

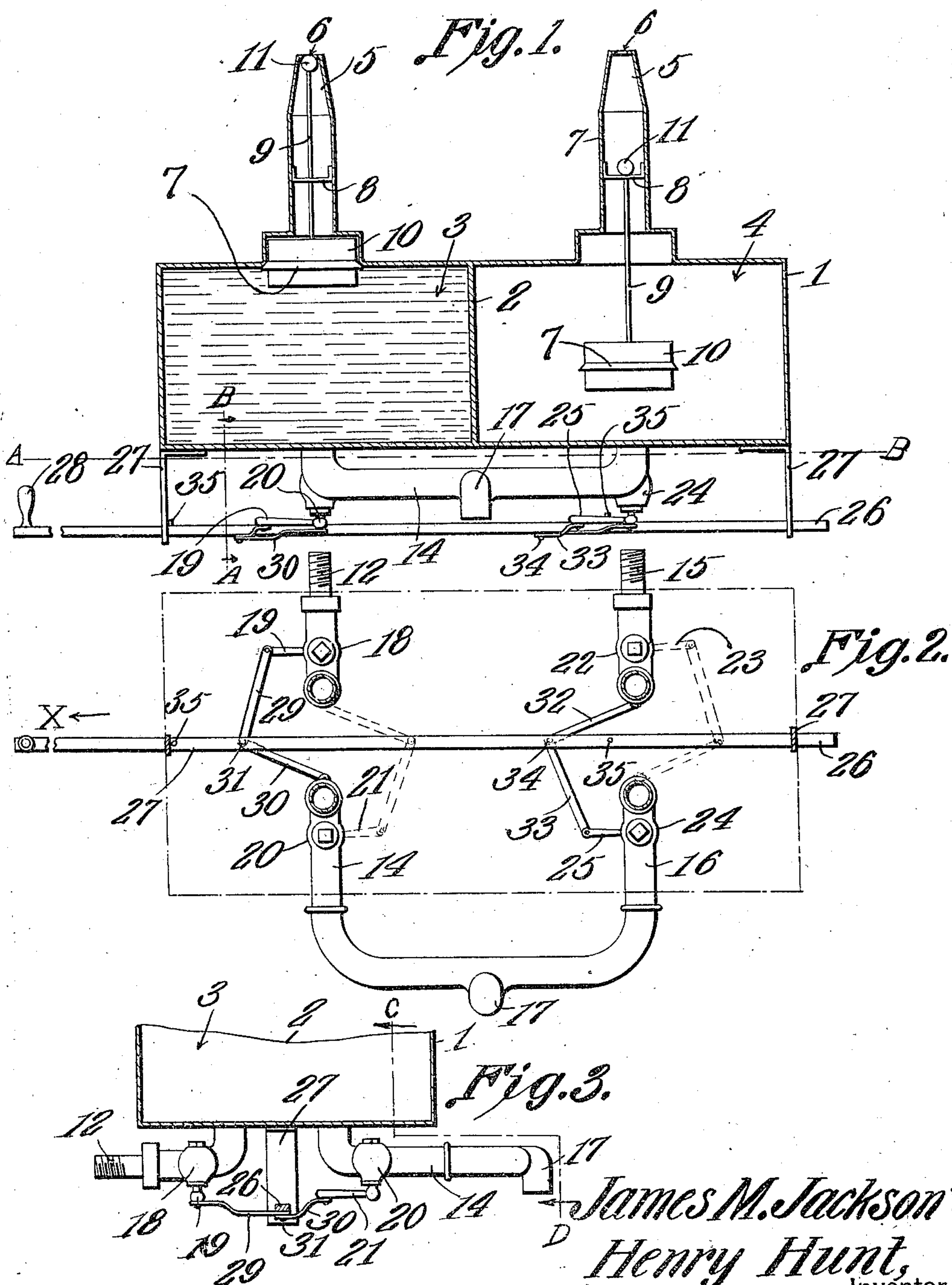
J. M. JACKSON & H. HUNT.

OIL REGISTER.

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996,646.

Patented July 4, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES M. JACKSON AND HENRY HUNT, OF GREENTOWN, INDIANA.

OIL-REGISTER.

996,646.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed December 9, 1910. Serial No. 596,540.

To all whom it may concern:

Be it known that we, JAMES M. JACKSON and HENRY HUNT, citizens of the United States, residing at Greentown, in the county of Howard, State of Indiana, have invented a new and useful Oil-Register, of which the following is a specification.

It is the object of this invention to provide a measuring device for liquid, having novel means for controlling the outlet and the supply of the device.

Another object of the invention is to provide a structure of the character above mentioned, comprising separate tanks, and to equip such a structure with means whereby one tank will be filling while the other tank is emptying.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings,—Figure 1 is a vertical longitudinal section on the line C—D of Fig. 3, wherein sundry details are shown in elevation; Fig. 2 is a horizontal section, on the line A—B of Fig. 1, the cutting plane passing beneath the bottom of the tank, and the bottom of the tank, in Fig. 2 being indicated by broken lines. Fig. 3 is a fragmental transverse section upon the line A—B of Fig. 1.

In carrying out the invention there is provided, as a primary and fundamental element, a receptacle 1, closed upon all sides. A partition 2 is located within the receptacle 1, the partition dividing the receptacle into separate tanks 3 and 4.

Fixed to and rising from the top of the receptacle 1, is a casing 5 for each tank. This casing is provided in its top with a vent 6, and with a cross piece 8.

The invention further includes a valve structure, involving a rod 9, slidable in the cross piece 8, the rod 9 being equipped at its lower end with a float 10. Secured to the upper end of the rod 9 is a head 11. As the oil accumulates in the tank, the float 10 will be raised, sliding the rod 9, and bringing the head 11 against the top of the casing, to close the vent 6 therein. The float

10 is supplied with a gasket 7, fitting into the mouth of the casing 5 to effect a closure thereof. The head 11 coöperates with the gasket 7 in effecting a double closure of the air outlets of the structure.

The tank 3 is provided with a supply pipe 12, and with an oppositely positioned outlet pipe 14, the tank 4 being equipped with the supply pipe 15, and with an oppositely positioned outlet pipe 16. These several pipes preferably enter the bottom of the receptacle 1, the supply pipes 12 and 15 protruding beyond one side of the receptacle, while the outlet pipes 14 and 16 protrude beyond the other side of the receptacle, as clearly seen in Fig. 2. The outlet pipes 14 and 16 preferably merge into a common discharge pipe 17.

A valve 18 is located in the supply pipe 12, the valve being operated by a radial arm 19. A valve 20 is located in the outlet pipe 14, this valve being provided with an arm 21 for its manipulation. In the supply pipe 15 there is a valve 22, controlled by an arm 23, a valve 24 in the outlet pipe 16 being manipulated by means of an arm 25. These several valves are rotary valves of any common and well known type.

The valve 18 in the supply pipe 12 is closed when the valve 20 in the outlet pipe 14 is open, the valve 22 in the supply pipe 15 being opened when the valve 24 in the outlet pipe 16 is closed. Moreover, the valve 22 is open when the valve 20 is open. This construction will be most clearly seen in Fig. 2, the arms 19 and 25 ordinarily operating in parallel relation, while the arms 21 and 23 bear a similar relation to each other. An operating member, ordinarily a rod 26, is mounted for longitudinal sliding movement in brackets 27, secured to the bottom of the receptacle 1, adjacent the ends of the receptacle. This rod 26 is equipped adjacent one end, with an upstanding grip 28, whereby the rod may be slid to and fro. A link 29 is pivoted to the arm 19, a link 30 being pivoted to the arm 21. These links 29 and 30 are united by a common pivotal connection 31, with the operating member 26. A link 32 is pivoted to the arm 23, a link 33 being pivoted to the arm 25. These arms 32 and 33 are united with the operating member 26 by a common pivotal connection 34. The operating member 26 is supplied with outstanding stops 35, adapted to engage the brackets 27, when the operating

member is reciprocated, to open and to close the several valves, as will be described hereinafter.

The operation of the device is as follows:

5 Presupposing that the tank 3 is supplied with oil, it will be seen that when the rod 26 is moved in the direction of the arrow X of Fig. 2, to the position there shown, the valve 18 in the supply pipe 12 will be closed, 10 the valve 20 in the outlet pipe 14 being open. The oil or other material which is in the tank 3 will therefore be discharged through the spout 17. The movement of the rod 26 in the direction of the arrow X will close 15 the valve 24 in the outlet pipe 16 of the tank 4, the valve 22 in the supply pipe 15 of the tank 4 being opened. Thus, the tank 4 will fill, while the tank 3 is being emptied. Obviously, the stops 35, engaging the brackets 20 27, serve to limit the sliding movement of the rod 26 so that a proper coöperation of the several valves may be secured. When the rod 26 is in the position shown in Fig. 2, 25 the rod may be slid in a direction contrary to the arrow X, to move the arms 19 and 23 through a small arc, and to operate the arms 21 and 25 in a similar manner, thus closing all of the valves, and cutting off both the supply pipes and the outlet pipes. The 30 tanks 3 and 4 hold a predetermined quantity, say, a half gallon. When either tank is empty, the float 10 will descend, withdrawing the head 11 from the vent 6, thus permitting the oil or other liquid to flow 35 freely into the tank. When the tank fills to its maximum volume, however, the float 10 will be lifted, causing the head 11 to close the vent 6, the gasket 7 preventing the egress of oil.

40 Having thus described the invention, what is claimed is:—

1. In a device of the class described, a

tank having a vent; a float-controlled valve for opening and closing the vent; a supply pipe for the tank; a separate outlet pipe for 45 the tank; a rotary valve in each pipe, one valve being open while the other is closed; an operating member held for longitudinal sliding movement only; and links pivoted eccentrically to the valves and pivotally 50 connected with the operating member.

2. In a device of the class described, separate tanks; a supply pipe for each tank; an outlet pipe for each tank; a rotary valve in each pipe, the valve in the supply pipe of 55 each tank being open when the outlet pipe of the same tank is closed, and the valve in the supply pipe of one tank being open when the valve in the outlet pipe of the other tank is open; an operating member held for slid- 60 ing movement in a single fixed direction; and links pivoted eccentrically to the valves and pivotally connected with the operating member.

3. In a device of the class described, a 65 tank having a vent; a float-controlled valve for opening and closing the vent; a supply pipe for the tank; an outlet pipe for the tank; a rotary valve in each pipe, one valve being opened when the other valve is closed; 70 brackets secured to and depending from the tank; a rod slidable in a single direction in the brackets; stops upon the rod adapted to engage the brackets; and links pivoted eccentrically to the valves and pivotally con- 75 nected with the rod.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

JAMES M. JACKSON.

HENRY HUNT.

Witnesses:

H. E. ASH,

H. E. MURRAY.