J. D. MULLER.

LIQUID-MEASURE.

No. 177,267. Patented May 9, 1876.

Fig. I.

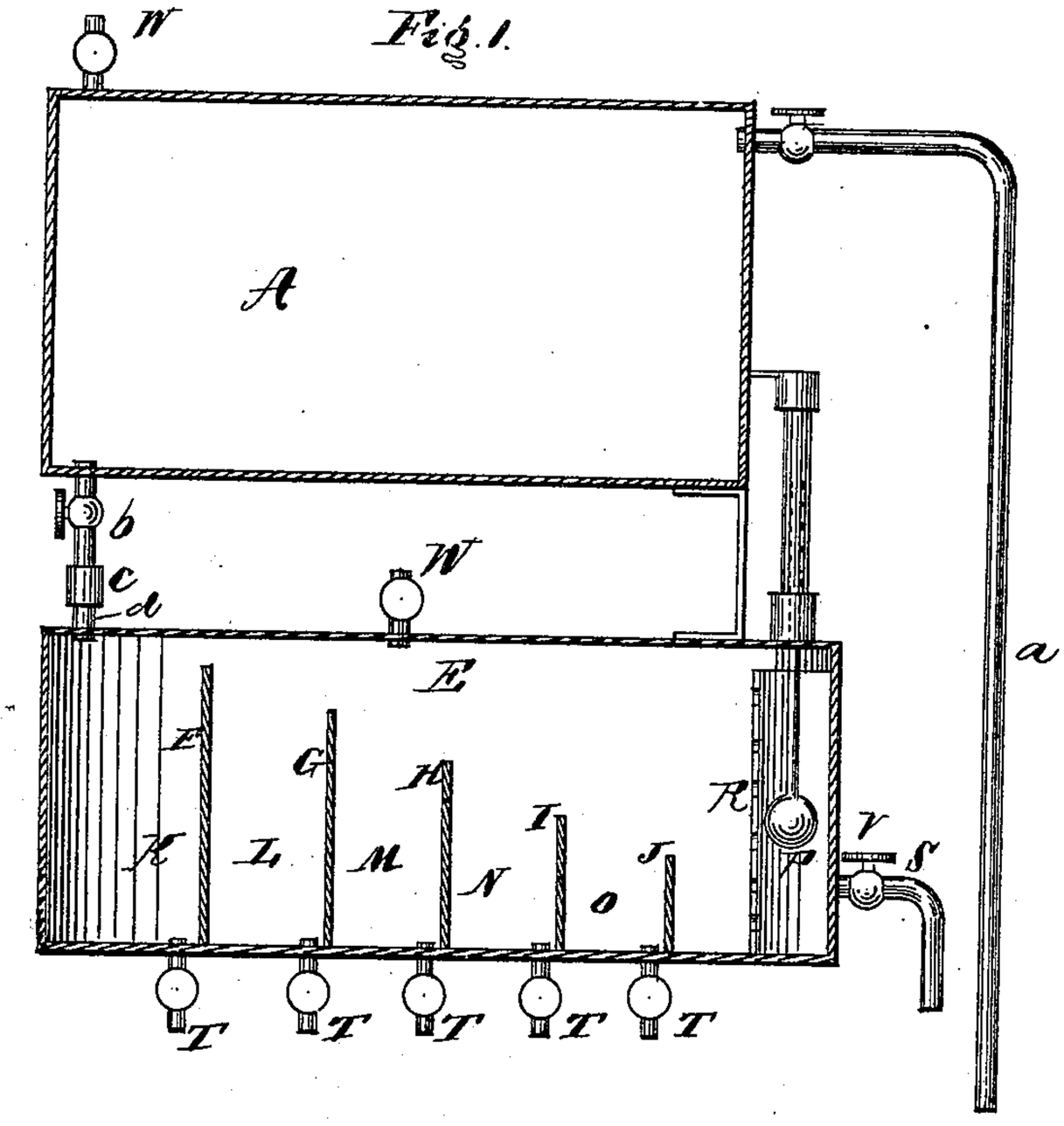
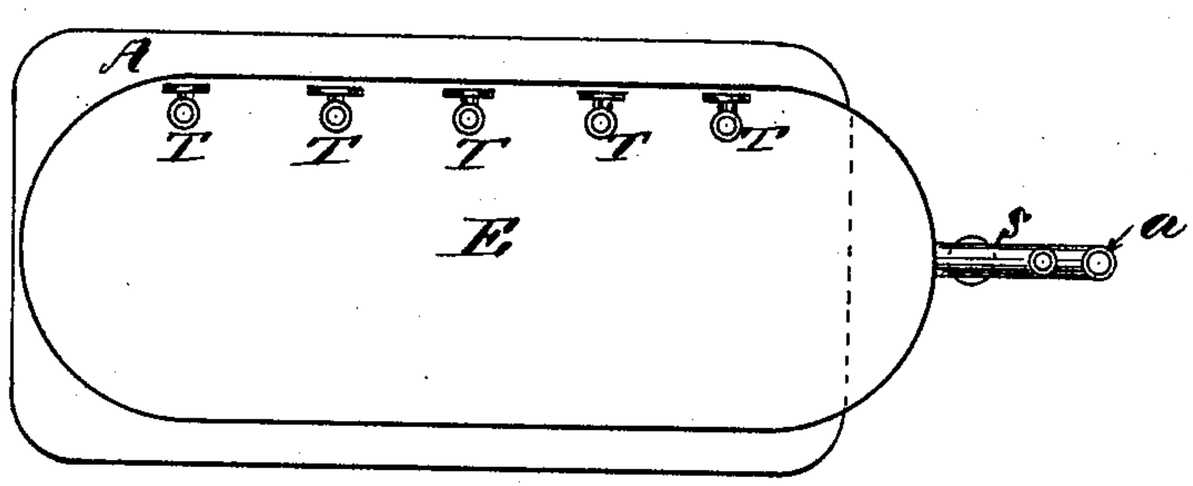


Fig. II.



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UNITED STATES PATENT OFFICE.

JOHN D. MULLER, OF NEW YORK, N. Y.

IMPROVEMENT IN LIQUID-MEASURES.

Specification forming part of Letters Patent No. **177,267**, dated May 9, 1876; application filed April 22, 1876.

To all whom it may concern:

Be it known that I, JOHN D. MULLER, of New York city, county and State of New York, have invented certain Improvements in Apparatus for Measuring Kerosene-Oil and other Fluids, of which the following is a specification:

The object of my invention consists in constructing an improved apparatus, by aid of which kerosene-oil and other fluids can be measured out by the gallon, half-gallon, quart, pint, gill, &c., in an absolutely certain manner as to correct measure, avoiding waste of liquid and danger of ignition or explosion.

My invention consists in constructing a vessel or reservoir, the interior of which is divided off by partitions across the same, reaching upward from the bottom, at a certain height or distance toward the top cover, in such a manner that each space thus divided off will contain a certain quantity of liquid—for instance, one gallon, half a gallon, a quart, a pint, a gill, &c., and that the divisions are made of gradually less height.

Over the largest measure, and to the top of the reservoir, is fastened an inlet-tube, which is provided with screw-threads in the interior, fitting over a tube fastened to the bottom of an oil-receiver, into which the oil is elevated from a barrel by aid of a pump or any other suitable device. The measuring vessel or reservoir is also provided with a swimmer, which indicates the height of the fluid in the last compartment in the vessel, which is not a measuring-compartment, but serves to receive the oil or liquid, which flows over the divisions from one compartment into the other when the oil is let down from the upper oil-receiver into the measuring-vessel. This swimmer penetrates the top of the measuring-vessel, on which is fastened a vertical glass tube, which receives the stem of the swimmer and permits the same to be seen without exposing the fluid to the atmosphere.

When the stem of the swimmer rises in the glass tube it shows that all compartments are full, and any surplus or overflow in the last compartment is allowed to flow back into the barrel or cask which is placed below the measuring-vessel.

To the bottom of each of the measures or compartments are fastened cocks, by aid of which any of the said compartments may be emptied, as required, thus giving the exact measure of any desired quantity of fluid.

When one or more compartments are emptied oil is again let into the measuring-vessel from the upper receiver, and allowed to flow over the divisions until the swimmer or indicator shows that all compartments are filled again.

In order to describe my invention more fully, I refer to the accompanying drawing, forming a part of this specification.

Figure I is a vertical section of my improved apparatus for measuring fluids. Fig. II is a bottom view of the same.

A is the receiver, into which the oil or fluid is elevated through the pipe *a* from a cask or barrel below. *b* is a threaded exit-tube, over which is screwed the coupling C, which receives the inlet-tube *d* of the measuring-vessel E. F, G, H, I, and J are the divisions of the compartments K, L, M, N, and O, representing spaces or measures of a gallon, half a gallon, a quart, a pint, and a gill. P is the swimmer in the compartment R, serving to receive the overflow of oil. S is the outlet-pipe of the surplus overflow oil into a cask or barrel below. T T T T T are the cocks or faucets, by aid of which the oil is withdrawn, as required, from the measuring-compartments K, L, M, N, and O. V is a faucet, by aid of which all the oil may be withdrawn from the overflow-compartment R. W W are cocks for the purpose of giving vent to the reservoir and receiver.

Having thus described my invention, I desire to claim—

The measuring-vessel E, with compartments K, L, M, N, O, and R, swimmer P, inlet-pipe *d*, and outlet-pipe S, and faucets T and V, in combination with the reservoir A with inlet-pipe *a*, and outlet-pipe *b*, substantially as described, and for the purpose set forth.

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Witnesses:

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