May 10, 1927.

1,627,734

G. V. GAVAZA

SIPHON HOLDER

Filed Aug. 11, 1926

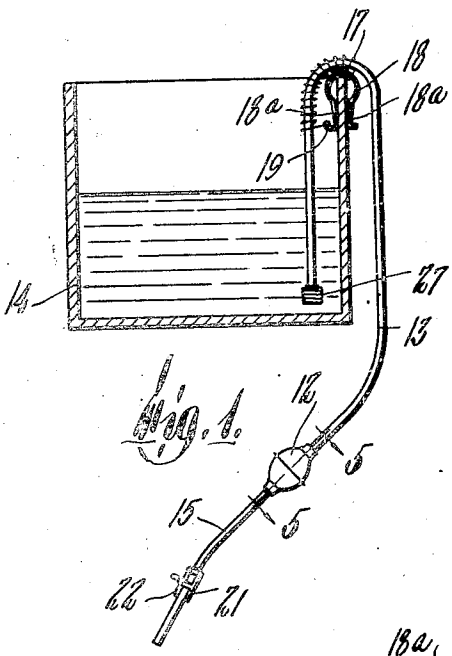


Fig. 1.

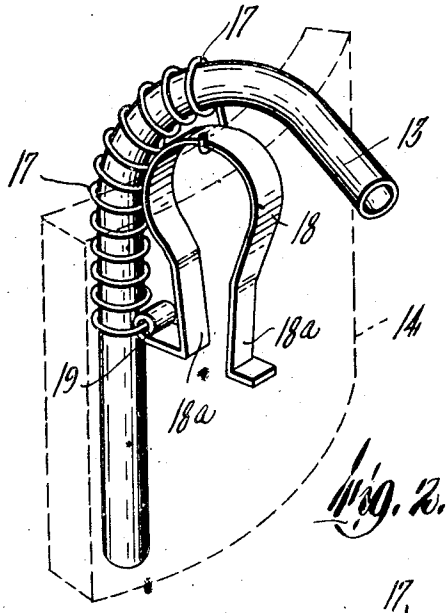


Fig. 2.

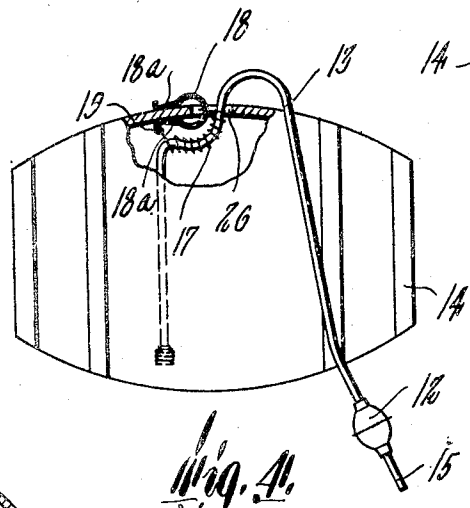


Fig. 4.

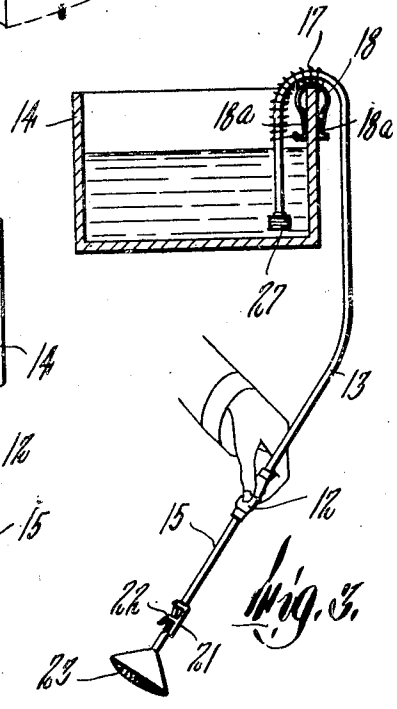


Fig. 3.

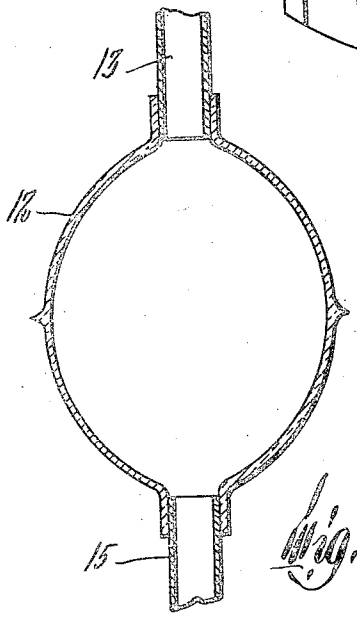


Fig. 5.

Inventor:
George V. Gavaza,
by Mayer Brown Linley & May
attys.

Patented May 10, 1927, 1,627,734

UNITED STATES PATENT OFFICE.

GEORGE V. GAVAZA, OF QUINCY, MASSACHUSETTS.

SIPHON HOLDER.

Application filed August 11, 1926. Serial No. 128,586.

This invention relates to a siphon which includes a flexible conduit, adapted to be bent to form a longer and a shorter siphon leg, and a neck connecting the legs.

The object is to provide a siphon holder of simple construction whereby the neck portion may be conveniently engaged with a container, and prevented from so abruptly bending as to impede the flow of liquid from the shorter to the longer leg, the holder being adjustable to vary the length of the shorter leg. The invention is embodied in the construction of the holder hereinafter described and claimed.

Of the accompanying drawings forming a part of this specification,—

Figure 1 is a side view, showing a siphon, and a holder therefor, embodying the invention, the holder being engaged with a supply container shown in section.

Figure 2 is a fragmentary perspective view, showing the holder and a portion of the siphon, a portion of the container being shown by dotted lines.

Figure 3 is a view similar to Figure 1, showing the longer leg of the siphon provided with a rose nozzle, the bulb shown by Figure 1 being compressed.

Figure 4 shows the siphon with its holder engaged with a cask constituting a supply container, a portion of the latter being shown in section.

Figure 5 is a section on line 5—5 of Figure 1.

The same reference characters indicate the same parts in all of the figures.

The siphon shown by the drawings comprises a normally expanded elastic rubber bulb 12, a receiving tube 13, of elastic rubber, connected at one end with an end portion of the bulb, and having a free opposite end adapted to enter a supply container 14, and a delivering tube 16, of elastic rubber, connected at one end with the opposite end portion of the bulb.

The receiving tube is elongated and adapted to be bent so that its free end portion constitutes the shorter leg of a siphon connected by a neck portion with another portion of the tube which constitutes, with the bulb 12 and the delivering tube 15, the longer leg of the siphon.

The holder is adjustably engaged with the receiving tube 13, and is separably engageable with the container 14. The holder comprises an elongated helically coiled spring 17, embracing a portion of the receiving tube 13, and adjustable lengthwise thereof, by sliding the spring on the tube, one end of the spring being provided with an open hook 17^a. The holder comprises also a resilient yoke 18, which may be a strip of sheet metal, and includes a bowed central portion formed to bestride a portion of the supply container and engaged with opposite ends of the spring 17, to curve the latter and the embraced portion of the tube. One end of the yoke 18 has an eye 19 (Figure 2), engaged with one of the end convolutions of the wire member. The bowed portion of the yoke is loosely and separably engageable with the hook 17^a as shown by Figure 2.

The spring 17 is curved by its engagement with the yoke 18, and acts to reinforce the bent neck portion of the tube and prevent it from becoming kinked or bent so abruptly as to impede the flow of liquid. The resilient yoke 18 includes resilient end portions 18^a, connected by the bowed neck and constituting jaws adapted to bear yieldingly on opposite surface portions of the supply container, as shown by Figures 1, 2, 3 and 4. The neck normally presses the jaws toward each other.

The arrangement is such that when the holder is engaged with the container, the portion of the receiving tube 13, between the free end thereof and the holder, constitutes a shorter siphon leg, which is variable in length by adjustments of the holder on the tube.

The delivering tube may be temporarily closed, as by pinching it between a thumb and finger, or between members of a clamp composed of a back member 21, and a cam lever 22, pivoted to ears on the back member, such clamp being a well known device for compressing a rubber tube.

The bulb 12 is collapsible by the operator's hand, as indicated by Figure 3. A siphonic flow may be caused when the holder is engaged with the container, and the shorter leg depends therein, by first closing the delivering tube, then collapsing, and then releasing the bulb, and then opening the delivering tube.

The free end of the delivering tube may be

adapted to be inserted in a bottle or other receiving container, or it may be provided with a rose nozzle 23, as shown by Figure 3, or otherwise adapted for use in delivering liquid siphoned from a container.

The adjustability of the holder on the receiving tube enables the length of the shorter leg to be varied, to conform to the depth of the container 14. Said container may be a crock, carboy, can, or other receptacle having a mouth at its upper end, surrounded by a vertical wall portion, as indicated by Figures 1, 2 and 3, or a cask having a mouth formed by a bung hole 26, and surrounded by a horizontal wall portion, as shown by Figure 4.

The free end of the receiving tube 13 may be provided with a strainer 27.

The bowed neck of the yoke acts to normally press the jaws against opposite sides of the container, or in other words, to tension the jaws so that they conform to the thickness of the container's wall. When the hook 17^a is disconnected from the bowed portion of the yoke, the spring straightens, so that it is adapted to slide freely on the tube, and when the hook 17^a is engaged with the neck portion of the yoke, the spring is curved and caused to conform to the portion of the yoke between the eye 19 and the midlength of the yoke neck, and the jaws are adapted to be forced apart by a container portion.

I claim:

A holder for a flexible siphon tube, comprising an elongated helical spring adapted to receive a portion of the tube, and provided with an open hook at one end, and a resilient yoke composed of end portions constituting container-grasping jaws, one of said end portions having an eye engaged with the opposite end of the spring, and a bowed neck resiliently connecting the jaws and normally pressing them toward each other, so that they are adapted to yieldingly grasp a container wall, the neck being formed to loosely and separably engage the spring hook, the arrangement being such that the spring is practically straight when disengaged from the yoke, so that it may slide freely on the tube, the engagement of the hook with the yoke flexing the spring and the portion of the tube enclosed thereby, and causing the spring and tube portion to conform to the portion of the yoke, between the eye and the midlength of the yoke neck.

In testimony whereof I have affixed my signature.

GEORGE V. GAVAZA.