M. GORE.

Agricultural Boiler.

No. 103,870. Patented June 7, 1870.

Fig. 1.

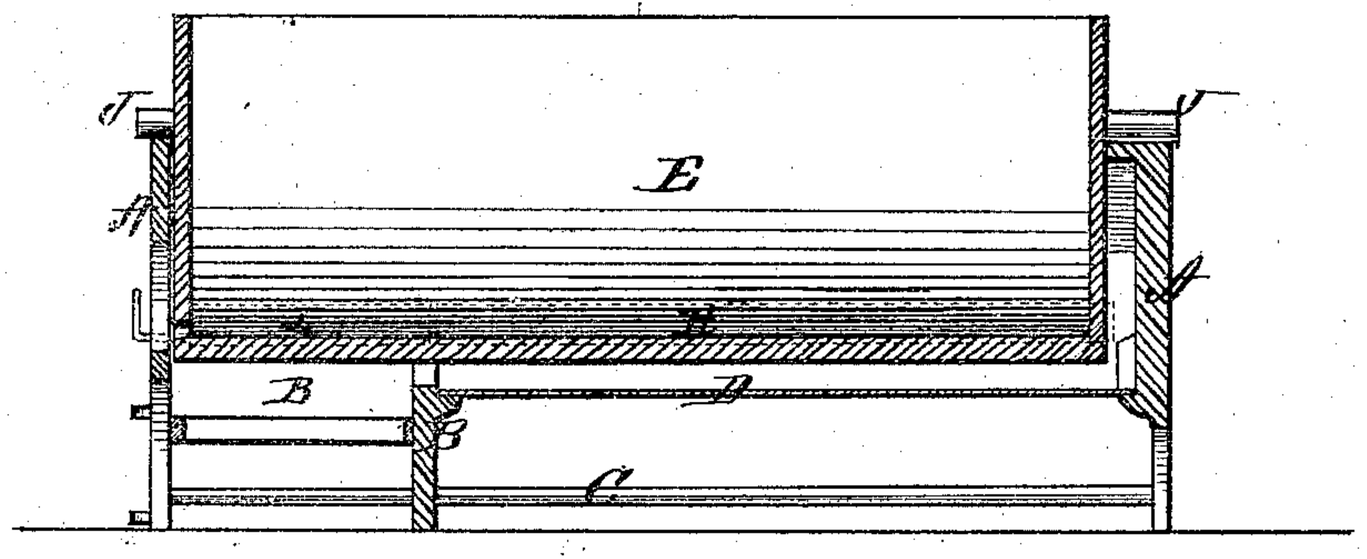


Fig. 2.

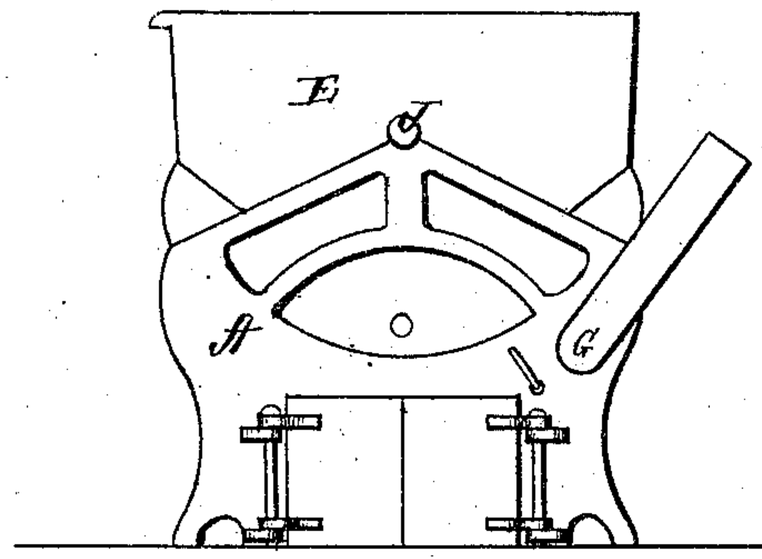
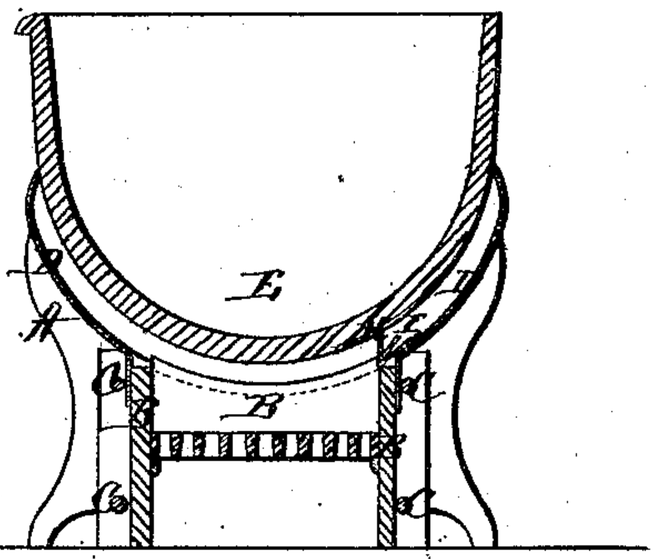


Fig. 3.



Witnesses:

C. L. Curtis.

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per

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Atty.

United States Patent Office.

MYRON GORE, OF BATAVIA, ILLINOIS.

Letters Patent No. 103,870, *dated June* 7, 1870.

IMPROVEMENT IN BOILERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, MYRON GORE, of Batavia, in the county of Kane and in the State of Illinois, have invented certain new and useful Improvements in Furnace and Boiler; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of an "improved furnace and boiler" for preparing feed, or other purposes.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section;

Figure 2, a front view; and

Figure 3, a transverse vertical section of my improved furnace and boiler.

The arch of my furnace is composed of five cast pieces, the two end pieces, A A, and the three pieces, B B, forming the sides and back of the fire-box, all held together by bolts, C C, running the whole length of the arch, said bolts being provided with shoulders, on the inside, to come against the fire-box and the back end plate, and with nuts on the outer ends.

Between the end pieces A A is fastened a sheet-iron shell, D, of suitable size and shape to contain the boiler E, which may be made in any manner and dimensions desired. The edges of the shell D should come close to the sides of the boiler, so that the smoke and heat cannot escape between, and between the shell and the boiler is thus formed a chamber or flue, allowing the heat to come in contact with the boiler, the smoke passing out through the pipe G, in the front end piece.

In the shell D is a partition, H, arranged between the upper side edge of the fire-box and the pipe G, which partition runs the entire length of the arch, and comes up against the bottom of the boiler E, thus causing the heat and smoke to pass to the back end of the boiler, on one side of the division, and come forward again on the other, to pass out through the pipe G, in its course passing around the back end of the boiler.

The damper I is so arranged that it forms part of the partition H, when up, and, when down, lets the fire take a short cut up the stove-pipe.

The boiler E may, as already stated, be of any shape and dimensions that may be desired, and provided with journals, J J, at its ends, to rest in depressions or recesses on the end pieces A A.

This furnace and boiler are perfectly portable, and can readily be taken to any place where it is desired to use the same, either for cooking feed, as a scalding vat, or for any other purpose.

The boiler I construct of cast-iron, or any sheet metal, in a long form, either flat or rounded at the ends, of such depth and length as are best suited to the work required.

Having thus fully described my invention,

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

1. The furnace, composed of the end pieces A A, fire-box sides and back B B, and sheet-iron shell D, all fastened together by the bolts C C, substantially as and for the purposes herein set forth.

2. The arrangement, within the shell D, of the partition H and damper I, substantially as and for the purposes herein set forth.

3. The combination of the arch or furnace A B D, boiler E, pipe G, partition H, and damper I, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 21st day of March, 1870.

MYRON GORE.

Witnesses:

J. O. MCCLELLAN,

C. H. BROWN.