

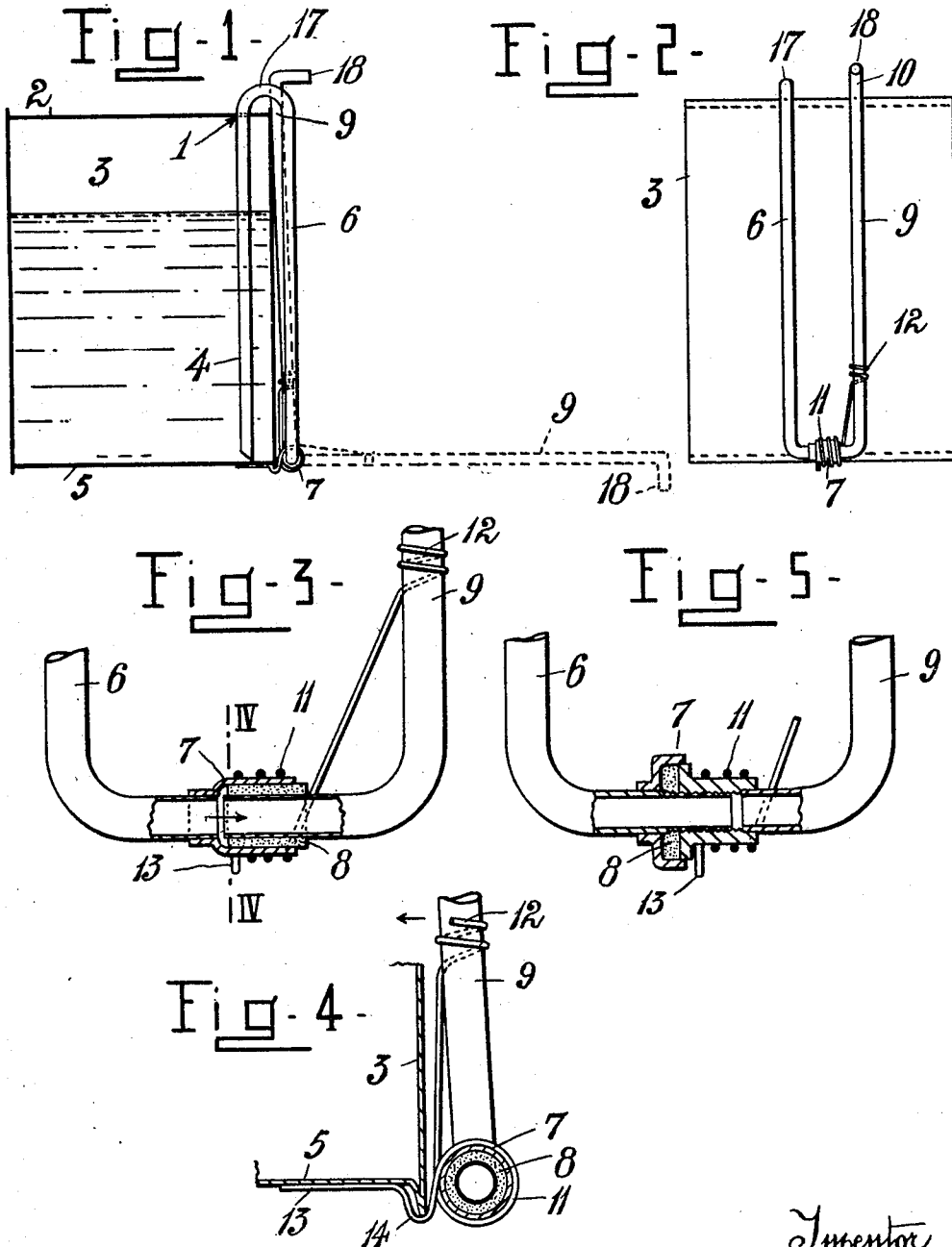
No. 892,382.

PATENTED JUNE 30, 1908.

A. W. OMOND.

SIPHON DEVICE FOR WITHDRAWING LIQUIDS FROM VESSELS.

APPLICATION FILED JAN. 12, 1907.



Witnesses

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SIPHON DEVICE FOR WITHDRAWING LIQUIDS FROM VESSELS.

No. 892,382.

Specification of Letters Patent.

Patented June 30, 1908.

Application filed January 12, 1907. Serial No. 352,034.

To all whom it may concern:

Be it known that I, ALBERT WILLIAM OMOND, a subject of the King of Great Britain, residing at No. 464 Hargreaves street, Bendigo, in the State of Victoria, Australia, have invented an Improved Siphon Device for Withdrawing Liquids from Vessels, of which the following is a specification.

This invention consists of a simple and inexpensive device for withdrawing liquids from vessels wherein the siphon principle is employed, and it is one that will be found particularly useful in withdrawing kerosene from tins and supplying it to lamps.

The invention consists essentially in hinging a discharge pipe (preferably by means of a water-tight joint) to the exit end of the outer leg of a siphon, the inner leg of which is in the vessel containing the liquid.

The end of the discharge pipe is normally kept above the level of the liquid and in order to withdraw the latter said discharge pipe is lowered until its end is below the level of the contained liquid, when by starting the siphon the liquid will flow and may be instantly checked by again raising the end of the discharge pipe, which is normally kept in an approximately vertical position by means of a spring.

The drawings illustrating the invention comprise,—Figure 1 a vertical section through a kerosene tin showing the application of the device, and Fig. 2 a side elevation thereof. Fig. 3 an enlarged detail (partly in section) of one suitable form of watertight hinge joint. Fig. 4 a vertical section on line IV—IV Fig. 3. Fig. 5 a similar view to Fig. 3, illustrating another form of joint for connecting the discharge pipe to the outer leg of the siphon.

According to this invention a hole 1 is punched in the top 2 of the vessel 3, and the inner leg 4 of the siphon is pushed down through said hole until its end which is beveled rests on the bottom 5. The outer leg 6 of the siphon extends to a point approximately level with the bottom of the vessel where it is bent as shown in the drawings and provided with a gland 7 adapted to receive a suitable packing preferably a bored cork 8. A discharge pipe 9 normally standing in an approximately vertical position with its upper end 10 above the level of the liquid in the vessel, is bent at its lower end and adapted to fit into the gland 7, and forms

a watertight hinge so that the exit end of said discharge pipe may be raised above or lowered beneath the level of the liquid in the vessel.

Various means may be adopted for insuring the discharge pipe being maintained in its highest position, as for instance by giving same an inclination towards the vessel, or by tying it in position.

The means shown in the drawings are especially applicable when using the device with kerosene tins. In this case a spring 11 is coiled around the gland 7 and one end 12 is attached to the discharge pipe 9, and the other end 13 is bent around the flange 14 of the tin (as shown in Fig. 4) and lies flat against the bottom 5 thereof. By this arrangement the weight of the tin holds one end of the spring down, while the other end keeps the discharge pipe normally against the side of the tin in its approximately vertical position.

Fig. 5 shows another form of water-tight hinge joint in which case the gland 7 is provided with a cork or other packing 8, while the ends of the down pipe 6 and discharge pipe 9 are threaded and the hinge joint is made by screwing said ends together.

It will be obvious that although only two forms of hinge joints are shown the object of such a junction of the outer leg of the siphon and the discharge pipe may be achieved by various mechanical means.

When it is desired to withdraw some or all of the contents, the discharge pipe is lowered as shown by dotted lines in Fig. 1, and it is necessary to start the siphon by some suitable means. This is done with a kerosene tin for instance by imparting a sudden pressure of the hand on the sides thereof. This causes the liquid to pass over the bent or upper end 17 of the siphon, whence it passes in a continuous stream through the outer leg 6 and discharge pipe 9 which latter is provided with a bent exit end 18 to facilitate the filling of receptacles such as lamps or stoves.

Having thus described my invention, what I claim is

1. A device of the class described, comprising an inverted U-shaped pipe forming an inner and outer leg, the inner leg having a beveled end, a gland on the terminal of the outer leg, a discharge pipe having one end movably associated with the gland, a watertight filling interposed between the gland and

the end of the discharge pipe to form a water-tight joint, and a tension means having one end adapted to engage a fixed abutment and the opposite end connected with the discharge pipe to hold the same in normally vertical position.

2. The combination with a fluid tank, of an inverted U-shaped pipe forming an inner and outer leg, the inner leg being inserted within the tank and extending into close proximity to the bottom thereof, said terminal of the inner leg being beveled, a gland formed on the end of the outer leg, a discharge pipe having one end movably connected to the gland and its opposite end bent on itself at right angles to form a discharge mouth adapted to be positioned within the

tank, a filling mounted in the gland and associated with the engaging end of the discharge pipe to form a water-tight joint, and a spring element coiled around the gland and having one end in engagement with the bottom of the tank and the opposite end connected with the discharge pipe to normally hold the latter in a position parallel with the outer leg of the inverted U-shaped pipe.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT WILLIAM OMOND.

Witnesses:

EDWARD WATERS,
EDWARD N. WATERS.