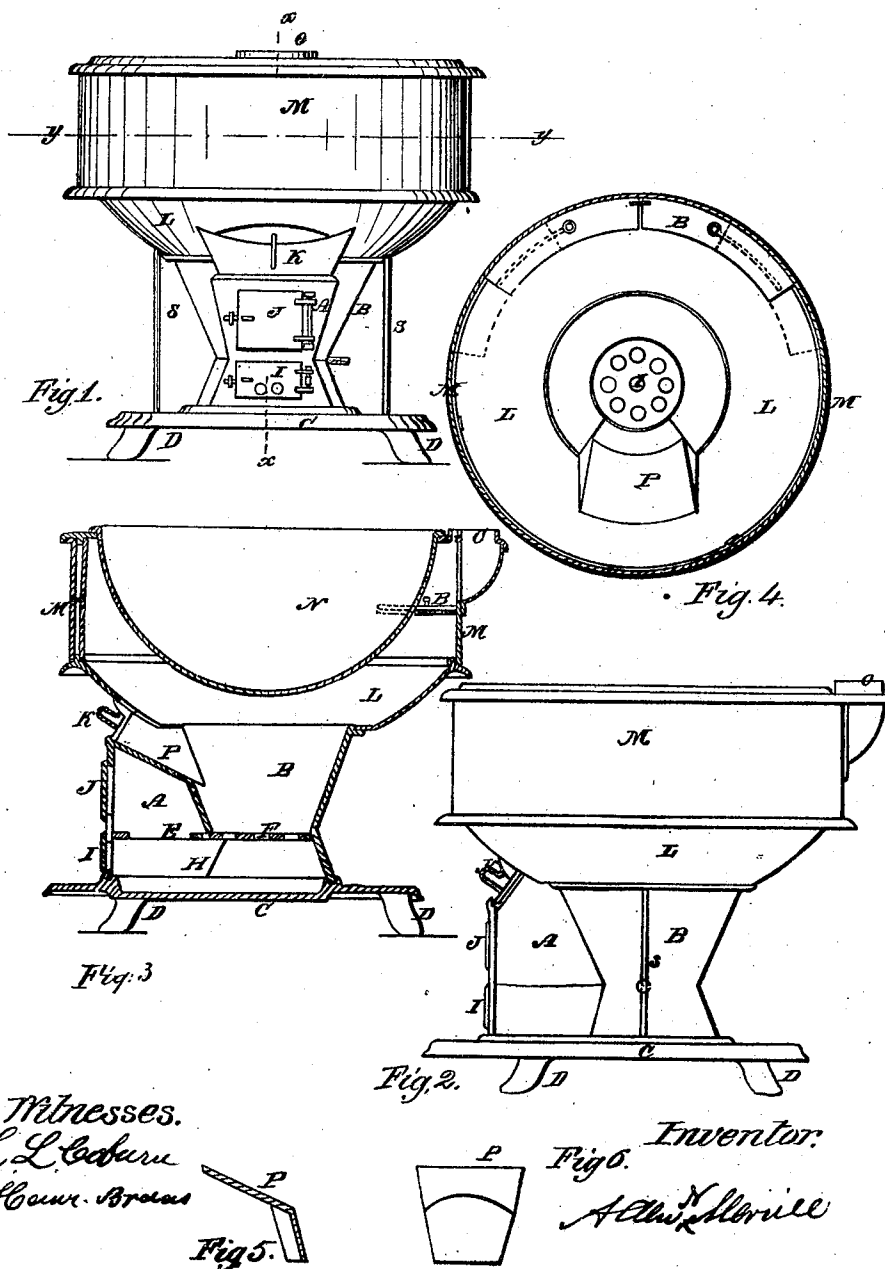


A. N. MERRILL.
Agricultural Boiler.

No. 103,639.

Patented May 31, 1870.



Witnesses.
L. L. Leaburn
H. W. Brown

Inventor.
A. N. Merrill

United States Patent Office.

ALLEN N. MERRILL, OF BATAVIA, ILLINOIS.

Letters Patent No. 103,639, dated May 31, 1870.

FARMERS' BOILER.

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

I, ALLEN N. MERRILL, of Batavia, in the county of Kane and State of Illinois, have invented a new and useful Improvement in Farmers' Boilers, of which the following is a specification, reference being had to the accompanying drawing which forms a part thereof.

Nature and Object of the Invention.

The first part of my invention relates to the projecting front A of the fire-pot B, containing a wood grate, so constructed and arranged that it can be used in connection with the fire-pot B, for burning wood when desired, or the fire-pot can be used for burning coal, as hereafter more fully described, the object being to make a farmer's boiler that can be used either for burning wood or coal, as may be desired.

The second part of my invention relates to the removable partition, which is used to divide the wood-grate from the coal-pot, when coal is used for fuel. The object is to make a regular coal fire-pot, separated from the wood grate, for burning coal; and the shape of this removable piece is such that, while it serves to divide the wood grate from the coal fire-pot, it also serves as a spout for feeding coal to the fire-pot.

The third part of my invention relates to the extension plate between the kettle and its case, to regulate the passage of the heat, as hereafter described.

Description of the Drawing.

Figure 1 represents a front elevation of my farmer's boiler.

Figure 2, a side elevation of the same.

Figure 3, a vertical sectional view, at the line *xx*.

Figure 4, a horizontal sectional view at the line *yy*.

Figures 5 and 6, views of the removable plate or partition P.

General Description.

C is the bottom plate and hearth of the boiler, supported upon legs D. It is made sufficiently large to support the fire-pot B and its projecting front A.

E is a wood-grate, and

F is a coal-grate. They may be constructed in any of the known forms of grates.

The space H, below the grates, is simply an ash-space.

When the plate P is removed, the wood extends

into the fire-pot B, and both grates are used; but, when it is desired to use coal, the plate P is placed in the position shown in fig. 3, and the part B is converted into a conical coal fire-pot, the upper part of the plate forming a feed-spout for feeding the coal to the fire-pot.

I is the door to the ash-space.

J, the door to the wood fire, and

K, the door or slide to the coal fire.

L and M constitute a jacket, which may be made of one piece, or two, as shown. It rests on the top of the fire-pot, and constitutes a holder for the kettle N, as shown.

O is the smoke-pipe.

R is the extension plate, and is sufficiently wide to fill the space between the jacket M and the kettle N, and, when the pieces are slid out, as indicated by the dotted lines in fig. 4, the heat and smoke cannot go as direct to the pipe O as when they are not slid out as so indicated.

The object of this extension plate is to control the heat, and retain it about the kettle when desired.

S are rods for holding the different parts of the boiler together.

In manufacturing farmers' boilers to be used for cooking feed for stock, I find it very desirable to make them so that either wood or coal can be used for fuel.

Having described the construction and operation of my improved boiler,

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

1. The projecting front A, in combination with the fire-pot B of a farmer's boiler, when they are so constructed and arranged that either wood or coal can be used for fuel, substantially as specified and shown.

2. The removable partition plate P, when constructed and operating in a farmer's boiler, substantially as and for the purpose set forth and shown.

3. The extension plate R, in combination with the jacket M and kettle N, when constructed and operating substantially as and for the purposes described and shown.

ALLEN N. MERRILL.

Witnesses:

LEWIS L. COBURN,
H. BRUNS.