

N. M. SIMONDS.

PLATES FOR RANGES AND STOVES.

No. 186,372.

Patented Jan. 16, 1877.

FIG. 1.

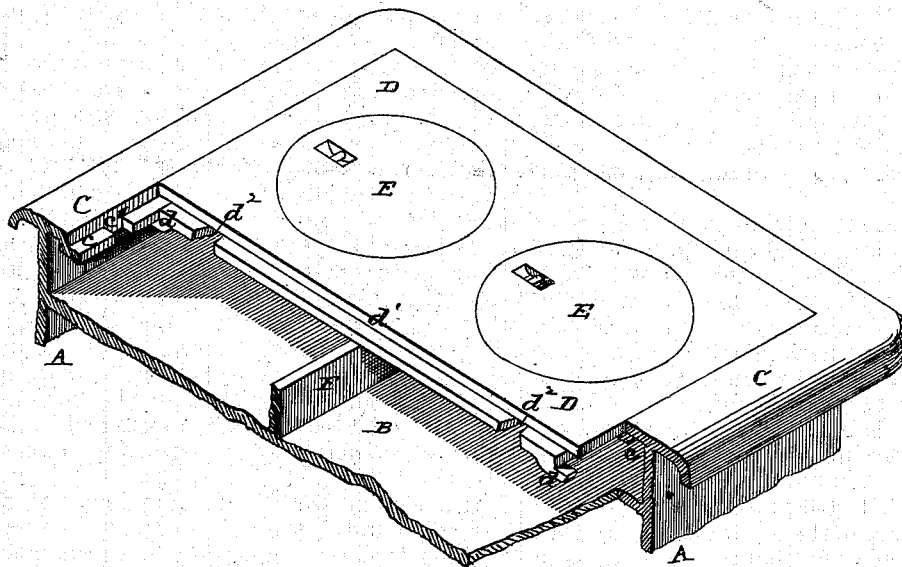
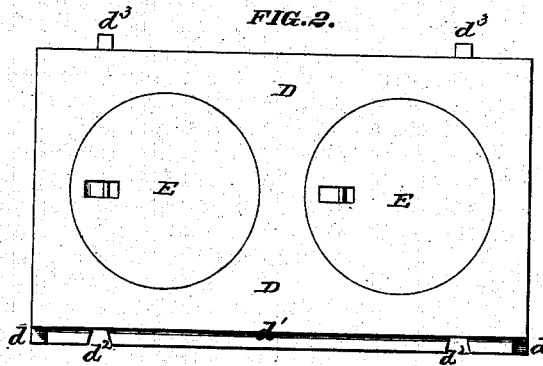


FIG. 2.



ATTEST:

Robert Burus.
L. Blonde-Burdett

INVENTOR:

Nathaniel M. Simonds.
per Knight Bro.
attys.

UNITED STATES PATENT OFFICE

NATHANIEL M. SIMONDS, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN PLATES FOR RANGES AND STOVES.

Specification forming part of Letters Patent No. **186,372**, dated January 16, 1877; application filed November 22, 1876.

To all whom it may concern :

Be it known that I, NATHANIEL M. SIMONDS, of the city and county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Cooking Stoves and Ranges, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification.

My improvement applies to that class of cooking stoves and ranges subject-matter of my Patents No. 140,550, dated July 1, 1873, No. 174,865, dated March 14, 1876, and No. 177,577, dated May 16, 1876. In these a bar, either solid or tubular, extends centrally under the top plates of the range, and supports the plates at that part, the plates in said patents extending half-way across the range.

In my present improvement I retain the supporting bar or tube as a central support to the top plates; but said plates extend all across between the sides of the top frame of the stove or range, instead of but half-way across, as in my former patents. Plates extending across the range are subject to warp from the changes of temperature, and would invariably become curved with the concave curve upon the top side, and consequently the ends, when the center is supported, would be lifted from contact with the top rim of the stove; and to overcome this tendency to warp I use at the ends of the top plates lugs, which, when said plates are in position, project beneath the edges of the top frame, and hold the ends of the plate down.

In the drawings, Figure 1 is a perspective view, showing an end portion of a cooking-range with my improved plate. Fig. 2 is a top view of one of the top plates.

A A are the side walls of a cooking-range. (In the specification the word is used, but my improvement is equally applicable to cooking-stoves.) B is the top plate of an oven. C is the top frame of the range, rabbeted, as usual, at its inner edge *c*, to fit the ends of the top plates D. E E are the covers. *c'* is a notch

in the lower or projecting part of the rabbeted edge *c*, to admit the descent of the lug *d*, projecting from the end of the top plate. After the lugs *d* have passed down through the notches *c'*, and the ends of the plate D rest in the rabbet *c*, the plate is slid sidewise into the position shown, and the hooked lug *d* holds beneath the inner margin or edge *c* of the frame C. The plates D are fitted together at the sides *d'* by rabbet-joint, similar to that at the ends, and at this place the edge of the one plate has notches *d''*, similar to those *c'*, and the other plate has hook-lugs *d'''*, similar to those, *d*, at the ends of the plate, and as the plate is moved sidewise into position the lugs *d'''* pass beneath the edge of the next plate, and form a support to it. Thus, by the combination of the hook-lugs and rabbeted edge, neither of the plates can warp away from the other.

It is evident that the locking device for the ends or sides of the plates D may be varied without essentially changing the principle of the invention; and I do not confine myself to the means shown for locking down the ends of the plates D, as bolts or other means may be used for this purpose.

F is the central supporting-bar, extending transversely to the plates D, and lying beneath them, to prevent them from sinking at the middle. This supporting-bar may be solid, as shown, or of any of the forms shown and described in my patents hereinbefore mentioned, or said support may have any form suitable for the purpose proposed.

I claim as my invention—

The combination of central support F and plates D, extending across the range or stove, the ends of said plates being secured to the body of the range or stove, in the manner described, to prevent the warping of the plates.

NATHANIEL M. SIMONDS.

Witnesses:

SAML. KNIGHT,
ROBERT BURNS.