

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

Reservoir Cooking-Stoves.

No. 142,934.

Patented September 16, 1873.

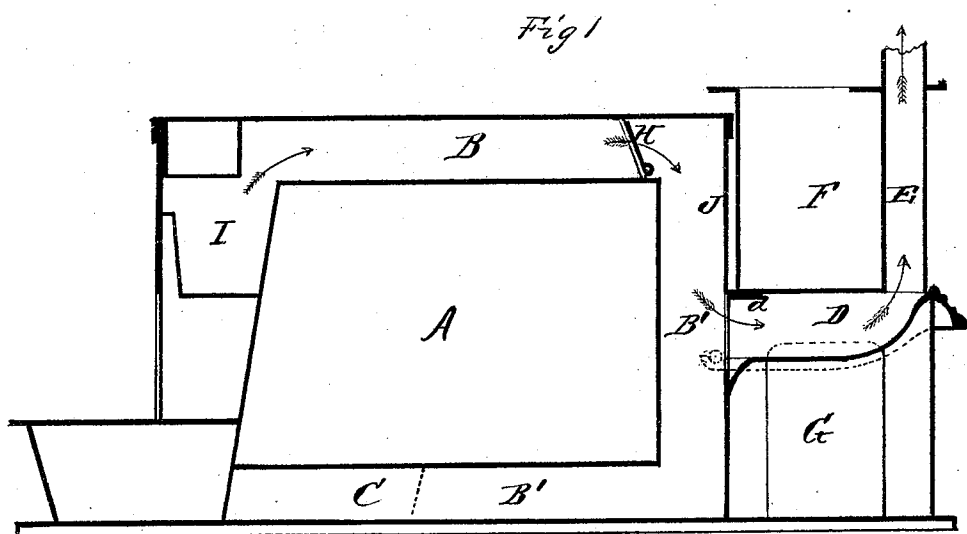


Fig 3

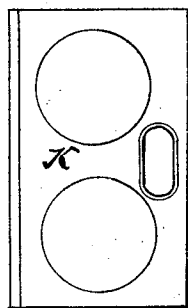


Fig 4

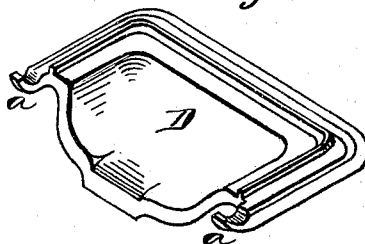
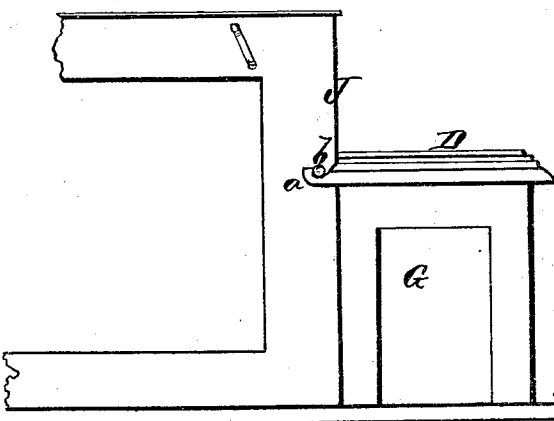


Fig 2



Witnesses:

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UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN RESERVOIR COOKING-STOVES.

Specification forming part of Letters Patent No. **142,934**, dated September 16, 1873; application filed July 2, 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 Reservoir Cooking-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 cooking-stove with a portable base-pan or flue-shell, and the means for attaching the same, 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 of our improved cooking-stove. Fig. 2 is a side view of the rear end of the same. Fig. 3 is a plan view of a loose cover or plate for the base-pan, and Fig. 4 is a perspective view of the portable base-pan or flue-shell.

A represents the main baking-oven of the stove. B is the top flue; B B', the vertical and horizontal side flues. C is the center flue. D is the base-pan or flue-shell; E, the exit-flue passing up the rear side of the reservoir. F is the reservoir; G, the warming-closet; H, the damper; I, the fire-chamber; and J, the division-plate. When using the direct draft, the damper H occupies a line parallel with the back plate of the main oven, hanging down in the center flue of the back part of the stove. At such time the products of combustion pass from the fire-chamber I, along the top flue B, and down the center flue, between the back oven-plate and the division-plate J, into the base-pan D, and out of the exit-flue E. When using the indirect draft the damper H occupies the position shown in Fig. 1. At such time the products of combustion pass over the top oven-plate flue B, and down the vertical end flues B' into the corresponding flues at the bottom, making the turn into the center flue of the bottom at C, through said bottom center flue, into and

through the rear center flue, through the division-plate J, into the base-pan flue D, and out of exit-flue E, so that, whether using the direct or indirect draft, the reservoir is heated only on its bottom surface. The base-pan D is made separate from the stove, and provided on each side with a hook projection, *a*, to be fastened on a pin, *b*, projecting from the side of the stove. By this means the base-pan can readily be attached and detached, and when attached it fits in the upper end and forms the top of the warming-oven G. K represents a plate with two boiler-holes in it, which can be used when the reservoir is removed or should become broken in shipment, thus converting it into a six-hole stove.

It is our purpose to insert a loose center-piece between the boiler-holes in the plate K, so that an ordinary wash-boiler can be used on said plate, if desired.

The novelty of this invention consists in the portability of the reservoir base-pan D and in the warming-closet attachment, whereby we economize space in shipment, and whereby repairs can be made at a very small cost and by unskilled workmen, as all the attachments will be shipped separate from the body of the stove, and mounted after they reach their destination.

Should the reservoir become broken in shipment or otherwise, the plate K can be used, thus converting it into a six-hole stove, upon which an ordinary wash-boiler can be used in case of emergency.

The front bottom corner of the reservoir rests upon a strip, *d*, attached to the division-plate J, which thus entirely shuts off the air-space at the bottom.

By means of the base-pan flue D extending under the whole bottom of the reservoir F and the space between the reservoir and the division-plate J, the reservoir becomes heated only on its bottom surface, where there will always be water, if any in the reservoir at all. The exit-flue E passes up through and forms part of the reservoir F at the back or rear side, as shown.

We do not claim, under this specification, the combination of the reservoir with the back of the stove when an air-space open at the

top is left between the two, as seen in the drawings; nor do we claim the sheet-flue under the reservoir in the shell D, as both of these arrangements are the subject-matter of a separate application for a patent now pending.

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

1. The detachable base-pan or flue-shell D, attached to the body at a point near the center of the back plate of the stove by means of hooks *a a* cast on the base-pan, and pins *b b* on the stove-body, substantially for the purposes herein set forth.

2. The portable reservoir F, with flue E in

the rear side, in combination with the portable base-pan or flue-shell D, substantially as and for the purposes herein set forth.

3. The combination, with a three-flue stove having damper H arranged as described, of the portable base-pan or flue-shell D and warming-closet G, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 9th day of June, 1873.

DAVID H. NATION.
EZEKIEL C. LITTLE.

Witnesses:

BENJ. S. BUCK,
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