S. C. CALL.

GRATE EXTENSION FOR STOVES.

No. 192,227. Patented June 19, 1877.

Fig. 1.

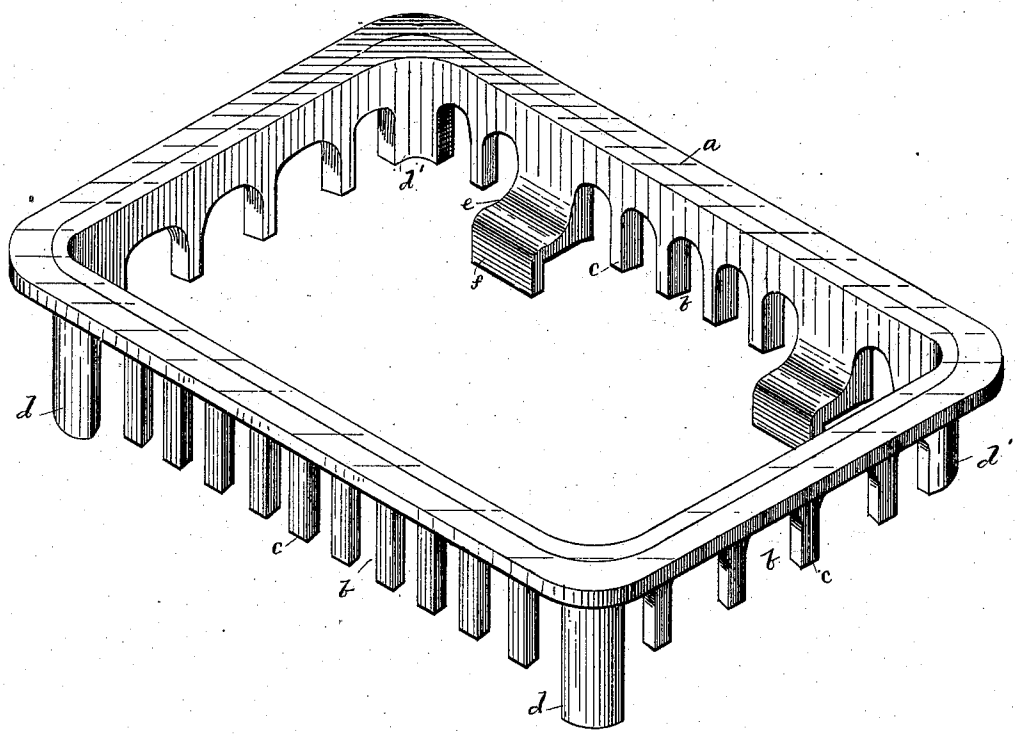
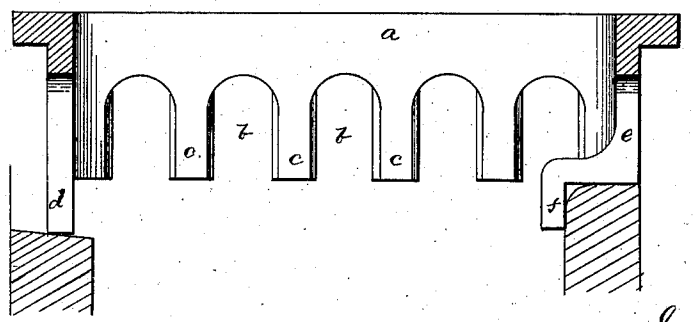


Fig. 2.



Witnesses.
W. J. Pratt.
E. B. Perkins.

Inventor
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UNITED STATES PATENT OFFICE.

SARAH C. CALL, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN GRATE-EXTENSIONS FOR STOVES.

Specification forming part of Letters Patent No. **192,227**, dated June 19, 1877; application filed May 7, 1877.

To all whom it may concern:

Be it known that I, SARAH C. CALL, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Protector for Cooking-Stoves and Ranges, of which the following is a specification:

This invention relates to a protector for cooking-stoves and ranges, it being adapted to be applied directly above the fire-brick or other lining constituting the sides and ends of the fire-box, thereby forming a grate-like surrounding between such lining or the upper rim of the fire-box and the top plate of the stove or range, to prevent the fuel, when being placed in the fire-box, from getting into the flues or out upon the front plate, where it acts to burn off the top of the grate.

By the use of this protector the fuel cannot be thrown into the flue-space above the oven to choke it and stop the proper action of the stove as to its baking properties. If the bottom of the flue-space over the oven is covered with coal, &c., it prevents the inward radiation of heat to the oven, and then, to make the oven hot enough, instead of cleaning out the stove, more coal is put on to increase the amount of fire.

This protector, by preventing the accumulation of coal in the flue, which reduces the heat of the oven, enables the products of combustion passing from the fire-box in contact with the oven to exert their full effect, and, consequently, the protector becomes a fuel-saver, for, when used, sufficient heat for all baking and cooking purposes may be gained without filling the fire-box so full.

Figure 1 represents one form of a protector to illustrate this invention, and Fig. 2 a cross-section.

The protector *a* is formed as a rim, shaped to conform substantially with the outline of the fire-box in the stove or range to which it is to be applied. The lower portion of the protector extends substantially to the upper partion or top of the walls of the fire-box, while its upper portion terminates just below the stove-covering plates. Between the upper and lower edges of the rim are a series of openings, *b*, to permit the passage of the products of combustion from the fire-box to the flues. These openings leave a series of fingers, *c*, and corner-posts, *d*. The corner-posts *d* sustain the front of the protector, and the lugs *e*, with lips *f*, sustain the back portion of the protector, fitting, preferably, over the fire-brick and preventing the backward movement of the protector.

It is evident that, instead of slotting the rim, as shown at *b*, it might be provided with a series of round or oblong openings of sufficient area.

These protectors may be readily applied to a new or old cooking-stove or range.

I claim—

1. As a new article of manufacture, the protector for cooking-stoves and ranges, adapted, substantially in the manner specified, to be placed between the top of the fire-box and the removable top plate of the stove or range, to prevent the fuel from getting into the flues, substantially as described.

2. The combination, with the protector, of the lug *e* and lip *f*, to hold the protector up at one side and prevent it moving backward, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MRS. SARAH C. CALL.

Witnesses:

G. W. GREGORY,

E. C. PERKINS.