M. F. TROY.

SANITARY CUSPIDOR.

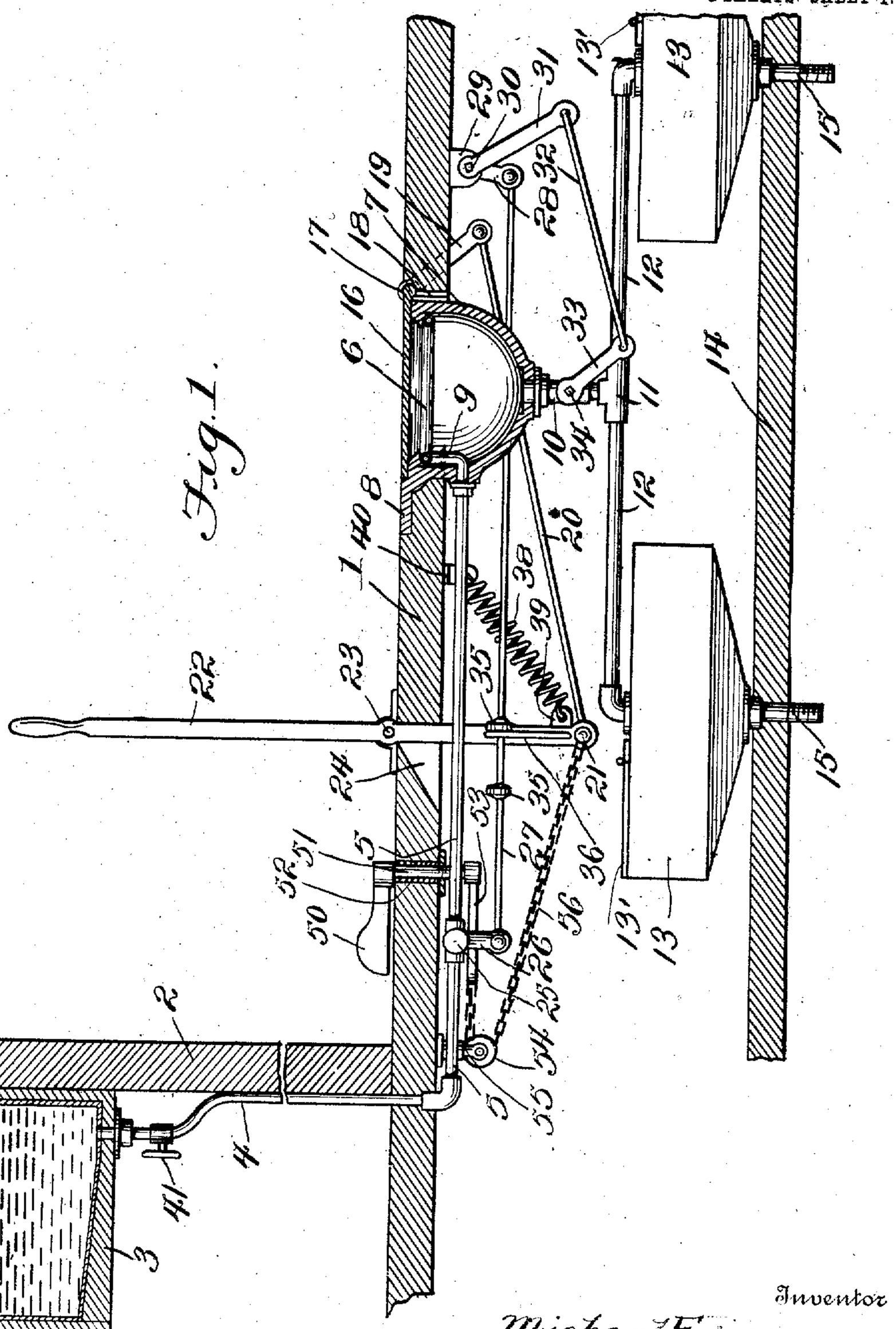
APPLICATION FILED NOV. 12, 1909.

963,664.

Patented July 5, 1910.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

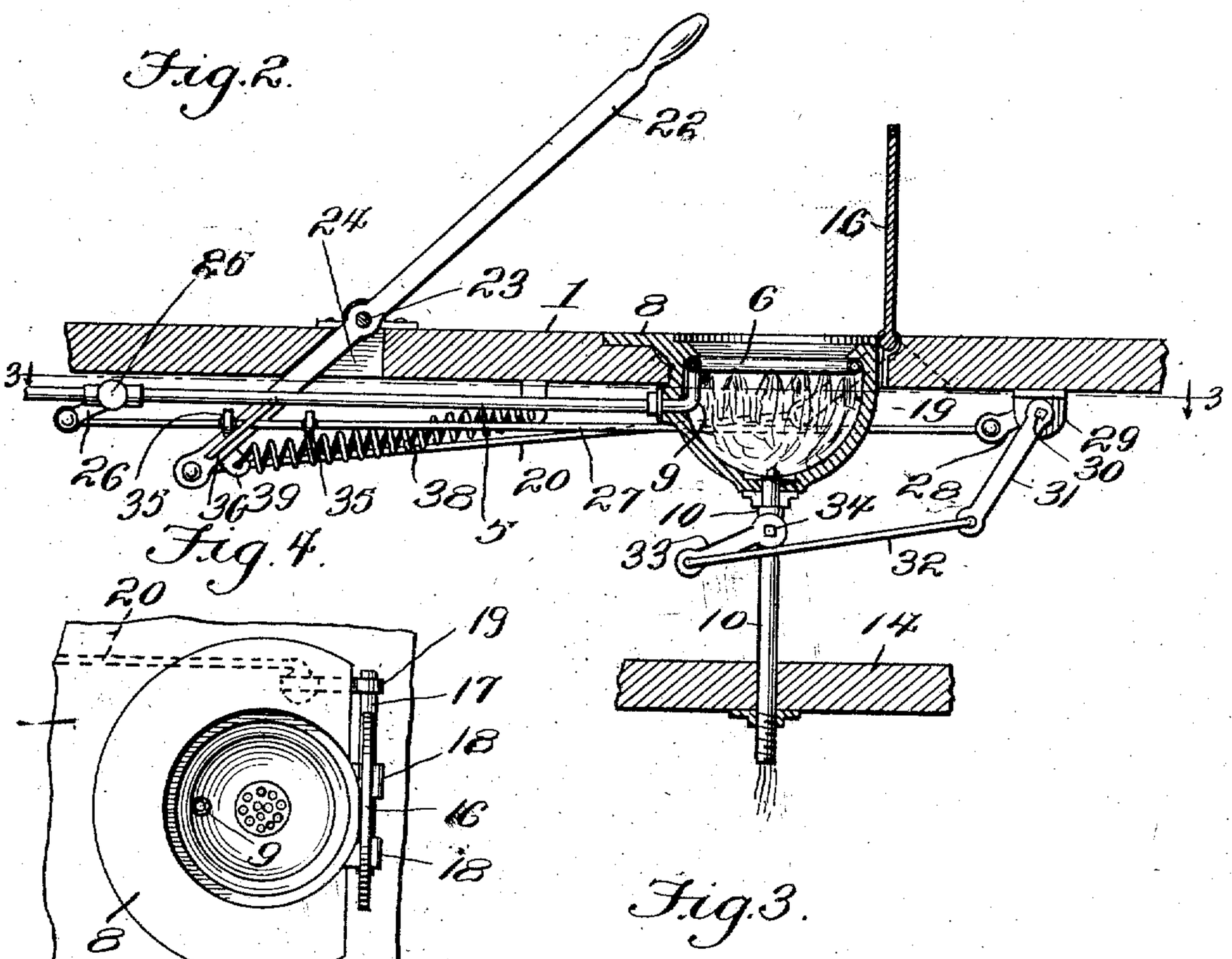
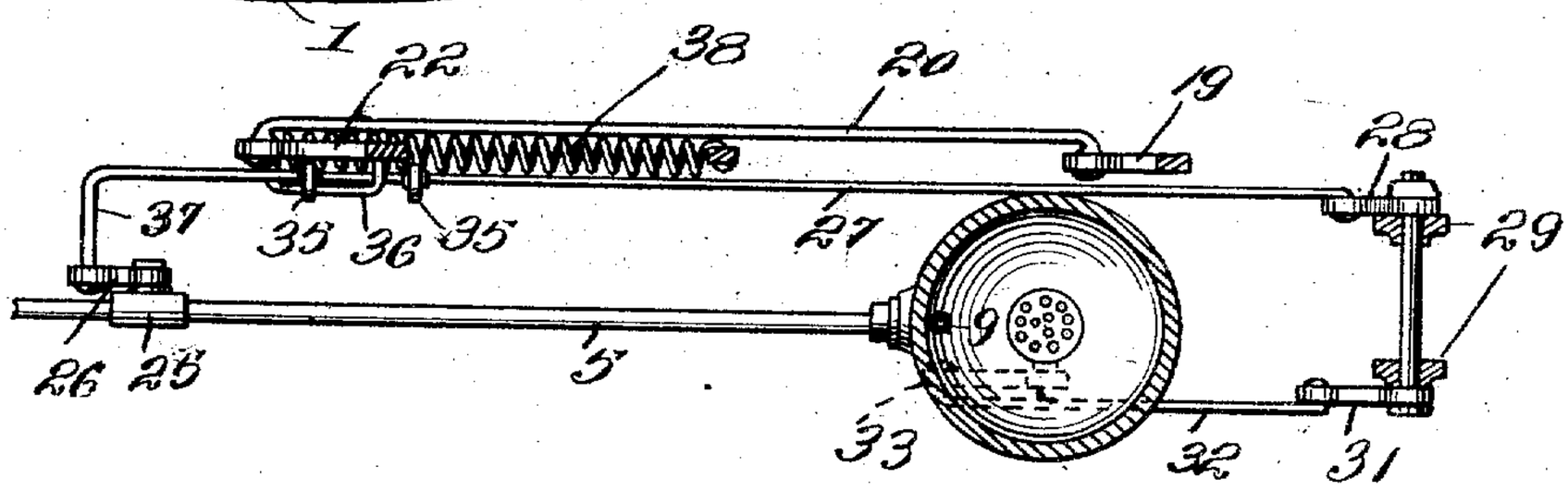


Fig. 4.

Fig. 3.



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UNITED STATES PATENT OFFICE.

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SANITARY CUSPIDOR.

963,664. Specification of Letters Patent. Patented July 5, 1910.

Application filed November 12, 1909. Serial No. 527,720.

To all whom it may concern:

Be it known that I, MICHAEL F. TROY, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Sanitary Cuspidors, of which the following is a specification.

This invention relates to sanitary cuspidors designed for use in railway cars, hotels and other public places, and one of the principal objects of the same is to provide means for readily cleaning the cuspidors, said means being operated by either a hand or a foot lever for flushing the cuspidor.

Another object of the invention is to provide a cuspidor having a cover therefor and connections between said cuspidor and a water tank, the cover being operated by either a hand or a foot lever connected to a valve for opening communication between the water tank and the cuspidor for flushing the latter.

Still another object of the invention is to provide a cuspidor, the cover of which is hinged to lie flush with the floor in which the cuspidor is disposed and a lever for operating the cover for simultaneously flushing the cuspidor.

A still further object of the invention is to provide catch basins underneath the cuspidor to catch the refuse matter as it is flushed from the cuspidor.

With the above and other objects in view, which will appear as the description progresses, the invention resides in the novel construction and arrangement of elements hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal section through a floor and through the cuspidor and water tank for flushing the same, the operative mechanism being shown in elevation. Fig. 2 is a longitudinal sectional view through the cuspidor and floor to which the cuspidor is attached, the operating mechanism being shown in elevation and the cover of the cuspidor raised. Fig. 3 is a horizontal sectional view of the cuspidor taken on the line 3—3 Fig. 2 and looking in the direction of the arrows. Fig. 4 is a detail top plan view of the cuspidor, the cover being shown open.

In the accompanying drawings the numeral 1 designates the floor of a car or a room, and 2 is a wall to which is secured a water tank 3. The water tank is in a sufficiently elevated position to permit the water to run to a pipe 4 by gravity, and the flow of the water from the tank is regulated through the medium of a suitable valve 41. The pipe 4 is connected to a longitudinally extending pipe 5 disposed underneath the floor 1 and the said pipe terminates in an annular spray 6 disposed inside of a cuspidor 7 set in flush with the upper surface of the floor 1. The cuspidor has a flange 8 set in recesses in the top of the floor as shown in Fig. 1. The pipe 5 extends through a suitable opening provided in the side of the cuspidor and is bent upwardly as at 9, the annular spray pipe 6 being connected to the upper end of the said bent portion which is positioned within the cuspidor. A discharge drain pipe 10 is connected to the lower side of the cuspidor, said pipe being provided with a T 11 to which branch pipes 12 are secured, and said branch pipes lead to suitable catch basins 13 supported upon a supplemental floor or timber 14. The discharge pipes 15 extend through the floor or timber to provide outlets for the refuse matter within the said tanks 13. The tanks 13 have their tops normally closed, but in order to provide for the cleansing of the said tanks each of the tops are cut away a sufficient distance adjacent one of the sides of the tank and the said opening is normally closed through the medium of a hinged door 13'. The cover 16 of the cuspidor is provided with a pintle or hinge member 17 passing through bearing members 18 secured to the cuspidor. The pintle 17 has connected with its projecting end a crank member 19 and connected to the said crank member is a rod 20 which has its opposite end pivotally connected as at 21, to a lever 22. The lever 22 is pivoted as at 23 to the top of the floor, the said lever extending through a suitable slot or opening 24 provided in the said flow. The pipe 5 is provided with a suitable valve 25 having a handle 26 and the said handle is connected with an operating rod 27. The rod 27 extends longitudinally beyond the floor 1 and the pipe 5 has its opposite end connected to a lever 28 pivoted in a bracket 29 depending from the floor 1. Connected to shaft 30 of the lever 28 is a link 31, and the said link is connected with a rod 32 which has its opposite end secured to a lever 33 connected with the squared portion of the valve handle 34 of a suitable valve provided in the dis-

charge pipe 10. The rod 27 is provided with stops 35, said rod extending through a loop or keeper 36 on the lever 22, and it will be noted that by swinging the lever 22 upon its pivot the stop members 35 will be contacted by the loop or keeper 36. A spring 38 is connected at one end to a lug 39 and the lever 22, the opposite end of said spring being connected to a bracket 40 beneath the floor 1. The tension of the spring 38 is to exert pressure to return the lever 22 to a vertical position after it has been operated. By reference to Figs. 1 and 2 of the drawings it will be noted that the slot or opening 24 has one of its walls beveled and its opposite wall in a substantially vertical plane, this latter wall being contacted by one side of the lever through the medium of the spring 38 to retain the said lever in a perfectly vertical position when not swung.

The operation of the device may be briefly described as follows:—In using the cuspidor the lever 22 is thrown toward the cuspidor in the position shown in Fig. 2. The movement of the lever pulls upon the rod 20 and opens the cover 16 of the cuspidor. At the same time the movement of the lever opens the valve 25 and permits water to flow from the tank 3 through the said pipe into the annular spray pipe 6 to flush the cuspidor. The rod 27 being connected at one end to the lever 28 operates said lever and the link 31 to open the valve in the discharge pipe 10 and to discharge the flushed liquid into the catch basins 13 and from the catch basins out through the discharge pipes 15. When the lever is released the spring 38 returns the parts to their initial position. A foot lever is also employed in addition to the hand lever 22. This foot lever 50, as shown in Fig. 1 of the drawings, is provided with a spindle 51 mounted in a suitable bearing provided by the bearing 52 extending through a suitable opening within the floor 1. The lever thus comprises an L-shaped member and the downwardly extending portion 51 thereof has its extremity provided with a link or finger 53. Positioned upon the underneath surface of the floor 1 at a suitable distance away from the finger 53 is a suitable roller 54 which is mounted for rotation within a suitable bracket 55, and passing over the said roller 54 and having one of its ends connected with the finger 53 is a flexible element, preferably a chain, as designated by the numeral 56. The opposite end of the said chain 56 is connected with the lower extension of the lever 22. By this arrangement it will be noted that by merely rotating the L-shaped lever 50 the finger 53 will be caused to rotate thus drawing the flexible element 56 over the pawl 54 and thus causing the mechanism to operate in a manner precisely similar to that heretofore set forth.

From the foregoing it will be obvious that my invention can be connected to the floor of a car or any public building or other places and can be readily operated for flushing the same whenever used, thus providing a sanitary device for the purpose referred to, it being of course understood that the discharge pipe 15 of the catch basins may be connected directly with a sewer. It is to be further understood that while I have described the improvement in connection with cuspidors the same is susceptible to other uses such as basins and the like and while I have illustrated and described the preferred embodiment of the improvement, as it now appears to me, minor details of construction within the scope of the following claims may be resorted to if desired.

I claim:—

1. A sanitary cuspidor comprising a water tank, a cuspidor, a pipe leading from the tank to the cuspidor, a cover for the cuspidor, and a lever and connections for raising the cover and flushing the cuspidor simultaneously.

2. A sanitary cuspidor comprising a water tank, a cuspidor, a cover adapted to normally close the top of the cuspidor, a water pipe connected to the water tank and leading to the cuspidor, said water pipe terminating in an annular spray pipe, a valve in the water pipe, and a level for simultaneously raising the cover of the cuspidor and flushing the latter.

3. A sanitary cuspidor comprising a water tank, a cuspidor, a water pipe leading from the tank to the cuspidor, a valve in the water pipe, a discharge pipe in the cuspidor, a valve in said discharge pipe, and a lever and connections for raising the cover of the cuspidor, opening the valve in the water pipe and opening the valve in the discharge pipe of the cuspidor.

4. A sanitary cuspidor comprising a water tank, a cuspidor, a water pipe leading from the tank to the cuspidor, a cover hinged to the cuspidor, a discharge pipe provided with a valve, a valve in the water pipe, catch basins, a branch pipe leading from the discharge pipe in the cuspidor to said basins, and a lever and connections for simultaneously raising the cover, opening the valve and flushing the cuspidor into the catch basins.

5. A sanitary cuspidor comprising a water tank, a cuspidor secured in the floor of a car or building, a cover for said cuspidor adapted to lie flush with the upper surface of the floor, said cover being hinged to the cuspidor, a water pipe leading from the tank to the cuspidor, an annular spray pipe in the cuspidor and connected to the water pipe, a discharge pipe in the cuspidor, a valve in said pipe, catch basins, pipes between said discharge pipe and catch basins, a lever, and

connections between the cover and valve and said lever whereby the operation of said lever will raise the cover to the cuspidor and flush the same into the catch basins.

6. A sanitary cuspidor comprising a water tank, a cuspidor, a water pipe connecting the water tank with the cuspidor, a discharge pipe in the cuspidor, catch basins, branch pipes connecting the discharge pipe with the catch basins, a valve in the water pipe, a valve in the discharge pipe, a lever, and connections between the cover, the valve and the lever, whereby the operation of the latter will raise the cover and operate the valves for flushing the cuspidor into the catch basins.

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

MICHAEL F. TROY.

Witnesses:

JOHN P. FEDDERSEN,

HENRY LEEHR.