T. V. GARLOCK.

LIQUID EXTRACTOR.

APPLICATION FILED MAY 15, 1914.

1,178,512. Patented Apr. 11, 1916.

Fig. 1.

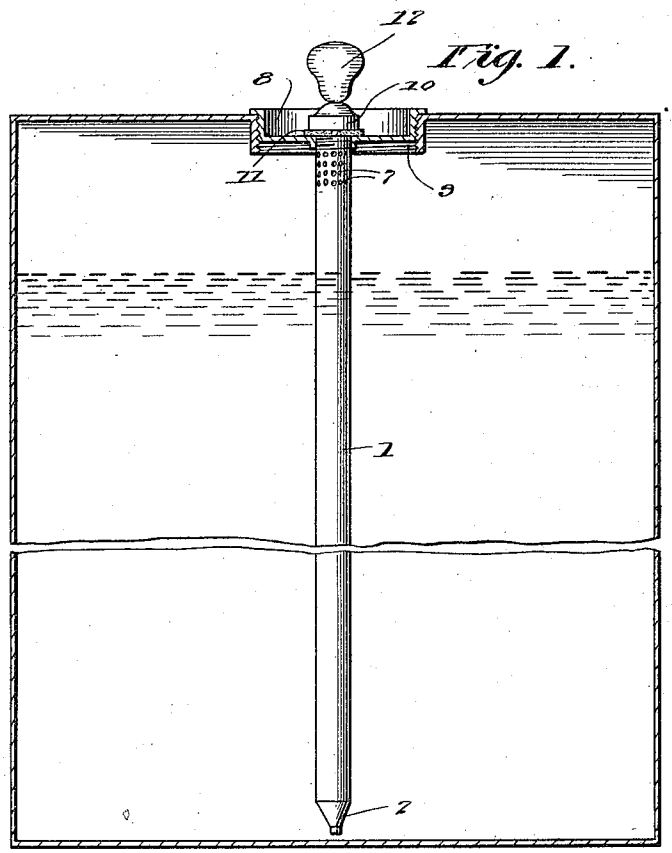


Fig. 2.

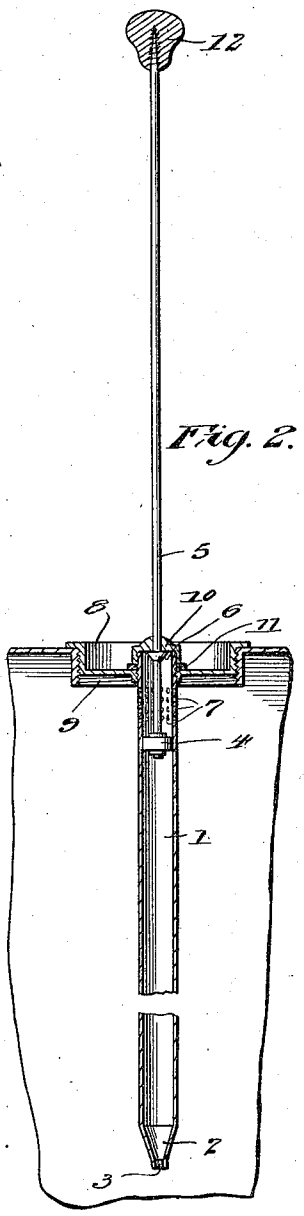
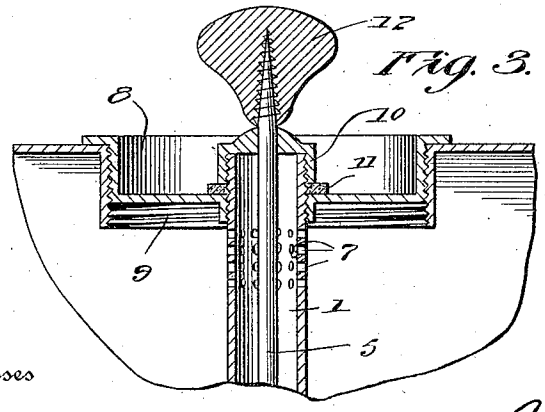


Fig. 3.



Witnesses

Frederick P. Moran

C. A. Hines.

Inventor

T. V. Garlock,

By Victor J. Evans

Attorney

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS V. GARLOCK, OF CUSTER, SOUTH DAKOTA.

LIQUID-EXTRACTOR.

1,178,512. Specification of Letters Patent. Patented Apr. 11, 1916.

Application filed May 15, 1914. Serial No. 838,834.

To all whom it may concern:

Be it known that I, THOMAS V. GARLOCK, a citizen of the United States, residing at Custer city, in the county of Custer and State of South Dakota, have invented new and useful Improvements in Liquid-Extractors, of which the following is a specification.

This invention relates to a liquid extractor particularly designed for use in connection with gasolene and other storage and supply tanks for the purpose of drawing off portions of the contents thereof.

The object of the invention is to provide a simple, reliable and efficient device of this character which may be applied to the screw cap of the tank opening for attachment therewith, and by means of which various quantities of the contents of the tank may be readily and conveniently drawn off.

The invention consists of the features of construction, combination and arrangement of parts herein fully described and claimed, reference being had to the accompanying drawing in which:—

Figure 1 is a sectional view through the tank of the character described showing the application of the invention, the plunger being at the limit of its inward stroke. Fig. 2 is a sectional view through the extractor showing the plunger at the limit of its outward suction stroke. Fig. 3 is a sectional view through the outer end of the suction tube or cylinder and allied parts on an enlarged scale.

In carrying my invention into practice, I provide a suction tube or cylinder 1 having a conical inlet end 2 provided with an intake opening 3. Arranged for operation within said tube is a plunger 4 suitably fixed to the inward end of a rod 5, to which is applied, at a point in proximity to said plunger, a stop member 6. The outer end of the tube 1 is perforated or slotted for a portion of its length, as indicated at 7, and an extremity of said end of the tube is threaded and passes through threaded opening in a supporting member herein shown in the form of the screw cap or closure 8 normally employed to seal an opening 9 in the tank. The projecting end of the tube or cylinder is closed by a screw cap 10, and suitably arranged and clamped between the aforesaid parts is a washer 11, of felt or other preferred material, which prevents leakage of the contained liquid through the joint. The outer end of the plunger rod extends through the washer and cap 9 and is threaded to receive an operating knob or handle 12. The stop 6 is so arranged that it will contact with the cap 10 and limit the outward movement of the plunger when the inner or front face of the plunger reaches a point just in advance of the perforated portion 7 of the tube.

In practice, it will be understood that the device is applied to the tank with the closure 8 and hence is pendent or projects into the tank so that the intake 3 will be submerged, whereby upon drawing the plunger outwardly a vacuum will be produced within the tube in advance of the plunger, so that the tube will be filled with the gasolene or other liquid for withdrawal, allowing a quantity to be withdrawn on each operation in an obvious manner.

It will, of course, be understood that through leakage or otherwise an amount of the liquid may be present in the tube behind the plunger. When the plunger is drawn upward, however, this liquid will be elevated and discharged through the perforated portion 7 back into the tank, thus avoiding waste and obstruction to the motion of the plunger.

An extractor or draw-off device of the character described is simple of construction and by the mode of application set forth may be applied to gasolene or other storage or supply tanks in such a manner as to be readily filled and withdrawn, and is easily applied and secured in position through the simple adjustment of the cap 8 to seal the opening 9. The device allows an amount of the gasolene or other liquid to be drawn from the tank whenever required, and its convenience in this respect will be appreciated.

I claim:—

A device of the character described comprising a suction tube having a tapered inner end formed with a restricted intake opening, and having its outer end provided for a distance inwardly from its extremity with perforations forming discharge apertures, and provided outwardly beyond said apertures with external screw threads, a tank closure engaging said threads, a cap upon the outer end of the tube, a washer surrounding said tube and held in position

by the closure and cap, an operating rod extending longitudinally within said tube and having its outer end projecting through the closure and cap, a plunger upon said rod within the tube, and a stop upon the rod in spaced relation to said plunger and adapted for contact with said cap to arrest the movement of the plunger when it reaches the innermost extremity of the perforated portion of the tube.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS V. GARLOCK.

Witnesses:
HENRY E. WAY,
C. E. PERRIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."