T. I. WESTON.

SIPHON CONSTRUCTION.

APPLICATION FILED FEB. 4, 1915.

1,297,280. Patented Mar. 11, 1919.

FIG. 1.

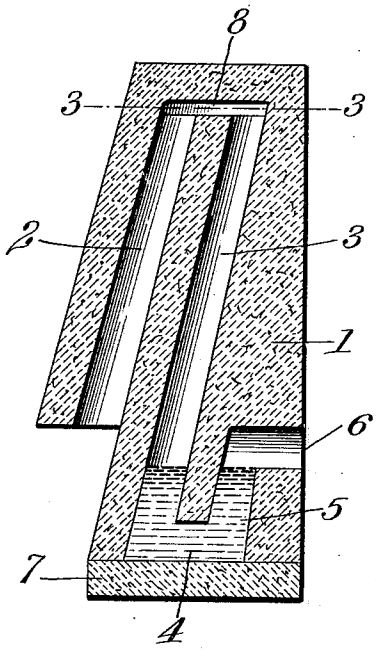
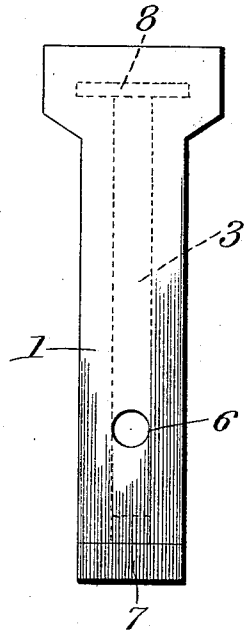



FIG. 2.



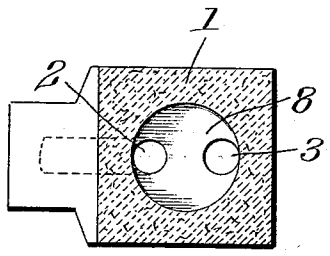




FIG. 3.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

THOMAS I. WESTON, OF COLUMBIA, SOUTH CAROLINA.

## SIPHON CONSTRUCTION.

1,297,280. Specification of Letters Patent. Patented Mar. 11, 1919.

Application filed February 4, 1915. Serial No. 6,174.

*To all whom it may concern:*

Be it known that I, THOMAS I. WESTON, a citizen of the United States, and resident of Columbia, county of Richland, State of South Carolina, have invented certain new and useful Improvements in Siphon Constructions, of which the following is a specification.

This invention relates to siphons used for septic tanks, flush tanks, or to automatically flush any vessel or receptacle when the liquid therein rises to a predetermined point. This invention is an improvement on the form of siphon disclosed in my Patent No. 1,120,351 granted December 8, 1914, and it has been my purpose to so simplify the construction as to make the manufacture and assembling of the device simple and inexpensive and another object of the invention has been to make the device operate more quickly and certainly when the liquid reaches the predetermined level. The novel features of the invention will be apparent from the following description, taken in connection with the drawings.

In the drawings,

Figure 1 is a sectional view through a siphon embodying my invention;

Fig. 2 is a vertical plan viewed from the outlet side; and

Fig. 3 is a cross section on the line 3—3 of Fig. 1.

As shown in the drawings my siphon construction is made up of a block or member 1 which may be made in one integral piece as shown and which may be made of concrete. The material of which the siphon is made, however, may vary and the main features of the invention are not limited to any particular material. The block or member 1 is provided with an upwardly extending inlet passage 2, and a downwardly extending longer outlet passage 3, which in the drawings is shown as practically parallel to the inlet passage. The lower ends of the passages 2 and 3 are open and it will be observed that this simplifies the work of making the device since the cores used for making the passages may be easily removed. The outlet passage 3 communicates at 4 with the upwardly extending water seal passage 5 which leads to the discharge outlet 6. The member 1 may be placed on a member 7 which extends across and closes the lower open ends of the passages 3 and 5, so as to make the water travel down the passage 3 across through the connection 4 and up the outlet passage 5 forming a water seal.

The passages 2 and 3 are connected at their upper ends by a cross passage 8 and which is made comparatively thin vertically, but wide horizontally, and this connecting passage 8 extends over the upper ends of the passages 2 and 3 so that the liquid rising in passage 2 can spread out in the passage 8 leaving the upper end of that passage on practically three sides, as shown in Fig. 3. This permits the proper volume of water to pass from 2 to 3 but at the same time makes the stream very thin vertically. This thin passageway makes the siphon automatically commence to operate quickly and positively when the water reaches a level corresponding to the upper ends of the passages 2 and 3. If the cross passage is not flattened, as above described, the water tends to flow over from the inlet passage to the outlet passage without entirely filling the cross connection and the result is that the contents of the tank is gradually discharged and kept at a level rather than being automatically siphoned out to a point on a level with the lower end of the inlet 2. The upper end of the member 1 may be enlarged as shown in Fig. 2 so as to make room for the wide cross passage 8.

Having described the invention what is claimed is,

A concrete siphon for sewage disposal systems and the like, comprising a vertically arranged block of concrete having therein the inlet passage 2, the outlet passage 3, and the water seal passage 5, the upper ends of the passages 2 and 3 being connected by a transverse passage, the lower ends of the passages 2, 3 and 5 being open for the withdrawal of cores after casting, the lower end of the passage 5 communicating with the lower end of the passage 3, and the upper end of the passage 5 serving as an outlet, in combination with a base member serving as a closure for the lower ends of the passages 3 and 5 when the siphon block is in operative position.

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

THOMAS I. WESTON.

Witnesses:

SAM TUCKER,

N. J. DORMAN.

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