

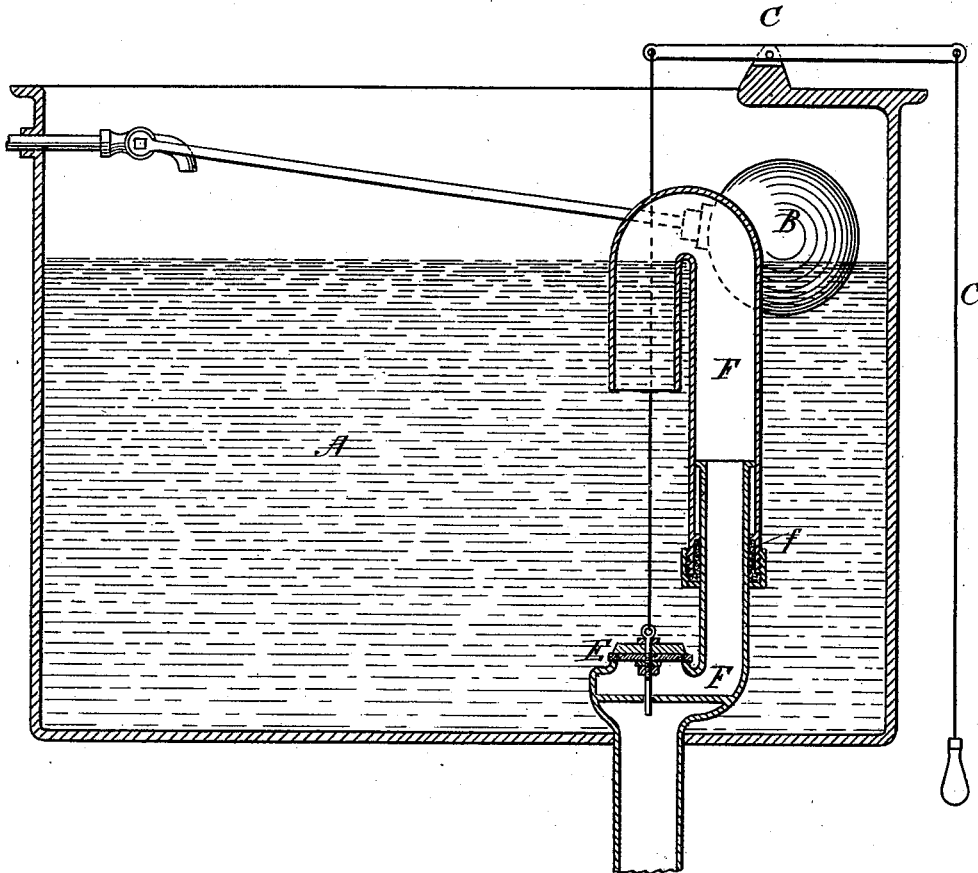
(No Model.)

H. C. WEEDEN.

FLUSHING DEVICE FOR WATER CLOSET TANKS.

No. 343,214.

Patented June 8, 1886.



WITNESSES.

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INVENTOR

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# UNITED STATES PATENT OFFICE.

HENRY C. WEEDEN, OF BOSTON, MASSACHUSETTS.

## FLUSHING DEVICE FOR WATER-CLOSET TANKS.

SPECIFICATION forming part of Letters Patent No. 343,214, dated June 8, 1886.

Application filed September 24, 1885. Serial No. 178,000. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. WEEDEN, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented certain new and useful Improvements in Flushing Devices for Water-Closet Tanks, of which the following is a specification.

My present invention relates to improvements in flushing devices for use in tanks for supplying water-closets and similar structures; and its object is to furnish improved apparatus for giving automatically an ample flushing-discharge of water from the tank, irrespectively of the length of time that the flushing apparatus is operated by the occupant of the closet.

It has frequently been found in practice with many styles of flushing discharge apparatus intended to allow water to escape from a tank in order to flush the water-closet or other similar structure that, owing to ignorance or carelessness on the part of the person operating the apparatus, the outlet-valve is held open for too short a time, and consequently less than the desired amount of water is allowed to escape into the structure to be flushed. To obviate this defect a siphon-discharge has heretofore been used, provided with a valve, which, when operated by the person using the closet, started the siphon, which then continued in operation to flush the closet until the water in the tank had descended below the mouth of the siphon, thereby stopping its operation. In all these constructions, however, the siphon has been so arranged that there was no means of adjustment of the amount of water discharged, except by altering the depth of the flushing-tank, or, in other words, its height above the level of the mouth of the siphon. Inasmuch as these flushing-tanks, as commonly made, are of no uniformity in the matter of depth, but vary very widely in this respect, it has heretofore been necessary to make a special siphon for each tank or style of tank. By my present improvement I am enabled to obviate this defect and to furnish a siphon discharge-pipe, which may be regulated or adjusted so as to be used in tanks of various depths.

The accompanying drawing shows in vertical section an apparatus embodying my present invention, and this apparatus I will now proceed to describe.

In the drawing, A represents a flushing-tank, of ordinary construction, with its supply-pipe B provided with a ball-cock and with the ordinary lever and pull, C. This lever is connected by means of a wire, cord, or chain, D, of ordinary construction with a valve, E. This valve opens and closes an orifice in a siphon-formed discharge-pipe, F, which at its lower end leads to the pipe conveying the flushing-supply to the closet or other structure. The upper orifice of this discharge-pipe is normally submerged below the water-level in the tank when the ball-cock is closed.

I form the siphon F in two parts telescopically connected, as shown, with a suitable water-tight packing, *f*, interposed. The lower part of the siphon F is rigidly attached to the bottom of the tank, as shown, while the upper part may be adjusted upon the lower part at the desired height required for any particular depth of tank. After this adjustment has been made, and so long as the siphon is used in the tank for which it has thus been adjusted, the parts remain stationary, no further adjustment being required.

In practice the ball-cock should close at or before the time when the water in the tank reaches the level of the neck of the siphon, as otherwise the ball-cock will not close and water will run to waste through the discharge-pipe F, which, it will be observed, also acts as an overflow-pipe, no special overflow-pipe being required.

It will be found desirable in practice to make the outlet governed by the valve E of sufficient size to insure the entrance of water enough, even when the valve E is lifted only momentarily, to start the siphon. I have found that good results are obtained by making the capacity of the outlet at E substantially equal to that of the discharge-pipe F itself at its lower orifice.

I claim—

The combination, with the flushing-tank A, of the vertical adjustable siphon discharge-

pipe F, formed in two parts, having the lower  
part firmly secured to the tank and the upper  
part telescopically attached and provided with  
water-tight packing f, adapted to be adjusted  
5 and set at any desired point, according to the  
size of the tank or condition of the water, as  
shown.

In testimony whereof I have hereunto sub-  
scribed my name this 21st day of September,  
A. D. 1885.

HENRY C. WEEDEN.

Witnesses:

J. HENRY TAYLOR,  
JAMES F. BLIGH.