

901,255.

Fig. 2.

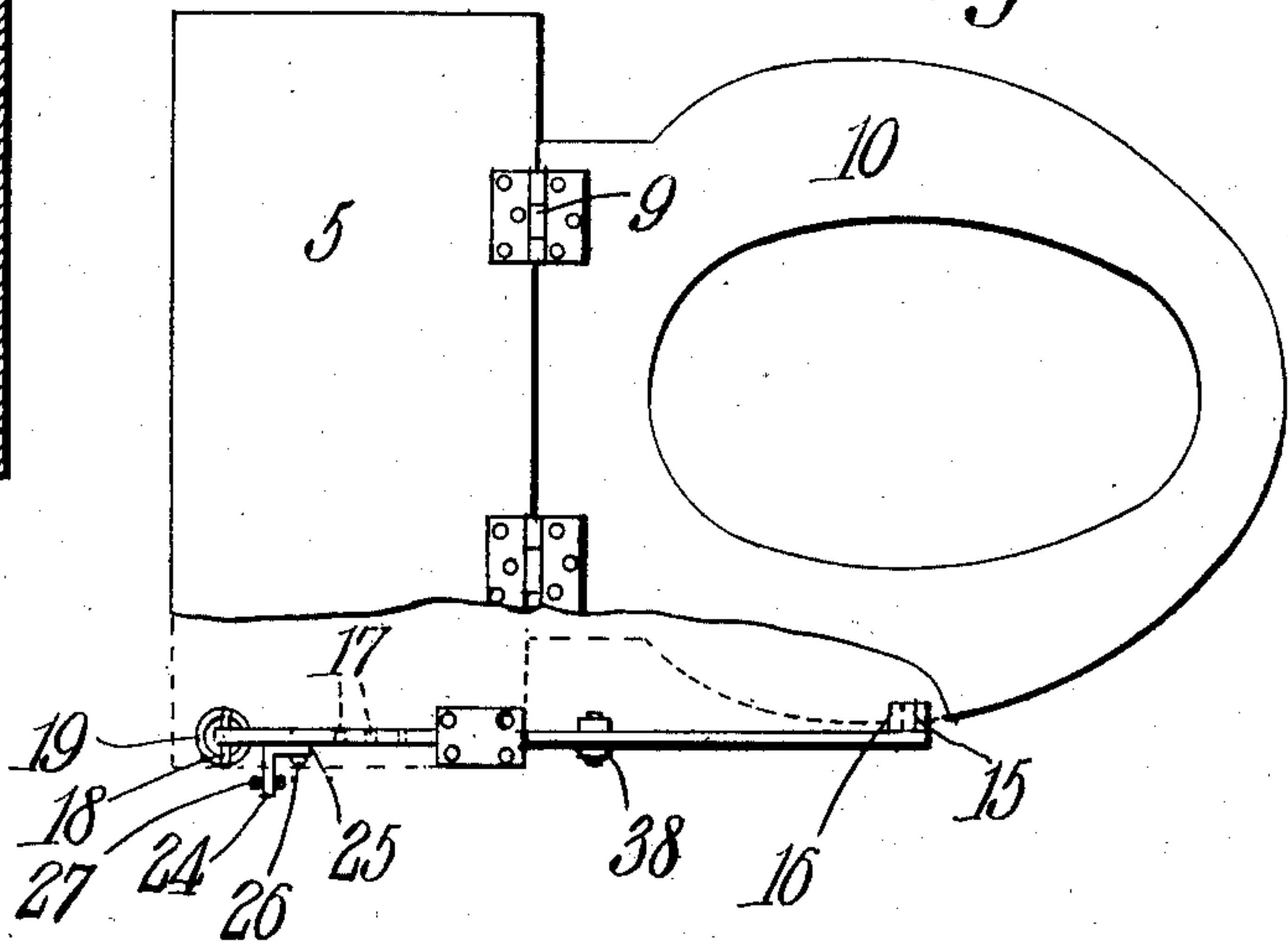
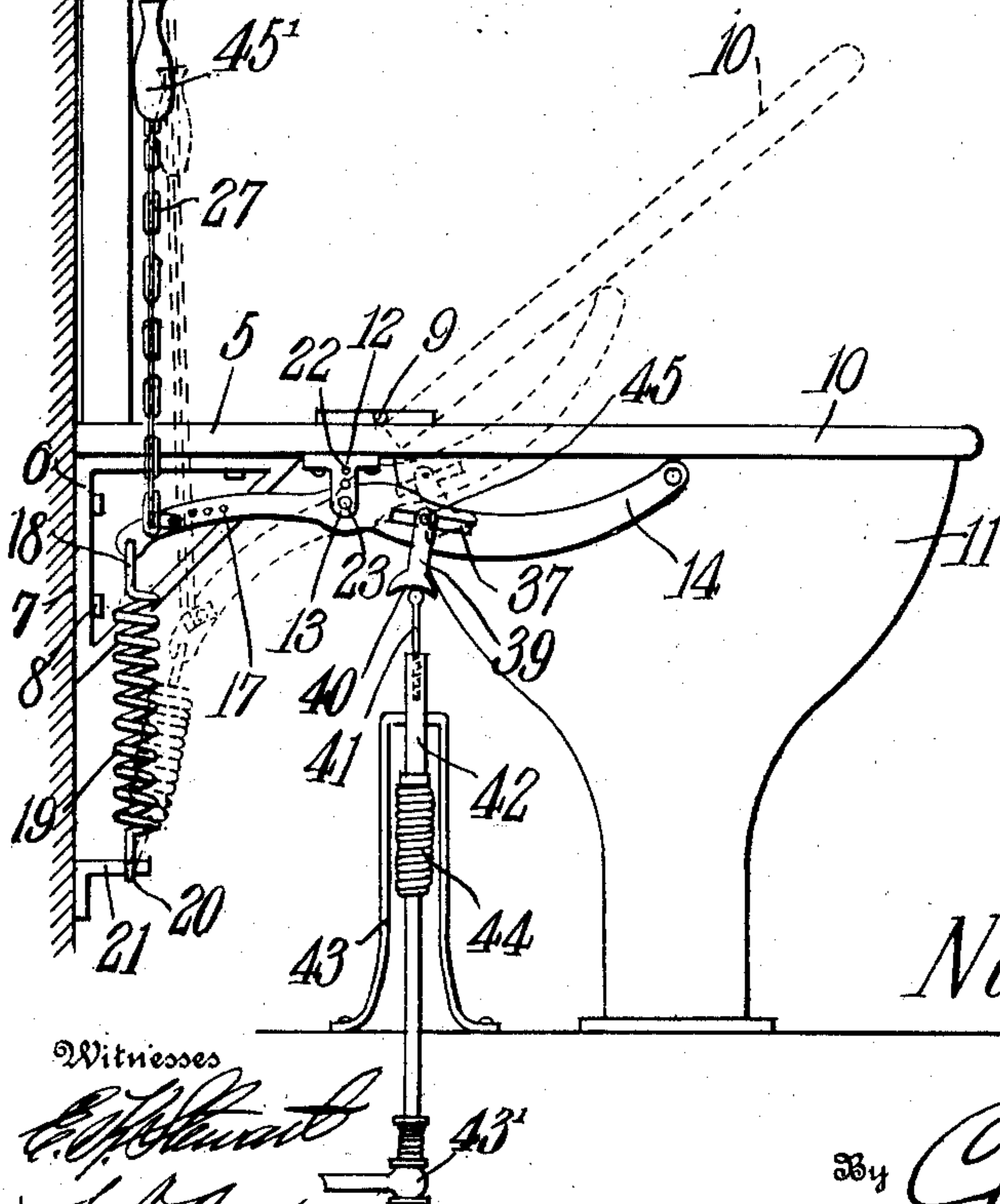


Fig. 1.



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NILS PETERSON, OF MOSCOW, IDAHO, ASSIGNOR OF ONE-THIRD TO CHARLES L. THOMPSON,
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ANTIFREEZING CLOSET.

No. 901,255.

Specification of Letters Patent.

Patented Oct. 13, 1908.

Application filed August 3, 1907. Serial No. 386,930.

To all whom it may concern:

Be it known that I, NILS PETERSON, a citizen of the United States, residing at Moscow, in the county of Latah and State of Idaho, have invented a new and useful Antifreezing Closet, of which the following is a specification.

This invention relates to antifreezing closets and has for its object to provide a comparatively simple and inexpensive closet of this character including a depressible seat one end of which is normally held in elevated position and operatively connected with the cut-off valve of the water supply tank so that when the seat is depressed water will be admitted to the tank and when the seat is elevated the valve will be actuated to effect the flushing of the closet and thus prevent freezing of the water in said tank.

A still further object of the invention is generally to improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a side elevation partly in section of an antifreezing closet constructed in accordance with my invention, showing in full lines the seat in depressed position and in dotted lines in elevated position. Fig. 2 is a top plan view of the seat and its associated parts.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved closet forming the subject matter of the present invention consists of a frame 5 the inner end of which is supported on a bracket 6 secured to a wall or other suitable support 7 by bolts or similar fastening devices 8.

Pivotally mounted at 9 to the free end of the frame 5 is a depressible seat 10 which is normally and yieldably supported in elevated position above the bowl or basin 11, as shown.

Depending from the bottom of the frame 5 is a bracket 12 provided with spaced ears or lugs 13 between which is pivotally mounted a lever 14. One end of the pivoted lever

is curved upwardly and provided with a terminal laterally extending stud 15 on which is mounted for rotation an anti-friction roller 16 adapted to bear against the bottom of the seat 10, as best shown in Fig. 2 of the drawing. The rear end of the lever 14 is bent downwardly and provided with a series of perforations 17 one of which is adapted to receive the adjacent hooked terminal 18 of a coiled spring 19, the opposite hooked terminal 20 of the coiled spring being detachably secured to a bracket 21 fastened in any suitable manner to the wall. The depending lugs 13 are provided with a plurality of transverse perforations 22 adapted to receive the pivot pin 23 so that by changing the pivot pin 23 from one perforation to the other the angle or inclination of the seat 10 may be changed at will. Extending laterally from the rear end of the pivoted lever 14 is an arm 24 having an angular extension 25 for attachment to the lever, said arm being adjustable longitudinally of the lever and secured in adjusted position by means of a bolt or similar fastening device 26 which passes through the adjacent opening 17 in the pivoted lever.

Fastened in any suitable manner to the arm 24 is one end of the chain or other flexible medium 27, the opposite end of which is operatively connected with a lever 28 pivotally mounted at 29 on a bracket secured to the over-head supply tank 30. The lever 28 is connected through the medium of a chain 31 with a bell or cut off valve 32 which controls the discharge of water from the over-head tank to the bowl or basin.

The bottom of the supply tank is inclined towards the center thereof and is provided with a central opening in which is seated a bushing 33 having its interior walls inclined or beveled to form a valve seat for the correspondingly inclined walls 34 of the valve 32, the latter being formed with a reduced extension 35 which extends within the bushing 33 when the valve is in closed position, as shown, and serves to center the valve within the supply tank.

Secured to the lower end of the bushing 33 is a discharge pipe 36 the lower end of which communicates with the bowl or basin 11 so as to permit the water from the tank 11 to flow into the basin when the valve 32 is moved to elevated or open position.

The pivoted lever 14 is provided with an

elongated slot 37 preferably disposed on one side of the pivot point 23, and embracing the lever at said slot are the spaced arms 38 of a depending valve actuating member 39.

5 The lower end of the valve actuating member is provided with an enlarged head having its face provided with a segmental bearing surface 40 adapted to engage and depress the rod section 41. The rod section

10 41 is threaded for engagement with a mating rod section 42 mounted for reciprocation in a supporting bracket 43, the lower rod section 42 being positively connected with a valve 43' of any suitable construction for

15 controlling the supply of water to the over-head tank. The rod sections 41 and 42 are normally supported in elevated position by a coiled spring 44 so that when the seat is depressed the member 39 will bear against

20 the adjacent rod section 41 and thus move the supply valve to open position thereby to permit the water to enter the supply tank.

The depending member 29 is adjustable longitudinally of the lever 14 and is locked

25 in adjusted position by a bolt or similar fastening device 45 which extends through the walls of the slot 37 and engages the arms 38, as shown. By rotating the rod section 41 within the section 42 said sections may be

30 adjusted so as to regulate the quantity of water admitted to the supply tank when the closet seat is depressed while by reason of the slot 37 the depending member 39 may be adjusted longitudinally of the actuating

35 lever so as to always engage the rod 41. It will thus be seen that under normal conditions the seat is elevated and the tank valve in open position so that the tank remains empty as long as the closet is not in use.

40 When the seat 10 is depressed the slack in the chain 27 will permit the cut off valve 32 to move by gravity to closed position. As the seat is depressed the actuating member 39 will engage the upper rod section 41 and

45 move the supply valve to open position so as to permit the water to enter the tank and fill or partly fill the same. As soon as the pressure on the seat is removed the spring 19 will automatically elevate said seat and

50 through the medium of the chain 27 move

the valve 32 to open position so that the water in the tank is free to flow through the pipe 36 to the bowl or basin and thus effect the flushing of the same.

As a means for flushing the tank independently of the automatic means there is provided a handle 45' preferably interposed between two of the links of the chain 27 so that by exerting a downward pressure on the handle 45' the water in the tank may be discharged without the necessity of the occupant leaving the seat.

From the foregoing description it is thought that the construction and operation of the device will be readily understood by those skilled in the art and further description thereof is deemed unnecessary.

Having thus described the invention what is claimed is:

The combination with a supporting frame, 70 of a bowl, a seat pivotally mounted on the frame and normally and yieldably supported in elevated position above the bowl, a pivoted lever mounted on the frame and having an elongated slot formed therein, one end of 75 said lever being provided with a terminal roller adapted to bear against the adjacent face of the seat, a spring operatively connected with the opposite end of the lever, an over-head tank, a cut off valve disposed with- 80 in the tank, a connection between the cut off valve and adjacent end of the lever, an actuating member having spaced ears embracing the cut off lever and provided with a bearing face, a fastening device extending 85 through the slot for engagement with the ears of the actuating member for locking said member in adjusted position, and a supply valve disposed beneath the actuating member and movable to open position by en- 90 gagement with said actuating member when the seat is depressed.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

NILS PETERSON.

Witnesses:

C. L. THOMPSON,
P. COATES.