(No Model.)

J. H. ALLYN.

GRATE FOR OVENS.

No. 369,831. Patented Sept. 13, 1887.

FIG. 1.

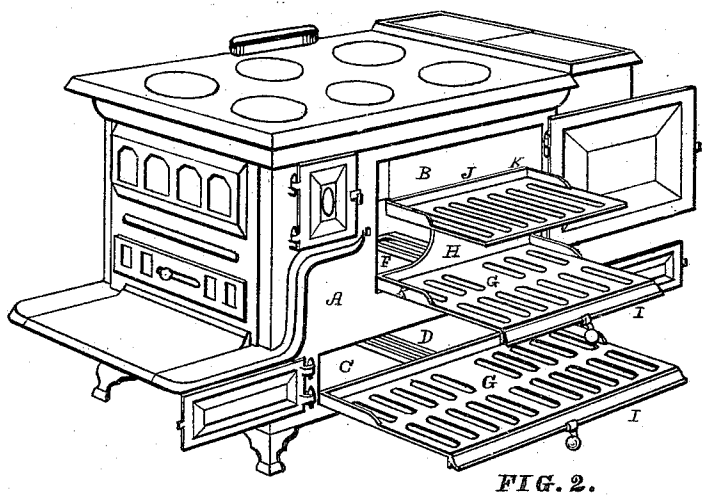


FIG. 3.

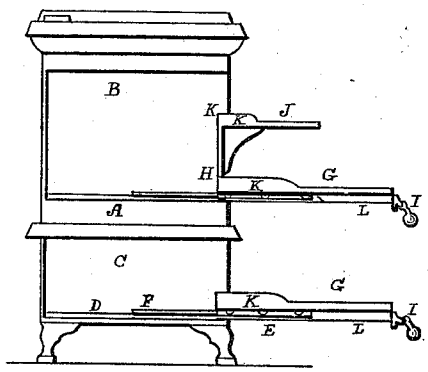


FIG. 2.

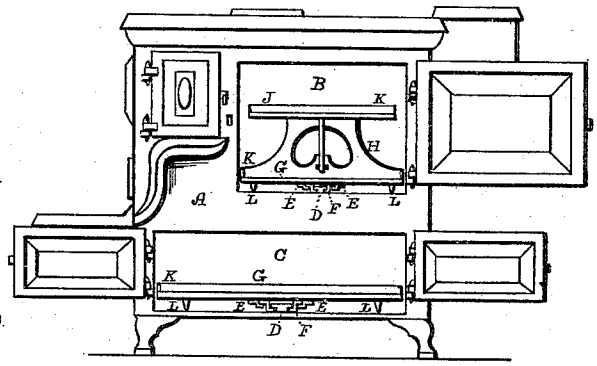


FIG. 7.

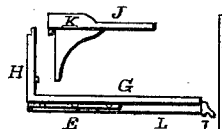


FIG. 6.

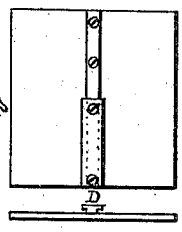


FIG. 5.

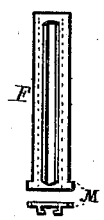
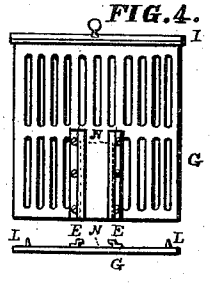


FIG. 4.



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GRATE FOR OVENS.

SPECIFICATION forming part of Letters Patent No. 369,831, dated September 13, 1887.

Application filed January 3, 1887. Serial No. 223,313. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. ALLYN, a citizen of the United States, residing at Whitesborough, in the county of Oneida and State of New York, have invented a new and useful Grate for the Oven and Warming-Closet of a Range or Stove, of which the following is a specification.

My invention relates to improvements in grates for the oven and warming-closet of ranges or stoves in which a grate and slide operate in conjunction with the floor of an oven or warming-closet; and the objects of my improvements are, first, to provide a means of guiding and supporting a grate during the operation of drawing forth and returning into the oven or warming-closet of a range or stove; second, to afford facilities for guiding and supporting a grate on a horizontal plane with the floor of an oven or warming-closet of a range or stove while withdrawing and returning out and into same; third, to prevent the back of the grate from leaving or losing the support received from the floor of the front of oven or warming-closet. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a range as it appears with the oven and closet doors open and grate and slides in position when drawn out; Fig. 2, a side elevation view of a range as it appears with the oven and closet door open; Fig. 3, a front elevation view of a range as it appears with grates drawn out and supported by guides, slide, and guide-strip; Fig. 4, a plan view of the under side and edge of a grate, showing guide-strips, ways, and grate front with handle attached; Fig. 5, a top plan and end view of a slide; Fig. 6, a top plan and edge view of the floor of an oven or closet as it appears with the guide attached; Fig. 7, side elevation views of grate and grated shelf.

Similar letters refer to similar parts throughout the several views.

The range A, containing the oven B and warming-closet C, constitutes the frame-work.

The guide D, provided with ways on the upper and outer edges, is secured to or may form a part of the floors of the oven B and warming-closet C.

The guide-strips E, constituting ways and forming recess N, are attached to or may form a part of the under side of the grate G.

The slide F is provided with stop M and a longitudinal slotted recess, N, the lower surfaces and sides of which constitute inside lower ways, and the upper surfaces and sides constituting outside upper ways.

The grate G consists of a grated frame conforming in shape to the floor of the oven B or warming-closet C, and when adapted for the oven B is provided on the back edge with side pieces, K, and supporter H, having a rabbet at the top with lug to receive a catch for attaching shelf J.

The grate G, when adapted for the warming-closet C, is provided with back and side pieces, K. The forward edge is provided with a front, I, and handle attached. The ends and lower edge of the front I project for the purpose of closing against the front edge of the oven or warming-closet, the upper edge forming a threshold in line with the lower edge of the doors.

The ribs L extend downwardly from the under side of the grate G, supporting the grate G on a line parallel with the floor of the oven B or warming-closet C, the shelf J, having back and side pieces, K, on the upper side, bracket underneath, and catch on the upper edge, the catch adapted to fit the lug on supporter H.

In operation the grate G, when drawn forth, is retained parallel with the floor of the oven B or warming-closet C by the ribs L, and is held to the floor of the oven B or warming-closet C by the guide-strips E, the slide F, and guide D, the slide E extending about to the center of the grate G and supporting it on a horizontal plane with the floor of the oven B and warming-closet C. By means of the stop M on the front end of the slide F stopping in the recess N, and by the back cross-section of the slide F stopping against the inner end of the guide D, the grate G is prevented from leaving the oven B or warming-closet C. When returned into the oven B or the warming-closet C, the front I on the grate G closes on the front edge of the range A, leaving the handle of the front I projecting outside, thereby avoiding the heat.

The ledge and face on the upper side of the

front I constitute a threshold for the door of the oven B or warming-closet C to close against.

The back and side pieces, K, attached to the upper sides of the grate G and the shelf J, prevent the contents from sliding off when drawing from and returning into the oven B or warming-closet C.

The shelf J, when attached to the support H, constitutes a part of and is carried by the grate G in its forward or backward movement.

I am aware that prior to my invention grates have been in use in ovens and warming-closets. I therefore do not claim such, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. On the floor of the oven and warming-closet of a stove or range, the guide D, in combination with the slide F, the guide-strips E, and the grate G, substantially as shown and described, and for the purpose specified.

2. In the oven and warming-closet of a stove or range, the slide F, provided with the stop M, in combination with the guide D, the guide-strips E, and grate G, substantially as shown and described, and for the purpose specified.

3. The combination, with a stove having an oven, a door for closing said oven, a grate resting on guides within the oven, and a molding or projection on the front edge of the grate, a space being left between the bottom of the door and the front edge of the oven-bottom for the passage of the grate, substantially as shown and described.

4. In combination with grate G, the front I, ribs L, supporter H, shelf J, and back and side pieces, K, for the oven of a range or stove, substantially as shown and described.

JOHN H. ALLYN.

Witnesses:

HAMMOND P. EVANS,

JAMES K. PARKER.