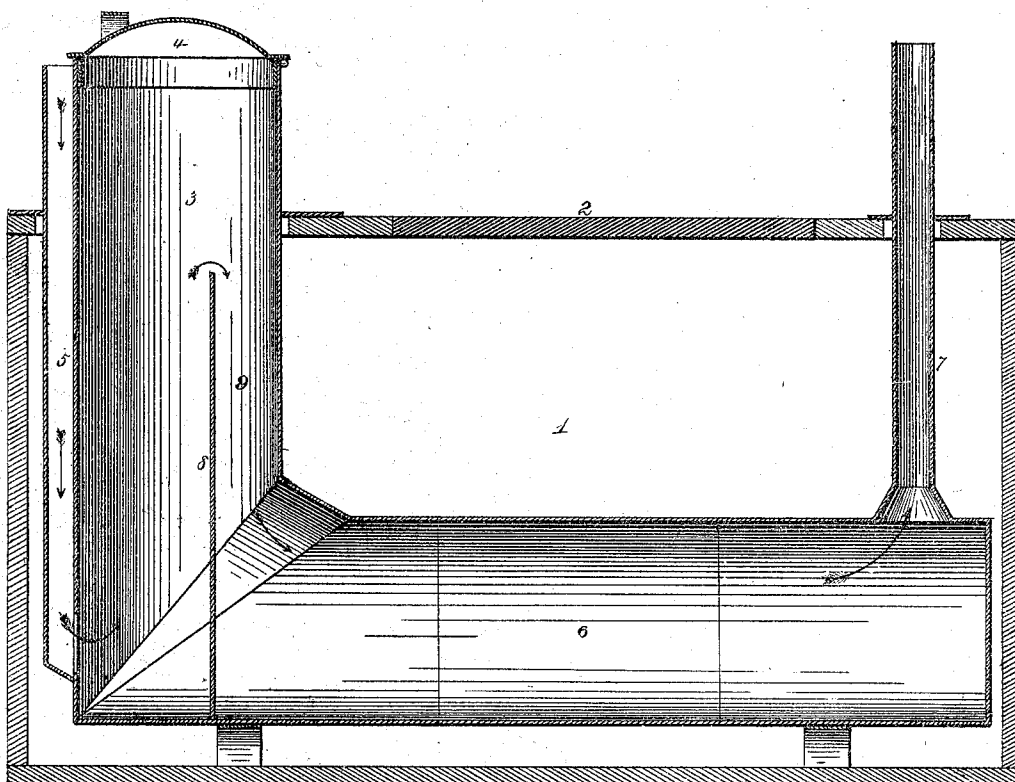


C. M. CLOUD.
Agricultural Boilers.

No. 142,326.

Patented September 2, 1873.



WITNESSES.

J. Dennis
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INVENTOR.

Charles M. Cloud
By Daniel Breed Atty.

UNITED STATES PATENT OFFICE.

CHARLES M. CLOUD, OF GRINNELL, IOWA.

IMPROVEMENT IN AGRICULTURAL BOILERS.

Specification forming part of Letters Patent No. **142,326**, dated September 2, 1873; application filed May 26, 1873.

To all whom it may concern:

Be it known that I, CHARLES M. CLOUD, of Grinnell, Poweshiek county, Iowa, have invented certain new and useful Improvements in Feed-Boilers, of which the following is a specification:

The nature of my invention relates to an improvement in boilers for boiling feed for stock; and it consists in so constructing the heater that the flue, or part through which the products of combustion pass, shall extend through the box, barrel, or other receptacle in which the feed is placed, and raise the water contained therein to a boiling-point, as will be more fully described hereafter.

The accompanying drawing represents a longitudinal section of my invention.

1 represents a wooden box, of any desired shape or size, having a lid or cover, 2, for inserting and removing the feed which is to be cooked. Placed in this box is the heating device, consisting of the vertical pipe 3, provided with the cover 4 for inserting the fuel, a draft-tube, 5, extending down so as to supply the fire with air, an extended heating-surface, 6, which rests near the bottom of the box in contact with the feed therein, and a chimney, 7.

The feed having been prepared and placed in the box around the pipe or cylinder 6, the fire is lighted in the pipe 3, and the heat, in escaping out through the pipe 6, raises the water with which the feed is mixed to a boiling-point.

Where it is desired to increase the heating effect and insure a more perfect combustion of the fuel, a partition, 8, is placed in the pipe, extending upward any suitable distance, so as to form a flue, 9, through which the heat and smoke must pass before it reaches the cylinder 6. This partition may or may not be used, just as may be desired, and may be made to slide in grooves, so that it can be taken out at will.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the box and the heater, consisting of the draft-pipe 5, vertical pipe 3, cylinder 6, and chimney 7, substantially as shown and described.

CHARLES M. CLOUD.

Witnesses:

R. M. HAINES,
WM. HIRONS.