(No Model.)

H. A. ROSE.

HOG TROUGH.

No. 443,228. Patented Dec. 23, 1890.

Fig. 1.

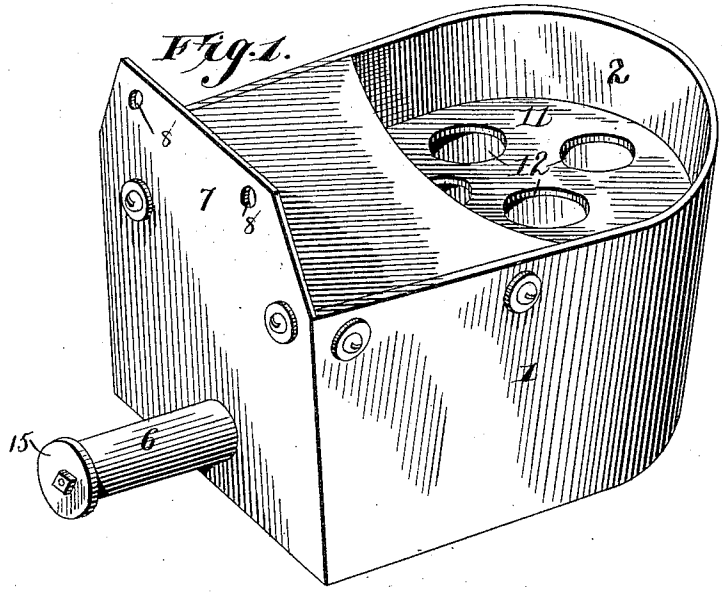
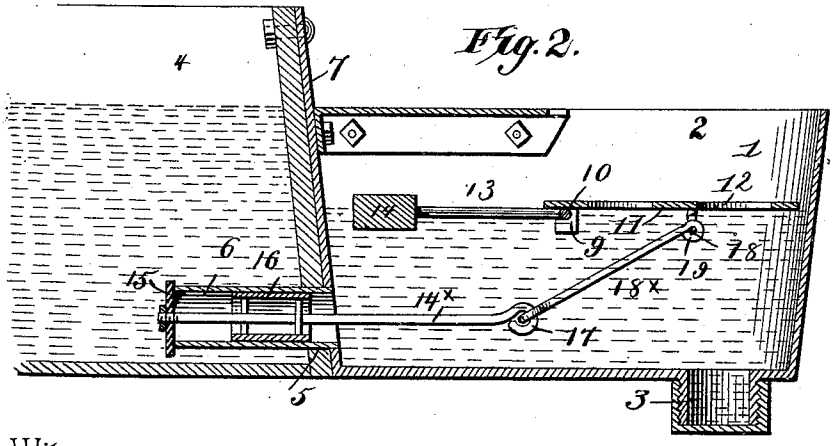


Fig. 2.



Witnesses
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HOWARD A. ROSE, OF SYRACUSE, NEBRASKA.

HOG-TROUGH.

SPECIFICATION forming part of Letters Patent No. 443,228, dated December 23, 1890.

Application filed August 23, 1890. Serial No. 362,823. (No model.)

To all whom it may concern:

Be it known that I, HOWARD A. ROSE, a citizen of the United States, residing at Syracuse, in the county of Otoe and State of Nebraska, have invented a new and useful Hog-Trough, of which the following is a specification.

This invention has relation to hog-troughs; and the objects in view are to provide a trough adapted to be applied to a supply-tank of any kind and to communicate with the trough and to provide means for governing the admission of water to the trough in accordance with the amount consumed by the hog.

With the above objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a perspective of a hog-trough constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section of the same.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the trough, which may be of any desired shape and proportion, and in this instance is substantially elliptical in shape, and is provided with an upper opening 2, below which in the bottom of the trough is located a drain-opening 3.

4 designates an ordinary supply-tank which is provided with an opening 5 near its bottom, through which passes a short pipe 6, leading from the rear end of the trough. The trough is provided at its upper rear end with a securing-plate 7, having perforations 8, through which pass bolts or screws into the tank. In rear of its opening the trough is provided upon the inner side of its opposite walls with U-shaped bearings 9, and in the same there is removably mounted a transversely-disposed rock-shaft 10.

11 designates a plate provided with a series of perforations 12, said plate approximating in shape and size the front end of the trough, and having its rear end secured upon the rock-shaft 10. A pair of arms 13 extend rearwardly from the rock-shaft and are connected by a weighted bar 14, adapted to counterbalance the perforated plate 11.

$14^{\times}$ designates a valve-rod mounted in the supply-pipe leading from the tank, and having its rear end extending into the tank and there provided with a valve 15. A guide-sleeve 16 is mounted for reciprocation in the pipe and at its center is connected to said rod. The inner end of the rod terminates in an eye 17, and is connected to an eye 18, upon the under side of the plate 11, by means of a connecting-rod $18^{\times}$, having eyes 19 for connecting with the eyes 17 and 18 in a loose manner.

The operation of the trough is as follows: In his endeavors to get at the water in the bottom of the tank the hog's snout presses the plate 11 down and consequently elevates the weight 14, and the depression of the plate serving through the medium of the rods $14^{\times}$ and $18^{\times}$ to force the valve away from the end of the pipe, so that as long as the hog is drinking, water is fed from the tank to the trough. When the hog has finished drinking, the weight 14, being heavier than the plate 12, falls and elevates the plate, thus serving through the said rods $14^{\times}$ and $18^{\times}$ to draw the valve to its seat, in which position it is normally retained through the influence of the weight, thus cutting off communication between the tank and trough.

Having described my invention, what I claim is—

The combination, with the supply-tank, of a watering-trough having an opening in its top at the front end, opposite internal bearings at the rear end of the opening, a perforated securing-plate at the rear end of the trough, bolted to the tank, a pipe leading from the tank to the trough and communicating therewith near the lower end of the trough, a rock shaft mounted in the bearings and located above the supply-pipe, a perforated plate secured at its rear end to the rock-shaft and standing into the opening of the trough, a pair of rock-arms extending rearwardly from the shaft, a weighted bar connected to the same, a sleeve mounted for reciprocation in the supply-pipe, a valve-rod secured to the sleeve and extended beyond the same and the pipe into the tank, a valve mounted upon the end of the rod, and a rod loosely connecting the front end of the valve-rod with an eye upon the under side of the perforated plate. substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HOWARD A. ROSE.

Witnesses:

F. E. BROWN,

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