April 30, 1957 C. D. DORSEY ET AL 2,790,455

SIPHONING DEVICE

Filed Jan. 17, 1956

Fig. 1

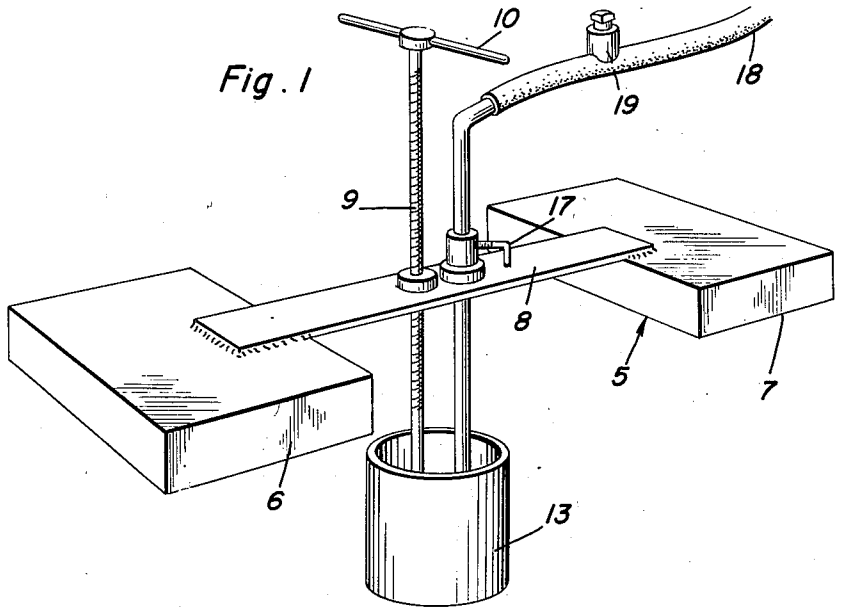


Fig. 2

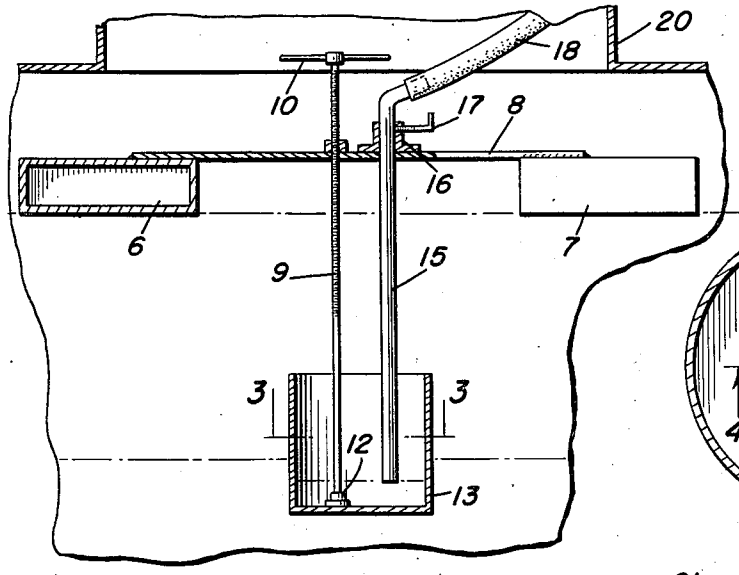
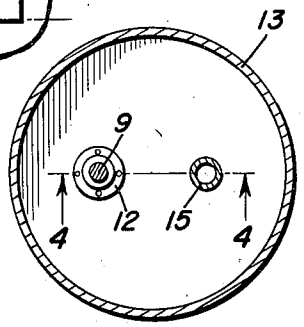


Fig. 3



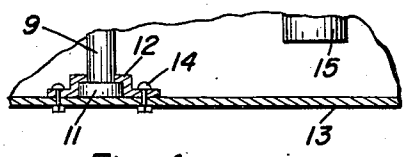


Fig. 4

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SIPHONING DEVICE

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1 Claim. (Cl. 137—152)

The present invention relates to new and useful improvements in siphoning devices for use in removing scum, oil or other fluent material from the surface of water in a tank.

An important object of invention is to provide means for supporting a receptacle below the surface of water in a tank to collect scum or other relatively light fluid in the receptacle and extending a siphoning tube from the receptacle to draw off the contents thereof.

Another object of invention to to provide means for vertically adjusting the receptacle while in its submerged position to regulate the receptacle relative to the liquid to be siphoned.

A still further object is to provide a device of this character of simple and practical construction, which is efficient and reliable in operation, relatively inexpensive to manufacture and otherwise well adapted for the purpose for which the same is intended.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view;

Figure 2 is a vertical sectional view;

Figure 3 is an enlarged transverse sectional view of the receptacle taken on a line 3—3 of Figure 2; and,

Figure 4 is an enlarged fragmentary sectional view taken on a line 4—4 of Figure 3.

Referring now to the drawing in detail wherein for the purpose of illustration we have disclosed a preferred embodiment of invention, the numeral 5 designates a buoyant member which comprises a pair of floats 6 and 7 rigidly connected to each other by a crossbar 8.

A feed screw 9 is threaded vertically in the crossbar with the upper end of the feed screw provided with a handle 10 and the lower end of the feed screw provided with a circular head 11 rotatably positioned in a housing

12 which is secured to the bottom of a receptacle 13 by rivets or the like 14 to provide a swivel connection for the lower end of the screw in the receptacle.

A siphoning tube 15 is slidable vertically in a collar 16 which is secured on top of the crossbar 8 and the siphoning tube is secured in vertically adjusted position in the collar by a set screw 17. A flexible hose 18 is connected to the upper end of the tube and the hose 18 is provided with a coupling 19 of a conventional construction and by means of which a suction pump (not shown) or other suitable siphoning apparatus may be connected thereto.

In the operation of the device the buoyant member 5 having the receptacle 13 attached thereto is placed in a tank 20 to float the buoyant member on the level of liquid contained in the tank. The receptacle 13 is lowered into the liquid in a submerged position and is adjusted vertically in order that scum or other relatively lighter fluid on the surface of the liquid will enter the open top of the receptacle.

A hand pump (not shown) may then be connected to the free end of the tube 18 to start the siphoning action whereupon the scum or other fluid collected in the receptacle 13 will be siphoned therefrom and removed from the tank 20.

The siphoning action may be speeded up by connecting a pump to the coupling 19.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

A siphon comprising a buoyant member, a receptacle, means carried by the buoyant member supporting the receptacle in vertically submerged position under said member, said receptacle having an opening at its top to admit liquid thereto, and a siphon tube having its lower end positioned in the receptacle, said receptacle supporting means comprises a feed screw threaded vertically in the buoyant member and swivel means connecting the lower end of the feed screw to the receptacle.

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