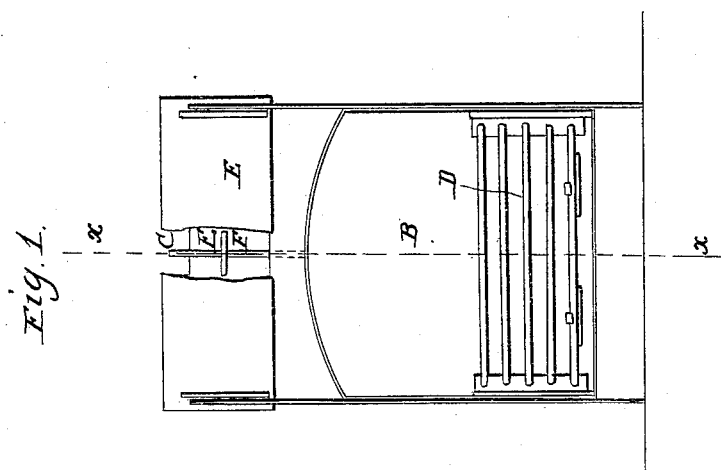
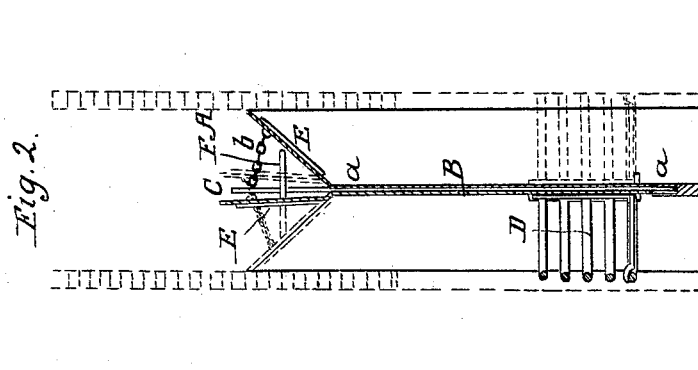


P. J. BORIS.
Revolving Grate.

No. 45,895.

Patented Jan'y 10, 1865.



Witnesses:

J. W. Coombs
M. M. Livingston.

Inventor:

P. J. Boris
by *Munroe & Co.*
Attys.

UNITED STATES PATENT OFFICE.

P. J. BORIS, OF HALIFAX, NOVA SCOTIA.

REVOLVING GRATE.

Specification forming part of Letters Patent No. 45,895, dated January 10, 1865.

To all whom it may concern:

Be it known that I, P. J. BORIS, of Halifax, in the county of Halifax and Province of Nova Scotia, have invented a new and Improved Grate; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a front view of my invention. Fig. 2 is a vertical section of the same, taken in the line *xx*, Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in attaching an ordinary grate to a revolving back plate, so arranged relatively with a flue or chimney running up in the partition between two compartments that said back plate and its grate may be turned and the grate adjusted in either compartment, and two compartments warmed or heated by one and the same grate.

The invention also further consists in arranging two dampers with the back plate of the grate in such a manner that the dampers will be opened and closed automatically by the turning of the grate.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a flue or chimney which is built in the partition of two compartments, and B is a vertical plate which is fitted centrally in the lower end of the flue or chimney, on an axis or shaft, C, which is allowed to turn freely in its bearings *aa*. The plate B is of metal, and it extends the whole width of the flue or chimney A, and to one side of said plate a grate, D, which may be of the usual or any proper construction, is permanently attached. In the flue or chimney A, just above

the plate B, there are placed two dampers, E E, one at each side of the plate B. These dampers are connected by a chain, *b*, which is of such a length as to hold one damper open when the other is closed. This will be fully understood by referring to Fig. 2. The axis or shaft C extends up some distance above the plate B, and has an eccentric, F, upon it, which is between the two dampers E E. The damper E, which is directly over the grate D, is always open, in order, of course, to admit of the proper draft, and the other damper at the opposite side of the plate B is always closed. The grate D, by turning the plate B, may be adjusted in either compartment, and, as the plate B is turned, the eccentric F on the axis or shaft C turns down or closes the damper E, which was formerly over the grate, and opens the one which was formerly closed. Thus it will be seen that the dampers E E are operated automatically, the damper over the grate always being open; and it will also be seen that two rooms may be heated by one and the same stove, the stove being turned or adjusted in either room, as may be desired. Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The revolving grate D, arranged in the lower part of the flue or chimney A, in combination with the eccentric F, placed on the axis or shaft C of the plate B, and arranged relatively with the dampers E E to operate automatically by the turning of the plate B and grate D, substantially as described and represented.

P. J. BORIS.

Witnesses:

ROBERT MCINTOSH,
JAMES E. BARSS.