R. J. KING.

COOKING-STOVES.

No. 194,918. Patented Sept. 4, 1877.

Fig. 1.

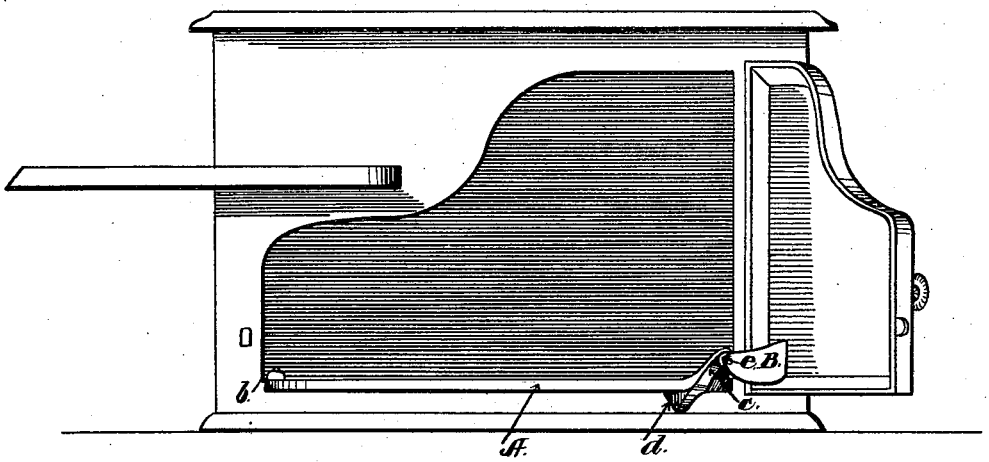
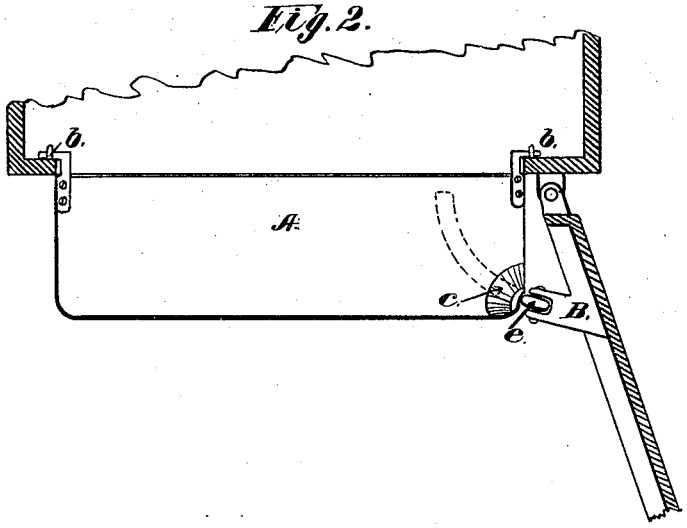


Fig. 2.



Witnesses;
Chas. M. Peck
Wm Ritchie

Inventor;
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by his Attys.
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UNITED STATES PATENT OFFICE.

RUFUS J. KING, OF DAYTON, OHIO.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. **194,918**, dated September 4, 1877; application filed August 14, 1877.

To all whom it may concern:

Be it known that I, RUFUS J. KING, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Cooking-Stoves; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to an improvement upon that described in Letters Patent No. 180,001, granted July 18, 1876, to Esek Bussey and Chas. A. McLeod, for certain improvements in cooking-stoves.

The invention so patented is for an oven-shelf fitted to fall outward and down when the oven-door is opened, and to be raised up by the closing of the latter, which operates upon it for that purpose. The parts employed are a shelf pivoted in the oven, so that when let down the top of the shelf and bottom of the oven lie in the same plane, and a segmental lug upon the bottom inner corner of the door bearing against the edge of the shelf, and so arranged that, as the door is closed, the lug raises the shelf.

In the course of time this construction becomes practically inoperative, for the reason that the edges of the shelf and the lug become worn and indented by constant impact and friction, and the free upward motion of the shelf becomes more and more impeded until finally the parts will become rigidly interlocked.

The object of my invention is to remedy this difficulty by providing on the oven-door a lug with a friction-roller, in combination with a cam-surface upon the under side of the shelf, at its side, whereby all wear of the parts is practically prevented, and the device rendered operative, as will be herewith described.

In the accompanying drawing, Figure 1 is a side elevation of a cook-stove provided with my improved devices for operating the shelf. Fig. 2 is a plan view of the shelf, showing its relative position to the oven and door, and having my improved mechanism.

A represents the shelf, pivoted at *b* to the oven bottom in such a way as to fall down to a horizontal position when the door opens. On the edge of this shelf, next the door and cast with it, are upward and downward projecting lugs *c* and *d*, whose edges, with the edge of the shelf, form a cam, whose face describes a parabolic curve, as shown by dotted lines in Fig. 2.

On the bottom inner corner of the oven-door is a lug, B, having its end recessed or slotted, to accommodate a roller, *e*, which is pivoted therein, as shown. This lug and roller are so located that when the door is swung around in the act of closing the roller will travel along the face of the cam on the shelf, and cause the latter to rise and stand in a vertical position when the door is closed.

By this arrangement all wear of the parts is prevented, and a practical operative device obtained.

Having thus described my invention, I claim as follows:

In combination with a stove-oven and its door, the shelf A, having the cam-lugs *c* and *d*, whose faces form a parabolic curve, and the lug B, carrying a friction-roller, *e*, arranged in the manner described, so that as the door is being closed the roller travels upon the cam and causes the shelf to be raised, substantially as and for the purpose specified.

Witness my hand this 8th day of August, A. D. 1877.

RUFUS J. KING.

Witnesses:

GEORGE R. YOUNG,

CHAS. J. MCKEE.