A. VON RADICH.

FLUSHING DEVICE FOR WATER CLOSETS.

APPLICATION FILED DEC. 4, 1912.

1,083,782. Patented Jan. 6, 1914

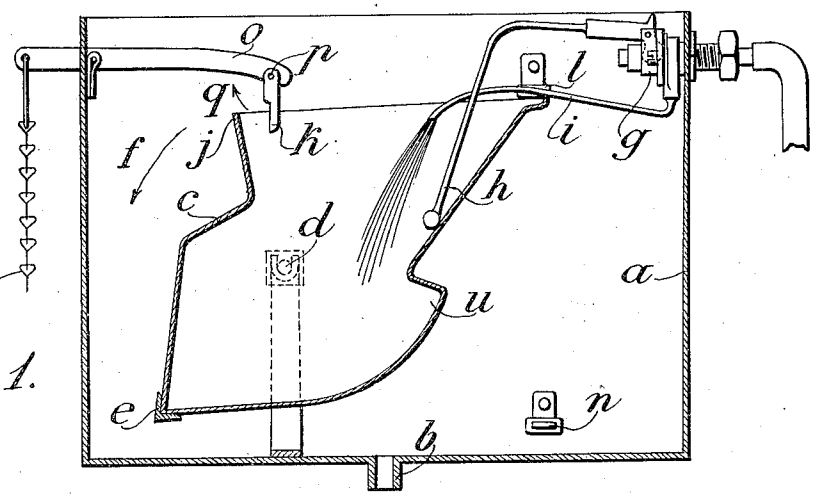


Fig. 1.

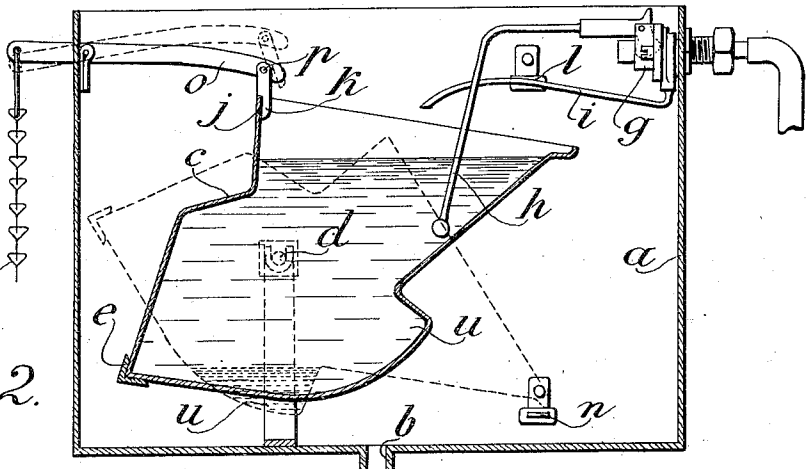


Fig. 2.

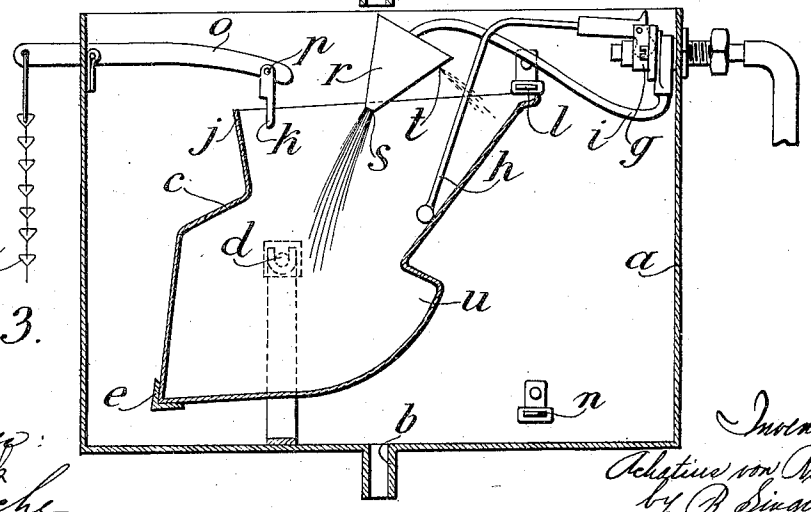


Fig. 3.

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FLUSHING DEVICE FOR WATER-CLOSETS.

1,083,782. Specification of Letters Patent. Patented Jan. 6, 1914.

Application filed December 4, 1912. Serial No. 734,915.

To all whom it may concern:

Be it known that I, ACHATIUS von RADICH, subject of the King of Hungary, residing at King Palace, Budapest I, Austria-Hungary, have invented certain new and useful Improvements in Flushing Devices for Water-Closets, of which the following is a specification.

This invention relates to a new and improved flushing device for water closets, and my improvements consist in certain combinations and arrangements of parts, as are fully described hereinafter.

My invention is illustrated in the accompanying drawing, in which—

Figure 1 is a vertical longitudinal section through my improved flushing device; Fig. 2 shows the same parts in two other positions, one of them being drawn in full lines, the other being indicated by dotted lines, and Fig. 3 is a representation similar to Fig. 1, showing a slightly modified form of construction.

Referring to Figs. 1 and 2, *a* is an open box having an outlet *b* and containing a vessel *c* of somewhat peculiar shape, which is supported by pivots *d* and may swing upon the same. The part of the vessel *c* lefthand from the pivots *d* is heavier than the other part and may be furnished for this purpose with a special piece of iron *e* forming a poise. Owing to the greater weight of the lefthand part of the vessel *c*, the latter when empty has a tendency to turn in the direction of the arrow *f* until its movement is stopped by a lug *l*.

i is the pipe for conducting the water into the vessel *c*.

The cock *g* has an arm *h*, which is moved by the adjacent wall of the vessel *c* also in the direction of the arrow *f;* the cock *g* is then opened, and water flows into the vessel filling it up to a certain height, when the righthand part of the vessel becomes the heavier one, so as to cause the vessel to tilt from the left to the right (Fig. 2). The movement of the vessel *c* in this direction is stopped by a lug *k* attached at *p* to a lever *o*, hinged to one of the walls of the box *a* and being provided with a chain *m* or the like, by means of which the lug *k* may be drawn off the vessel *c*. Previous hereto the position of the vessel *c* is that shown in full lines in Fig. 2, and in this position the arm *h* is out of contact with the vessel and the cock *g* is closed. When the lug *k* is drawn off the edge *j* of the vessel *c*, the latter tilts suddenly and flushes the closet as usual, its position being then that indicated by dotted lines in Fig. 2, in which its free edge is supported by a lug *n*. The shape of the vessel *c* is such that after the tilting a certain small quantity of the water remains within the vessel in such a position as to assist in the vessel reassuming, automatically, its former position. *u* Fig. 2 is the recess where that quantity of water collects.

The lug is hinged to the lever *o* and may turn around the pivot *p* in the direction of the arrow *q* only. The edge *j* of the vessel *c* may thus pass away below the lug *k* (from the right to the left) also when the lever *o* is in its position of rest, but in the other direction (Fig. 2) the lug *k* cannot give way.

If the device remains out of action for a comparatively long time, so that a certain part of the water can evaporate, it seems possible that the vessel *c* assumes a medium position, or a state of equilibrium respectively, so that its rear wall moves away from the lug *k*, but its front wall does not raise enough the arm *h* to open the cock *g*. The device is then obviously unable to work. To prevent such a state, I have devised the form of construction represented in Fig. 3, the gist of which consists in an arrangement for adding, automatically a certain small quantity of water to the water already contained in the filled vessel *c* when the latter abuts against the lug *k*, so that the superfluous water cannot be evaporated in regular intervals of working of the device. For this purpose a vessel *r* is inserted in the pipe *i*, which vessel has beside this discharge opening *s* a very small opening *t*. The section of the discharge opening *s* is a little smaller than the section of the pipe *i* or the cock *g*, so that the vessel *r* will be filled with water, when the cock *g* is opened. If the cock *g* is then closed the content of the vessel *r* is filled in the vessel *c*, so that the same receives a superfluous surcharge of water, which will not be evaporated in the regular intervals of working. The small opening *t* serves to cause the air to enter in the vessel *r*, when the latter is emptied.

It is obvious that the invention as described is independent of the form and arrangement of the vessel *r* and that the same can be replaced by a bulge or other enlargement of the water pipe *i*.

Claim:

In a flushing device of the character described in combination with the tilting vessel thereof, a valve having an arm controlled by the movement of said vessel for opening and closing said valve, a pipe for supplying water to said vessel upon the opening of the valve by said arm, a vessel at the end of said pipe having a discharge opening of smaller diameter than the diameter of the pipe, and an air vent, substantially as described and for the purpose set forth.

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

ACHATIUS von RADICH.

Witnesses:

FÜRÖP SCHÖN,

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