

Stove Door.

Patented Oct. 25, 1870.

[illegible]

A diagram of a beam of length l and weight W . The beam is supported at point A by a vertical reaction force R_A and at point B by a horizontal reaction force R_B . The weight W acts vertically downwards at the center of the beam. The distance from A to B is l .

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ROYAL E. DEANE, OF NEW YORK, N. Y.

Letters Patent No. 108,691, dated October 25, 1870.

IMPROVEMENT IN COOKING-RANGES.

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

To all whom it may concern:

Be it known that I, ROYAL E. DEANE, of the city, county, and State of New York, have invented, made, and applied to use certain Improvements in the construction of Cooking-Ranges; and that the following is a full, clear, and correct description of the same, reference being had to the accompanying drawing making part of this specification and to the letters of reference marked thereon, in which—

Figure 1 is a front view of my improved range, a portion of the front of the same being removed.

Figure 2 is a transverse section of a portion of the same, showing the dust-damper opened and the grate in position.

Figure 3 is a transverse section of the same, the dust-damper being closed and the grate thrown down.

Figure 4 is an end view, showing the oven door thrown down.

In the drawing like parts of the invention are designated by the same letters of reference.

The nature of my invention consists in improvements in the construction of cooking-ranges, for supporting the oven-door or doors when the same are thrown down, that access may be had to the interior of the ovens.

To enable those skilled in the arts to make and use my invention, I will describe the construction and operation of the same.

A is a cooking-range; and

B is an oven-door, constructed in the ordinary manner, and hung upon its bottom edge, that it may be opened and thrown down when access is desired to the interior of the oven.

This door is provided upon each side, about one-third its height, with the stops *b*, the object of which will be hereinafter set forth.

A short distance below the bottom edge of the oven-door B are placed the ears *c*, in which are inserted the rods *d*, upon which are secured the uprights C.

The lower extremities of the uprights are curved, and have attached to them the weights *e*, made sufficiently heavy to counterbalance the weight of the uprights and the door, and so arranged that when the uprights are placed in position upon the short rods the weights shall be upon the interior of the lower portion of the front plate of the range, or inside the line of the front plate.

The uprights, when the door is closed, rest against the front of the door, and when the door is thrown down, that access may be had to the interior of the oven, are thrown forward until the top ends of the uprights are brought into contact with the stops upon the sides of the oven-doors. Thus it will be seen that when the door is thrown down the fall is governed by the weighted uprights, and that the descent of the door from the vertical position it occupies when closed, to the horizontal position it assumes when opened, is eased, and that, when thrown down into this horizontal position, it is received by and rests upon the top ends of the uprights, which in turn bear against the stops *b*.

D shows the grate hung within the fire-chamber of the range.

E shows what I term the dust-damper, hung about centrally in the rear or back part of the ash-pit, and covering an opening in the back plate of the range, which opening, when the damper E is open, allows the dust to pass out of the ash-pit and into a flue and away from the range.

Having thus set forth my present invention,

What I claim as new, is—

The combination with the oven-door, provided with the stops of the weighted uprights, when the same shall be constructed and operate substantially as and for the purposes set forth.

ROYAL E. DEANE.

Witnesses:

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