Nov. 14, 1944. J. P. EISCHENS 2,362,620

HOG WATERER

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Fig. 1.

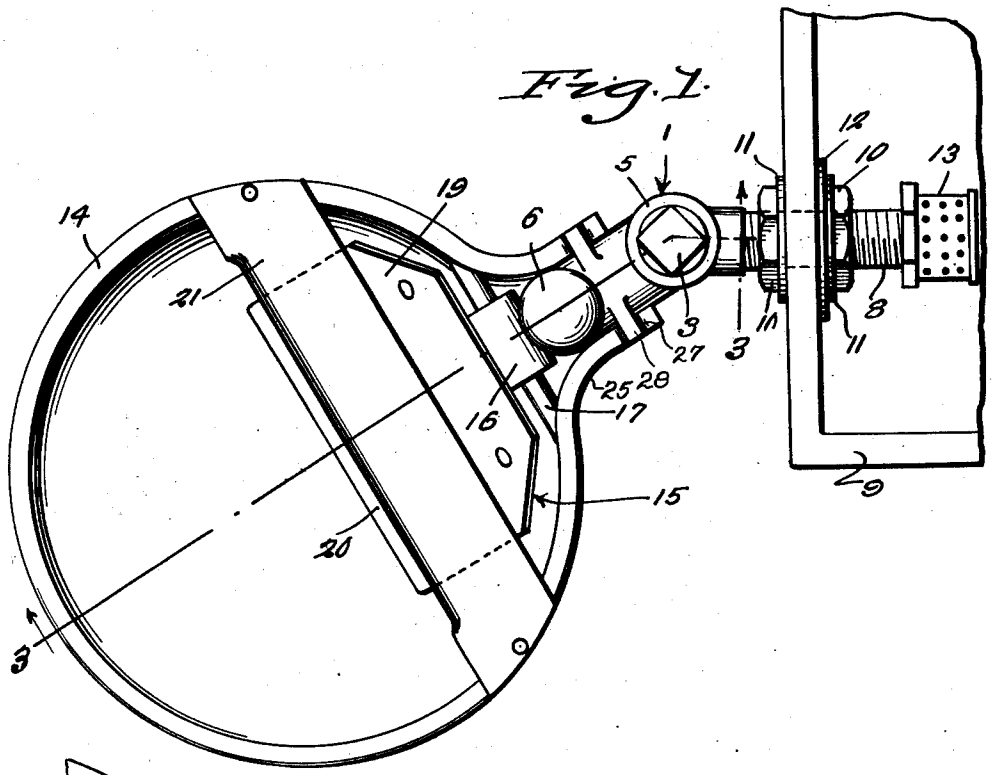
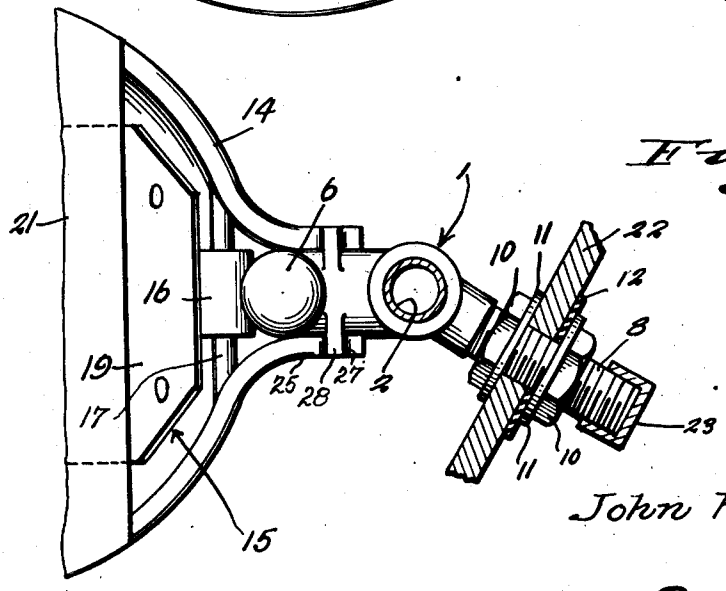


Fig. 2.



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Fig. 3.

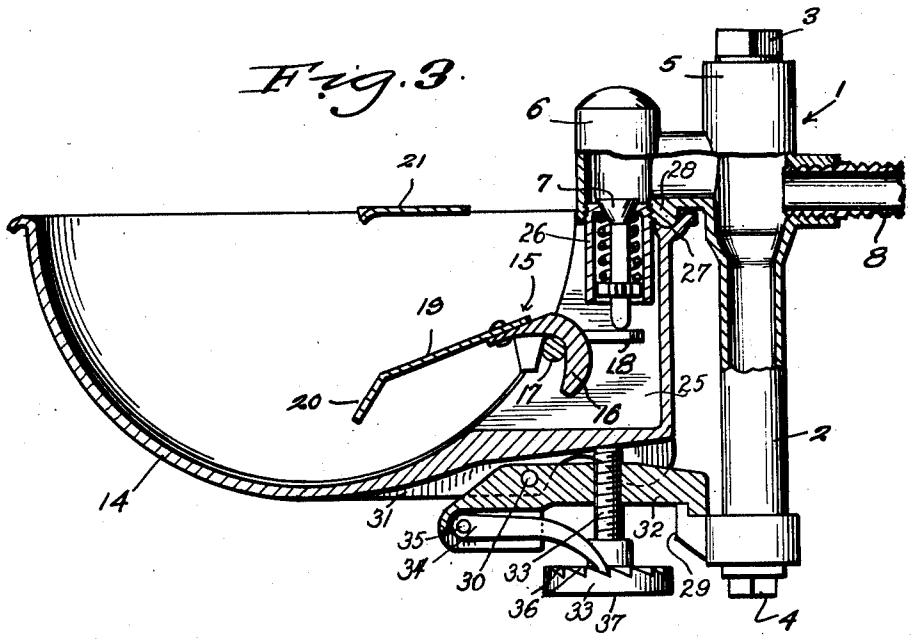


Fig. 4.

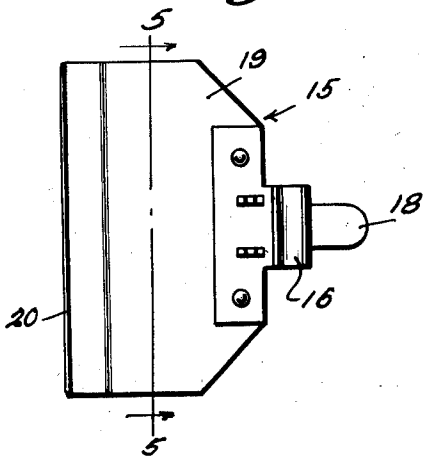
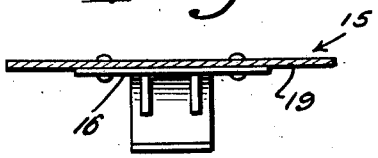


Fig. 5.



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HOG WATERER

John P. Eischens, Olivia, Minn.

Application August 20, 1943, Serial No. 499,411

4 Claims. (Cl. 119—75)

The present invention relates to new and useful improvements in hog waterers of the animal-actuated, valve-controlled type, and has for its primary object to provide, in a manner as hereinafter set forth, novel means for preventing a hog from holding the valve open and overflowing the device.

Another very important object of the invention is to provide a hog waterer of the aforementioned character comprising a bowl-supporting fixture which may be connected either to a conventional yard stock tank, barrel, et cetera, for mounting the bowl thereon, or to a water pipe.

Other objects of the invention are to provide a hog waterer of the character set forth which will be comparatively simple in construction, strong, durable, compact, and which may be manufactured at low cost.

All of the foregoing, and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a top plan view of a hog waterer constructed in accordance with the present invention.

Figure 2 is a view in horizontal section through the fixture and a portion of the support on which said fixture is mounted, showing the tank or barrel connection closed, as when the device is to be connected to a water pipe.

Figure 3 is a view in vertical section, taken substantially on the line 3—3 of Figure 1.

Figure 4 is a bottom plan view of the swinging pedal.

Figure 5 is a cross-sectional view through the pedal, taken substantially on the line 5—5 of Figure 4.

Referring now to the drawings in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a metallic fixture which is designated generally by reference numeral 1. The fixture 1 includes a vertical tube 2 having its end portions internally threaded to receive removable plugs 3 and 4. The vertical tube 2 comprises an enlarged upper end portion 5 having projecting therefrom a discharge spout 6 which is controlled by a spring-closed valve 7.

The fixture 1 further includes an intake pipe 8 which is threadedly connected to the enlarged upper end portion 5 of the tube 2. The pipe 8 is adapted to project into a water reservoir such as a yard tank 9 for receiving water therefrom and for mounting the fixture 1 thereon. Toward this end, the intake pipe 8 is engaged in an opening provided therefor in a wall of the tank 9. Nuts 10, which are threadedly mounted on the pipe 8, are engaged with the opposite sides of the tank wall for firmly securing the fixture thereon.

Washers 11 and a gasket 12 are provided for preventing leakage around the pipe 8. A strainer 13 is removably mounted on the intake end portion of the pipe 8.

Removably and adjustably mounted on the fixture 1 for receiving water from the discharge 6 thereof is a bowl 14. An animal-actuated pedal 15 is operable in the bowl 14 for opening the valve 7. The pedal 15 includes a hinge 16 which is journaled on a transverse pin 17 in the rear portion of the bowl 14. Projecting rearwardly from the hinge 16 is a lever 18 which is engaged beneath the valve 7 for opening said valve. A plate 19 is fixed on the hinge 16 and projects forwardly and downwardly therefrom in the bowl 14. The plate 19 comprises a downturned free or forward end portion 20.

Extending transversely across the top of the bowl 14, above the plate 19, is a metallic bar 21. The bar 21 constitutes a guard or shield for preventing an animal from holding a foot on the plate 19.

It is thought that the manner in which the invention functions will be readily apparent from a consideration of the foregoing. Briefly, a hog seeking water in the bowl 14 engages and depresses the pedal 15, thereby opening the valve 7 for admitting water to said bowl from the tank 9 through the fixture 1. When the pedal 15 is released, the valve 7 closes for shutting off the water. The downward inclination of the plate 19 with the angular free end portion 20 thereof prevents the animal from holding the valve 7 open too long and overflowing the bowl 14. The guard 21 prevents the animal from placing a foot on the plate 19 and holding the valve 7 open.

If desired, the fixture 1 may be connected to a water pipe instead of a tank or other reservoir 9. When thus used, the pipe 8 is secured on a suitable support 22 (see Fig. 2) and a closure cap 23 replaces the strainer 13. The plug 3 is then removed to permit the water pipe to be connected to the tube 2.

The bowl 14 has a narrow rearwardly projecting portion 25 within which the removable nozzle 26 of spout 6 depends, said nozzle carrying the spring seated valve 7. The bowl portion 25 has a rear wall formed with a recess 27 in its upper edge in which is seated a depending lug 28 provided on the spout 6. Carried by the lower end of the tube 2 is a hook 29 and pivoted at 31 to

and between spaced ribs 31 provided on the rear bottom portion of bowl 14 is a hooked lever 32 whose hooked rear end engages behind the hook 19. Threaded through the lever 32 rearwardly of its pivot 30 is a set screw 33 arranged to impinge the bottom of bowl 14. Upon engagement of lug 28 in recess 27 and engagement of the hooked end of lever 32 behind hook 29, the set screw 33 may be threaded upwardly to force the tank upwardly to tightly seat lug 28 in recess 27 and to simultaneously swing lever 32 into firm engagement behind hook 29, thereby securely fastening the bowl 14 in place. Accidental retrograde turning of set screw 33 is prevented by a pawl 34 pivoted at 35 to the under side of the forward end of lever 32 and engaging ratchet teeth 36 provided on the upper side of the head 37 of set screw 33.

It is believed that the many advantages of a hog waterer constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of construction may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

1. A hog waterer comprising a bowl having a narrow rear portion, a fixture including a vertical tube having a water inlet and provided with a forwardly extending discharge spout, said spout having an outlet nozzle depending within the narrow rear portion of the bowl and having a downwardly seating spring-seated cut-off valve provided with a downwardly projecting stem, means to rigidly secure said fixture to a support, means rigidly mounting the bowl on the fixture, a horizontal pivot pin supported by the side walls of said narrow rear bowl portion below and forwardly of said spout, a forwardly inclined plate pivoted at its rear edge on said pivot pin and having a rigid rearwardly projecting lever engaged with the lower end of the valve stem, said plate being elongated transversely of the bowl and having a straight downturned forward edge portion, and a straight bar fixed on the top of the bowl and extending transversely of the latter with its forward edge disposed parallel with and slightly rearwardly of the downturned forward edge portion of said plate.

2. A hog waterer comprising a bowl having a narrow rear portion, a fixture including a vertical tube having a water inlet and provided with a forwardly extending discharge spout, said spout having an outlet nozzle depending within the narrow rear portion of the bowl and having a downwardly seating spring-seated cut-off valve provided with a downwardly projecting stem, means to rigidly secure said fixture to a support, means rigidly mounting the bowl on the fixture, a horizontal pivot pin supported by the side walls of said narrow rear bowl portion below and forwardly of said spout, a forwardly inclined plate pivoted at its rear edge on said pivot pin and having a rigid rearwardly projecting lever engaged with the lower end of the valve stem, said plate being elongated transversely of the bowl and having a straight downturned forward edge portion, and a straight bar fixed on the top of the bowl and extending transversely of the latter with its forward edge disposed parallel with and slightly rearwardly of the downturned forward edge portion of said plate, said bowl mounting means including cooperating elements on the discharge spout and the top of the bowl, and further cooperating elements on the bottom of the bowl and the lower end of the tube.

3. A hog waterer comprising a bowl having a narrow rear portion, a fixture including a vertical tube having a water inlet and provided with a forwardly extending discharge spout, said spout having an outlet nozzle depending within the narrow rear portion of the bowl and having a downwardly seating spring-seated cut-off valve provided with a downwardly projecting stem, means to rigidly secure said fixture to a support, means rigidly mounting the bowl on the fixture, a horizontal pivot pin supported by the side walls of said narrow rear bowl portion below and forwardly of said spout, a forwardly inclined plate pivoted at its rear edge on said pivot pin and having a rigid rearwardly projecting lever engaged with the lower end of the valve stem, said plate being elongated transversely of the bowl and having a straight downturned forward edge portion, and a straight bar fixed on the top of the bowl and extending transversely of the latter with its forward edge disposed parallel with and slightly rearwardly of the downturned forward edge portion of said plate, said bowl mounting means including cooperating elements on the discharge spout and the top of the bowl, and further cooperating elements on the bottom of the bowl and the lower end of the tube, the first-named cooperating elements including a lug depending from the spout, and a recess in the upper edge of the rear wall of said narrow bowl portion in which said lug is seated.

4. A hog waterer comprising a bowl having a narrow rear portion, a fixture including a vertical tube having a water inlet and provided with a forwardly extending discharge spout, said spout having an outlet nozzle depending within the narrow rear portion of the bowl and having a downwardly seating spring-seated cut-off valve provided with a downwardly projecting stem, means to rigidly secure said fixture to a support, means rigidly mounting the bowl on the fixture, a horizontal pivot pin supported by the side walls of said narrow rear bowl portion below and forwardly of said spout, a forwardly inclined plate pivoted at its rear edge on said pivot pin and having a rigid rearwardly projecting lever engaged with the lower end of the valve stem, said plate being elongated transversely of the bowl and having a straight downturned forward edge portion, and a straight bar fixed on the top of the bowl and extending transversely of the latter with its forward edge disposed parallel with and slightly rearwardly of the downturned forward edge portion of said plate, said bowl mounting means including cooperating elements on the discharge spout and the top of the bowl and further cooperating elements on the bottom of the bowl and the lower end of the tube, the first-named cooperating elements including a lug depending from the spout, and a recess in the upper edge of the rear wall of said narrow bowl portion in which said lug is seated, the second-named cooperating elements including a hook carried by the lower end of the tube and a hooked lever engaged behind said hook and pivoted on the bottom of the bowl, and means to force the tank upwardly and simultaneously swing the rear end of the hooked lever downwardly to tightly seat the lug in said recess and to simultaneously tightly engage the hooked lever behind said hook on the tube.

JOHN P. EISCHENS.