(No Model.) 2 Sheets—Sheet 1.

C. F. LEWIS & J. W. CLARK.

SELF MEASURING VESSEL.

No. 564,383. Patented July 21, 1896.

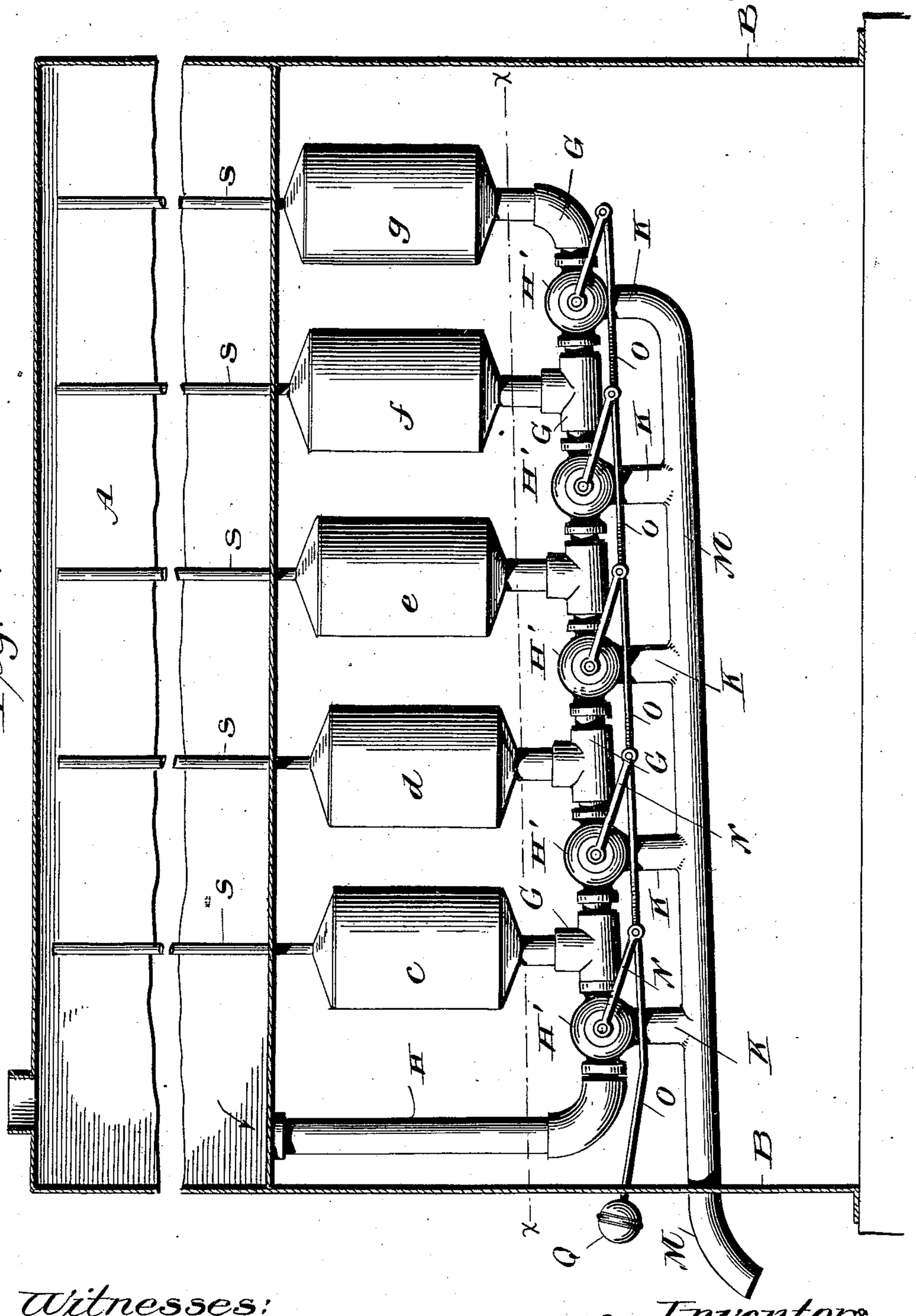

Fig. 1.

Witnesses:
L. C. Gillis.
W. S. VanSoan

Inventors
Charles F. Lewis and
Julian W. Clark,
by Franklin H. Hough
Atty.

(No Model.) 2 Sheets—Sheet 2.

C. F. LEWIS & J. W. CLARK.

SELF MEASURING VESSEL.

No. 564,383. Patented July 21, 1896.

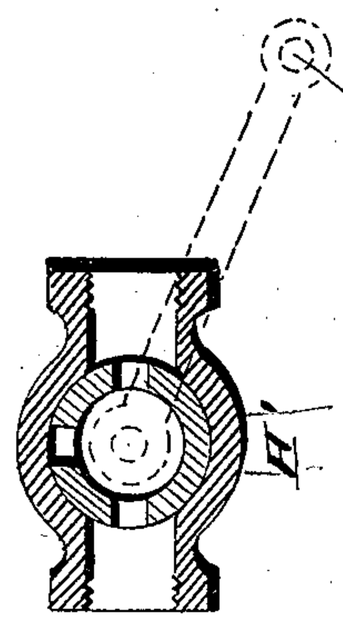

Fig. 4.

Fig. 2.

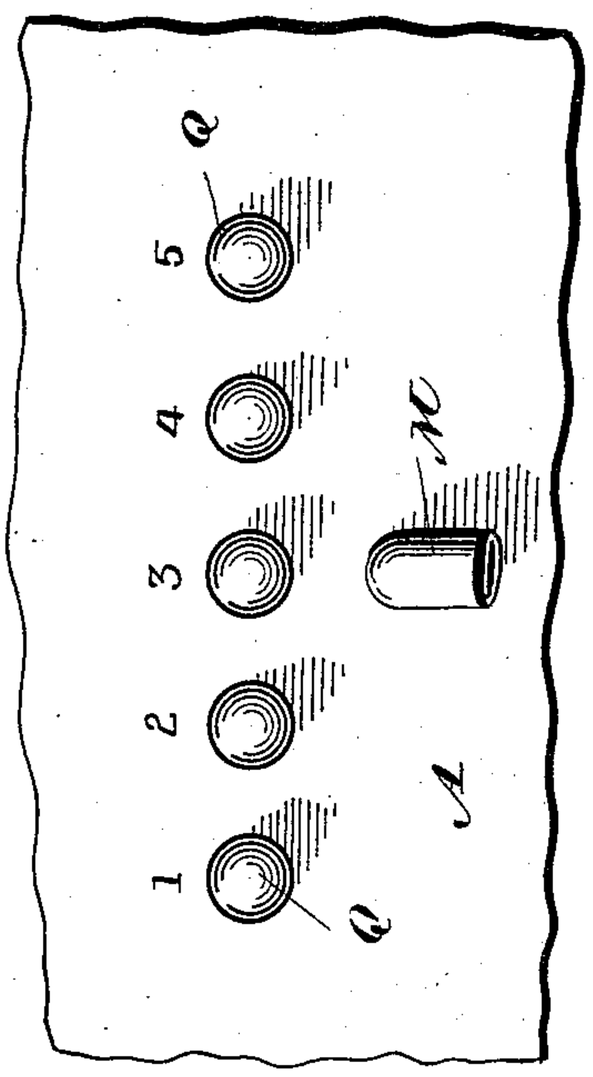

Fig. 3.

Witnesses:
L. C. Hills.
W. S. VanDoan

Inventors
Charles F. Lewis and
Julian W. Clark,
by Franklin H. Hough
Atty.

UNITED STATES PATENT OFFICE.

CHARLES F. LEWIS AND JULIAN W. CLARK, OF RUSSELL, PENNSYLVANIA.

SELF-MEASURING VESSEL.

SPECIFICATION forming part of Letters Patent No. 564,383, dated July 21, 1896.

Application filed October 11, 1895. Serial No. 565,372. (No model.)

To all whom it may concern:

Be it known that we, CHARLES F. LEWIS and JULIAN W. CLARK, citizens of the United States, residing at Russell, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Self-Measuring Vessels; and we do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in measuring devices for oil-tanks, and especially to a construction of self-measuring vessels held within an inclosure having a single supply-pipe leading from an oil-tank and having a valved connection with a series of measures, whereby one vessel may be emptied by opening one valve, or the whole series of vessels, or a certain set of measures, may be emptied by the operation of a single valve.

To these ends and to such others as the invention may pertain, the same consists, further, in the novel construction, combination, and adaptation of the parts as will be hereinafter more clearly set forth, and then defined in the appended claim.

We clearly illustrate our invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a vertical longitudinal sectional view, parts in elevation, of our invention, showing an oil-tank and receptacle beneath containing the measuring apparatus. Fig. 2 is a section on line *x x* of Fig. 1. Fig. 3 is a front elevation of the case showing the handles for operating and Fig. 4 a longitudinal section of one of the three-way valves.

Reference now being had to the details of the drawings by letter, A designates an oil-tank mounted on suitable supporting-legs B, and *c*, *d*, *e*, *f*, and *g* are measuring-vessels mounted on a pipe G by suitable unions, and H is a supply-pipe leading from the oil-tank to the pipes G, and H′ are valves located at such intervals in the pipe G that the contents of one measuring-vessel may be drawn off without affecting the contents of the others, or all of the vessels may be drawn off by operating a single valve.

Leading off from the pipe G from each valve are the pipes K, which empty into a common pipe M, which carries the contents of the vessels to the outside of the inclosure, where it may be conducted into a receptacle. Each valve is provided with a lever N, to the end of which is connected a rod O, running to the outside of the inclosure, and has suitable knobs, as Q, secured at the end of each.

S are vent-tubes extending from the upper end of each measuring-vessel up through the oil-tank and opening in the space above the oil.

The operation of the device is as follows: The measuring-vessels shown in the drawings, being in connection with the supply-tank, are kept full when the valves are in position shown in Fig. 1, and when it is desired to empty the contents of the vessel the farthest to the right, the valve nearest to the outlet of said vessel is turned so as to shut off the supply of oil, and at the same time allow the contents of the vessel to run off through the discharge-pipe, after which the valve is opened or communication again had with the supply-pipe by simply pushing on the rod connected with said valve, and when it is desired to empty the contents of two vessels, the valve second from the right is turned so as to allow the contents of the two vessels to the right to escape through the discharge-pipe, and when it is desired to empty three vessels the third valve is operated in a like manner, &c.

Although we have shown but five measuring-vessels in use in connection with our apparatus, as shown in the accompanying drawings, we do not limit ourselves to the use of any particular number of such vessels, as it is at once evident that the number may be varied as desired, or to meet the requirements for which the apparatus is to be used.

An essential feature of the invention resides in the peculiar form of the measuring-vessels, which, as will be seen upon reference to the drawings, are at both their upper and lower ends provided with conical extensions,

the ventilating air-pipe S leading upward from the apex of the upper end and the outlet-pipe being connected at the apex of the lower end. By this construction all of the air contained within the measure is permitted to escape and the complete filling of the measure with oil or other liquid contained within the tank is at all times assured, while the outlet-pipe being connected at the apex of the lower end assures the complete drainage of the vessel when the outlet-valve is opened.

Having thus described our invention, what we claim to be new, and desire to secure by Letters Patent, is—

In a self-measuring vessel, the combination with the supply-tank, a series of measuring-receptacles mounted on pipes having connection with unions, three-way globe-valves interposed between the said unions, vents S extending from the upper ends of the said measuring-receptacles through the supply-tank and opening near the upper portion of the supply-tank, of the discharge-pipes K and M communicating with the said valves, of the series of rods O disposed in a horizontal plane and each having connection with a valve-lever on the three-way-valve stems, the forward ends of the said rods supported in apertures in the wall B, and provided with pulling-knobs Q all substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES F. LEWIS.
JULIAN W. CLARK.

Witnesses:
W. A. CLARK,
EUGENE MARSH.