S. E. HUMPHREYS.

Measuring-Can.

No. 207,523. Patented Aug. 27, 1878.

Fig. 1.

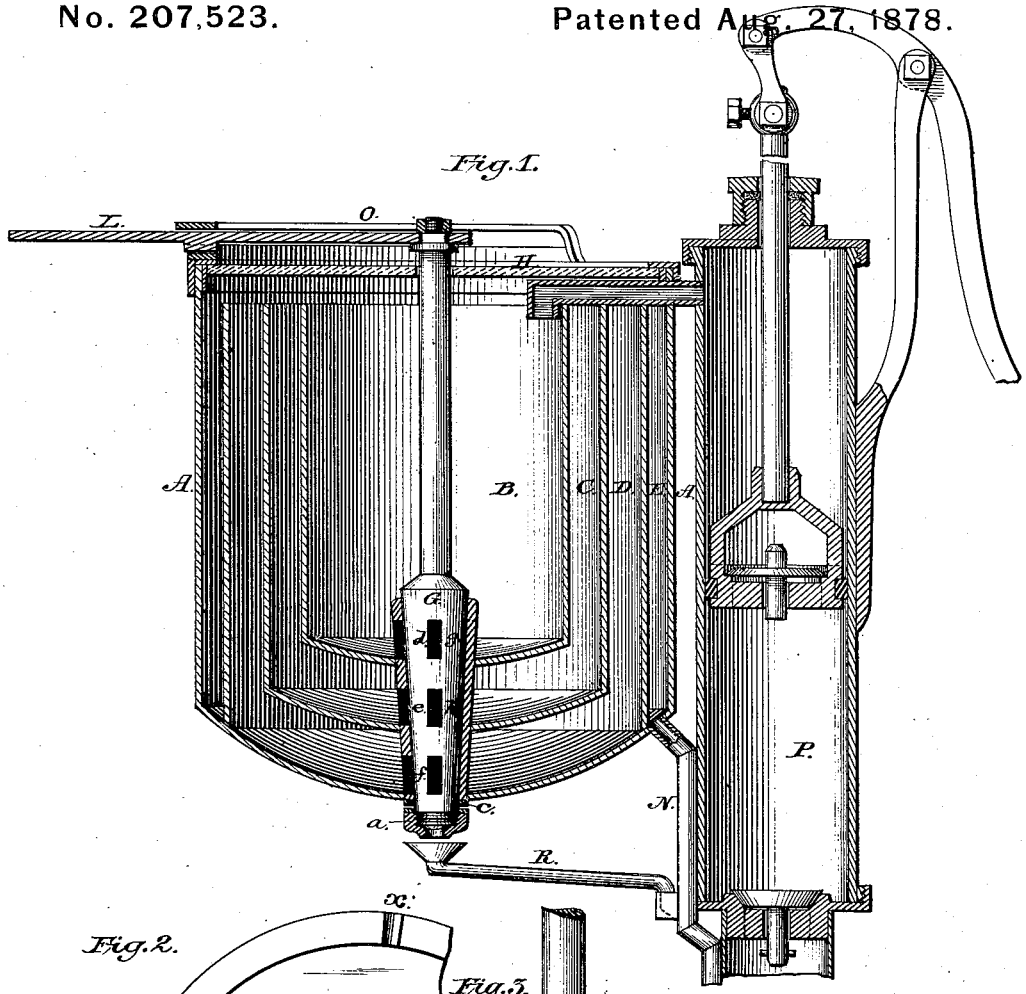


Fig. 2.

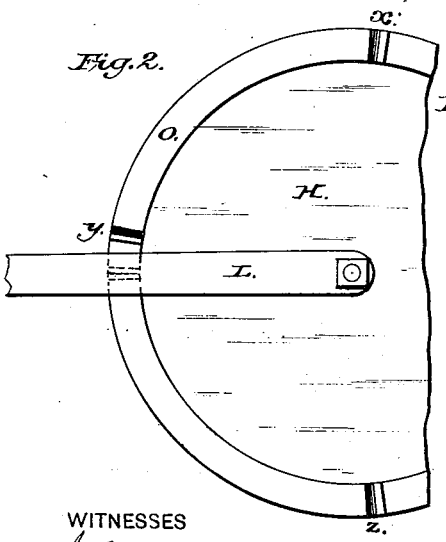


Fig. 3.

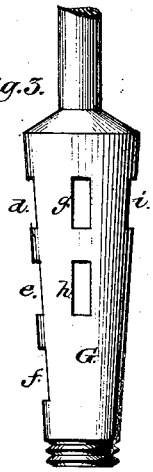
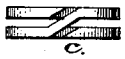


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

SYLVESTER E. HUMPHREYS, OF LEAVENWORTH, KANSAS.

IMPROVEMENT IN MEASURING-CANS.

Specification forming part of Letters Patent No. **207,523**, dated August 27, 1878; application filed July 6, 1878.

To all whom it may concern:

Be it known that I, SYLVESTER E. HUMPHREYS, of Leavenworth, in the county of Leavenworth and State of Kansas, have invented a new and valuable Improvement in Measuring-Pumps; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical central section of my measuring-pump; and Figs. 2, 3, and 4 are detail views of the same.

My invention relates to means for retailing oil and other fluids from barrels or casks; and it consists in the novel construction and arrangement of a measuring-vessel, having a series of concentric apartments, graduated in size, together with a faucet-plug, provided with exit-ports leading from each compartment, a lever for actuating the faucet, and a pump for filling the vessel, as hereinafter specifically described and claimed.

The letter A of the drawings represents a cylindrical vessel, having compartments B, C, D, and E, each of which is annular, as shown, and entirely closed at its bottom, except through the openings in the faucet-plug, as hereinafter set forth. These compartments of the vessel are graduated in holding capacity from the inner to the outer, or in the reverse direction, as may be found desirable—that is to say, for example, the interior compartment (marked B) is made to hold one quart; the next compartment, C, should hold two quarts, and the third compartment D should hold one gallon.

It is obvious that an unlimited number of compartments may be formed in my vessel, each containing a fixed amount of holding capacity, and corresponding to the measures in use for retail purposes. They may, if desired, begin at gills and end with gallons, or even larger measures.

The outer compartment, E, as shown in the drawing, is not designed as a measure, but is utilized as means for returning the overflow back to the barrel or tank, as hereinafter described.

The letter G represents my faucet-plug, the extended upper end of which passes through the top of vessel A, where it is united with the lever L, while its lower end passes through the bottom of said vessel, as shown. In order to hold the lower end of plug G securely in position, and at the same time provide means for easy rotation, I cut a screw-thread on said end, and adapt thereto the screw-nut *a*. I also provide a spring-washer, *c*, to be interposed between the nut and the base of the vessel, which washer consists of a double metallic ring, united as represented on the detail figure.

The plug G is beveled in the usual manner, as shown, and is also provided with ports, extending from its sides to and through its bottom, (marked on the drawings *d*, *e*, *f*, *g*, *h*, and *i*, respectively.) Three of these openings, *d e f*, are upon the same vertical line, and hence, when the plug is turned in the proper direction, they will respectively face the compartments B C D, and the entire contents of those compartments will be discharged through the same, passing out through the bottom of the faucet-plug into any proper receptacle placed under the bottom of vessel A. On the side of the plug G, and at right angles with the openings *d e f*, are the openings *g* and *h*. These ports communicate with two of the compartments only, while the third one remains closed. The result is that, by turning the plug in the position required for that purpose, the two compartments with which these ports *g* and *h* communicate will be emptied, leaving the third compartment still full. On the side of plug G opposite the ports *d e f* is the opening *i*. This leads to one compartment only, and provides the exit by which the same can be emptied without interference with the contents of the other compartments.

It is obvious that, in case the number of compartments in vessel A is increased, the number of ports in the faucet-plug must be increased likewise, and that in all cases the number of said ports must correspond with the number of compartments, and they must also communicate with such compartments respectively.

The letter H represents the cover of my vessel, which should preferably be made of glass or other transparent substance, to permit the operator to examine the interior of the vessel at will. On the upper side of this glass cover, and usually in the same ring or annulus in which said cover is secured, I arrange a segmental guard, (marked O on the drawings.) I further form notches (marked *x y z*) in the plate or rim below the guard, as shown. This guard is designed to regulate the movement of the operating-lever L, while the notches serve as rests for said lever at the points at which the ports in the faucet-plug are brought into communication with the compartment or compartments desired to be emptied.

The letter L indicates the operating-lever, arranged upon the top of plug G and under the guard O. The letter P represents my pump adapted for attachment to the cask, its exit-spout leading into the central compartment of the vessel A.

To operate my device, I attach the pump to the common receptacle, and, by the usual process of pumping, fill the vessel. This is effected by the overflow from the interior compartments B and C, and from thence into D. When the latter is filled, if the process of pumping be still carried on, the compartment E will receive the overflow, and the same will be conducted back to the barrel or tank through the return-pipe N.

The letter R shows a drip-pipe, having a cup on its outer end, while its inner end communicates with the tank by a suitable conduit.

To provide for placing a receptacle below the vessel A to receive the contents of the same, I arrange the inner end of pipe R in a socket, so that its cup end can be swung around at will.

In the construction of my apparatus I do not confine myself to any especial material; but I find that for most of its parts galvanized iron is preferable to others.

What I claim as new, and desire to secure by Letters Patent, is—

The faucet-plug G, having ports, as described, in combination with the lever L, guard O, and notches *x y z*, arranged to operate in connection with the vessel A, having graduated compartments, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SYLVESTER EDGAR HUMPHREYS.

Witnesses:

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SAMUEL H. HOLMES.