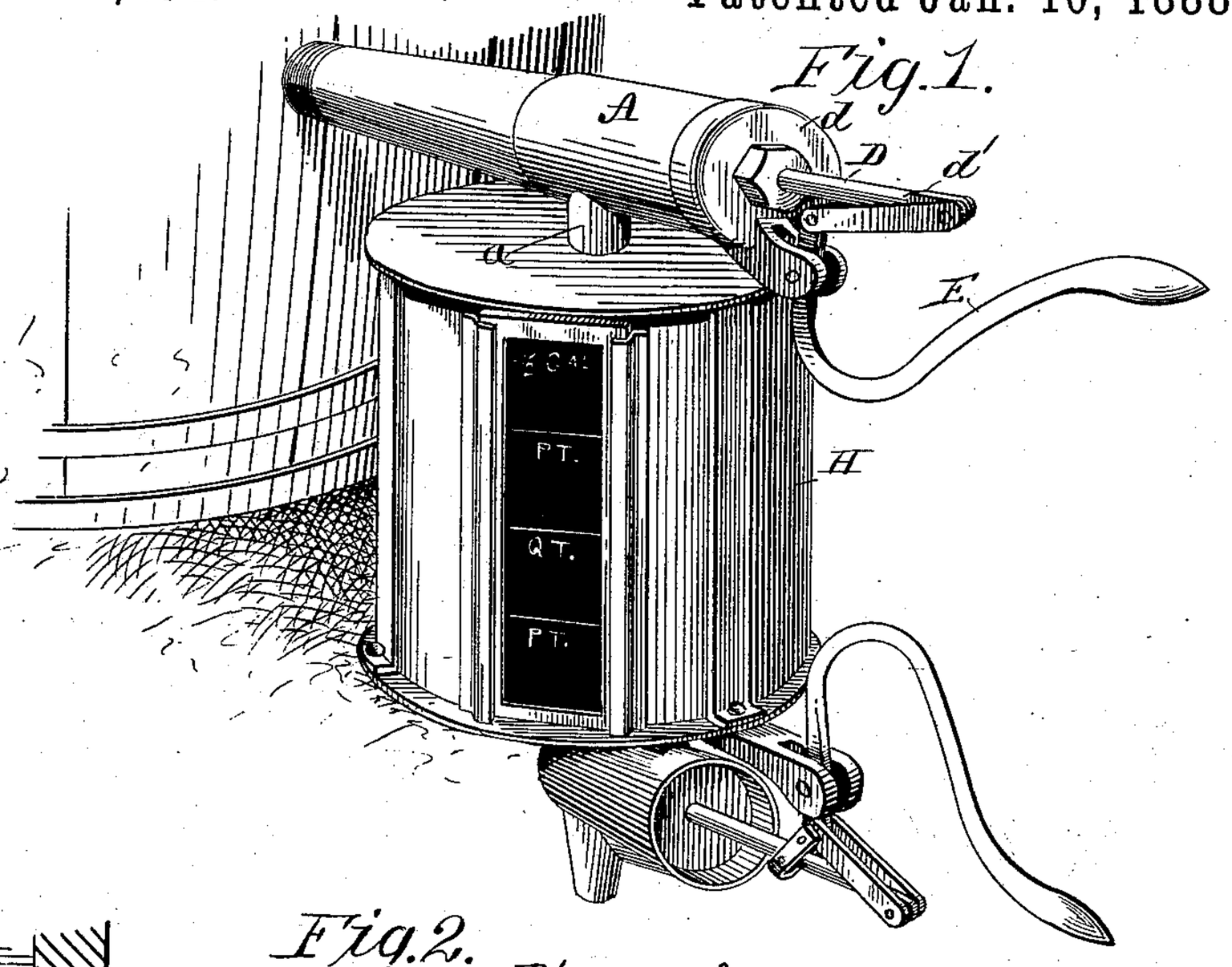
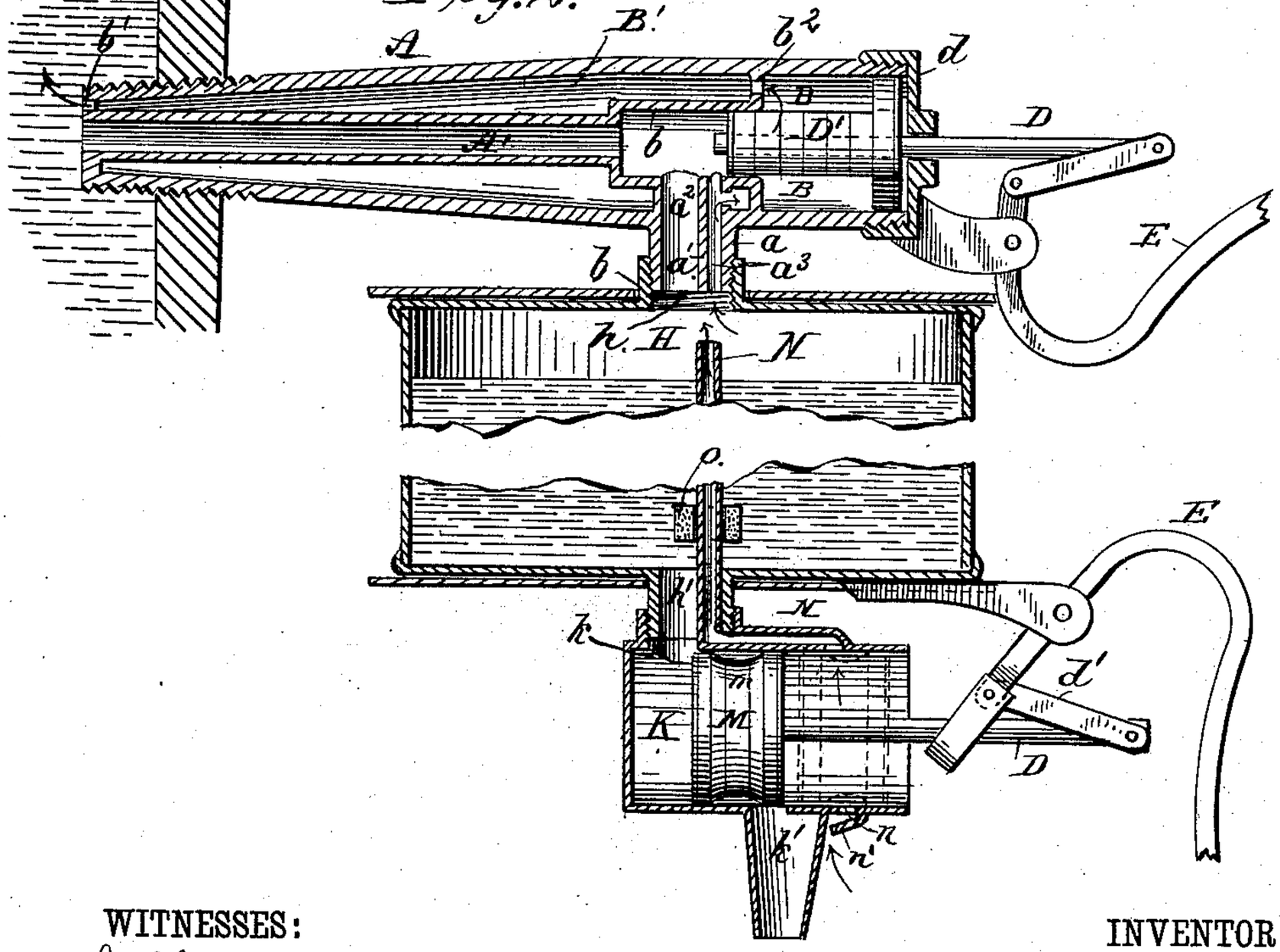


Fig. 2.



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LIQUID-MEASURING FAUCET.

SPECIFICATION forming part of Letters Patent No. 376,254, dated January 10, 1888.

Application filed September 20, 1887. Serial No. 250,185. (No model.)

To all whom it may concern:

Be it known that I, HERMAN MARCELLUS NYE, of Corydon, in the county of Harrison and State of Indiana, have invented a new and useful Improvement in Liquid-Measuring Faucets, of which the following is a full, clear, and exact description.

My invention relates to an improvement in measuring-faucets, and has for its object to provide a faucet of simple construction whereby the liquid may be measured as drawn from the cask or receptacle, and wherein the faucet will be durable and effective in operation and capable of being manufactured at a comparatively small cost.

The invention consists in the construction and operation of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of the device applied to a cask; and Fig. 2 is a central vertical section through the same, the reservoir being broken away.

In carrying out the invention, A represents the faucet proper, which, for convenience, I denominate the "supply-faucet," and which is adapted to be attached to a cask, barrel, or other receptacle in any approved manner.

The supply-faucet, constructed from any approved material, is provided with an outlet-tube, *a*, in the under side near the front, which tube is projected up within the body of the faucet to a connection with an interior longitudinal feed or fluid tube, A′.

The feed-tube A′ is flanged at the rear end, which flange is secured to the rear end of the jacket or shell of the faucet, so that at that point the two are integral, the liquid being adapted to pass into the faucet through the said interior tube.

The tube A′ at its forward end, where it intersects the outlet-tube *a*, is increased in diameter, as shown at *b*, Fig. 2, and extends forward only a short distance in advance of the outlet, where it is united to the jacket in the same manner as at the rear. Thus a chamber, B, is provided at the front end of the faucet the full diameter thereof, and a second chamber, B′, is made to intervene the jacket or shell and the supply-tube.

At the rear end of the chamber B′ an air-vent, *b′*, is provided, adapted to open into the cask, and at the opposite end a similar vent, b^2, is produced, leading into the chamber B.

The outlet-tube *a*, which is exteriorly threaded, is interiorly and unequally subdivided longitudinally from end to end by a partition, *a′*, whereby a passage, a^2, is provided for the liquid and an adjoining air-passage, a^3, the said air-passage having an outlet into the chamber B′, and likewise into the enlarged portion of the supply-tube A′.

The forward end of the supply-faucet has a cap, *d*, screwed thereon, centrally apertured to receive a rod, D, carrying a plunger, D′, the forward end of the plunger being made of a diameter equal to the inner diameter of the chamber B, and the rear end of a peripheral size equal to the inner peripheral size of the enlarged end of the tube A′, as the plunger is adapted to reciprocate in both the chamber B and the tube A′. The plunger is actuated by a lever, E, pivoted in a bracket attached to the cap *d*, the connection between the lever and plunger-rod being effected by a link, *d′*.

In further carrying out the invention a graduated reservoir, H, is provided, indicating the various fractions of a gallon or gallons, having an inlet, *h*, in which the outlet-tube *a* of the supply-faucet is screwed, and an outlet, *h′*, united with a discharge-faucet, K.

The discharge-faucet K consists of a cylindrical body provided with an inlet, *k*, registering with the outlet of the reservoir, and a discharge outlet and tube, *k′*, out of alignment with the inlet.

Within the body of the discharge-faucet a plunger, M, is adapted to slide, having a central annular groove, *m*, which plunger is operated in a similar manner to the plunger contained in the supply-faucet, the bracket supporting the lever being, however, attached to the bottom of the reservoir. Air-vents *n* are made in opposing sides of the body. The under vent is protected by a lip, *n′*, and a tube, N, is made to cover the upper vent, which tube extends upward into the reservoir.

The tube N may be utilized as a receptacle

for a series of washers, *o*, adapted for use when the graduations are inaccurate.

In operation the plunger D′ is drawn outward and the liquid is permitted to flow through the tube A′ down the outlet a^2 into the reservoir until the required quantity to be drawn is indicated, the lower plunger, M, having been forced in to cover the outlet *h′*. Air to permit the liquid to flow is admitted in the barrel through the vent *b′*, which air passes up from the reservoir through the passage a^3. Any air in the chamber B is also forced into the cask through the vent b^2 when the plunger D′ is pushed in to cover the outlet *a* and stop the supply. The supply being cut off from the cask, the plunger M is drawn back, the groove *m* registering with the air-vents *n*, air thereupon passes up into the reservoir through the tube N, and the liquid therein flows out through the delivery-faucet and outlet-tube *k′* into any receptacle placed beneath it.

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

1. The combination, with a supply-faucet provided with an inner longitudinal fluid-tube, A′, an air-chamber surrounding said tube, having a vent in its inner end, an outlet fluid-passage, a^2, an air-inlet passage, a^3, leading into the said air-chamber, and a plunger, D′, adapted to reciprocate in said fluid-tube, of a graduated reservoir attached to said supply-faucet, and a discharge-faucet, K, provided with a plunger, M, and an inlet and outlet attached to said reservoir, and means, substantially as described, for introducing air into the reservoir.

2. The combination, with a supply-faucet provided with an inner longitudinal fluid-tube, A′, an air-chamber surrounding said tube, provided with vents at each end, an outlet, *a*, provided with a fluid-passage, a^2, leading out from said tube A′, and an air-passage, a^3, leading into the air-chamber, a chamber, B, in front of said tube A′, and a plunger, D′, adapted to reciprocate in the tube A′ and chamber B, of a graduated reservoir attached to said outlet, and a discharge-faucet, K, secured to and connected with the reservoir, provided with a non-aligning outlet and inlet, a grooved plunger, M, air-vents *n*, and a tube adapted to convey the air from said vents into the reservoir, all arranged to operate as set forth.

3. The combination, with a supply-faucet provided with an inner longitudinal fluid tube or conduit, A′, having an enlargement, *b*, an air-chamber surrounding said tube, provided with vents at each end, an outlet, *a*, provided with a fluid-passage, a^2, leading out from the tube A′, and an air-passage, a^3, leading into the air-chamber, a chamber, B, in front of the tube A′, and a plunger, D′, adapted to reciprocate in the chamber B and enlargement of the tube A′, of a graduated reservoir attached to said outlet, and a discharge-faucet, K, secured to and connecting with the reservoir, provided with a non-aligning outlet and inlet, a centrally-grooved plunger, M, air-vents *n*, a tube, N, adapted to convey the air from said vents into the reservoir, and means, substantially as described, for operating the plungers, as and for the purposes set forth.

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Witnesses:
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