C. SCOVILLE.

PORTABLE SIPHON.

APPLICATION FILED NOV. 3, 1915.

1,317,324. Patented Sept. 30, 1919.

Fig. 1

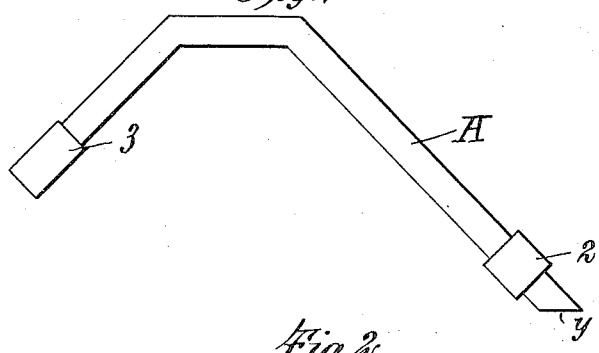


Fig. 2

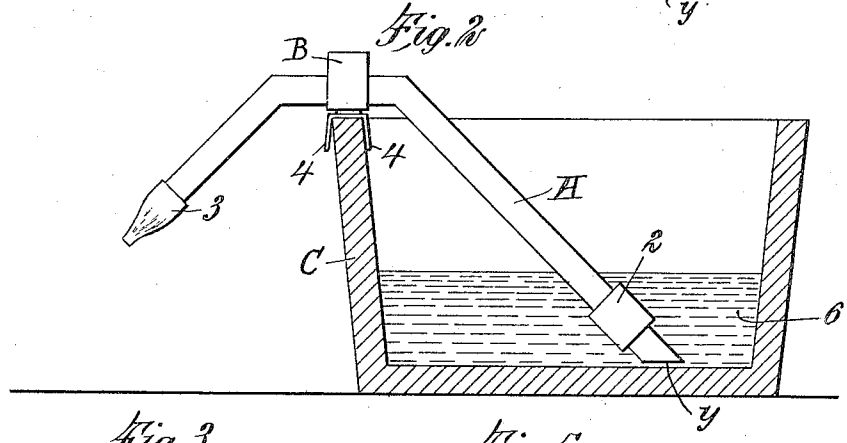


Fig. 3

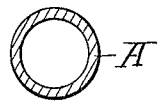


Fig. 5

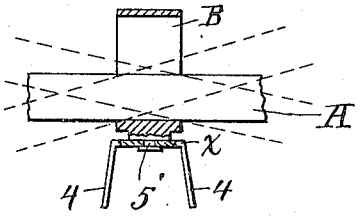


Fig. 4

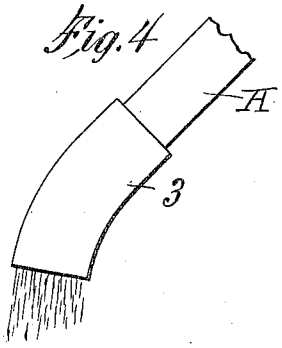
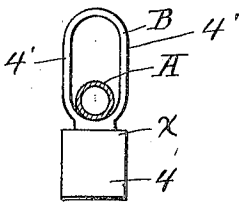


Fig. 6



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PORTABLE SIPHON.

1,317,324. Specification of Letters Patent. Patented Sept. 30, 1919.

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To all whom it may concern:

Be it known that I, CHARLES SCOVILLE, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Portable Siphons, of which the following is a specification.

My invention relates to an improvement in portable siphons in which a siphon tube is provided with means for supporting it on a tank and for holding its interior end in position beneath the water and a flexible valve on its outer end acting automatically under air and gravity pressure and it has for its object to provide a portable, easily constructed, siphon for cleaning and removing the water and sediment from fountains, watering troughs and receptacles of like character.

With this object in view my invention consists in certain novel features of construction and arrangement of parts as will be hereinafter fully described and pointed out in the claim, reference being had to the accompanying drawings in which—

Figure 1 is a side view of my device. Fig. 2 is a side view of my device mounted on a water tank. Fig. 3 is a view in cross section of my device. Fig. 4 is a side view of a fragmentary part of my device. Fig. 5 is a side view of a fragmentary part of my device. Fig. 6 is an end view of a fragmentary part of my device.

The same reference characters denote like parts in each of the several figures of the drawings.

In carrying out my invention I provide the siphon tube or body A of a curved or angular form, as shown in Fig. 1. On one end of the siphon tube I have mounted a ring of lead 2 for the purpose of holding this end in the water, this end of the tube A being oblique. On the other end of my siphon tube I have mounted a flexible rubber sleeve 3, which will expand and contract with the stream of water issuing through its discharge end, the discharge end being normally collapsed, as clearly shown in Fig. 2.

As a further part of my device I also have the tubular guide B pivotally mounted on the support x, which support has the extensions 4, 4. The tubular guide B is of oval shape, the height of the opening being greater than its width. The tube A resting within the guide B can be moved back and forth, also at the same time tipped vertically up and down guided by the sides 4′, 4′; also the tube A can be turned to the right or left by the turning of the guide B on its pivot 5′.

In the operation of my device I invert the siphon body A and fill it with water. I then turn the siphon over and insert the leaded end of the siphon in the water of the tank C, extending the leaded end down to the bottom of the tank and mount the pivot support B on the side of the tank by placing the extensions 4, 4 on either side of the edge of the tank C. The water then proceeds to flow out, the rubber sleeve conforming to the size of the discharge stream of water. As the water in the tank lowers, if the bottom and sides of the tank are curved, I slide the tube A inward as the water lowers so that the inner end of tube A is always submerged and for this purpose I can tip the tube A within the guide B and thus lower the end of tube A to a deeper position within the tank; also by means of pivot 5′ I can turn tube A from right to left and in this manner by changing the location of the end of the tube A from point to point within the interior of the tank continue the flow of water until the siphonic action is destroyed. The oblique end of tube A generally conforms to the bottom line of the tank and thus the end of tube A remains entirely submerged and the siphonic action continues until practically all the water is removed. While the water is flowing I stir the sediment in the bottom of the tank and it is carried out with the water. As the water becomes more shallow and a tendency of the air to rush in becomes greater the flexible sleeve 3 closes and thus regulates the pressure and I am able to maintain a continuous flow of the water by this automatic regulator alternately opening and equalizing the effect of the outer pressure and thus the water is permitted to continue its flow until the contents of the tank are exhausted.

Having thus described my invention, what I claim as new and for which I desire Letters Patent is as follows:

In a portable siphon for water tanks and

the like, a tubular body of angular formation, a guide having a vertically elongated opening adapted to receive the body of the siphon and permit vertical tilting of the same, a supporting means for the guide adapted to engage the edge of a water tank and the like, and a swivel connection permitting lateral swinging movement between the guide and the supporting means, whereby the siphon may be moved and held in adjusted position.

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

CHARLES SCOVILLE.

Witnesses:
E. A. JOYNER,
M. F. TERRY.

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