

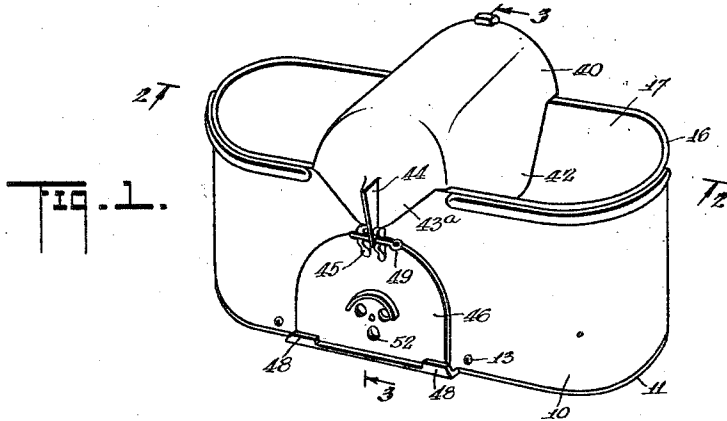
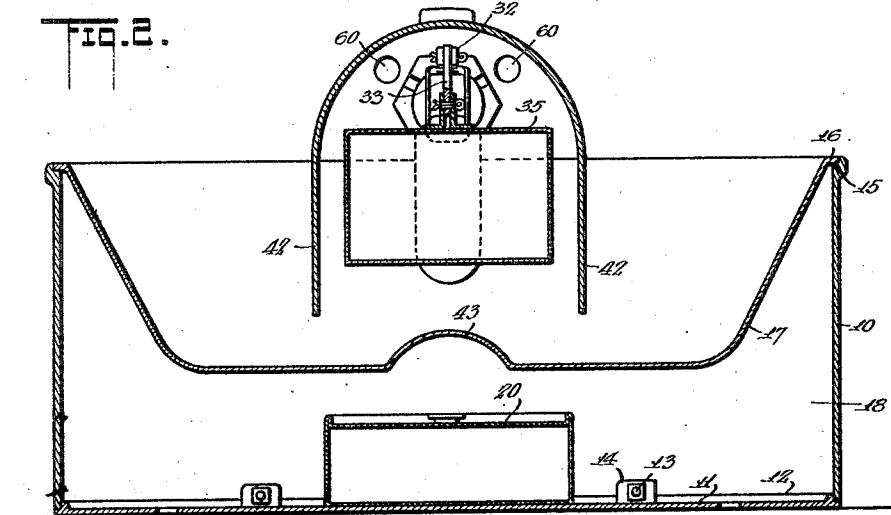
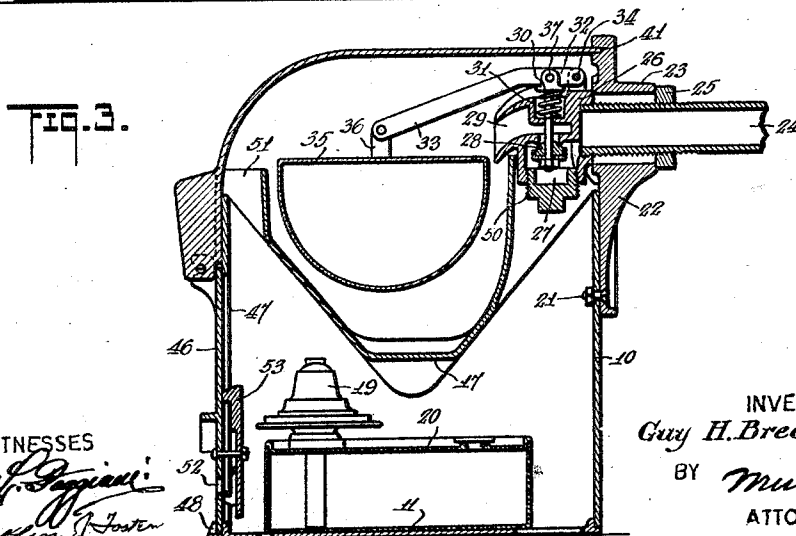
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STOCK FOUNTAIN

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STOCK FOUNTAIN.

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The present invention is concerned with the provision of a fountain adapted to be used by all classes of live stock, and provided with a heating means for preventing the
5 water from freezing in cold weather.

An object of the invention is to provide a stock fountain of this character to which water is admitted from a float control valve, the valve and its associated parts being protected against interference by an accumula-
10 tion of sediment in the fountain trough.

Other objects of the invention are to provide a heated fountain in which a part of the heat utilized is directed about the valve and its associated parts to prevent any
15 danger of the valve freezing.

Other objects of the invention are to provide a device of this character equipped with a self-cleaning valve of a type in which positive closing is assured, and in which there is
20 no danger of a continuous trickle of water causing overflow of the trough.

Still other objects of the invention are to provide a stock fountain of simple, practical construction which will be rugged, durable and efficient in use, and which is well suited
25 to the requirements of economical manufacture.

With the above noted and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter set forth and pointed out
30 in the claim. The invention may be more fully understood from the following description in connection with the accompanying drawings, wherein—

Fig. 1 is a perspective view of a stock fountain embodying the invention.

Fig. 2 is a longitudinal sectional view
40 therethrough on the line 2—2 of Fig. 1.

Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 1.

In the drawings I have shown an open topped container which may be of any appropriate shape, but which has been illustrated as of generally oval shape including a side wall portion 10, and a base portion 11. Preferably the wall portion 10 seats on the
50 edge of the base and is centered by an upwardly projecting flange 12 cast integral with the base. The wall 10 may be secured in position by bolting or otherwise securing it at 13 to lugs 14 projecting upwardly from

the base. The inside upper edges of the
55 walls 10 are grooved as at 15 to provide a seat for the lip 16 of a trough 17. This trough seating in the groove 15, depends into the receptacle 10 and defines with the bottom and side wall of the receptacle, a
60 chamber 18 in which a heating unit may be mounted. The heating unit may be of any convenient or conventional type and has been illustrated as an oil burner 19 mounted upon an oil tank 20.

Bolted as at 21 to the outer face of one of the side walls of the container is a plate-like casting 22 projecting above the top of the container and formed with a cylindrical boss 23 through which the supply pipe 24 for the
70 fountain is adapted to project. This supply pipe may be engaged by a nut 25 bearing against the outer face of the boss, and by a valve body 26 screwed on to the inner end of the pipe and abutting the inner face of the
75 casting 22. The valve body or casing 26 is in effect, supported by the inner end of the pipe, and cooperates with the nut 25 to retain the pipe in proper position.

The water from the pipe 24 enters a chamber 27 in the lower end of the valve casing 26 and is adapted to flow upwardly past a spring pressed valve 28 into a discharge spout 29, delivering into the trough 17. The valve 28 is normally held in seated position
85 by a coiled expansion spring 30 encircling the valve stem and pocketed in a recess in the top of the casing 26. The spring is backed against the bottom of the pocket 31 and acts on a bifurcated collar 32 carried by the upper end of the valve stem. A lever 33
90 is pivoted at one end to the top of the valve casing 26 by a pin 34, and a float valve 35 is pivotally hung from the free end of the lever by an arm 36. Collar 32 straddles the lever
95 33 near the pivoted end of the latter and is pivotally connected thereto as by a pin 37.

A hood 40 conceals and protects the valve and float mechanism. This hood is received at one end in an arcuate notch 41 formed on the inner face of the upper portion of the casting 22. Depending apron portions 42
100 of the hood extend downwardly below the water level in the trough 17 and prevent foreign matter on the surface of the water from reaching the float 35. Downward movement of this float is limited by a raised portion 43 of the trough bottom, so that the
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float can never rest on any slime or sediment which may collect in the bottom of the trough.

The side of the hood opposite the casting 22 is formed with a depending flanged portion 43 overlying the outer face of the container 10 and provided with a lug 44 adapted to enter between a pair of lugs 45 integral with the upper edge of a closure plate 46 of an opening 47 providing access to the heating compartment of the fountain. Door 46 is retained at its lower edge between the side wall 10 and upstanding brackets 48 integral with the base plate 11. A pin or other securing device 49 passed through aligned openings in the lugs 44 and 45 secures both the closure plate 46 and the hood 40 against accidental removal.

Preferably the lower end of the valve body 26 is accommodated in an offset portion 50 of the trough wall, so that it is exposed to the direct heat of the heating element 19. The trough is also shaped to provide a flue 51 at its opposite side through which escaping gases and products of combustion may pass.

Sufficient air to support combustion is assured by the provision of air inlets 52 in the closure plate 46, these inlets being backed by a spaced baffle plate 53 secured to the inner face of the closure plate. The baffle plate prevents the lamp from being extinguished by the wind.

The operation of the device is substantially as follows. The level of the water in the trough is regulated by the action of the float 35 which controls the valve 28. It is noted that the valve is so arranged that not only the pressure of the water behind it, but also the spring 30 tend to hold it in closed position. Coupled with this is the action of the float itself when the trough is filled to the desired level.

As the water level is lowered in the

trough, float 35 drops, depressing the spring 30 and positively opening the valve 28 to permit additional water to flow into the trough.

The heating element which may if desired be bodily removed and replaced through the top 47 upon removal of the closure plate 46 serves to maintain the contents of the trough at a temperature above freezing. The valve is prevented from freezing partially by the direct action of the hot air from the heating chamber and partially by the fact that the products of combustion escaping up the flue 51 are led across under the dome, over the valve mechanism and escape through vents 60 in the casting 22.

All of the parts of the fountain may be conveniently removed, cleaned and replaced if desired, and the assembly of the device is an extremely simple matter.

Obviously numerous changes and alterations might be made in the general form and arrangement of the parts described without departing from the invention. Hence I do not wish to limit myself to the details set forth, but shall consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claim.

I claim:

A stock fountain including an open topped receptacle in the bottom of which a heating unit is adapted to be disposed, a trough mounted in the receptacle and comprising a cover therefor, a valve controlled discharge pipe delivering water to the trough, a float controlling the valve, a hood extending transversely over the trough and housing the float and valve, a door in the receptacle permitting access to the heating unit, said door and dome overlapping and being secured against accidental displacement by a common securing device.

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