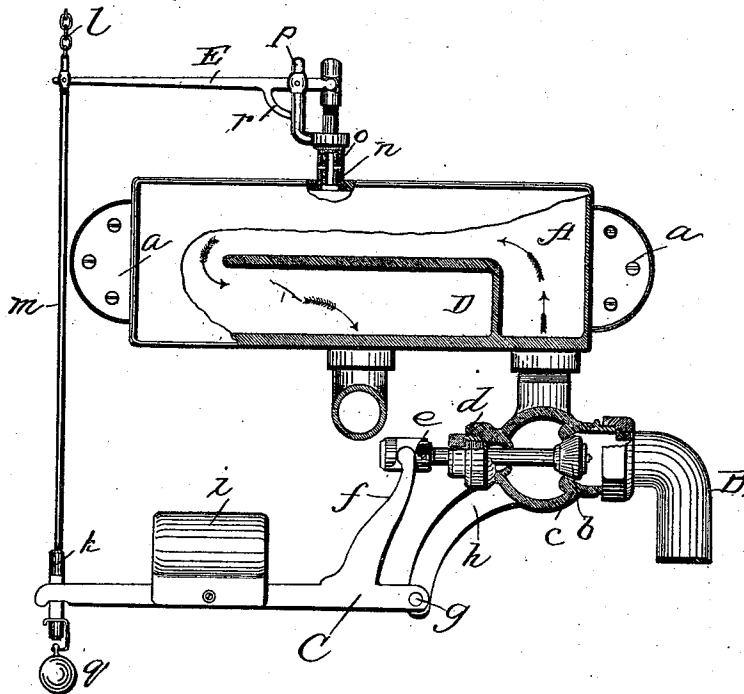


(No Model.)

M. S. BRAMBLE.
FLUSHING DEVICE FOR WATER CLOSETS.

No. 496,394.

Patented May 2, 1893.



WITNESSES:

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MARTIN SAMPSON BRAMBLE, OF BINGHAMTON, NEW YORK.

FLUSHING DEVICE FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 496,394, dated May 2, 1893.

Application filed June 13, 1891. Renewed October 6, 1892. Serial No. 448,085. (No model.)

To all whom it may concern:

Be it known that I, MARTIN SAMPSON BRAMBLE, a citizen of the United States of America, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements for Flushing Water-Closets, of which the following is a specification.

My invention is an improvement for flushing water closets, in which the closet is flushed by a flow of water being controlled by means of valves operated by levers which are connected to a chain attachment extending to within reach of the operator.

I have shown in the accompanying drawing the invention partly in side elevation and partly in section.

At A, I have shown a chamber which is of suitable size and is secured to the wall or partition above the closet by lugs *a, a*, or in any suitable manner. This chamber is in connection with the inlet pipe from the main indicated at B. Within this pipe is a valve *b*, which is cone shaped fitting a conical seat *c*, in the coupling between the inlet pipe and the chamber. This valve controls the inward flow of the water to the chamber A, and it has a stem projecting through a stuffing box *d*, with a socket carried upon its outer end as at *e*, this socket being slotted and receiving the projecting end *f*, of a lever C, pivoted at *g*, upon the bracket *h*, extending from the wall or from a coupling in which the valve *b*, is located. This lever C, is weighted as at *i*, and the tendency of this weight is to keep the valve *b*, pressed closely against its seat. A link *k*, provided with an elongated slot is passed over the outer end of the lever C, and this link carries a weight upon its lower end and is connected to a suitable operating chain *l*, by means of a rod *m*. The inlet to the chamber A, is at one end as shown by the arrows on the right of the figure and in order to prevent the currents of the water inflowing and outward flowing from having any effect the one upon the other I provide a diaphragm D, which extends up vertically and then horizontally over the exit opening though at a distance from the bottom of the chamber so as not to interfere with the outward flow of the water. An opening is made in the upper

part of the chamber which receives a tubular casing or nipple *n*, having its wall perforated at opposite points, and within this slides a tubular valve *o*, having perforations which register with the perforations in the walls of the nipple or casing. This is to provide a vent for the chamber A, and to aid the exit of the water in the flushing operation by providing for the admission of the air to the surface of the water in the chamber A. This valve *o*, is operated at the same time that the valve *b*, is operated in the inlet pipe. A bracket extends from the nipple *n*, as at *p*, and upon this is pivoted a lever E, whose extreme end enters a slot in the upper end of the valve stem and its opposite end is connected to the upper end of the rod *m*. The weight *q*, on the end of the lever *k*, keeps the outer end of the lever E, pressed down, a projection serving as a stop to limit its downward movement. As the chain is pulled upon the outer end of lever E, is raised and depresses the valve *o*, and the same action which operates the valve *o*, opens the inlet *c*, and allowing the water to enter the chamber A. The valve *o*, being depressed so that the passages therein will be thrown out of alignment with the passages in the casing *n*, and thus the force of the water alone will act to cause the flushing action, but as soon as the operating chain is released the valve *b*, will close and the weight *q*, will bring into alignment the perforations through the casing, and valve *o*, and the air entering through these perforations will act upon the water in the chamber A, and continue the flushing action after the flow of the water into the chamber has ceased.

I claim as my invention—

1. In a flushing apparatus, the chamber, the inlet pipe connected with said chamber on its lower side, an outlet pipe also connected to the chamber on its lower side and adjacent to the inlet opening and the means for preventing conflict between the inflowing and outflowing currents consisting of the partition D extending up from the edge of the inlet opening partially across the chamber and then laterally over the adjacent outlet opening to near the opposite end of the chamber, substantially as described.

2. In combination, the water chamber, the

inlet pipe with the valve *b*, the weighted lever *C* for holding said valve normally closed, the vent valve *o* connected with the casing, the lever *E* connected to said valve and the
5 means for operating both the inlet valve *b* and the vent consisting of a chain connected to the lever *E* and the connection *m* between the lever *E* and the lever *C* said connection being slotted at its lower end to embrace the lever

C and have movement independent thereof and being weighted to return the valve *n* to normal position, substantially as described.

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

MARTIN SAMPSON BRAMBLE.

Witnesses:

FRANK STEWART,

WM. F. LENTZ.