

T. GROOM.
Cooking-Range.

No. 168,152.

Patented Sept. 28, 1875.

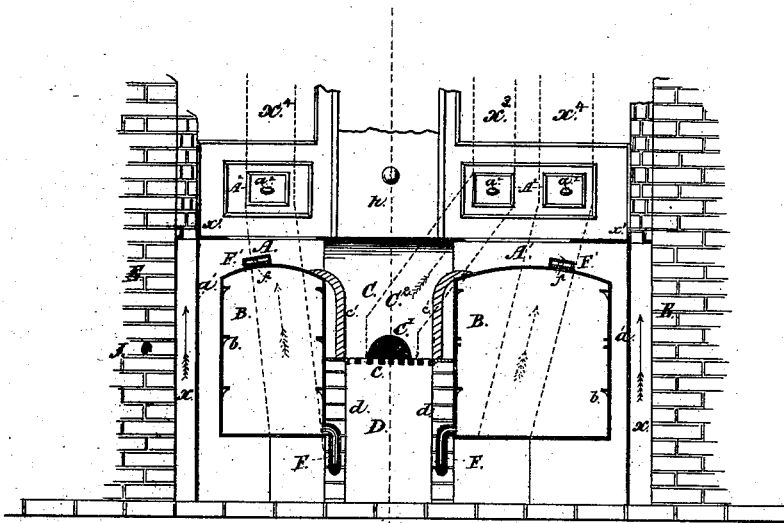


Fig. 1.

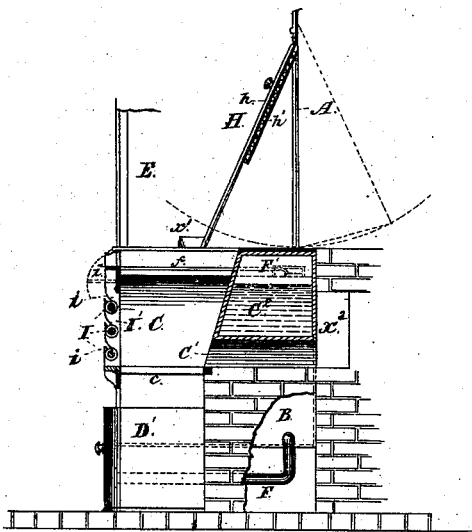


Fig. 2.

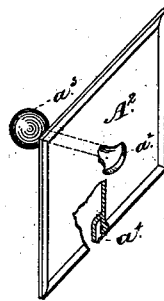


Fig. 3.

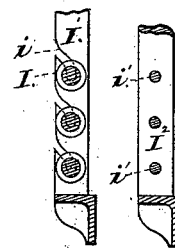


Fig. 6.

Witnesses:

Wm. H. ...
Com. Tr. Call

Inventor:

Thomas Groom
per *B. B. Ridoutt* *Att'y's*

T. GROOM. Cooking-Range.

No. 168,152.

Patented Sept. 28, 1875.

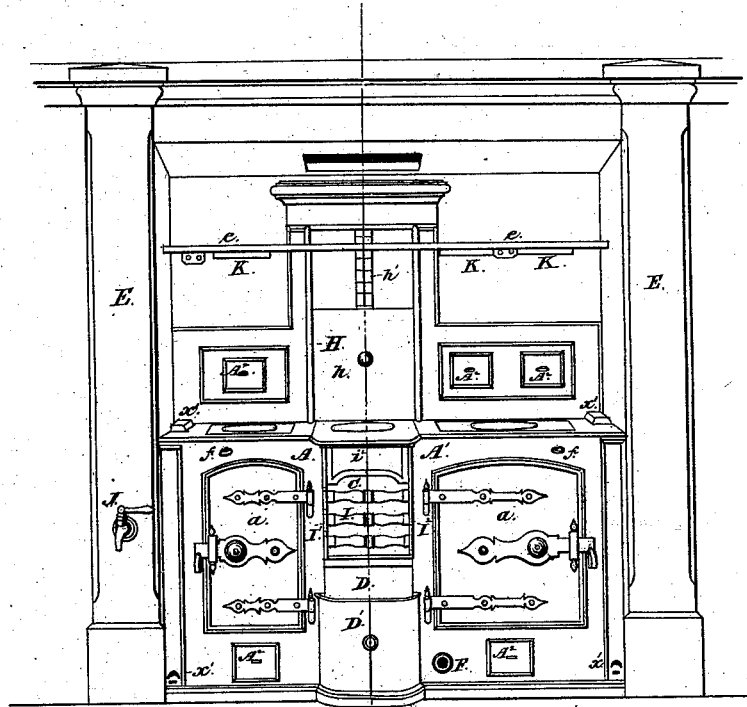


Fig. 3.

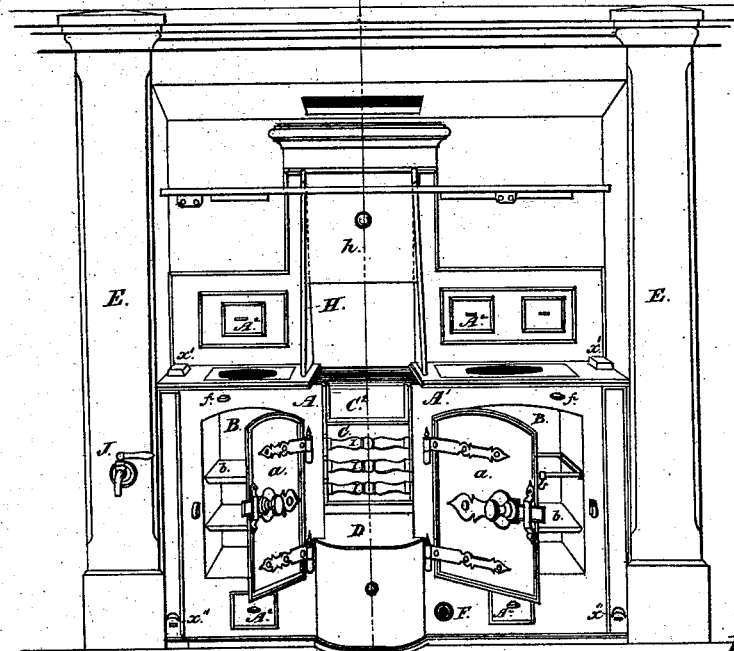


Fig. 4.

Witnesses;

Geo. A. Bird

Gov. W. Lally

Inventor:

for *Thustans Groom* ..
J. B. Ridout ..
Atty.

UNITED STATES PATENT OFFICE

THRUSTANS GROOM, OF GUELPH, CANADA.

IMPROVEMENT IN COOKING-RANGES.

Specification forming part of Letters Patent No. 168,152, dated September 28, 1875; application filed November 12, 1874.

To all whom it may concern:

Be it known that I, THRUSTANS GROOM, of the town of Guelph, Province of Ontario, Canada, have invented new and useful Improvements in Cooking-Ranges, of which the following is a specification:

My invention relates to improvements in the ordinary ranges used for cooking in hotels and private houses; and it consists in certain features hereinafter fully described.

Certain other features and devices are herein illustrated and described, which, however, do not form a part of the invention claimed herein, but which may form the subject-matter of other applications.

In the accompanying drawings, Figure 1 is a longitudinal section through a range embodying my improvements. Fig. 2 is a cross-section of the same. Fig. 3 is a front view of the range when closed up in cooking. Fig. 4 is a front view with oven-doors open and smoke-disperser raised. Figs. 5 and 6 are details, respectively, of the cleaning-out doors and grate-bar holders.

A and A¹ are the two divisions of the range, placed one on each side of the fire-place C. B are the ovens; *b*, the shelves therein. *a* are the doors of ovens. C¹ is a flue leading from fire under the hot-water reservoir C² to the rear, the smoke, &c., escaping through the flue *w*³. *c* is the grate. *c'* are fire-brick walls, placed to screen the metal of ovens from the direct heat of the fire, and molded to lap over the corners of ovens. D is the ash-pit; D', the ash-pan. E are the walls of the recess in which the range is fitted, and which form one side of the hot-air chambers *x*, the other sides being the cast-iron partitions *a'*. *x'* are the collars upon which the hot-air conducting-pipes connect. *x''* are dampers for admitting cold air. F are pipes for conducting air from the exterior of range to the interior of ovens, the inlet being placed near the bottom of the ovens. F' is a damper placed on the roof of ovens for regulating the exit of the air. The dampers and ports are covered with suitably-shaped hoods for directing the draft in the proper direction. *f* is a rod passing from the damper to the outside of range,

by means of which the operator is enabled to regulate the ventilation of the ovens. H is the smoke-disperser, constructed in the manner shown, to slide forward. *h* is the door, which slides up and down on H, and may be secured in any desired position on H by a spring-latch fitting into the notches *h'*. Thus, when roasting or baking, the range being closed up, the disperser is shoved back and the door *h* is drawn down.

When the range is used as an open fire, the disperser is drawn forward to its full extent and the door shoved up, as shown in Fig. 4.

I¹ and I² are the grate-bar holders, projecting outward from the front of range, and in which the grate-bars I are fastened by slipping one end into the circular hole *v'*, the other end fitting within the slot *i*.

It will be seen from an inspection of Fig. 6 that all or each of the bars can be removed readily when requiring to be cleaned, or for the purpose of raking out the fire-place.

J is the cock on the end of hot-water pipe leading from the reservoir C². A² are the cleaning-out doors of the flues. These doors are constructed with a lip, *a*⁴, on lower edge, which fits over the lower edge of opening, and acts as a hinge, the door being kept closed in place by the weight of the counter-balance *a*³ on the end of the handle *a*². K are dampers used in regulating the discharge of smoke, &c., through the flues, and also for changing the draft through the range.

The draft of the fire may be caused to pass either over the ovens and out through the flues *x*⁴ and *x*⁴, or it may be caused to pass up at once under the smoke-disperser H by manipulating the dampers K.

When passing, as in roasting or baking, over the ovens, the draft naturally carries with it the fumes which arise during the cooking of meats, and takes them off up the chimney, the hoods over the ports preventing the smoke from entering the oven.

Of course, I do not confine my improvements to any particular style of oven, they being applicable to all kinds of ranges with single, double, or more ovens.

I claim as my invention—

1. The grate-bars I, in combination with the grate-bar holders I¹ and I², provided with slots *i* and holes *i'*, arranged substantially as described, and for the purpose specified.
2. In combination with the vertical rear portion or wall of the range, the sliding smoke-

disperser H, with sliding door *h* and rack *h'*, substantially as described, for the purposes set forth.

THRUSTANS GROOM.

Witnesses:

GEO. HOWARD,
JACOB MARTIN.