

A. WEMYSS.
Cooking Stove.

No. 108,220.

Patented Oct. 11, 1870.

Fig. 1.

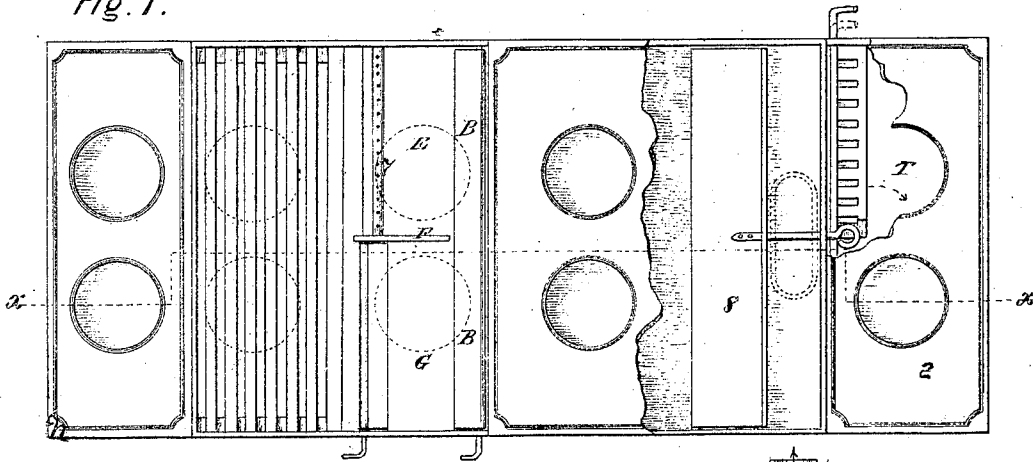
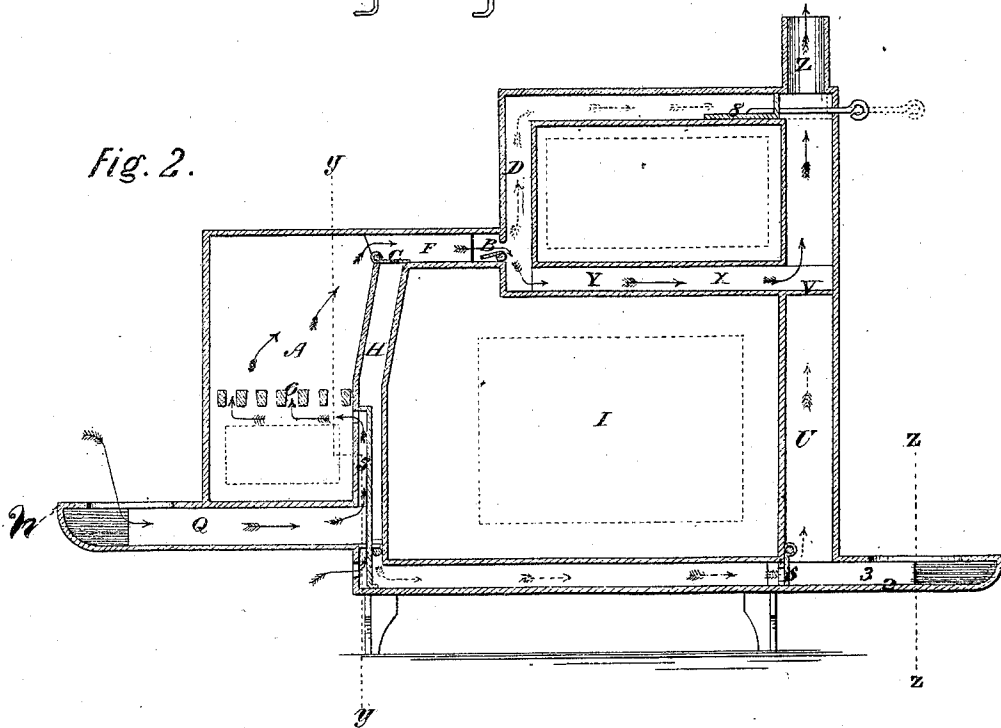


Fig. 2.



Witnesses:

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Inventor

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2 Sheets—Sheet 2.

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Fig. 3.

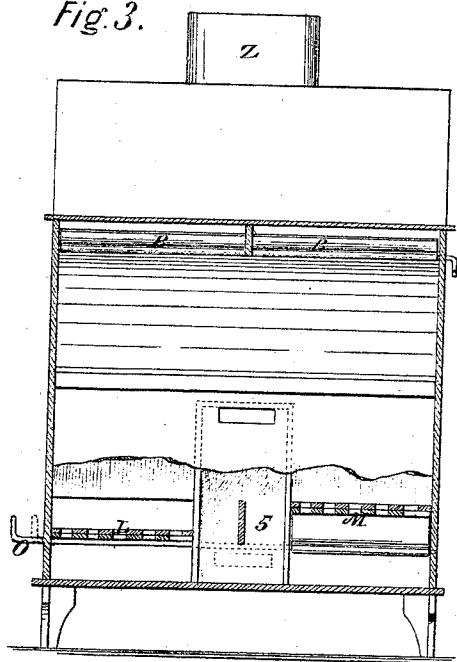


Fig. 4.

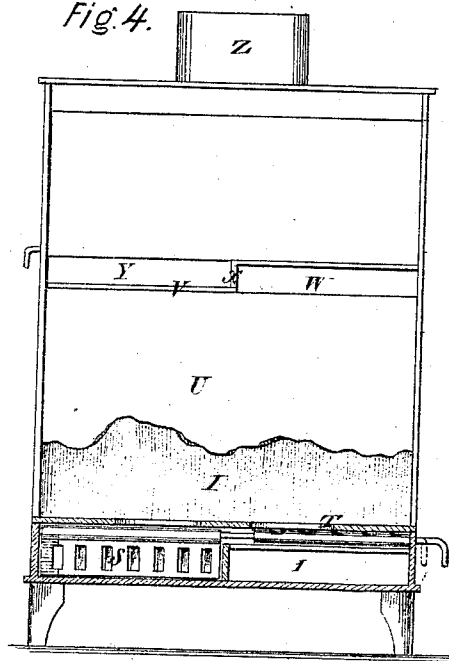
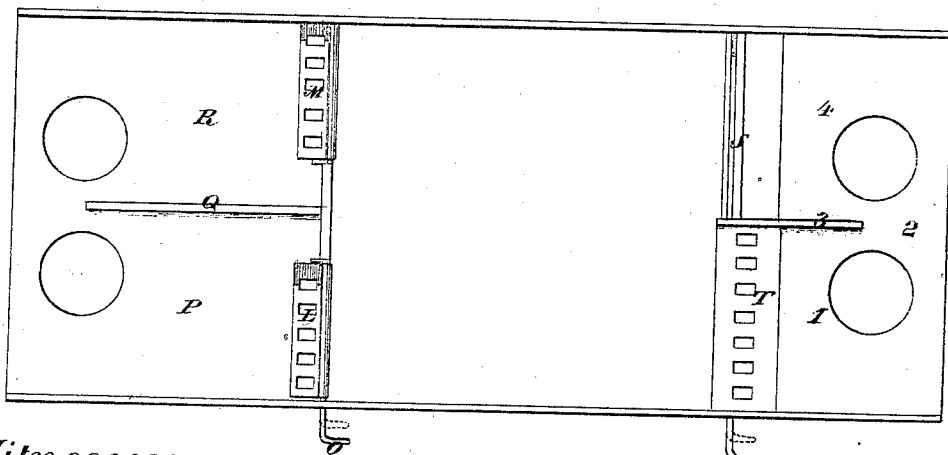


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALEXANDER WEMYSS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 108,220, dated October 11, 1870.

To all whom it may concern:

Be it known that I, ALEXANDER WEMYSS, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and Improved Cooking-Stove; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying sheet of drawings, and to the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a plan or top view with some of the plates removed, and with portions broken away to show some of its interior arrangements; Fig. 2, a vertical longitudinal section taken in the line *xx* of Fig. 1; Fig. 3, a vertical transverse section in the line *yy* of Fig. 2, with the lower part of the back plate of the fire-chamber broken away; Fig. 4, a vertical transverse section in the line *zz* of Fig. 2, looking from the rear, with the back plate of the stove removed and a portion of the inner plate broken away; and Fig. 5, a plan view of the bottom of the stove with the bottom plate removed.

Similar letters refer to similar parts in the several views.

In order to a perfect understanding of the construction and working of my improved cook-stove, it will be necessary to take up in detail each system of dampers and the flues upon which they respectively operate. Beginning at the fire-chamber A, when the direct-draft damper B on the top of the lower oven is open for the purpose of passing the draft over or under the top oven, as the case may be, when the direct-damper B at the entrance to the front flue, D, is closed, the damper C is opened, and the draft passes along the flue marked E on the top of the lower oven, and around the center dividing-plate, F, into the flue G on the top of the same oven, then down the front flue, H, in the front of the lower oven, I, between the fire-chamber A and the ash-box, where it is intercepted by the dampers L M, Fig. 5, situated one on the bottom of the ash-box and the other on the bottom of the flue-extended hearth N. They are on the same damper-rod O, and open and close simultaneously. When they are closed, the draft passes along the flue P, around the dividing-plate Q, into the flue R, down the front flue, H, in front of the lower oven, thence along the bottom of the stove. At the back of

the lower oven it passes through the openings of the double dampers S T, Fig. 2, into the flue U at the back of the stove, being turned by the plate V into the flue W between the lower and top ovens, passing around the center dividing-plate, X, into the flue Y at the back of the stove, and out through the pipe Z. The case may be that the top damper, S, will be closed. Then the draft is diverted around and over the top oven. When the double dampers S T are closed, the draft passes along the flue 1, formed by the extended back piece, 2, around the center dividing-plate 3, along the flue 4, and up the back flue, U, when the same operation of dampers takes place.

To make the back flue, U, a direct flue, the plates V can be provided with dampers similar to those at the front of stove. There is a chamber, 5, situated at or about the center of the front of the lower oven, I. It extends up to the fire-grate 6, and occupies part of the flue H, opening at or beneath the grate at 6. It can be regulated by a suitable damper, and is to supply air to the grate through the front flue, H. In the flue on the top of the lower oven there can be a suitable air-tube, 7, Fig. 1, provided with jet-holes to supply the gases of combustion with sufficient cold air to insure their combustion.

The dividing-plate or rib F in the flue on the top of lower oven forms a double flue, E G. It also answers the purpose of a rib or stay to keep the top plate from bellying when heated and loaded with pots and kettles.

The extended hearth-flues P R form a hearth with a center dividing-plate, Q, extending at right angles with the front of the lower oven.

I propose to move or lower the extended hearth-plate to the bottom line of the stove, thereby leaving a space between the ash-box and the top of the hearth-flue, which will form an additional oven.

The damper 8 at the back end of the top oven is composed of two plates at right angles, which control the passage of the draft through either of the flues.

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

1. Dividing the flue on the top of the lower oven into the flues E G by the dividing-plate F, substantially as shown.

2. The dampers L M, substantially for the purpose shown and described.

3. The dampers S T, substantially for the purpose shown and described.

4. The hearth-plate N, in combination with the dividing-plate Q, forming the flues P R, substantially as shown and described.

5. The flue 5 in front of the lower oven, substantially for the purpose shown.

In testimony whereof I hereunto sign my name to this specification in the presence of two subscribing witnesses.

ALEXANDER WEMYSS.

Witnesses:

FRANCIS D. PASTORIUS,

FRED. ZEITZ.