Jan. 29, 1935. R. G. FERRIS 1,989,477

ANTILAPPING WATER BOWL

Filed Sept. 6, 1933

Fig. 1

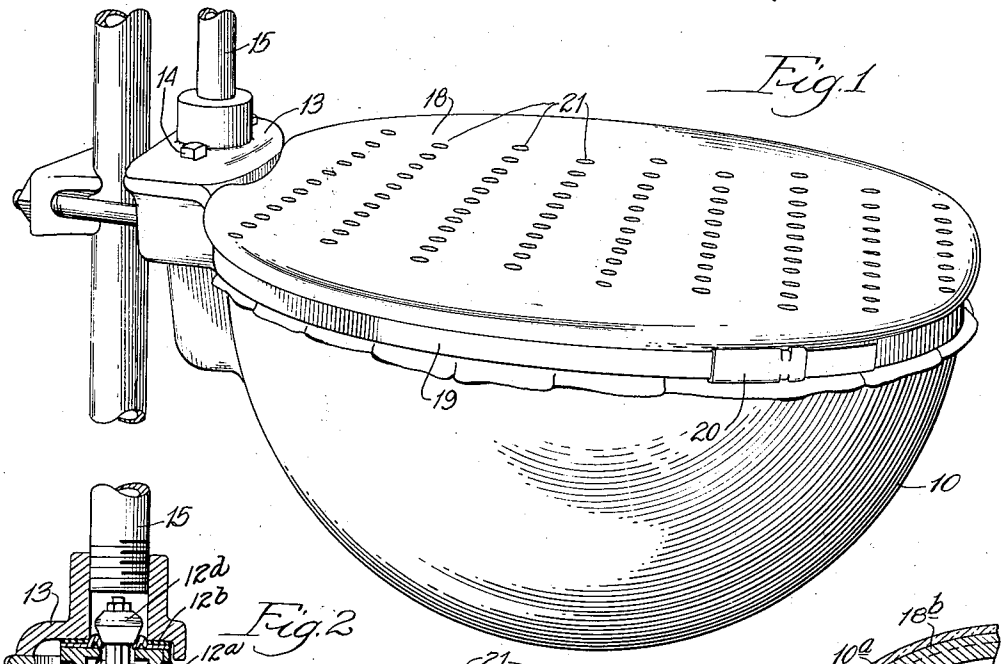


Fig. 2

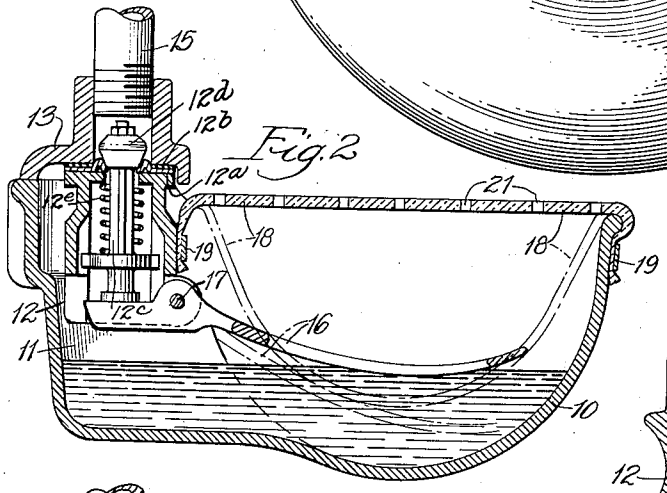


Fig. 3

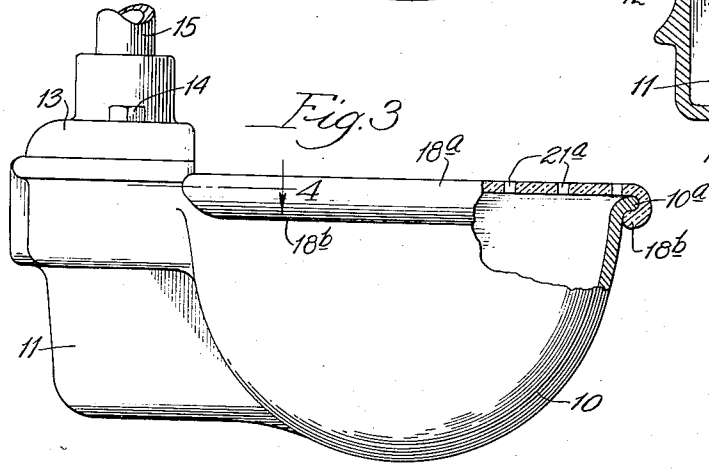
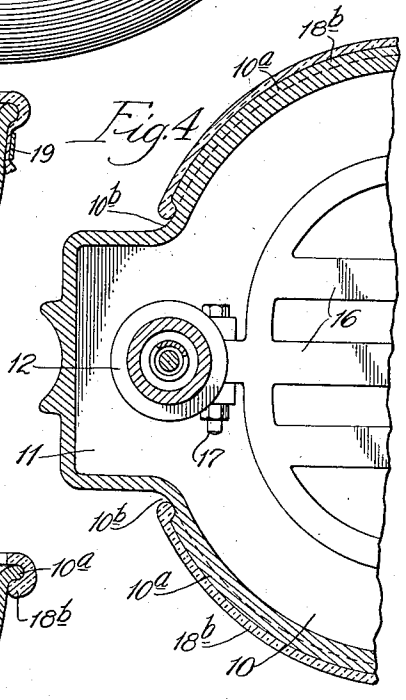


Fig. 4



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UNITED STATES PATENT OFFICE

1,989,477

ANTILAPPING WATER BOWL

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8 Claims. (Cl. 119—75)

This invention relates to water bowls for use in cattle barns, and the like, and particularly to means for keeping the bowls clean, and for preventing cattle from lapping water from the bowls.

Cows sometimes have a habit of lapping water from water bowls with their tongues apparently in a playful mood, and water thrown out of the bowl in this way keeps the manger wet and unsanitary.

An object of this invention is to provide a bowl from which a cow cannot lap water.

Another object is to provide a bowl which will tend to exclude feed, and dust and débris of all kinds from the bowl.

These and other objects, as will hereinafter appear are accomplished by this invention, which is fully described in the following specification and shown in the accompanying drawing, in which—

Figure 1 is a perspective view of a water bowl with my invention applied thereto;

Fig. 2 is a reduced vertical section through the center of the bowl;

Fig. 3 is a side elevation of a modified form of the invention; and

Fig. 4 is a partial horizontal view on the line 4 of Fig. 3.

The embodiment illustrated comprises a water bowl 10 of a well known form, the bowl as shown being substantially semi-spherical and having at one side a chamber 11, in which is secured a valve housing 12 which has a flange 13 (Fig. 1) through which pass screws or bolts 14 by means of which the valve housing is secured in place. A pipe 15 connects to a suitable source of water supply. Above the housing 12 is a valve seat 12^a and a rubber washer 12^b is held between the valve seat and the flange 13. A valve stem 12^c is suitably guided at its lower end, and has a rubber valve 12^d at its upper end, the valve normally being held on its seat by means of a spring 12^e. The valve is operated by means of a paddle 16 which is hingedly mounted at 17 and bears upon the lower end of the valve stem, so that pressure exerted, as by a cow's nose on the outer end of the paddle, lifts the valve off its seat. The paddle is shown in full lines in its normal inoperative position, and is shown in dotted lines when depressed to admit water to the bowl.

The water bowl so far described is used in the form substantially as shown and with various modifications. Some cows acquire the trick of using their tongues to throw water out of a bowl of this type. To prevent this I have placed over the top of the bowl a cover or diaphragm 18 of rubber or the like which may be secured in place by means of a metal band 19, the ends of which are held by a suitable fastener 20. This cover is provided with a series of openings 21. The wall of the bowl is cut to permit the band to pass through it. The rubber cover is not slitted but instead is merely folded under the band. The cover is very soft and flexible and will readily permit this to be done.

For the cow to drink it is necessary for her to place her chin against the cover forcing it down until it comes in contact with the paddle 16 and depressing both the cover and the paddle further to cause the valve to admit water to the bowl. While so held water will rise through the openings 21 so that the cow can drink. To do this, however, she must use enough force in depressing the cover that her mouth will remain closed, and it will be impossible for her to use her tongue to lap the water which has risen into the space above the depressed portion of the cover. The moment she raises her chin enough to permit her to extend her tongue from her mouth the cover will be above the water level, and she will still be unable to lap it.

This cover also serves in a large measure to keep feed, hay, dust and débris of all kind from getting into the bowl so that when such a cover is used, the bowl will remain much cleaner than would otherwise be the case. For example, the cow in eating frequently carries some of her food into the bowl and this feed is washed off by the water. In this case most of this feed will remain above the cover 18, with the result that as she drinks it will be carried into her mouth with the water, and thus be removed permanently from the bowl.

In Figs. 3 and 4 is shown a modified form of the device in which the bowl 10 is provided with an outwardly extending flange 10^a, and the cover 18^a is provided with a thickened bead 18^b which extends around the edge and overlies and engages the flange 10^a so as to be held in place. For this purpose the length of this bead should be normally less than that of the space under the flange so that it will have to be stretched so as to be retained thereon. The flange 10^a is preferably cut away at 10^b to assist in holding the bead in place at this point. The cover 18^a is likewise provided with openings 21^a, and aside from the method of securing it in place on the bowl it is similar in operation to the cover 18 previously described. Both forms of cover are readily removable for cleaning the bowl, and after cleaning are quickly and easily replaceable.

While I have shown and described but a few

embodiments of my invention, it is to be understood that it is capable of many modifications. Changes, therefore, in the construction and arrangement may be made which do not depart from the spirit and scope of the invention as disclosed in the appended claims.

I claim:

1. In combination, a water bowl having a spring-pressed valve and a paddle for operating the valve, and a perforate cover secured over the top of the bowl and paddle and yieldable so that the nose of a cow may depress both the cover and paddle to admit water to the bowl but the cover will prevent the cow from lapping.

2. In combination, a water bowl having a spring-pressed valve and a paddle for operating the valve, and a perforate rubber cover secured over the top of the bowl and paddle and yieldable so that the nose of a cow may depress both the cover and paddle to admit water to the bowl but the cover will prevent the cow from lapping.

3. In combination, a water bowl having a spring-pressed valve and a paddle for operating the valve, and a perforate rubber cover secured over the top of the bowl and over the outer end of the paddle, said cover being yieldable so that the nose of a cow may depress both the cover and paddle to cause water to flow into the bowl but the cover will prevent the cow from lapping.

4. In combination, a water bowl having a spring-pressed valve and a paddle for operating the valve, and a perforate rubber cover secured over the top of the bowl and over the outer end of the paddle, said cover being yieldable so that the nose of a cow may depress both the cover and paddle to cause water to flow into the bowl but the cover will prevent the cow from lapping, the upper edge of the bowl having an outwardly extending flange over which the cover depends, and a band surrounding the depending portion of the cover and bowl to secure the cover over the top of the bowl.

5. In combination, a water bowl having a valve and a paddle for operating the valve, and a perforate rubber cover secured over the top of the bowl and over the outer end of the paddle, said cover being yieldable so that the nose of a cow may depress both the cover and paddle to cause water to flow into the bowl but the cover will prevent the cow from lapping, the upper edge of the bowl having an outwardly extending flange, the edge of the cover having a bead adapted to depend over the edge of the flange of the bowl and to engage the same so as to hold the cover over the top of the bowl.

6. In combination, a water bowl having a spring-pressed valve, a paddle for operating the valve, and a diaphragm pervious to water positioned above the normal water level in the bowl and serving to prevent a cow from lapping the water from the bowl, the diaphragm being adapted to be depressed by the cow's nose when depressing the paddle.

7. In combination, a water bowl having a spring-pressed valve, a paddle for operating the valve, and a diaphragm supported at its periphery and positioned above the normal water level in the bowl and serving to prevent a cow from lapping the water from the bowl, the diaphragm being adapted to be depressed by the cow's nose when depressing the paddle.

8. In combination, a water bowl having a spring-pressed valve, a paddle for operating the valve, and a resilient diaphragm positioned above the normal water level in the bowl and serving to prevent a cow from lapping the water from the bowl, both the diaphragm and the paddle being adapted to be depressed by the cow's nose to admit water to the bowl.

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