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TOILET FLUSHER

Filed Oct. 29, 1928

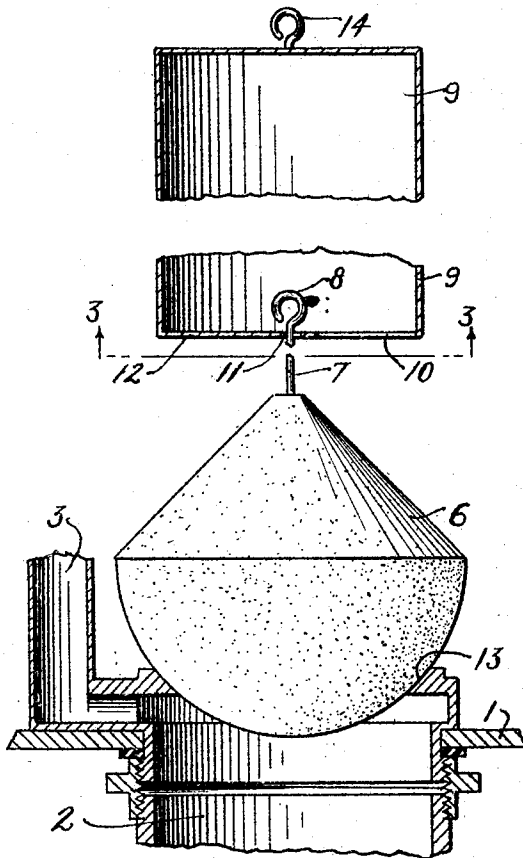


FIG. 2.

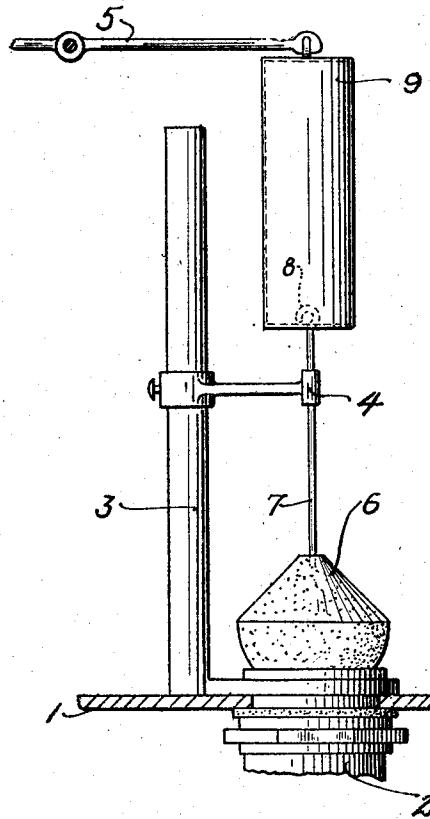


FIG. 1.

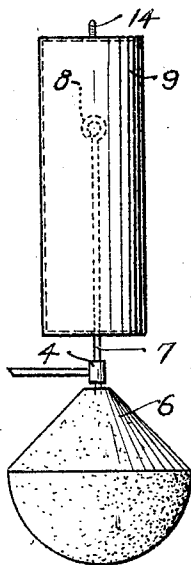


FIG. 4.

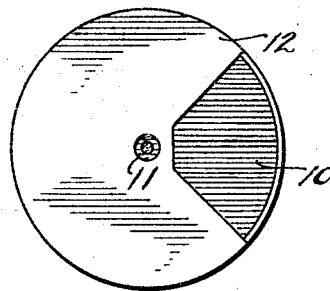


FIG. 3.

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## TOILET FLUSHER

Application filed October 29, 1928. Serial No. 315,887.

My invention relates to improvements in toilet flushers, and it consists in the combinations, constructions, and arrangements hereinafter described and claimed.

5 In the standard toilet flusher, a buoyant valve has a vertically extending rod by means of which the valve is lifted. The rod passes through a guide, and is provided with an eyelet at its top. A link is disposed in this eyelet and has its other end connected to a lever. 10 In operation the valve has a tendency to swing laterally and to bind the supporting rod on the link. The result is that the valve will not seat properly, and, therefore, the 15 water within the tank will continue to flow out through the discharge pipe so long as water flows into the tank.

The principal object of the present invention is to provide a connection between the 20 lever and the valve which will not become bound during the normal operation of the device. The attachment is so designed as to take the place of the standard link connection between the lever and the valve without 25 any alteration being necessary in the flushing device.

A further object of my invention is to provide a device of the type described which is 30 extremely simple in construction and which is durable and efficient for the purpose intended.

Other objects and advantages will appear in the following specification, and the novel 35 features of my invention will be particularly pointed out in what I hereinafter claim.

My invention is illustrated in the accompanying drawing forming a part of this application, in which

40 Figure 1 shows the device operatively applied in a flushing tank;

Figure 2 shows an enlarged sectional view of the device, the valve being shown in elevation;

45 Figure 3 is a section along the line 3—3 of Fig. 2; and

Figure 4 is a side elevation of the attachment.

50 In carrying out my invention, I make use of a flushing tank 1 that has a discharge pipe 2, an overflow pipe 3, an adjustable guide 4,

and a manually actuated lever 5. The parts thus far described are standard and form no part of my invention, except insofar as they cooperate with the parts now to be described.

I have already set forth how the buoyant 55 valve 6 is carried by a stem 7, and how the latter is formed with an eyelet 8 that is connected to the lever 5 by a link not shown. In place of the link, I substitute a container 9. Reference to Fig. 4 shows that the stem 7 has a 60 length equal to the length of the container 9. In Figures 2 and 3, I show the bottom of the container as having an opening 10 through which the stem 7 may be passed. The container is also provided with an opening 11 65 in the bottom 12, and the stem is passed through this opening after it has been received within the container through the opening 10.

The opening 11 is large enough to loosely 70 receive the stem, but small enough to prevent the passage of the eyelet 8 therethrough.

The diameter of the container 9 is large enough to permit a lateral movement of the 75 stem 7 within the container without the stem binding. In this way the valve will always be able to seat perfectly and to seal the opening 13 in the pipe 2.

From the foregoing description of the various parts of the device, the operation there- 80 of may be readily understood.

All that is necessary to connect the device to a standard flushing tank is to remove the link normally connecting the stem 7 with the 85 lever 5. The stem is then removed from the valve 6, and is threaded through the openings 10 and 11 in order to occupy the position shown in Fig. 1. The valve 6 is then screwed back upon the stem 7, and the container 9 is 90 secured to the lever 5 by means of a hook 14 carried by the top of the container.

Although the stem 7 passes through the 95 guide 4 (see Fig. 1), the guide has a large enough opening to permit a lateral movement of the stem. This movement takes place when the valve 6 surges upwardly after being released from the seat 13. The container 9 permits this lateral movement of 100 the stem; therefore there will be no binding action between the container and the stem.

After the flushing operation, the valve 6 will perfectly seat upon the wall of the opening 13, and, therefore, will prevent the passage of water through the discharge pipe 2.

5 Although I have shown and described one embodiment of my invention, it is to be understood that the same is susceptible of various changes and I reserve the right to employ such changes as may come within the scope of the invention as claimed.

10 I claim:

In a toilet flusher, a valve having a stem extending therefrom, an operating member for the stem and a connecting link between the stem and the member engaging the former with freedom of sliding motion and having a cylindrical wall encircling the stem as the valve is lifted for limiting tilting motion of the valve stem.

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