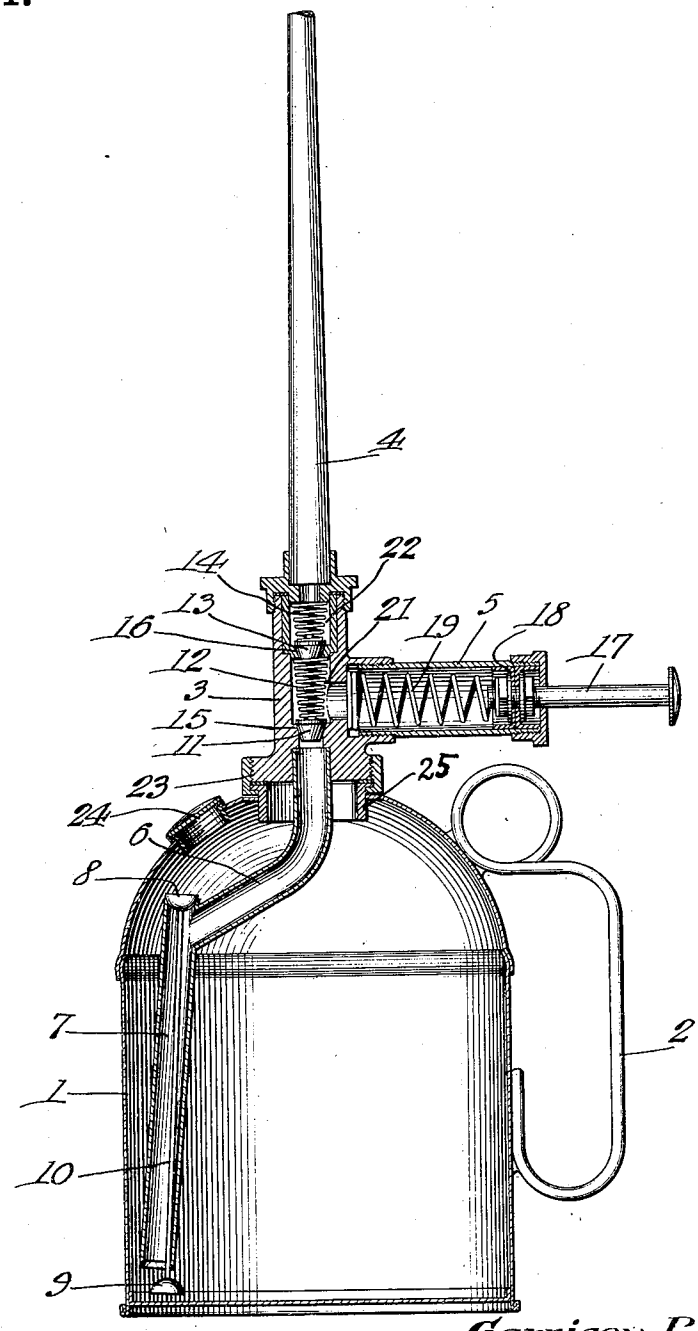
G. P. ANTHES.

PUMP OILER.

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1,325,134. Patented Dec. 16, 1919.



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PUMP-OILER.

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To all whom it may concern:

Be it known that I, GARRISON P. ANTHES, a citizen of the United States, residing at Evanston, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Pump-Oilers, of which the following is a specification.

My invention relates to improvements in pump oilers, in which the oil or other liquid is drawn from a container, which is an integral part of the whole, through an intake tube in conjunction with valves, by and into a suitable pumping mechanism at the top of the container and then by the same pumping mechanism forced through and out of a spout; and the objects of my invention are, first, to provide an intake tube leading from the container into the pumping device, so designed and arranged in combination with two valves as to permit the oil or other liquid to be drawn from and forced out of the container until the container is empty and to permit same to be done whether the container be in an erect or in an inverted position; second, to provide a disposition and arrangement of the intake tube leading from the container to the pumping device at the top of the container, in such manner that the tube and both inlets in the tube may be near the outer wall of the container and yet permit the intake tube to be withdrawn from the container by the loosening of a nut by which the pumping device in combination with the intake tube is connected to the container and to permit the inserting of the intake tube by reversing the operation; third, by means of the demountability of the parts as above stated, to make accessible all parts of the pump oiler for repairs, cleaning and replacement.

I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

The figure is a vertical section of my invention, partly in elevation.

Referring to the drawings, 1 designates the body of the oil can, having a handle 2, a valve housing 3 and a spout 4. Valve housing 3 is suitably secured to can 1 by a union 23. Suitably mounted in the valve housing 3 is a pump cylinder 5 positioned at right angles thereto and containing a plunger 18 operated by a plunger rod 17 and against tension of a coil spring 19.

I provide an intake tube 7 open at both ends, and having valve 8 adapted to seat on and close the upper end, and a valve 9 adapted to seat on and close the lower end of tube 7. The valves 8 and 9 are held at a definite distance apart by the valve stem 10, so that when the intake tube is erect, as shown in the accompanying drawings, the valve 8 will be seated; when inverted to a reverse position when the oil can is in use, the valve 9 will be seated and valve 8 open. I provide a tube 6 opening out of tube 7 and extending to the lower portion of valve housing 3. Valve housing 3 is provided with a valve seat 15 on which a valve 11 is normally seated, a spring 12 resiliently holding valve 11 to its seat. I provide a second or upper valve seat 16, positioned at a point in the valve housing 3 above pump cylinder 5. Seated on valve seat 16 I provide a valve 13 which is normally held in its seated position by a suitable spring 14.

In operation, pressure on plunger rod 17 forces plunger 18 toward chamber 21 of the inner valve housing, thus forcing any oil in chamber 21 upward past valve 13 into chamber 22 and out through spout 4. When the plunger is released it is forced back to its normal position as shown in the drawings, by spring 19, thus producing a suction action which draws oil from intake tube 7 and tube 6 past valve 11 and into chamber 21. If the oil can is in an erect position the oil will be drawn out through the lower end of intake tube 7, past the open valve 9; and if the oil can is in inverted position oil will be drawn through the other end of intake tube 7 past the valve 8 which is then in unseated position.

I prefer to provide a suitable filling cap 24, positioned at any suitable portion of the can to provide a convenient means for refilling the can. In the top of the can is soldered the female half 25 of the union 23, to which the threaded portion of valve housing 3 is screwed, and which permits of its convenient removal to withdraw tubes 6 and 7, as will be understood by reference to the drawings. Tube 6 is preferably soldered to housing 3.

I am aware that prior to my invention pump oilers have been made with containers in combination with pumping devices and tubes through which the oil or other liquid is drawn from the container into the pumping device and then forced out through a spout. I therefore do not claim such a combination broadly.

What I claim is:

1. In a pump oiler, the combination of an oil can, an intake tube in the oil can positioned in proximity to its vertical wall, valves connected by a valve stem of such length as to permit only one of the valves to be seated at a time on one end of the intake tube, a second tube connecting the intake tube with a valve housing, and means for causing the oil to flow into the valve housing, and means for forcing oil in the valve housing out through the spout of the oil can.

2. In a pump oiler the combination of a container and pumping device with an intake tube having upper and lower inlets with two valves operating jointly in connection therewith, said intake tube and valves being arranged and disposed to permit the upper and lower inlets to be at or near the outer wall of the container and to permit the container to be emptied by the pumping device when in either the erect or inverted position.

3. In a pump oiler the combination of a container and a pumping device at the top and center of the container, a connecting tube rigidly attached to the housing of the pumping device, an intake tube supported by and in offset relation to the connecting tube and being attached to said tube near its upper end and having upper and lower inlets and arranged to extend along and near the outer wall of the container and shaped and arranged to permit the intake tube, although lying along and near the outer wall of the container to be withdrawn with the pumping device to which it is securely attached from the container through a small opening at the top and center of the container, and a union securing the pumping device to the container, the above described tubes being removable from the container after merely loosening said union without any further dismounting or disconnection of parts.

GARRISON P. ANTHES.