Nov. 13, 1928. 1,691,695

A. L. ARMBRUSTER ET AL

SIPHON ATTACHMENT

Filed March 29, 1927

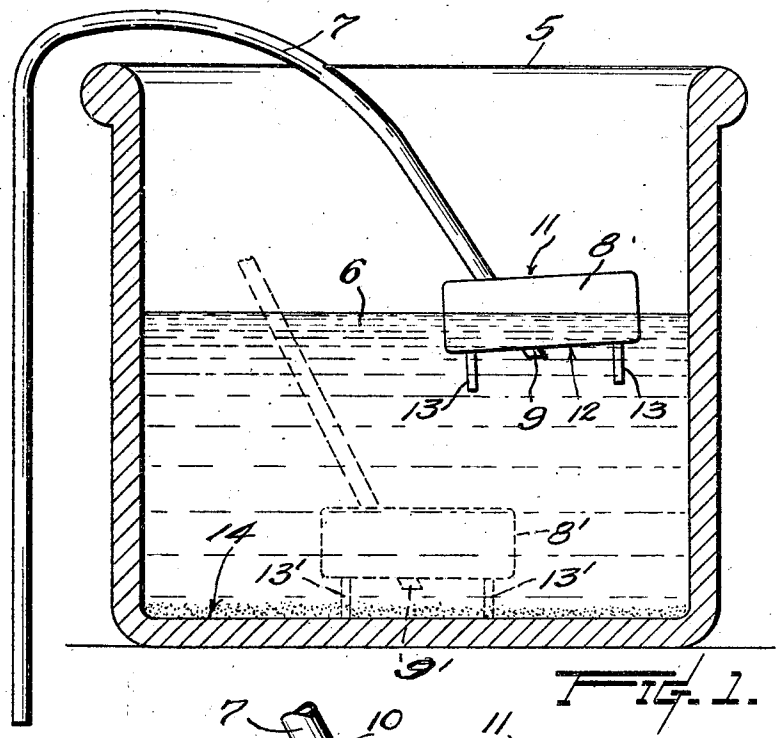


FIG. 1.

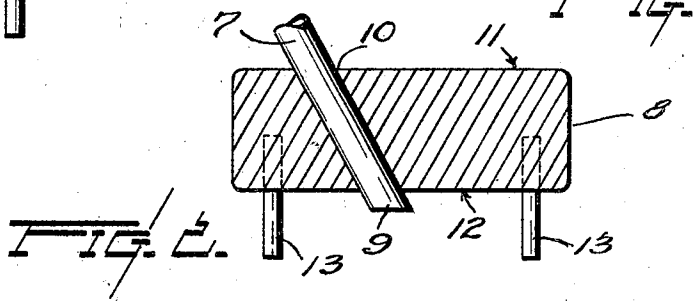


FIG. 2.

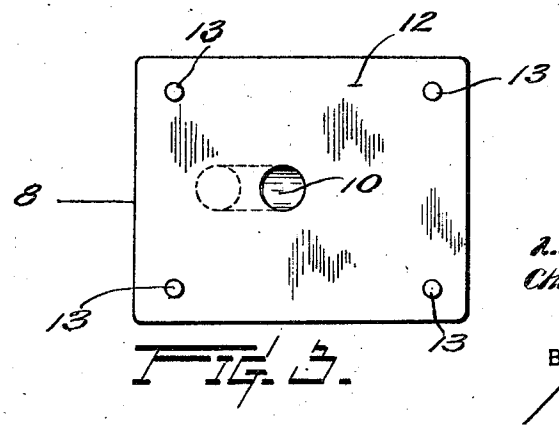


FIG. 3.

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Patented Nov. 13, 1928. 1,691,695

UNITED STATES PATENT OFFICE.

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SIPHON ATTACHMENT.

Application filed March 29, 1927. Serial No. 179,224

Our invention relates to siphoning apparatus. The object of the invention is the provision of an inexpensively constructed floatative device which is adapted to be attached to a siphon for retaining the suction end thereof at a short distance below the surface of the body of liquid which is to be withdrawn by the siphon.

The invention is illustrated in the accompanying drawing, in which,—

Figure 1 is a transverse vertical section of a liquid containing vessel, and in side elevation a siphon with an embodiment of the present invention applied thereto. Fig. 2 is a longitudinal vertical section, to a larger scale of a buoyant body connected to a siphon end; and Fig. 3 is an underside view of Fig. 2 with the siphon omitted.

In said drawing, the reference numeral 5 represents a vessel containing a liquid which is indicated by 6. 7 represents a flexible tube, or hose, for use as a siphon to withdraw liquid from said vessel.

According to the present invention I provide a buoyant body 8 which may be of wood or other suitable material. Said body is adapted to be detachably connected to the tube 7 as by providing a hole 10 in the body, and within which hole the tube makes a frictional fit.

This hole 10 is desirably located at one side of the midlength of the body and is arranged in an inclined relation with respect to the planes of its upper and lower body surfaces 11 and 12. Secured to and extending downwardly from near the ends of the body 8, are legs 13.

To apply the invention, the siphon tube 7 is inserted in the hole 10 from the top of the body and then pushed through the latter until the tube's inlet end 9 protrudes slightly below the under surface 12 of the body. After the tube is filled with a siphoning charge of liquid, the tube is applied substantially as shown in Fig. 1 with the buoyant body 8 in the liquid to floatatively support one end of the tube or siphon.

The siphon thus arranged operates to discharge the liquid from the vessel. As the liquid is thus withdrawn, the body 8 descends with the fall of liquid in the vessel, accompanied by the suction end of the siphon, which end is at all times located slightly below the liquid level.

When the liquid in the vessel is sufficiently depleted the body 8 is stopped at the position in which it is illustrated by dotted lines 8^1 in Fig. 1, by reason of the legs as at 13^1 engaging the vessel bottom 14, resulting in holding the siphon end, as denoted by 9^1, in spaced apart relation above the vessel bottom 14.

The distance it is desired at which the siphon's suction end be stopped above the vessel bottom surface is regulated by sliding the body lengthwise on the siphon.

From the foregoing it will be apparent that the invention provides means for progressively lowering the inlet end of a siphon and stopping such end at a selected distance above the bottom surface 14 of the vessel, and above a stratum of sedimentary matter, if any, on the bottom, thereby rendering the siphon capable of evacuating the liquid without the sediment.

What we claim, is,—

A floatative siphon-hose regulating device comprising in combination a body having a plane under surface and provided with an opening arranged in inclined relation with respect to said under surface and extending entirely through the body, said hole being of a diameter to receive the siphon-hose and to have the latter frictionally engage the body whereby the body may be disposed at a desired position along the length of the hose, and leg elements depending from the body at opposite sides of said opening.

Signed at Seattle, Washington, this 24th day of February, 1927.

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