

E. C. LOUD.

Stove Grate.

No. 100,536.

Patented March 8, 1870.

Fig:1.

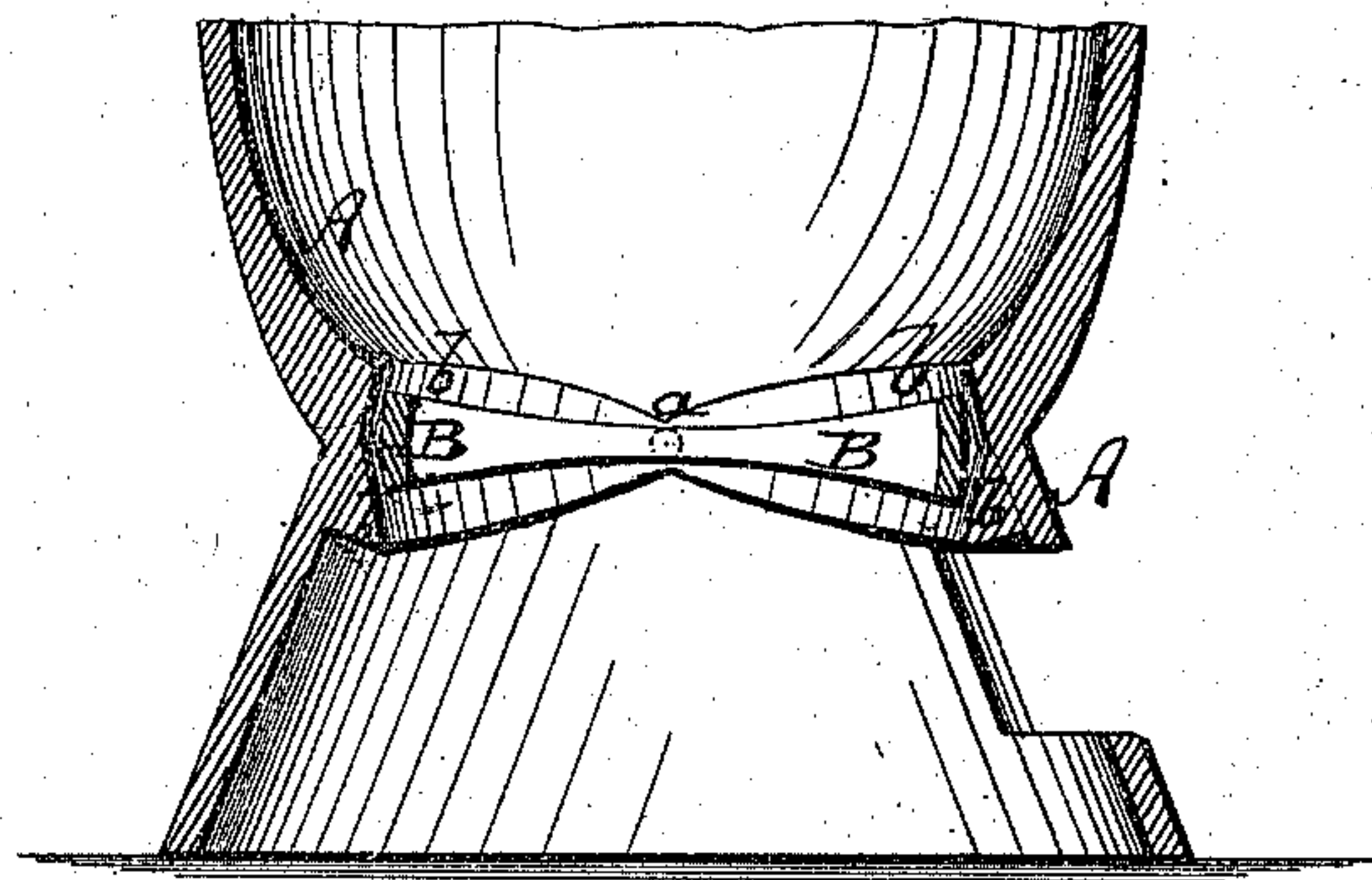
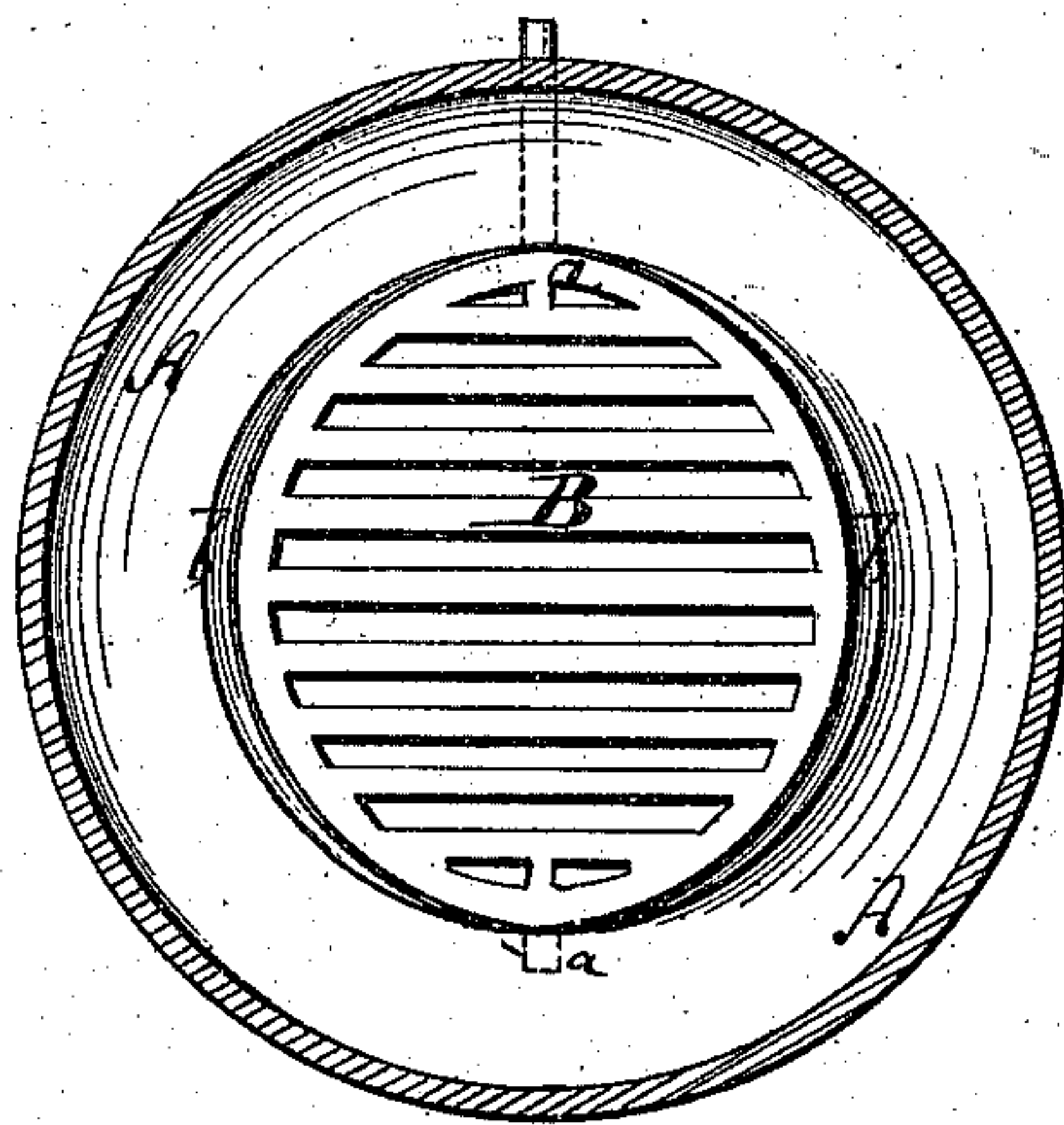


Fig:2.



Witnesses:

Wm. T. Brooks
Edgar Tate

Inventor:

E. C. Loud
PER M. M. Co.
Attorneys.

United States Patent Office.

ERASTUS C. LOUD, OF SPRINGFIELD, MASSACHUSETTS.

Letters Patent No. 100,536, dated March 8, 1870.

STOVE-GRATE.

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, ERASTUS C. LOUD, of Springfield, in the county of Hampden, and State of Massachusetts, have invented a new and useful Improvement in Stoves and Grates; 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 drawings forming part of this specification.

Figure 1 represents a vertical section of a stove having my improvement.

Figure 2 is a plan view of the same.

Similar letters of reference indicate corresponding parts.

This invention has for its object to so construct those stoves which have pivoted grates that the swinging sides of the grates will be opposite to concave surfaces, so that the grate can be considerably agitated to disturb the fuel, without danger of dropping any coal into the ash-box, and without danger of wedging coal or cinders between the edge of the grate and the stove-frame.

A represents the body of a coal-stove, thickened at the center, and provided at that part with an inner concave, *b*.

B is a grate, which may be of any form, but is preferably curved, and which is provided with jour-

nals *a a*, located in bearings at the middle of the concave *b*.

This concave is a curved surface, formed by the vibration of a semi-circumference, slightly larger than that of the grate, in an arc of about forty degrees; that is to say, about twenty degrees on each side of its stationary plane.

The proximity of this concave surface, at all points, to the perimeter of the grate should be very small.

The latter will therefore remain with its edges equidistant from the side of the stove as long as its motion does not exceed about twenty degrees to either side of the horizontal. Thereby a shaking of the grate to the said extent is allowed, without getting any coal or other matter between the stove and grate, and when the grate is dumped and readjusted, no difficulty from the same cause will be experienced.

The contiguous edges of the grate may also be, but not necessarily, correspondingly convex, as shown.

Having thus described my invention,

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

A grate, B, having journals *a a*, resting in bearings about the middle of a concave, *b*, and vibrated therein, as and for the purpose specified.

Witnesses:

G. R. TOWERSLEY,
W. H. SMITH.

E. C. LOUD.