No. 822,440. PATENTED JUNE 5, 1906.

J. FALK.

STOCK FOUNTAIN.

APPLICATION FILED JULY 13, 1905.

Fig. 1.

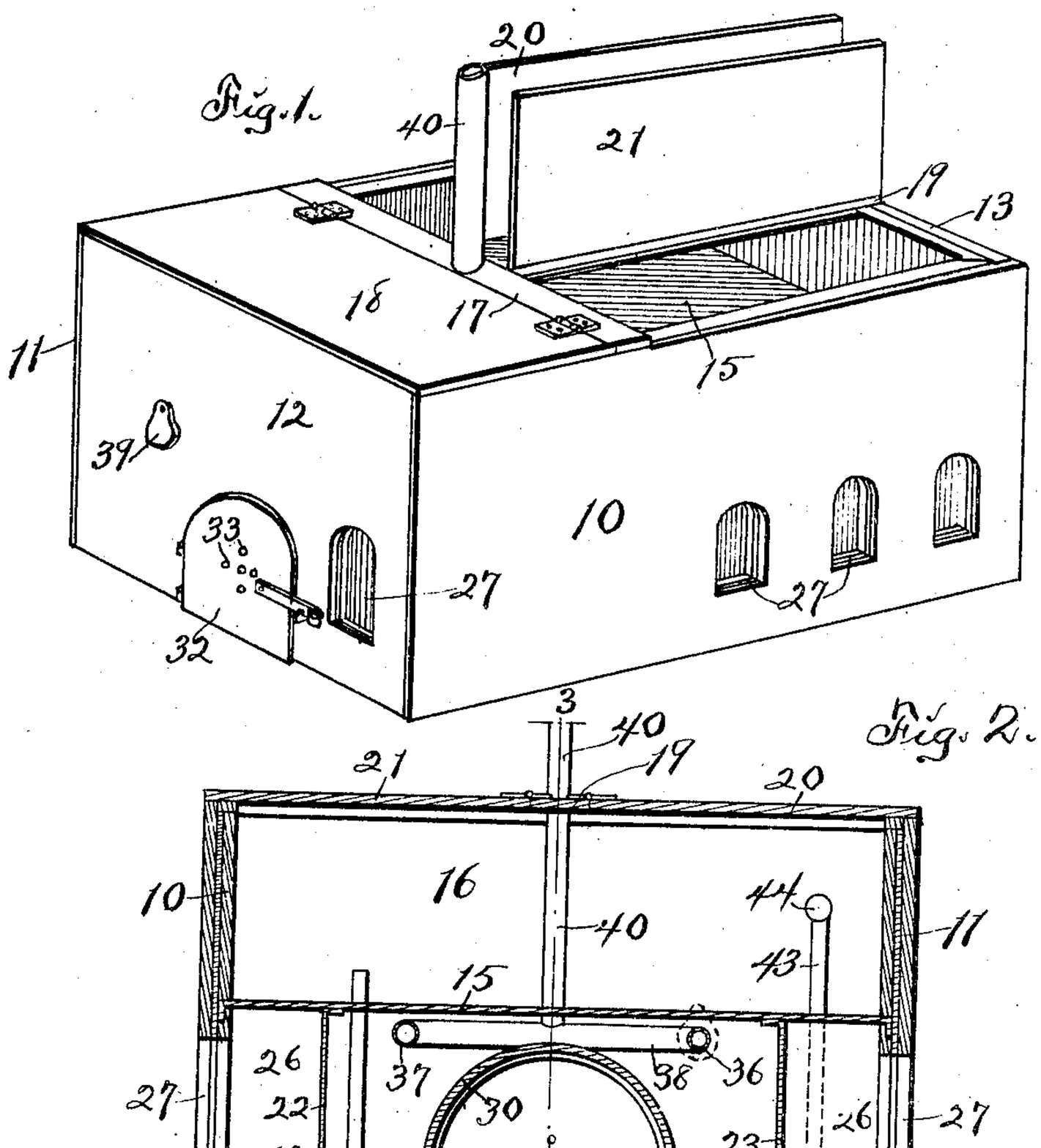

Fig. 2.

Fig. 3.

Attest:
L. L. Leibrock.
W. E. Ellis

Inventor:
John Falk,
By Sheldon & Sheldon
Att'ys

UNITED STATES PATENT OFFICE.

JOHN FALK, OF DEWITT, IOWA.

STOCK-FOUNTAIN.

No. 822,440. Specification of Letters Patent. Patented June 5, 1906.

Application filed July 13, 1905. Serial No. 269,557.

To all whom it may concern:

Be it known that I, JOHN FALK, a citizen of the United States of America, and a resident of Dewitt, Clinton county, Iowa, have invented a new and useful Stock-Fountain, of which the following is a specification.

The object of this invention is to provide improved means for containing water for use of live stock.

A further object of this invention is to provide improved means for warming and keeping warm water to be used by live stock.

A further object of this invention is to provide improved means for preventing freezing of water in a stock-fountain.

A further object of this invention is to provide an improved construction for stock-fountains.

My invention consists in the construction, arrangement, and combination of elements hereinafter set forth, pointed out in my claims, and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective of the complete device, two of the tank-covers being opened to provide access to water therein. Fig. 2 is a cross-section on the indicated line 2 2 of Fig. 3. Fig. 3 is a longitudinal section on the indicated line 3 3 of Fig. 2.

In the construction of the device as shown the numerals 10 11 designate side walls, and 12 13 end walls, of a casing or inclosure, which walls may be constructed in any desired manner and rigidly connected at their ends to form a parallelogram. The walls should be made of such material and in such manner as to resist cold or retain heat, such as of double layers of wood or metal separated by a layer of packing or mineral wool. A floor 15 is mounted horizontally between and fixed at its margins to the walls intermediate of the upper and lower margins of said walls, and the joints between said floor and the walls are water-tight to produce a water-tank 16. A cross-bar 17 is mounted on and connects the side walls 10 11 intermediate of the end walls, and a door or cover 18 is hinged to said cross-bar and serves to close a portion of the tank 16. A bar 19 leads from the cross-bar 17 to the end wall 13, and doors 20 21 are hinged to said bar 19 and serve to close the remainder of the tank 16 at times and are adapted to be opened, as shown, in order that large domestic animals—such as cattle, horses, and mules—may have access to and drink from said tank. Longitudinal partitions 22 23 are mounted vertically in the device and lead from the end wall 12 to a point near the end wall 13, and the rear ends of said partitions are connected by a transverse partition 24. A floor 25 connects the lower margins of the partitions 22, 23, and 24 to the lower marginal portions of the walls and is parallel with the floor 15. The joints between the partitions 22, 23, and 24 and the walls and the floor 25 are water-tight to produce a tank 26. Openings 27 are formed in the walls, as shown, in order that small domestic animals—such as swine, sheep, and goats, and fowls, such as poultry and pigeons may have access to and drink from the tank 26. A base-floor 28 is fixed to and connects the lower margins of all the walls and is cut away at 29 to form a furnace-opening. A furnace-arch 30 is fixed to, arches from, and connects the margins of the floor 28 on opposite sides of the opening 29, and a crown-sheet 31 closes the rear end of said arch, the forward end of said arch being fixed to the end wall 12. A door 32 in the end wall 12 provides access to the furnace or fire-box for stoking or cleaning, and draft-ports 33 in said door provide the necessary atmospheric air to promote combustion of fuel in said fire-box. A smoke-flue 34 extends rearwardly from the fire-box through the crown-sheet 31 and communicates with the central portion of a cross-flue 35, extending transversely in the space between the crown-sheet and the transverse partition 24. Smoke-flues 36 37 lead upward from the ends of the cross-flue 35 and extend forward immediately beneath the floor 15 to communication with end portions of a cross-flue 38. The flue 36 extends beyond the cross-flue 38 through the end wall 12 and is normally closed by a valve 39, to provide means for cleaning it, and for the same reason the flue 37 extends rearward through the end wall 13 and is closed by a similar valve. (Not shown.) A chimney 40 communicates with and rises from the central portion of the cross-flue 38, through the floor 15 and cross-bar 17, and consequently through the tank 16. The chimney 40 may be made in separable sections, if desired. A drainage-pipe 41, controlled by a valve, is provided for the tank 16, and a similar valve-controlled pipe 42 is provided for the tank 26. A supply-pipe 43, controlled by a float-valve 44, leads from a source of water-supply (not shown) through the floors 28, 25, and 15 and into the tank 16 and is adapted to sup-

ply water to said tank. A pipe 45 leads from the tank 16 through the floor 15 and laterally above the floor 28 and vertically through the floor 25 and is controlled by a float-valve 46 at its terminal within the tank 26. The terminal of the pipe 45 is in a plane slightly lower than the lower ends of the openings 27 in order that the float-valve may prevent overflow of the tank 26 through said openings, and the initial end of said pipe is in a plane above the bottom of the tank 16 in order that said pipe may not exhaust the supply of water in the upper tank and is below the terminal of the supply-pipe 43 in order that the tank 26 may be supplied with water constantly through the operation of the float-valve 44.

In the practical use of my device heat is radiated from the fire-box and flues and warms the water in the tanks, thus preventing freezing of said water and providing drink at the desired temperature for domestic animals.

I claim as my invention—

1. A stock-fountain, comprising tanks one above the other, a furnace centrally located in respect of the lower tank and beneath the upper tank, and smoke-flues leading from said furnace adjacent the lower tank and through the upper tank.

2. A stock-fountain, comprising upper and lower tanks, a valve-controlled supply-pipe having its terminal in the upper tank, a valve-controlled pipe leading from the upper tank to the lower tank, means of access for live stock to said tanks, and means for heating said tanks.

3. A stock-fountain, comprising an upper tank and means for supplying water thereto, a U-shaped lower tank beneath the upper tank, water communication between said tanks, a furnace between the arms of the lower tank, smoke-flues leading from said furnace into the space between the furnace and tanks and extending through the upper tank, and means of access for live stock to said tanks.

4. A stock-fountain, comprising an upper tank and means for supplying water thereto, a U-shaped lower tank beneath the upper tank, water communication between said tanks, a furnace between the arms of the lower tank, smoke-flues leading from said furnace into the space between the furnace and tanks and extending through the upper tank, means of access to said flues whereby they may be cleaned, and means of access for live stock to said tanks.

5. A stock-fountain, comprising an upper tank and means for supplying water thereto, a drainage-pipe leading from said upper tank, a U-shaped lower tank beneath the upper tank, water communication between said tanks, a drainage-pipe leading from said lower tank, a furnace between the arms of the lower tank and beneath the upper tank and spaced apart from both tanks, smoke-flues leading from said furnace into the space between the furnace and tanks and extending through the upper tank, means of access to said flues whereby they may be cleaned and means of access for live stock to said tanks.

Signed by me at Dewitt, Iowa, this 17th day of February, 1905.

JOHN FALK.

Witnesses:
A. W. JOHNSON,
E. CHRIS SVANFEN.