A. Brown.

Grate.

No. 60,334. Patented Dec. 11, 1866.

Fig. 1.

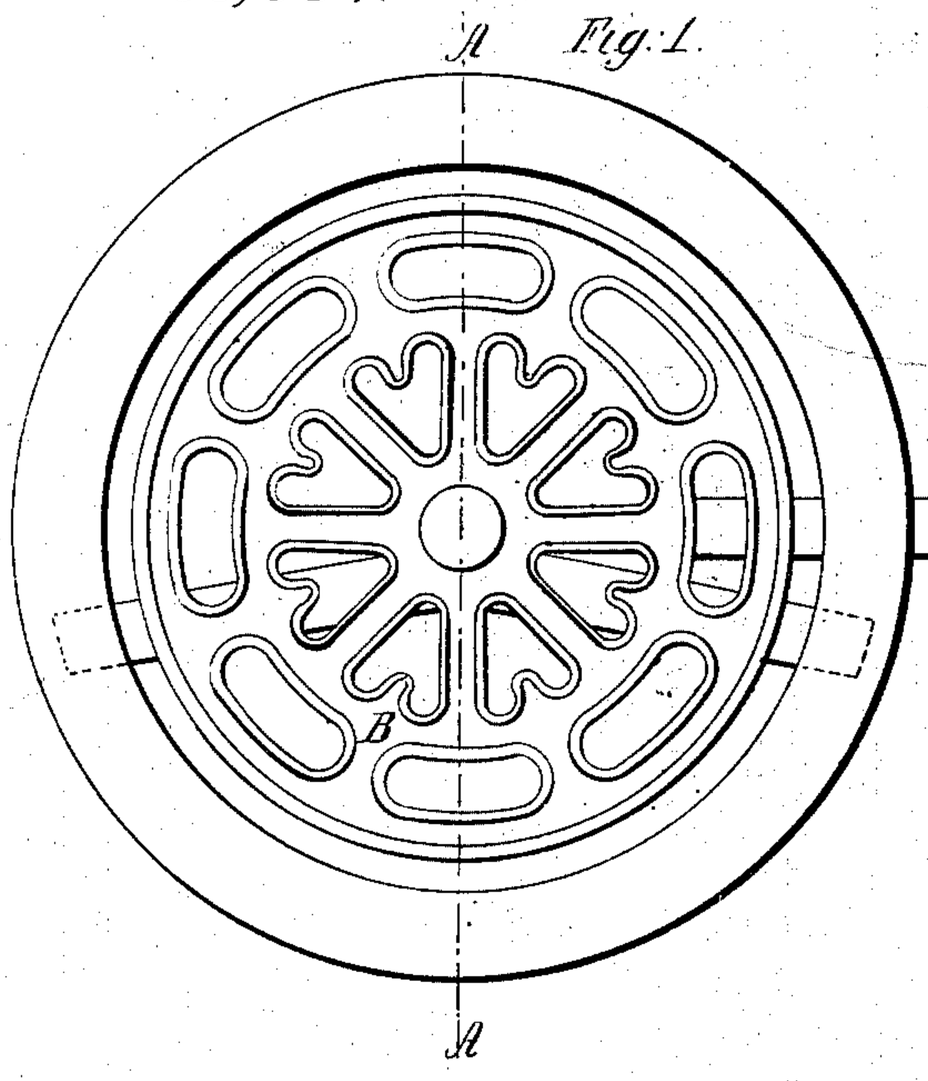


Fig. 4.

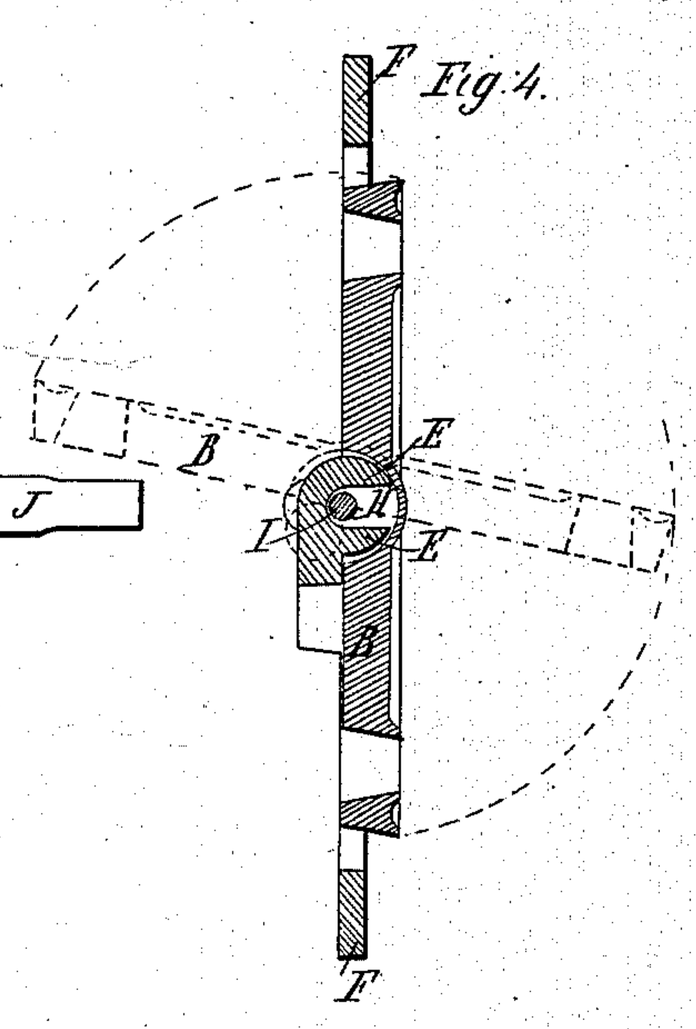


Fig. 2.

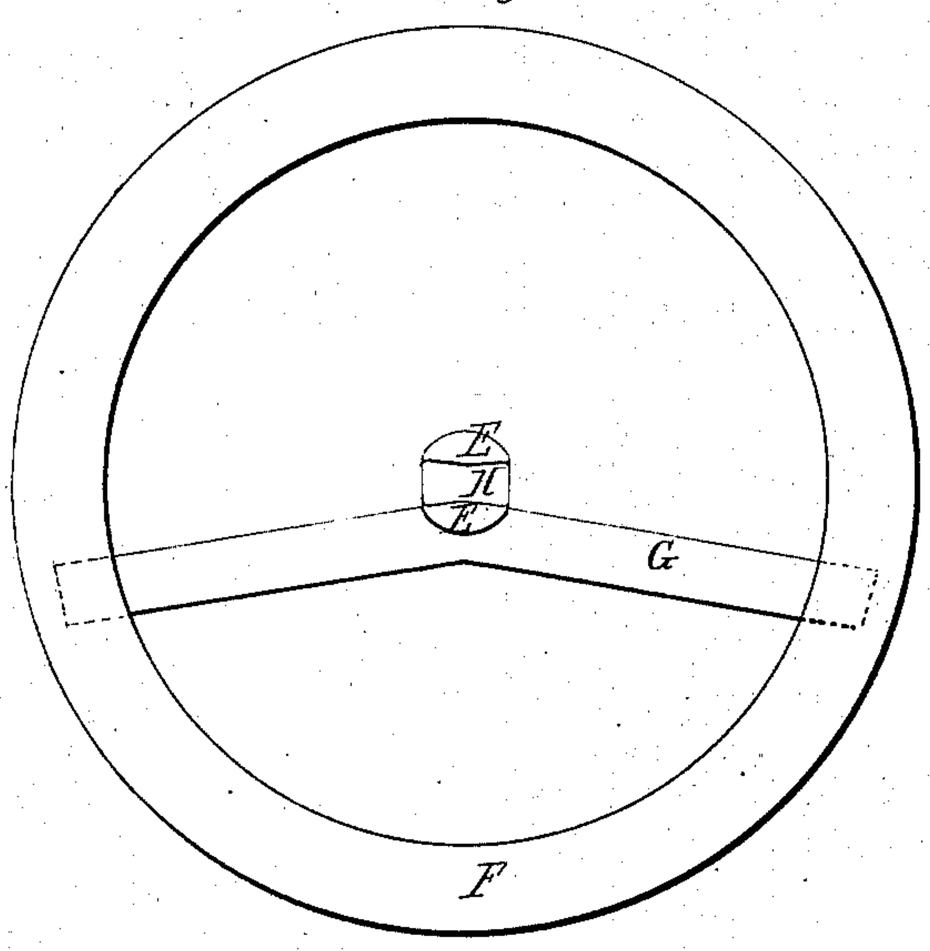
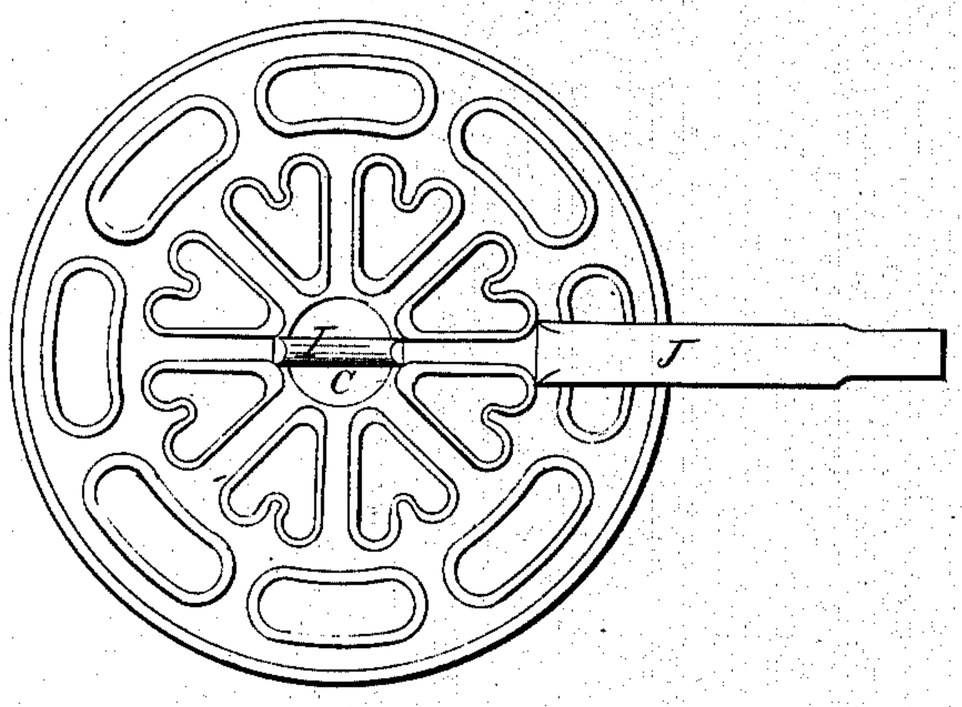


Fig. 3.



Witnesses;
Geo. A Wated.
R. B. Church.

Inventor;
Albert Brown

United States Patent Office.

IMPROVEMENT IN GRATES FOR STOVES.

ALBERT BROWN, OF TROY, NEW YORK.

Letters Patent No. 60,334, *dated December* 11, 1866.

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, ALBERT BROWN, of the city of Troy, in the county of Rensselaer, and State of New York, have invented a new and useful Improvement in Stove Grates; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and the letters of reference marked thereon.

Figure 1 shows a plan of the grate and frame.

Figure 2 is a plan of the frame with cross-bar and centre.

Figure 3 shows the under side of the grate when detached from the frame.

Figure 4 shows a cross section at line A A in fig. 1.

In the centre of the grate B, on the under side, is the concave cavity C, in exact form to admit a half globe or ball. Permanently attached to the frame F, and crossing a little one side of the centre of its area, is the cross-bar G, and to the centre of said cross-bar is attached the convex centre E, which is made to fit into the cavity C; upon this centre, E, the grate rests, and is made to revolve right and left, to sift down the ashes, &c., which collect above it, in order to keep the grate from falling off its centre, E, when dumped, or when turned in a perpendicular position, it was necessary to cut the slot H, in the convex centre E, for the cross-pin I, which is attached to the grate directly across the cavity C, to rest in. This cross-pin holds the grate to its centre when dumped, as shown in fig. 4, by the red lines. It will be observed that by turning the shank J, the grate can be dumped at any point of its sphere of movement, which is quite an accomplishment, as it saves the finding any exact point at which it can be dumped, as is necessary in other grates of the kind. It is necessary that the bar G should be permanently secured to or cast on to the frame F, in order to hold the centre E in place, to secure the harmonious working of the grate.

Having thus described my grate, I claim—

1. The permanent bar G, in combination with the frame F, and convex centre E, or equivalents, as and for the purposes set forth.

2. I claim the cavity C, in combination with the cross-pin I, and the convex centre E, as and for the purposes set forth.

3. I claim the grate B, working upon the centre E, so arranged as to dump on a line with the shank J, at any point within the sphere of its movement, as and for the purpose set forth.

ALBERT BROWN.

Witnesses:

GEO. A. WATERS,

R. B. CHURCH.