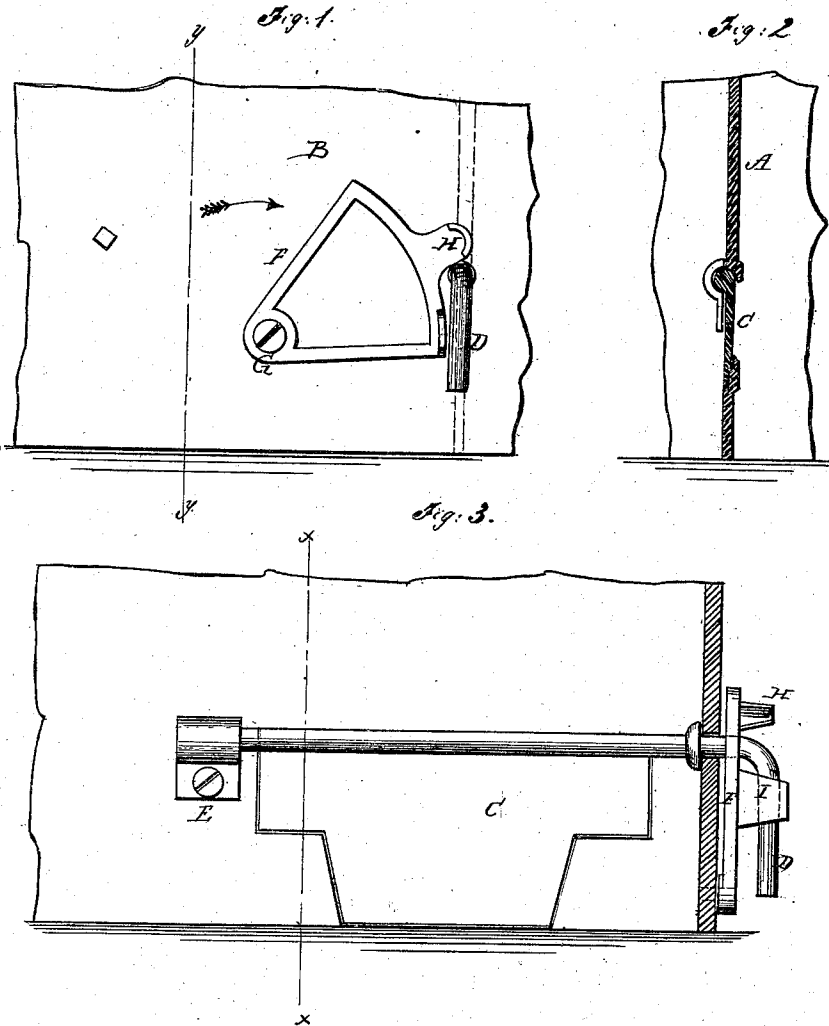


J. M. FREAR.
Damper.

No. 111,336,

Patented Jan. 31, 1871.



Witnesses:

Chas. Nida.
L. S. Mabee

Inventor:

J. M. Frear
PER *Wm. H. Co.*
Attorneys.

United States Patent Office.

JAMES M. FREAR, OF PITTSBURY, PENNSYLVANIA.

Letters Patent No. 111,336, dated January 31, 1871.

IMPROVEMENT IN DAMPERS.

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, JAMES M. FREAR, of Pittsburg, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Dust-flue Dampers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The object of this invention is to obtain convenient and easy access to the bottom flues of stoves and ranges for the purpose of cleaning the same, and also to create an under draught for carrying off the ashes and dust which rises when raking or shaking the grate; and

It consists in an adjustable damper, suspended on bearings, with a handle passing through the side of the stove for operating the same, and also in a plate for adjusting the damper, as will be hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents an outside view; showing the handle of the damper and the adjusting device.

Figure 2 is a vertical section of fig. 3, on the line *x x*.

Figure 3 is a cross-section, looking in the direction indicated by the arrow from the line *y y* of fig. 1, showing the side of the damper and the manner in which it is supported.

Similar letters of reference indicate corresponding parts.

A is the flue-plate.

B is the side of the stove or range.

C is the damper.

D is the handle, which projects through the side B and drops down, as seen in fig. 3.

E is a box, for supporting one end of the damper. The other end is supported by the side B, as seen in the same figure.

F represents the device by which the damper is adjusted.

This is a quadrant-shaped plate, attached to the side B by the pivot-screw or rivet, as seen at G.

This adjusting plate F has projections, H and I, between which the handle D may be held, so as to support the damper at an angle of about forty-five degrees, or partly open.

When the damper is fully open, or in an upright position, it is held in that position by the projection H, and when entirely closed it is held tightly to its place by the projection I.

By means of this damper free and ready access is obtained to the lower flue of the stove or range, and a strong draught is produced for the purposes named.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. The plate F, by means of which the damper may be adjusted, substantially as described, for the purposes set forth.

2. In a stove or range, the combination of the damper C and adjusting plate F, substantially as and for the purposes described.

JAMES M. FREAR.

Witnesses:

J. J. VINCENT,

PETER RINKER.