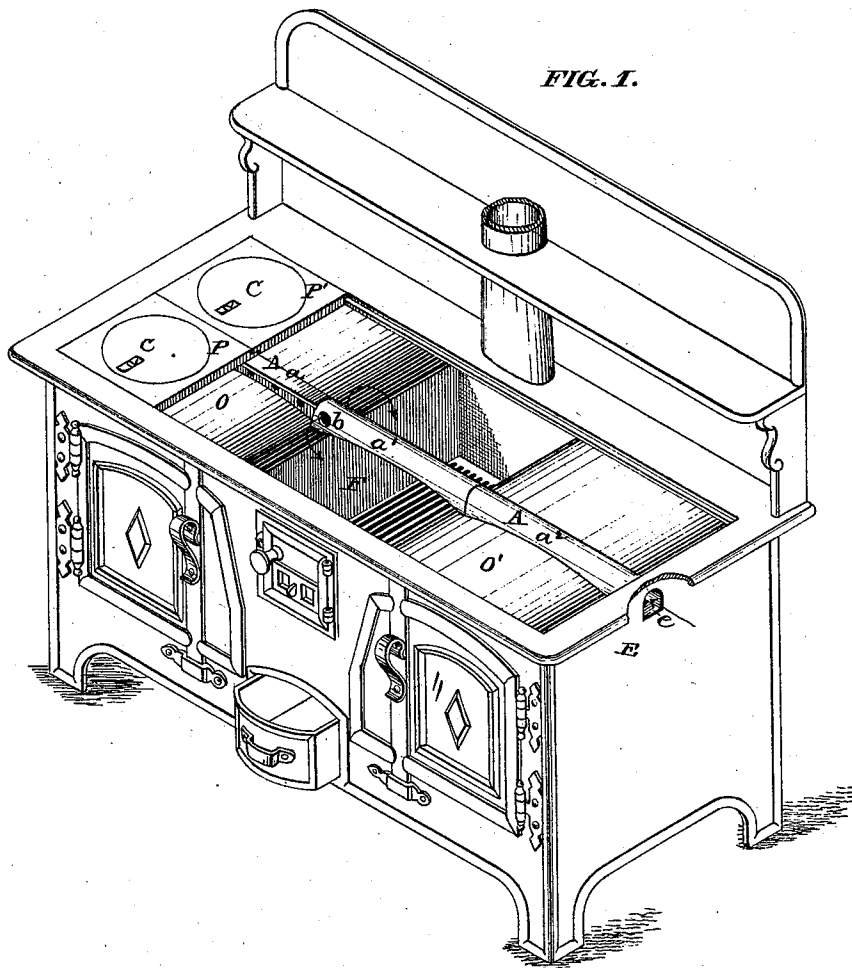


N. M. SIMONDS.

BEARING-BAR FOR RANGES, &c.

No. 177,577.

Patented May 16, 1876.



ATTEST:

*Robert Burns,
Le Blond, Burdett,*

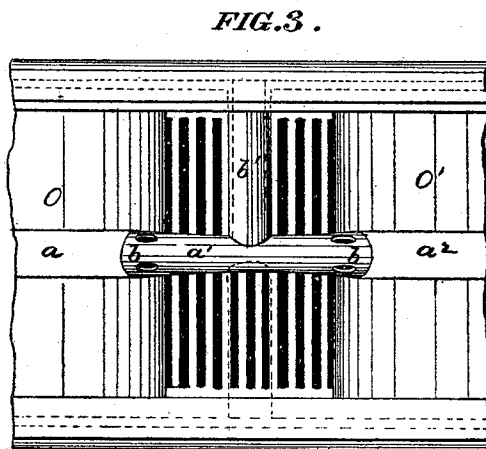
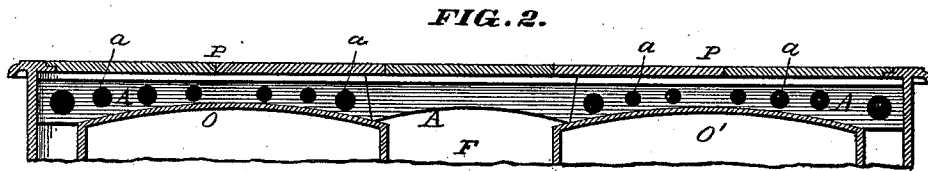
INVENTOR:

*Nathaniel M. Simonds
By Knight Bros.
Atty.*

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UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN BEARING-BARS FOR RANGES, &c.

Specification forming part of Letters Patent No. 177,577, dated May 16, 1876; application filed March 15, 1876.

To all whom it may concern:

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

In my improvement each of the covers is supported in a separate plate, said plates extending only to the middle of the range or stove.

My improvement consists in supporting these plates at the middle by a bar, which is made solid from end to end, or partly solid and partly tubular.

Figure 1 is a perspective view, showing the bearing-bar partly solid and partly tubular, the tubular part receiving air at one end of the range and discharging it at the inner end of said tubular part. Fig. 2 is a longitudinal section of the range, showing the bearing-bar solid from end to end. Fig. 3 is a top view with some of the top plates removed, showing another modification.

The range or stove may be of any usual form, my improvement consisting only in the construction of the bearing-bar A.

In Fig. 1, the bar A has a solid portion, a , extending over one of the ovens O, and a tubular portion, $a^1 a^2$, extending over the fire-place F and over the other oven O'. The tubular portion extends through the end E, where it is open at e , to allow the influx of air, which traverses the whole length of the tubular part $a^1 a^2$, and escapes at the inner end through the orifices b , the arrangement being such that the

tube is cooled throughout its whole length by the current of air passing through it. The bearing-bar A serves as a support to the top plates P P', in which the covers C are supported, the inner edges of the plates P resting on the bar, and the inner edges of plates P' resting in rabbet-grooves of the plates P.

In Fig. 2, the bearing-bar A is made solid throughout, except that it may have transverse orifices a^1 to lighten it. It may be made in one piece; but is preferably made with a removable section, a^1 , over the fire-place, where it is subject to injury from excessive heat and changes of temperature.

In the modifications shown in Fig. 3 the parts a and a^2 are solid, and the part a^1 over the fire-place is alone made tubular. The tubular part a^1 receives air through a pipe, b' , extending horizontally in a transverse direction through the back, as shown in full lines, or through the front, as shown in dotted lines, or through both back and front. In this modification the air escapes from a^1 through the orifices $b b$ at each end, so that the air (in two currents) traverses the whole length of section a^1 .

I claim—

The combination of top plates P P' and bearing-bar A, said plates extending part-way across the top opening of the stove and their inner edges supported on said bar, and said bar made solid throughout the whole or a portion of its length, substantially as and for the purposes set forth.

NATHANIEL M. SIMONDS.

Witnesses:

SAML. KNIGHT,
O. KNIGHT.