

(No Model.)

G. F. OAKLEY.
MEASURING FAUCET.

No. 474,343.

Patented May 3, 1892.

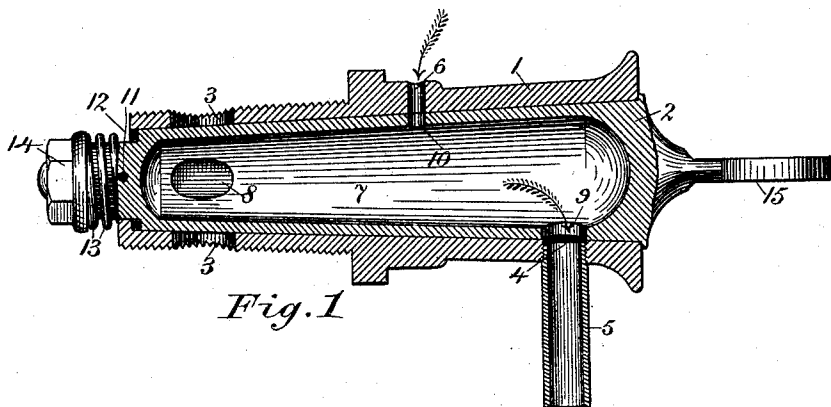


Fig. 1

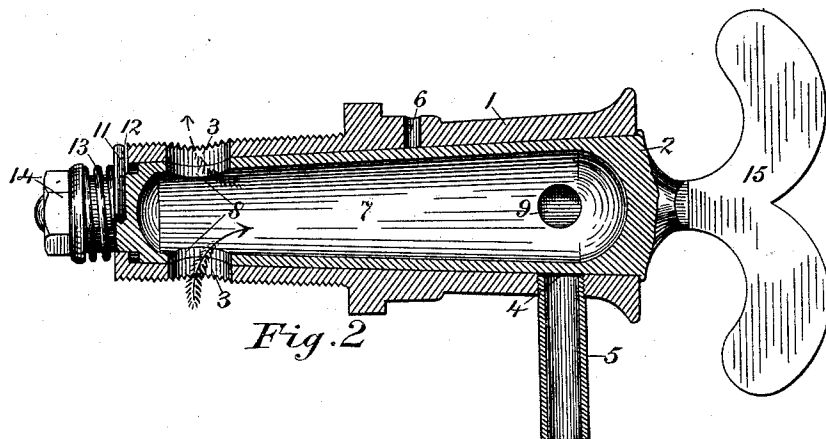


Fig. 2

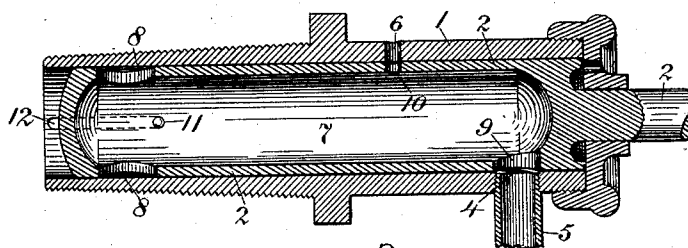


Fig. 3

Witnesses

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MEASURING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 474,343, dated May 3, 1892.

Application filed August 10, 1891. Serial No. 402,237. (No model.)

To all whom it may concern:

Be it known that I, GEORGE FREDERICK OAKLEY, a subject of the Queen of Great Britain, residing at the city of Toronto, in the county of York and Province of Ontario, Canada, have invented certain new and useful Improvements in Gaging or Measuring Taps, of which the following is a specification.

My invention relates particularly to an automatic measuring-tap for liquors or liquids in general that require to be dispensed by measure; and the objects of the invention are, first, to provide a tap that will uniformly measure its particular capacity at each operation, and, second, to provide a tap that cannot be left open by accident and the contents of the vessel to which it is attached allowed to escape through it. I attain these objects by means of the device illustrated in the accompanying drawings, in which similar numbers of reference refer to similar parts throughout.

Figure 1 represents a longitudinal vertical section through the body of the tap in position for discharging. Fig. 2 represents a similar view of the tap on being filled or recharged, and Fig. 3 represents a modification of the invention arranged to operate by reciprocal instead of vibratory motion.

In the drawings the tap is composed of the outer case 1 and the inner case or measure 2, adapted to move by rotary or reciprocal motion within the said outer case 1. The outer case 1 is threaded for a portion of its length when intended to be used in wooden vessels, and for glass or other material it would be adapted to suitable fitting, on which I lay no claim of invention. When used in wooden vessels, a means of turning the case 1 is formed thereon in the ordinary way. At the inner and smaller end of the case 1 diametrical ports 3 are provided, as shown, to stand when in position one at the upper and the other at the lower side of said case 1. At the outer end of the case 1 and in the lower side is located an outlet 4, provided with a tube or spout 5 to direct the liquid on issue. In the top of the case 1, and at any convenient point of the outer portion thereof, an air-vent 6 is provided for the purpose hereinafter specified. The said inner case 2 is hollow, as shown, having a capacity chamber 7 of a determined size and content, and is formed ex-

ternally to fit neatly into the said outer case 1. In the inner case 2 are provided corresponding ports 8, at the inner end, to those in the outer case 1, and one of which is shown in Fig. 1 turned away from said ports 3 in the outer case 1. At right angles to the ports 8 in the inner case 2 and at the outer end thereof is located an outlet 9, corresponding to the outlet 4 in said outer case 1, as shown in Fig. 2 of the drawings.

By inspection of the drawings it will be noticed that when the diametrical ports 3 in the outer case 1 and the ports 8 in the inner case 2 coincide, as shown by Fig. 2; the outlet 4 is closed, the outlet 9 in the inner case 1 being turned away, and when the outlets 4 and 9 in the outer and inner cases 1 and 2, respectively, coincide, as in Fig. 1, the ports 3 and 8 in said outer and inner cases 1 and 2 are at right angles to one another and no liquid can escape from the vessel. To permit the flow of the liquid through the coinciding outlets 3 and 8, as in Fig. 1, an air-vent 10 in the inner case 2 is necessary to coincide with the vent 6 in the outer case 1 and allow the air to enter at the top, in order that a vacuum in the chamber 7 is prevented and the flow cut off through the outlets aforesaid. A stop-pin 11 is provided in the inner case 2 to operate in an adapted recess or slot 12 in the outer case 1 as a means to regulate the movement of the cases 1 and 2, as necessary.

In the rotary-movement tap shown in Figs. 1 and 2 a spiral spring 13 is employed on the inner end of the case 2 to press against the end of the outer case 1, and a nut 14 on said inner case 2, as a means to regulate the tension between the said cases 1 and 2 and prevent leakage between their conical surfaces.

In the reciprocal-motion form shown in Fig. 3 the operation of filling the chamber 7 is done by pushing the inner case 2 so as to expose the ports 8 beyond the end of the case 1, where the liquid enters it. In this particular form the ports 8, vent 10, and outlets 4 and 9 are all necessarily in the vertical plane, and in the rotary-motion form shown by Figs. 1 and 2 they are, when in action or use, in the same vertical plane, as the principle of the working of the liquids is that when the ports are open in said cases 1 and 2 the greater specific gravity of the liquid enters the chamber 7

through the lower side, as shown in Fig 2 by the continuous arrow, and drives out the air (with which the chamber is now filled and all other exit cut-off, as the outlets 4 and 9 and vents 6 and 10 are closed and exit only open) through the upper ports surrounded by liquid of less density. The air displaced ascends to the top of the vessel.

Any suitable form of handle 15 may be employed on the end of the inner case 2 to operate it by. By attaching an indicator to the handle 15, so as to be operated each time a measure is drawn, a correct record of the number contained in the vessel or drawn during any interval of time can be obtained.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a gaging or measuring tap, the inner case adapted to fit neatly to operate within an outer case and having a capacity chamber within it, an air-vent in the top and an outlet in the bottom side to coincide both with a corresponding air-vent and an outlet in the outer case in discharging, a stop-pin to oper-

ate in a slot in said outer case, and the diametrical ports at the opposite end arranged to open when said air-vent and outlet in the other end are closed, substantially as shown and described.

2. In a gaging or measuring tap, the combination of the outer case provided with means whereby it is secured in a vessel and having both an air-vent and an outlet in the end without the said vessel and a slot in the end within said vessel, with the inner case fitted neatly to operate within said outer case and having an air-vent and an outlet to correspond to the same in said outer case when discharging, a stop-pin to operate in a slot in said outer case, and diametrical ports in the opposite end of said inner case within the vessel and arranged to open after said air-vent and outlet in the outer end have closed, substantially as shown and specified.

GEO. F. OAKLEY.

Witnesses:

JOS. HAWLEY,
GEO. PARKER.