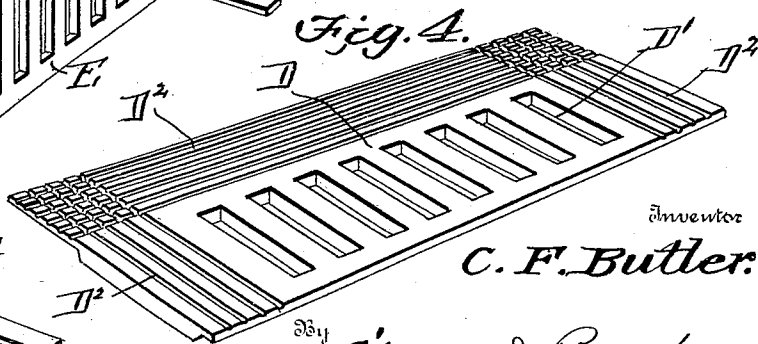
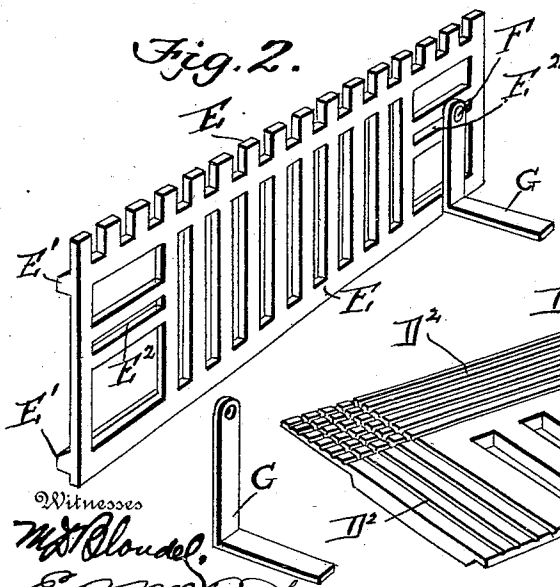
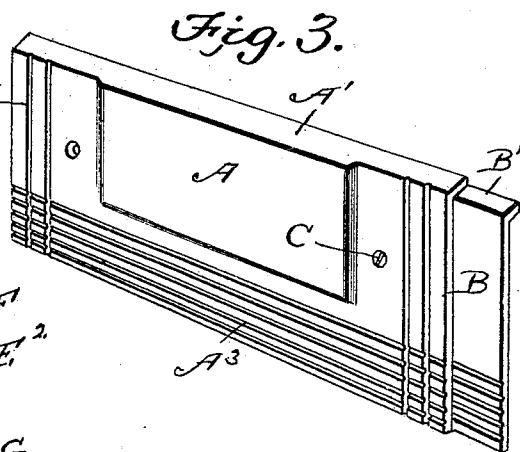
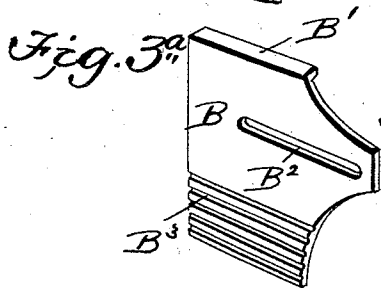
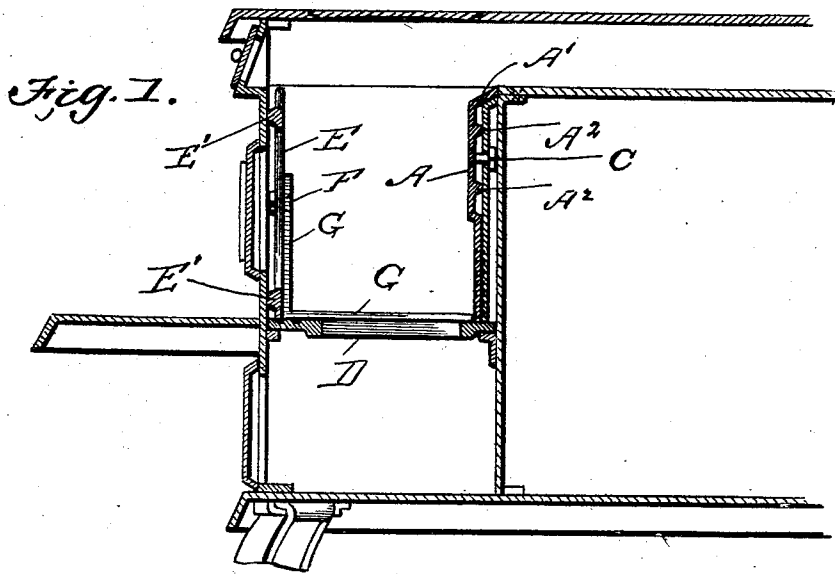


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GRATE.

APPLICATION FILED DEC. 18, 1905. RENEWED JUNE 6, 1908.

939,945.

Patented Nov. 9, 1909.



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UNITED STATES PATENT OFFICE.

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GRATE.

939,945.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed December 18, 1905, Serial No. 292,288. Renewed June 6, 1908. Serial No. 437,197.

To all whom it may concern:

Be it known that I, CHARLES F. BUTLER, a citizen of the United States, residing at Marshall, in the county of Calhoun and State of Michigan, have invented a new and useful Improvement in a Grate, of which the following is a specification.

This invention relates generally to stoves and more particularly to cooking stoves, the object being to provide a combination grate back and front. As a rule cooking stoves are provided with cast iron grates and fronts and fire brick backs and it is the object of my invention to avoid the fire brick back and provide a cast metal back of such construction that it can be made to fit any size stove.

Another object of the invention is to provide a front of such construction that when set in place upon the grate, it will not require any additional fastening means to hold the same in place.

With these various objects in view, the invention consists in the novel features of construction, combination and arrangement, all of which will be fully described hereinafter and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a sectional view of a cooking stove provided with my improvement. Fig. 2 is a detail perspective view of the front of the grate. Fig. 3 is a detail perspective view of the back. Fig. 3^a is a perspective view showing one of the end extensions, and Fig. 4 is a detail perspective view of the bottom or grate proper.

In carrying out my invention I employ a cast iron back A, having a flange A' at its upper end, and reinforcing ribs A², upon its rear face adjacent the upper end. The forward face is provided with a series of horizontal grooves A³ arranged adjacent to the lower end and a plurality of vertical grooves A⁴ arranged at the opposite ends of the cast iron back. B are the extension pieces having a flange B' at the upper end, said extension pieces being connected to the rear side of the back at each end by means of bolts C, which pass through the horizontal slots B², produced in the extension pieces B. By means of these extension pieces, the back can be adjusted to the length required to fit the fire box of the stove and it will be noted that the lower portion of the

extension pieces is grooved as shown at B³ to correspond with the grooved portion of the back A.

The bottom or grate proper D, is constructed as usual with a plurality of transverse openings D', through which ashes can escape and it will be noted that the front portion of the bottom D, is grooved longitudinally upon its upper face as shown at D² and also grooved transversely adjacent each end as shown at D³.

E indicates the reticulated front provided with reinforcing ribs E' upon the forward side and the front is also constructed with horizontal slots E² adjacent each end through which bolts F, are adapted to be passed for the purpose of securing the right angled supporting arms G, the upper ends of said arms being connected to the inner side of the front and the horizontal member of each arm rests upon the grate and not only serves to hold the front in an upright position but also serves to hold the lower end of the back in its proper position as it will be noted by reference to Fig. 1, that the rear end of the arm engages the lower end of the back. It will also be noted that the lower edge of the front rests in one of the transverse grooves produced in the front portion of the grate or bottom D.

It will thus be seen that I provide a cast iron fire box or chamber for an ordinary cooking stove and one in which certain of the parts are adjustable in order to be capable of use for various size stoves.

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

A grate for kitchen stoves comprising a bottom, an extensible back supported by said bottom, a front resting loosely upon said bottom and parallel to the back, and angled arms having their upper portions secured to the inner face of the front, the horizontal portions of said arms resting upon and extending across the bottom and bearing against the back, said arms holding the front and back in position relative to each other.

CHARLES F. BUTLER.

Witnesses:

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