

T. SCOTT.

Stove.

No. 48,240.

Patented June 13, 1865.

Fig. 1.

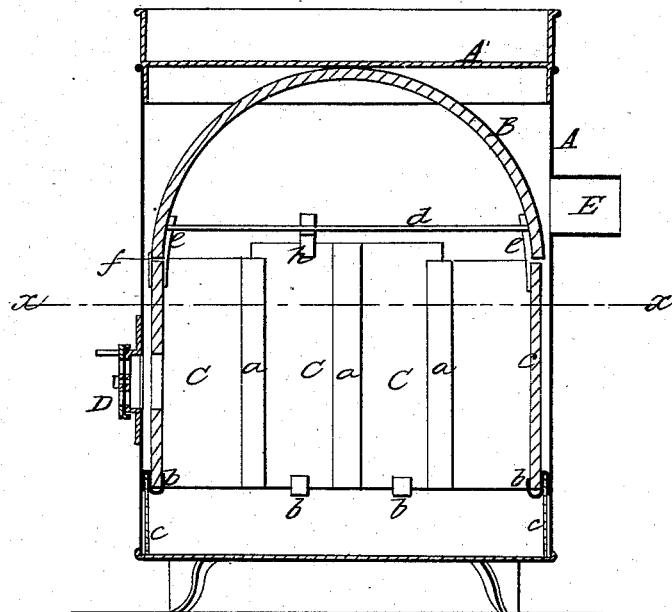
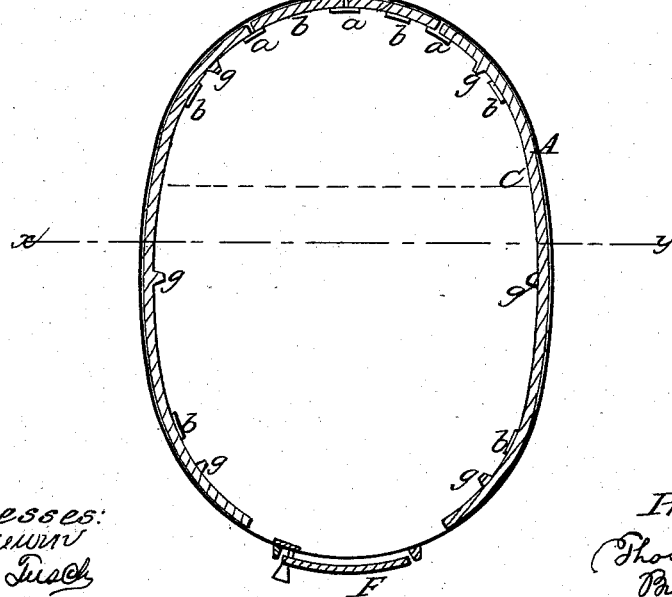


Fig. 2.



Witnesses:
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THOMAS SCOTT, OF CARROLLTON, ILLINOIS, ASSIGNOR TO THOS. SCOTT, SR.,
OF SAME PLACE.

IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. 48,240, dated June 13, 1865.

To all whom it may concern:

Be it known that I, THOMAS SCOTT, of Carrollton, in the county of Greene and State of Illinois, have invented a new and useful Improvement in Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical section of a stove made according to my invention, the plane of section being in the line *y* of Fig. 2. Fig. 2 represents a horizontal section of the same on the line *x* of Fig. 1.

Similar letters of reference indicate like parts.

The example of this invention here given relates more particularly to stoves for heating purposes, but the principle of the invention is also applicable to stoves for cooking purposes.

The invention consists in a novel way of combining cast-iron linings within a sheet-iron stove, whereby the walls of the latter are protected from the fire and the heating capacity of the whole structure is increased.

A designates a stove whose outer walls are made of sheet metal—such, for instance, as Russia sheet-iron. A' designates its top plate.

c c designate a plate of stout sheet-iron or other suitable material, which lines the lower part of the walls of the stove within, being set on its edge and carried around the whole inner circumference thereof, but not so as to be directly in contact.

b b designate stirrups hung loosely over the edge of the plate *c* at different points, so as to be in proper position to support the bottom edges of the cast-iron linings C. These linings are to be of suitable thickness and height to serve the purposes required. The end pieces of the lining are made narrower than those which are placed at the sides, because the sharpness of their curves makes it more convenient to cast them narrow. Each of the narrow pieces of the lining C rests in a stirrup, *b*, while the side pieces are supported in two stirrups, and these numbers may be increased for each piece, if desired.

a a designate thin overlapping strips pro-

jecting from alternate pieces of the lining over the edges of adjoining pieces, so as to protect the joints between them and keep out ashes. That part of the lining which comes opposite the damper D of the stove has an opening, as seen in Fig. 1, opposite the damper, to admit air to the interior of the stove. The lining may be held to its place by one or more buttons, *h*, fastened to the wall of the stove.

B is an arch, also made of cast-iron, its bases resting upon the upper edges of those parts of the lining C which occupy the narrowest part of the stove, and being held and locked thereby by means of fingers *e* and *f*, projecting from either surface of the arch. The bases of the arch, moreover, are connected by a rod, *d*, for the purpose of resisting any tendency in them to warp or lose their relative positions. The width of the arch is equal to about one-third the length of the stove, and its position is directly opposite the eduction-pipe E, so that the products of combustion are compelled to pass first to one or the other of the ends of the arch, and then behind it, before they can reach the flue. The dotted outline in Fig. 2 shows the relative width and the position of the arch in the stove.

F is the door of the stove. Its position is a little above the lower line of the damper D, and its height should be such as will allow the withdrawal through it of the arch B and the several pieces of the lining C, when that is desired.

When the stove is to be used ashes should be put in it almost as high as the bottom of the damper, so as to protect the lower plate, *c*, and the stirrups *b*.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. Protecting the interior of sheet-iron or other thin stoves with removable cast-iron linings constructed and applied within the stove, substantially as described.

2. The arch B, in combination with the lining C, substantially as above described.

THOMAS SCOTT.

Witnesses:

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