

D. H. NATION & E. C. LITTLE.

Cooking-Stoves.

No. 142,935.

Patented September 16, 1873.

Fig 1

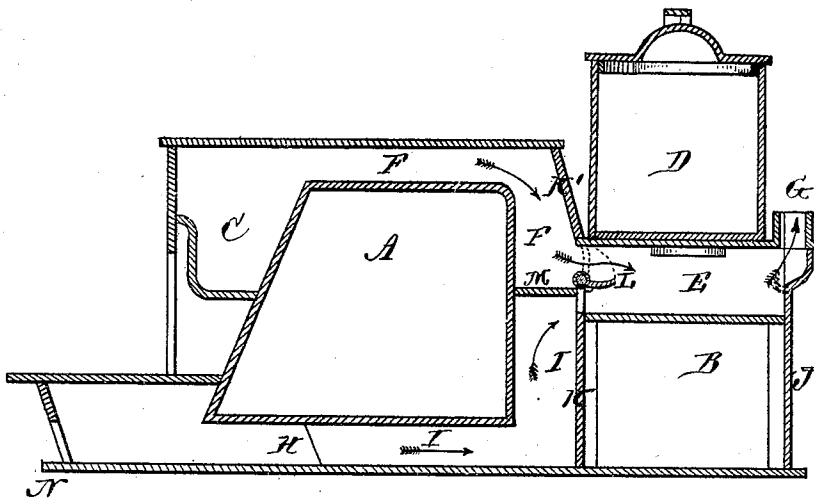
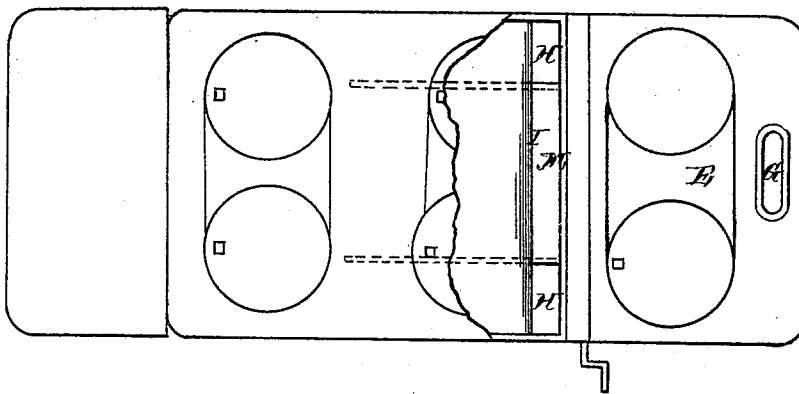


Fig 2



Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID H. NATION AND EZEKIEL C. LITTLE, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. **142,935**, dated September 16, 1873; application filed April 11, 1873.

To all whom it may concern:

Be it known that we, DAVID H. NATION and EZEKIEL C. LITTLE, of St. Louis, in the county of St. Louis and in the State of Missouri, have invented certain new and useful Improvements in Stoves; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction and arrangement of a low water-reservoir cooking-stove, as will be hereinafter more fully set forth.

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

Figure 1 is a longitudinal vertical section, and Fig. 2 is a plan view, part in horizontal section, of our cooking-stove.

A represents the main baking-oven. B is a supplementary baking-oven or hot closet. C is the fire-chamber; D, the wash-boiler or reservoir. E is the hot-air chamber or sheet-flue under the boiler. F is a vertical descending sheet-flue; G, the exit-flue. H H are the vertical end flues and side flues of the bottom, and I is a center vertical flue back of main oven, connecting with the center flue of the bottom. K is a plate between the front of the rear oven B and the back of the flues H H and I. K' is a plate extending from the top plate of the stove rearward on an incline to the plate which supports the reservoir above the sheet-flue E. J is the back plate of the stove. L is the damper which divides the flues E and F. M is a plate made to cover or shut off the center flue I, upon which the damper rests.

When using the direct draft the damper L, which extends the whole width of the stove, will occupy a horizontal line parallel with the plate M, and at such time the heated products of combustion pass through the sheet-flues F F into the hot-air chamber or flue E, and out of exit-pipe G. When the indirect draft is used the damper will occupy the position, as shown in dotted lines in Fig. 1, at about right

angles with the plate M, and at such time the direct communication with the flue E is closed, and the heated products of combustion pass down the vertical, and into the bottom, side flues H H, and then turn into the center bottom, and up the center rear vertical, flue I, into the hot-air chamber of flue E, and out of the exit-flue G.

The plates K K' are made in two parts, one part resting upon the top plate of the flue E, and the other part connecting with the bottom plate of the flue E, each being securely held by the proper flanges to receive them. The top plate of the flue E will be made with two boiler-holes and a loose center cross-piece, as shown in Fig. 2, to receive covers, so that when the boiler is not used thereon this part of the stove can be used for ordinary cooking purposes. The back plate J of the stove will be made with a swell or projection at its top edge for the purpose of accommodating the exit-flue G without necessitating so large an oven at B. The bottom plate of the stove will be made to extend the full length of the stove-body from N to N; but the body of the stove we intend to disconnect at the division-plate K, though the whole will be mounted together and secured to the bottom plate by means of bolts at the corners of the body, and also at the point of division-plate K.

The advantage of this invention consists chiefly in the portability of the boiler, by the removal of which we virtually have a six-hole stove. In fact, it is a low reservoir-stove without a reservoir. The boiler, being heated only on its bottom surface, where there will always be water, if any at all in the reservoir, is less liable to crack or burn out. Again, where the reservoirs are a fixture, and form a part of the body of the stove, the stove becomes entirely useless if the reservoirs are broken in transportation, handling, or other causes, which is often the case. Our stove is shipped mounted complete independent of the reservoir, and any common wash-boiler can be used for the purpose of a reservoir that conforms to the size of the boiler-holes. When the boiler is removed from the stove, this part made to receive it can be used for ordinary cooking purposes.

We do not claim under this patent the ar-

rangement of an air-chamber, communicating at the top with the air in the room, between the stove-back and reservoir-front; nor do we claim the sheet-flue under the reservoir-bottom, as herein shown, as these features are the subject-matter of a separate application for Letters Patent applied for by us.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the flues E, F, H H, and I, and plates K K', in combination with a double-oven cooking-stove, for the purposes herein set forth.

2. The descending vertical sheet-flue F, in combination with the flues H H and I, covering-plate M, and hot-air chamber or flue E, all

operating in the manner and for the purposes set forth.

3. The damper L, extending the whole width of the body of the stove below the line of the top plate of the main oven, in combination with the sheet-flue F, hot-air chamber or flue E, and flues H H and I, for the purposes set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 22d day of March, 1873.

DAVID H. NATION.
EZEKIEL C. LITTLE.

Witnesses:

ARTHUR L. PIERCE,
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