

F. H. ROOT.
Cooking Stove.

No. 103,083.

Patented May 17, 1870.

FIG. 1

FIG. 2

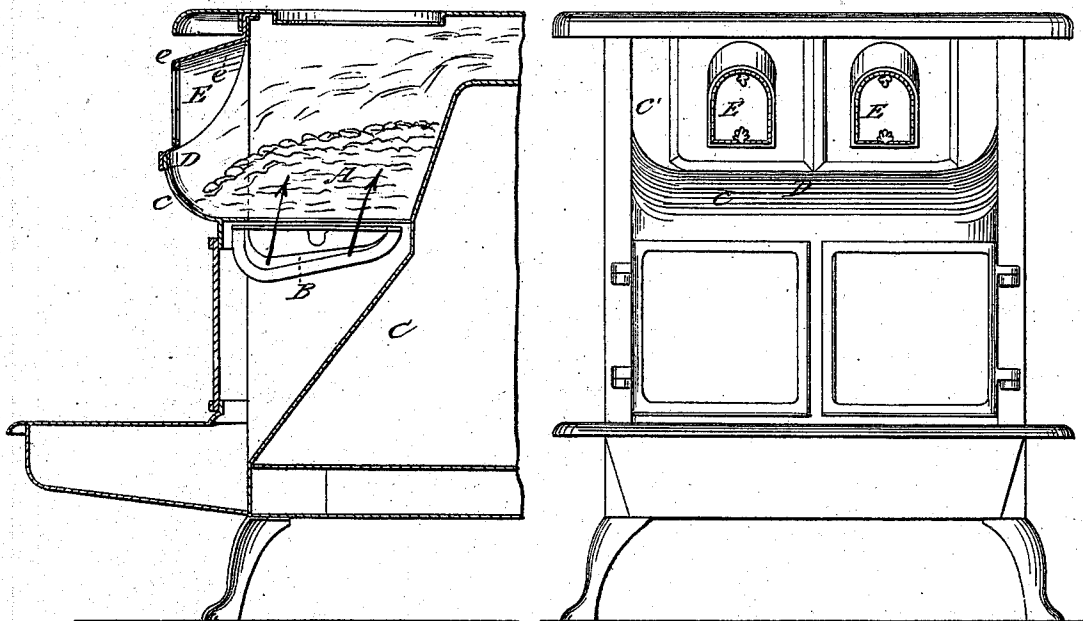
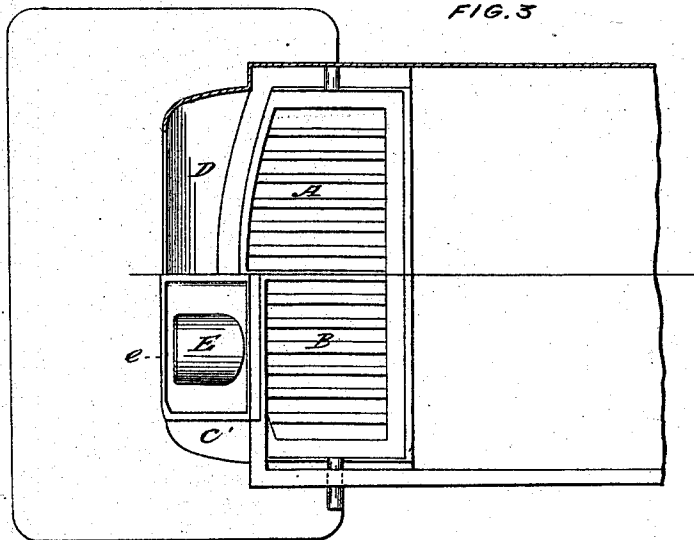


FIG. 3



WITNESSES:

Geo. J. Bonner
Victor H. Becker

INVENTOR:

F. H. Root
By Forbush & Hyatt
his attys

United States Patent Office.

FRANCIS H. ROOT, OF BUFFALO, NEW YORK.

Letters Patent No. 103,083, dated May 17, 1870; antedated April 10, 1870.

COOKING-STOVE.

The Schedule referred to in these Letters Patent and making part of the same.

I, FRANCIS H. ROOT, of the city of Buffalo, in the county of Erie and State of New York, have invented a certain Improvement in Cooking-Stoves, of which the following is a specification.

My invention consists in the construction of the front portion of the stove above the grate with a forward projection, having an inclined or convex bottom and an inclined or concave roof, provided with dormer windows, whereby the mica, of which the latter are composed, is removed from the intense heat of the fire, which would otherwise soon destroy the same.

In the accompanying drawings—

Figure I is a vertical section of the forward portion of a cooking-stove embracing my improvement.

Figure II is a front elevation thereof.

Figure III is a sectional plan.

Like letters of reference designate like parts in each of the figures.

A represents the fire-chamber.

B, the grate.

C, the forward part of the oven.

D, the projection in front of and above the grate; and

E, the dormer windows formed in the roof thereof.

The projection D is shown as commencing at the base of the fire-chamber, and extending forward with an upwardly-inclined or curved base, *c*, which terminates at a point about one-third of the distance from the base of the fire-chamber to the top plate of the stove.

From the termination of the plate *c*, which forms a portion of the front as well as the bottom of the extension, a receding inclined, or, preferably, slightly concave plate, *c'*, connects with the front of the fire-chamber at the top of the stove, and forms the roof or cover of this extension, D.

The dormer windows E are formed by the projection of an arched frame, *e*, from the roof-plate *c'*, the mica being secured in said frame in a common manner. I prefer to make the covering *c'* of the extension so that portions of it will slide horizontally, and thus furnish at this point an opening and way of access into the fire-pot. In such case the windows E are made in, and so as to project from the sliding portions, as represented in the drawings.

The forward extension D of the fire-pot removes the front portion of D away from the lines of draught and more intense heat of the fire; the coal naturally assuming the position shown in fig. 1, which also represents the lines of the draught, which, being backward, leaves the temperature of the front of the extension comparatively low.

The backwardly-inclined or concave plate *c'* conforms to a greater or less extent with back plate of the fire-pot and the natural direction of the draught, and produces a desirable form of fire-pot; while the projection of the windows from said inclined plate, in connection with the forward extension D, so removes the mica from the influence of the fire as to render the windows practicable and enduring.

I do not claim the dormer windows or inclined or curved roof-plate by themselves, as I am aware that they have been previously known and used in a stove called the "Mansard;" but

What I claim as my invention is—

The forward extension D, provided with dormer windows E, projecting from the receding-plate *c'*, as and for the purpose hereinbefore set forth.

FRANCIS H. ROOT.

Witnesses:

S. S. JEWITT,

W. H. FORBUSH.