

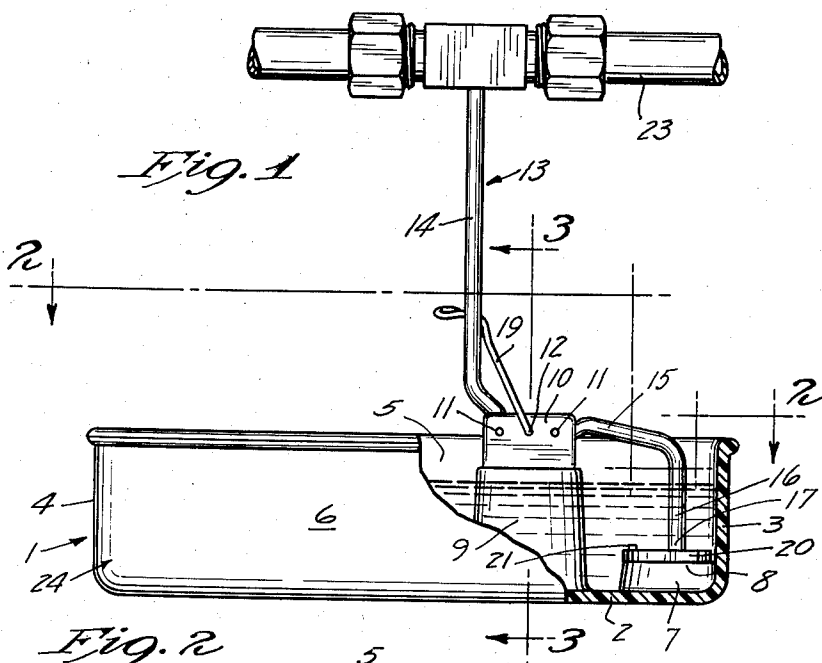
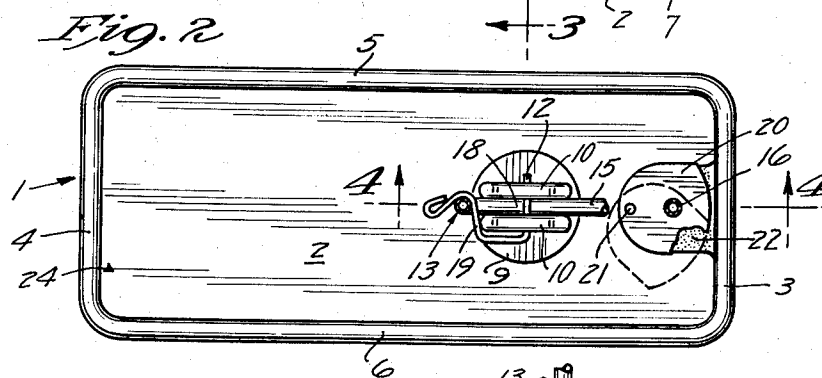
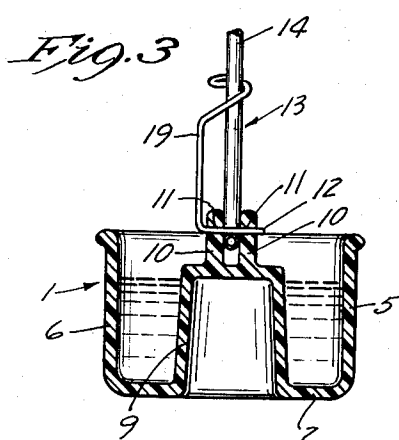
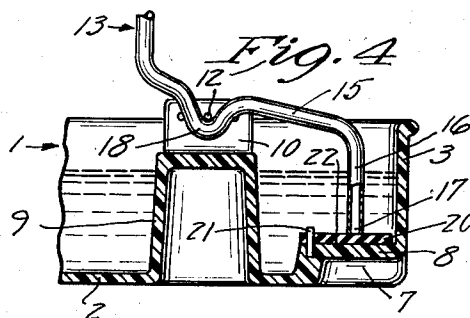
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DRINKING FOUNTAIN FOR POULTRY AND THE LIKE

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DRINKING FOUNTAIN FOR POULTRY AND THE LIKE

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1 Claim. (Cl. 137-408)

My invention relates to improvements in drinking fountains for poultry and the like, and has for its primary object the provision of a device of the class described which incorporates a minimum of working parts, and hence is relatively inexpensive to produce and yet is rugged and durable in construction.

A further object of my invention is the provision of a device of the class described which includes a bowl, a relatively rigid conduit adapted to be connected to a source of fluid under pressure and terminating in a discharge end position to discharge liquid into the bowl, means intermediate the center of the bowl and a side wall portion thereof mounting said bowl to said conduit for pivotal movements on a generally horizontal axis, and a sealing member carried by said bowl and movable into sealing engagement with the discharge end of said conduit during pivotal movement of the bowl in one direction responsive to accumulation of a predetermined quantity of liquid in said bowl.

A further object of my invention is the provision of a device of the class immediately above described in which the discharge end of said conduit terminates within the bowl intermediate said pivotal mounting means and the adjacent side of said bowl, said conduit opening downwardly in closely spaced relation to a horizontally disposed bottom portion of said bowl, said sealing means being mounted on said bottom portion.

A still further object of my invention is the provision of a device of the class immediately above described in which said sealing member is mounted for movements generally transversely of said discharge opening, whereby different surface portions of said sealing member may be moved into register with said discharge opening to compensate for wear.

A still further object of my invention is the provision of a device of the class immediately above described in which said sealing member comprises a compressible wafer overlying said bottom portion and pivotally secured thereto on a vertical axis laterally spaced from said discharge opening, and in which the sealing member is provided with a pressure sensitive adhesive undersurface which by engagement with said bottom portion retains the entire wafer in a horizontally disposed position between adjusting movements thereof.

A still further object of my invention is the provision of a device of the class generally above described in which the means for mounting said bowl to said conduit for pivotal movements comprises a mounting bracket, carried by and preferably formed as an integral part of said bowl, a horizontally disposed pivot pin carried by said mounting bracket and having overlying engagement with a generally horizontally disposed portion of said conduit upwardly of the discharge end thereof, and a pivot pin anchoring clip extending between said pin and a vertically disposed portion of said conduit upwardly with respect to said pivot pin.

A still further object of my invention is the provision of a device of the class immediately above described in

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which the horizontally disposed portion of said conduit is formed to provide an upwardly opening saddle for the reception of said pivot pin.

A still further object of my invention is the provision of a device of the class immediately above described in which said bracket is provided with a plurality of horizontally disposed apertures for the selective reception of said pivot pin to shift the axis of pivotal movement of said bowl with respect to said conduit discharge opening.

The above and still further objects of my invention will become apparent from the following detailed specification, appended claim and attached drawings.

Referring to the drawings wherein like characters indicate like parts throughout the several views:

Fig. 1 is a view in side elevation of my novel structure, some parts being broken away and some parts shown in section;

Fig. 2 is a sectional view taken substantially on the line 2-2 of Fig. 1;

Fig. 3 is a view in vertical section as seen substantially from the line 3-3 of Fig. 1; and

Fig. 4 is a fragmentary view in vertical section as seen substantially from the line 4-4 of Fig. 2.

Referring with greater particularity to the drawings, the numeral 1 indicates in its entirety a relatively shallow bowl preferably formed from molded plastic or the like and having a bottom 2, end walls 3 and 4 and side walls 5 and 6. As shown particularly by Figs. 1 and 4, the bottom 2 is formed, preferably immediately adjacent the end wall 3, with an upstanding portion 7 having a flat upper surface 8.

Preferably formed integrally with and projecting upwardly from the bottom 2 is a mounting bracket 9 which at its upper end is formed to provide a pair of laterally spaced mounting flanges 10 having a plurality of aligned apertures 11 therethrough for the selective reception of a pivot pin 12 for a purpose which will hereinafter be explained in detail. It will be noted that the mounting bracket 9 and the pivot pin receiving apertures 11 therein are intermediate the longitudinal center of the bowl 1 and the upstanding bottom portion 7.

A relatively rigid conduit 13 has a generally vertically disposed upper portion 14, a generally horizontal intermediate portion 15, and a vertically disposed depending lower end portion 16 which terminates in a discharge opening 17 in closely spaced relation to the flat upper surface 8 of the bottom portion 7. It will be noted that the horizontally disposed intermediate portion 15 of the conduit 13 extends relatively snugly between the mounting flanges 11 beneath the pivot pin 12. As shown particularly in Fig. 4, the conduit 13, intermediate the flanges 11, is formed to provide an upwardly opening saddle 18 for the reception of the pivot pin 12. Also preferably and as shown, one end of the pivot pin 12 is formed to provide an upstanding clip 19 which encompasses the vertically disposed portion 14 of the conduit 13 above the mounting bracket 9, whereby to detachably secure the conduit 13 to the pivot pin 12 against accidental removal.

A relatively flat compressible wafer 20, formed from sponge rubber or the like, is pivotally secured to the flat upper surface 8 of the bottom portion 7, as indicated at 21. It will be noted that the pivotal connection 21 is laterally spaced from the discharge opening 17 of the conduit 13, whereby the compressible wafer 20 may be shifted generally laterally with respect to the discharge end 17 as wear, caused by repeated engagement of said elements, may require. In order to maintain the entire wafer 20 in a horizontal position between adjustments thereof on the pivot 21 and also between intermittent relative raising and lowering movements therebetween and the discharge end 17 of the conduit 13, I preferably provide a pressure sensitive adhesive surface 22 to the

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undersurface of the wafer 20 for engagement with the flat surface 8 of the bottom portion 7.

As shown particularly in Fig. 1, the conduit 13 is adapted to be detachably connected to a source of fluid under pressure 23. When such a connection has been made, obviously the fluid therefrom will flow through the conduit 13 and out the discharge end 17 thereof against the compressible wafer 20 to a point where the bowl 1 has accumulated a sufficient quantity of liquid, normally water, to cause the bowl 1 to rock on the horizontal pivot axis 12, whereby to lower the outer end 24 thereof and raise the opposite end upon which the compressible wafer 20 is mounted. The heavier the end 24 becomes, due to such accumulation of liquid therein, the greater the force exerted by the compressible wafer 20 upon the discharge end 17 of the conduit 13, until finally the flow through the discharge end 17 is terminated. Selective reception of the pivot pin 12 in a given pair of cooperating horizontally disposed apertures 11 shifts the axis of pivotal movement of the bowl 1 with respect to the discharge opening 17 of the conduit 13, whereby to vary the maximum fluid shut-off level of the bowl 1, to compensate for varying conditions of use.

When and if a given surface portion of the compressible wafer 20 has been rendered relatively ineffective, by repeated engagement thereof with the discharge end 17 of the conduit 13, it is but a simple matter to break the seal between the pressure sensitive adhesive surface 22 and the flat top 8 of the upstanding bottom portion 7 and partially rotate same on the pivot axis 21. Thereafter, downward pressure on the wafer 20 re-establishes the engagement between the pressure sensitive adhesive surface 22 and the surface 8. While such adjustments greatly extend the life of the valve-acting compressible wafer 20, it should be clear that, since the wafer 20 is the only part which is subject to any appreciable wear, same may be replaced merely by removal of the pivot pin 21, preferably in the form of a screw.

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My invention has been thoroughly tested and found to be completely satisfactory for the accomplishment of the above objects and while I have shown a preferred embodiment thereof, it should be clear that my invention is capable of modification without departure from the scope and spirit of the appended claim.

What I claim is:

In a device of the class described, an open topped bowl, a relatively rigid conduit tube adapted to be connected to a source of fluid under pressure, said tube having a generally horizontally disposed portion bent to provide an upwardly opening notch-like saddle and a generally vertically disposed discharge end portion terminating within said bowl in closely spaced relation to the bottom of said bowl and adjacent a side wall portion thereof, a compressible sealing member mounted on said bottom of the bowl in underlying relation to the discharge end of said tube, bracket means in said bowl at opposite sides of said saddle, and a horizontally disposed pivot pin mounted in said bracket means and seated in said saddle for supporting said bowl from said saddle for pivotal movements of said bowl in directions to move said compressible sealing member toward and away from sealing engagement with the discharge end of said tube, said pivot pin including an angularly disposed anchoring clip portion engaging said tube in spaced relation to the axis of pivotal movement of said bowl to limit axial movement of said pivot pin relative to said tube and bracket means.

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