T. S. DOBBS.

AGRICULTURAL BOILER.

No. 190,424. Patented May 8, 1877.

Fig. 1

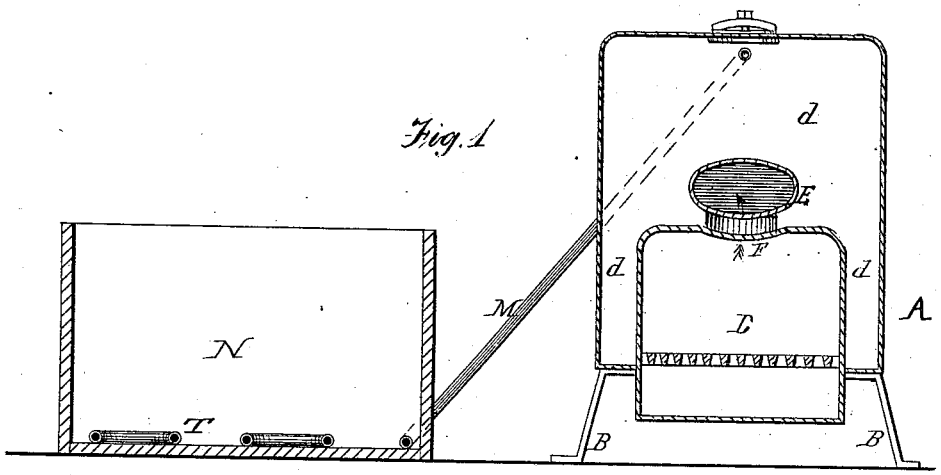


Fig. 2

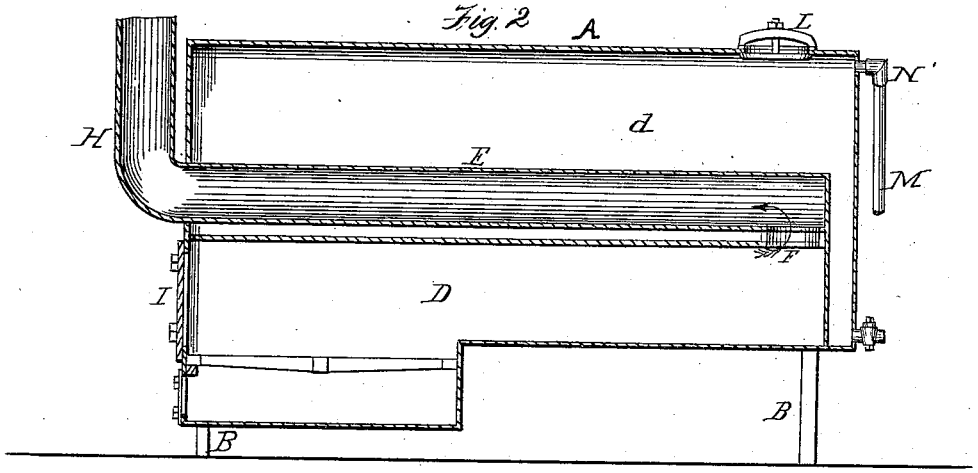
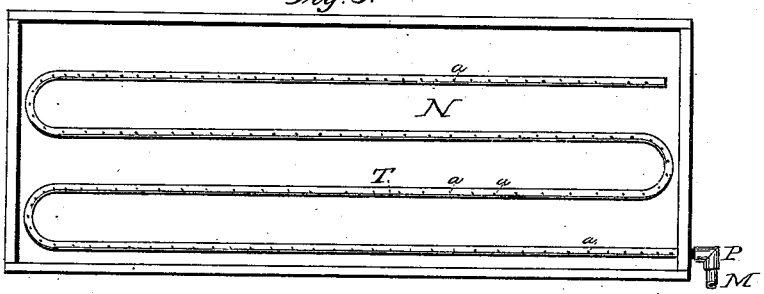


Fig. 3.



Witnesses
Chas. J. Gill
" N. C. Robinson

Inventor
Thomas S. Dobbs
by his Attys.
Cox & Cox

UNITED STATES PATENT OFFICE.

THOMAS S. DOBBS, OF LEXINGTON, OHIO.

IMPROVEMENT IN AGRICULTURAL BOILERS.

Specification forming part of Letters Patent No. **190,424**, dated May 8, 1877; application filed March 3, 1877.

To all whom it may concern:

Be it known that I, THOMAS S. DOBBS, of Lexington, in the county of Richland and State of Ohio, have invented a new and useful Improvement in Agricultural Boilers, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improvement in agricultural boilers; and consists in the mechanism hereinafter specifically described, the object being to provide a suitable device for the use of agriculturists.

Figure 1 is a transverse section of a device embodying the elements of the invention. Fig. 2 is a central vertical longitudinal section of the heater, and Fig. 3 a plan view of the food-tank.

In the accompanying drawings, A represents the heater, in the present instance in the form of a parallelogram, and sustained on legs B. In the lower interior portion of the heater is constructed the furnace D, which extends rearward, and is of such dimensions as to permit a space between its sides and end and the corresponding portions of the heater, being separated therefrom by the surrounding wall of the furnace. Immediately above, and extending horizontally with, the furnace is provided the smoke-flue E, connected with the same at a single point by the perpendicular flue F, and having its other parts properly separated from the upper surface of the furnace to afford a space for the passage of water. The products of combustion pass from the fire-chamber up the flue F to the flue E, through which they issue to the outlet H at the front face of the heater, immediately above the door I, which is provided for the entrance of fuel.

The space between and above the furnace D and flue E, and separating the sides and end of the heater from the like parts of the furnace, comprises the water-tank *d*, and it is obvious that by this arrangement a greater heating-surface is afforded than in the boilers in common use. In the upper surface of the heater, is furnished an aperture, L, through which water is passed to the tank *d*. To the upper rear end of the heater is secured one end of the steam-pipe M by the elbow N′, the other end of which pipe depends downward and outward, and is connected to the food-tank N at its lower rear end by an elbow, P, to which is attached one end of the pipe T. This pipe is placed in coils in the lower portion of the tank N, and is provided with apertures *a*, to permit the egress of steam passing from the water-tank to the food. Thus jets of steam are furnished all over the floor of the tank, thereby thoroughly performing the object of the invention.

It is obvious that the food-tank may be constructed in any preferable form, and that it can be detached from the boiler when it is simply desired to heat water, or to use the furnace for other purposes. It is also obvious that by having the smoke-flue at the front portion of the device, a greater heating-surface is afforded, and that the smoke could be drawn back to the furnace again, and thereby save fuel.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The water-tank *d*, as set forth, in combination with the pipe M and horizontal coiled pipe T, which is provided with apertures, and situated in the food-tank N, substantially as set forth.

2. The heater A, provided with furnace D, horizontal smoke-flue E, and water-tank *d*, in combination with the pipe M and food-tank N, furnished with the horizontal coiled pipe T, provided with suitable apertures for emitting steam, substantially as set forth.

In testimony that I claim the foregoing improvement in agricultural boilers, as above described, I have hereunto set my hand this 24th day of February, 1877.

THOMAS S. DOBBS.

Witnesses:

H. D. B. WILLIAMS,

T. E. BARROW.