No. 816,557. PATENTED APR. 3, 1906.

A. N. CHURCH.

WATERING DEVICE.

APPLICATION FILED SEPT. 18, 1905.

Fig 1

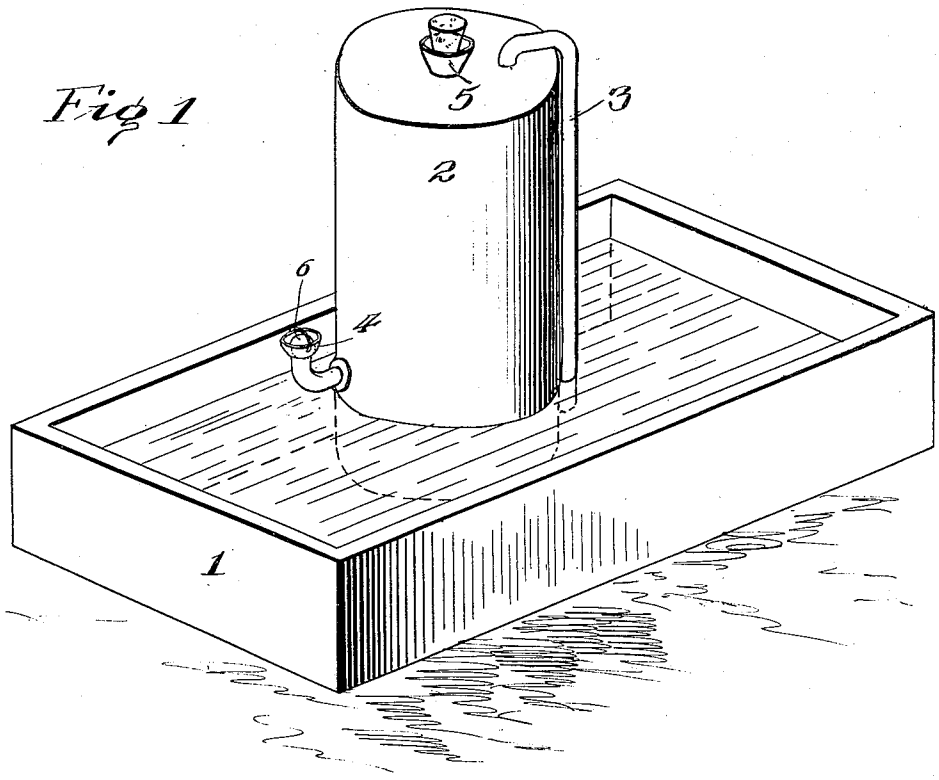
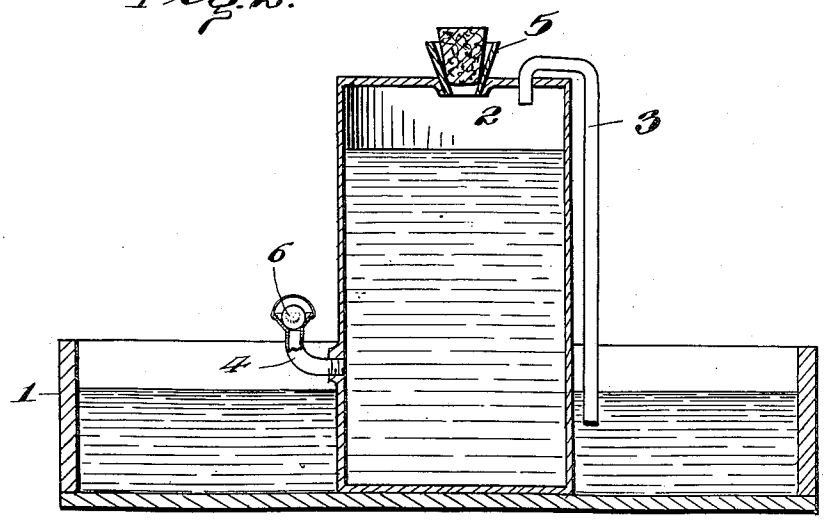


Fig. 2.



Witnesses

Inventor

Alonzo N Church.

By

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UNITED STATES PATENT OFFICE.

ALONZO N. CHURCH, OF BEACON, IOWA.

WATERING DEVICE.

No. 816,557. Specification of Letters Patent. Patented April 3, 1906.

Application filed September 18, 1905. Serial No. 279,062.

To all whom it may concern:

Be it known that I, ALONZO N. CHURCH, a citizen of the United States, residing at Beacon, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Watering Devices, of which the following is a specification.

The object of this invention is to provide an improved watering trough or tank for farm stock in which the level of the water in the tank is automatically maintained at the proper height and in which the supply-reservoir furnishes the water to the tank automatically as soon as the predetermined level in the tank has been lowered, all as will be hereinafter more fully set forth.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view of my improved watering-trough. Fig. 2 is a vertical transverse section thereof.

Corresponding and like parts are referred to in the following description and indicated in both the views of the drawings by the same reference characters.

The tank 1 may be of any desired shape and material according to the particular use for which it is designed. Within the tank 1 is located a supply-reservoir 2, which in the present instance is cylindrical in shape and rises to any height above the tank, according to the capacity it is intended to have. The cylindrical reservoir 2 is provided with an air-inlet pipe 3, which is provided with a crooked upper end returned upon itself and secured in the top of the reservoir. The pipe 3 extends down along the side of the reservoir from its crooked upper end, with its lower end extending below the margin of the tank or trough 1 and with such terminating at the point at which it is desired the level of the water shall be maintained in the tank. The reservoir is also provided with a water-outlet spout 4, which is located in a plane above the outlet end of the pipe 3 and above the normal high-water level. The reservoir is formed in its top with a funnel-shaped feed-opening 5, which may be closed in any suitable manner, the closure therefor, however, being of an air-tight construction.

In practical use the reservoir is first filled and the feed-opening thereof is closed in an air-tight manner. If at that time the water in the tank or trough 1 is above the level of the lower end of the pipe 3, the latter being immersed in the water, no water will flow out of the water-outlet 4; but as soon as the supply-water in the tank or trough 1 has been depleted to such an extent that the level thereof descends to expose the lower end of the pipe 3 air will be admitted to said pipe and establishing an atmospheric condition in the upper end of the reservoir will thereby permit the water to flow therefrom through the outlet 4 into the trough to restore the proper level therein and again submerge the lower end of the pipe 3. So long as this end is submerged no water will flow from the reservoir. This device avoids the necessity of using a spigot or other device, which would require the personal attendance of some one to always maintain the water-level in the tank at the proper height.

The advantages of my improved watering-trough are thus apparent. So long as the supply of water in the reservoir 2 is inexhausted the reservoir will automatically feed the trough and maintain the water in the latter at the proper level. By this means it is not necessary to keep a large amount of water standing in the trough, in which event it would become foul or unclean, as sufficient water can be always maintained in the reservoir to supply the want of the live stock. All that it is necessary to do is to fill the reservoir, and the height thereof can be so regulated in relation to the size of the trough that the latter may be kept filled for a considerable time.

As shown in the drawings, the outlet-spout 4 is curved or turned upwardly and provided with a ball 6, arranged to seal it, said ball being prevented from dislodgment from the mouth of the spout by means of a suitable guard. By this construction the spout will always hold water and will be rendered air-tight and by turning upwardly dripping is prevented.

Having thus described the invention, what is claimed as new is—

A device of the character described, comprising a trough and a reservoir supported within the trough and provided with a funnel-shaped feed-opening 5 and a closure therefor, an air-pipe 3 having its upper end returned upon itself to form a crooked end the extremity of which extends into the top of the reservoir and the said pipe having its other end extending outside of the reservoir

and down along the side of the same into the trough below the upper edge thereof, the said pipe being entirely unobstructed throughout its length and forming an open communication between the interior of the reservoir and the interior of the trough, and an outlet-spout 4 secured to said reservoir, the said spout being curved upwardly at its outer end and extending above the lower end of the pipe 3 and above the normal high-water level and being provided in its outer end with an upwardly-opening ball-valve mechanism and with a guard around the ball.

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

ALONZO N. CHURCH. [L. S.]

Witnesses:
JOHN F. LACEY,
LENA L. ROWE.