

(No Model.)

J. JEWETT.
Stove Grate and Bearings.

No. 236,036.

Patented Dec. 28, 1880.

Fig. 1.

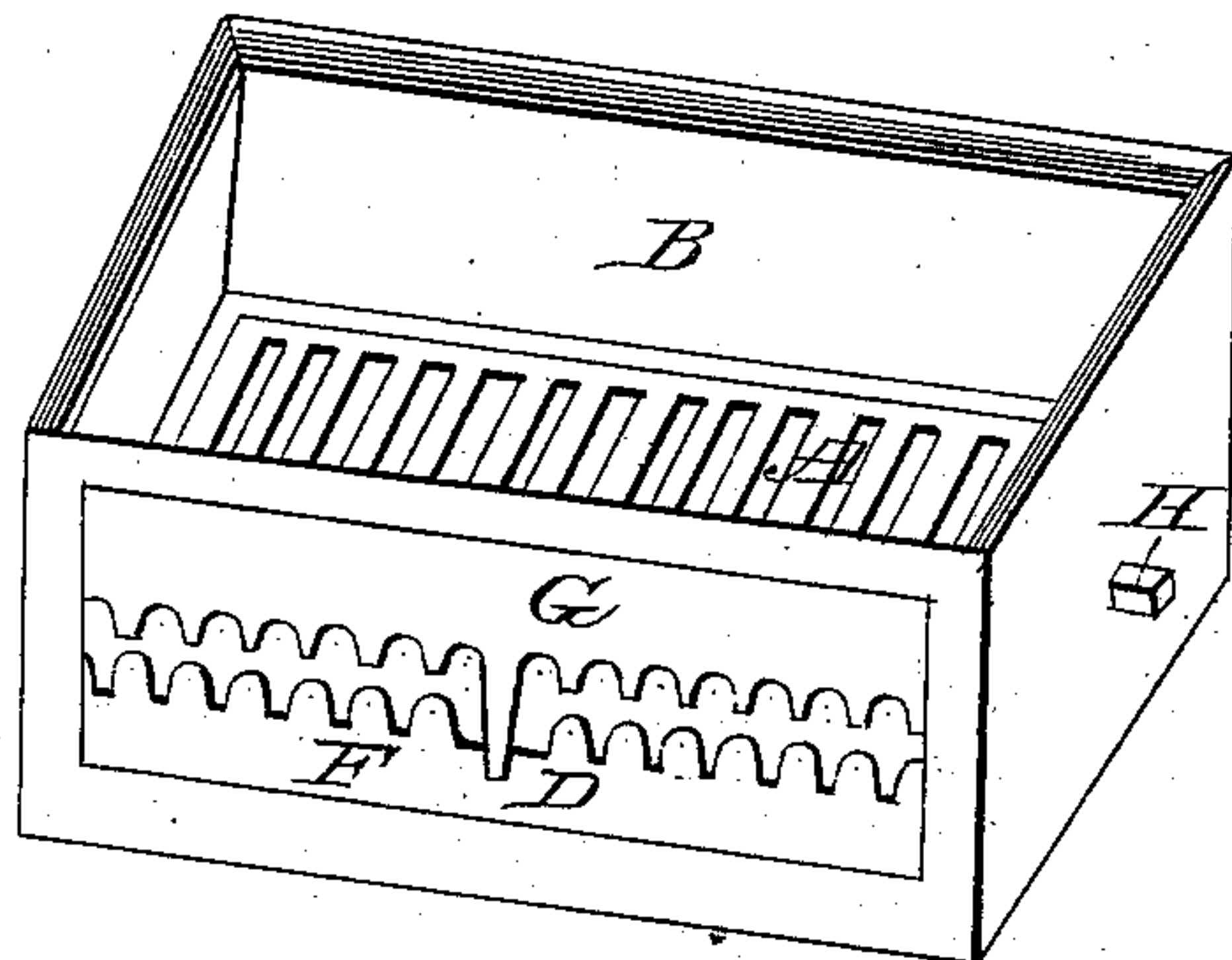


Fig. 2.

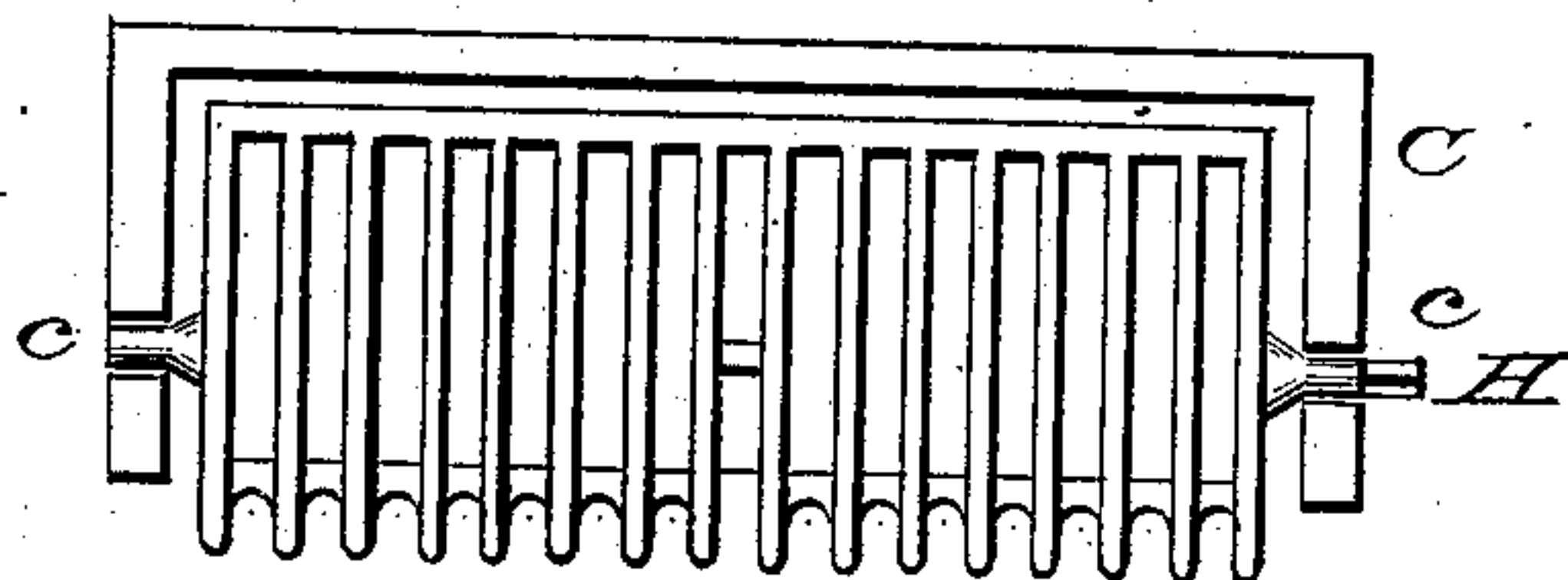


Fig. 3.

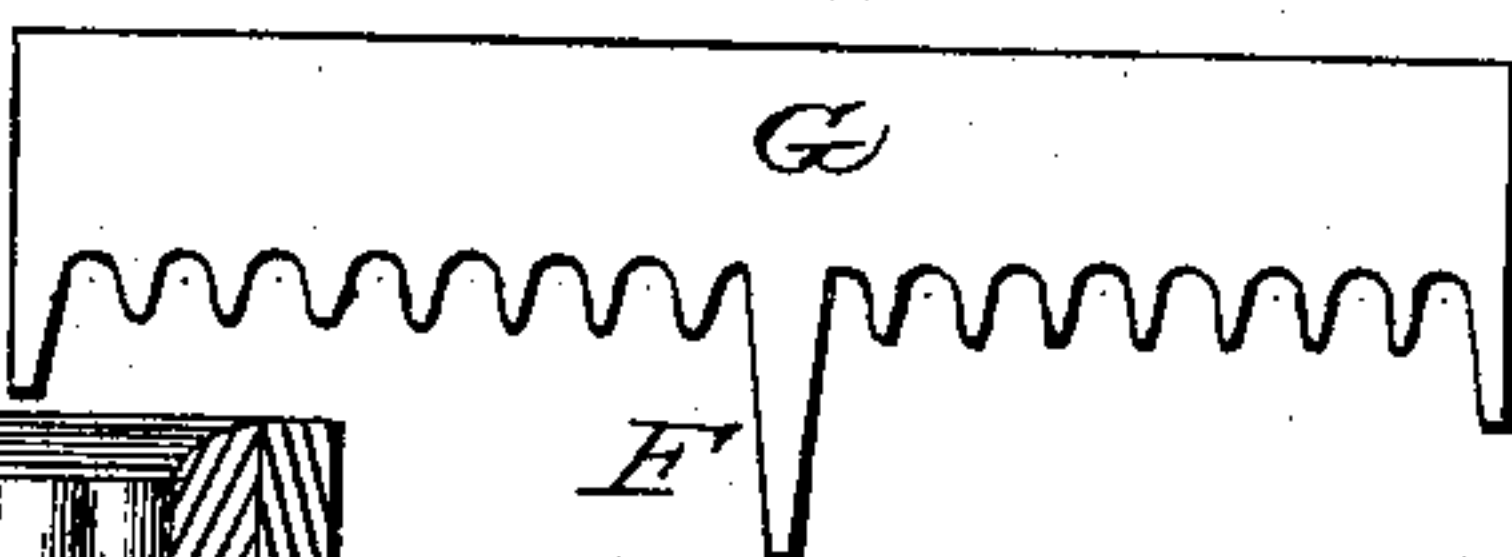


Fig. 5.

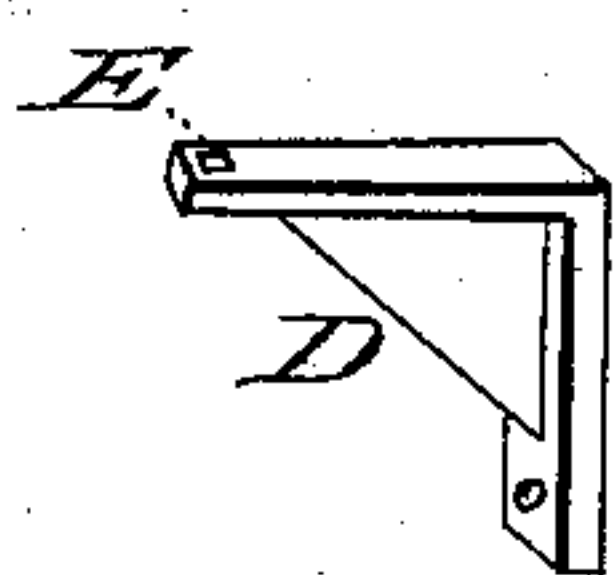
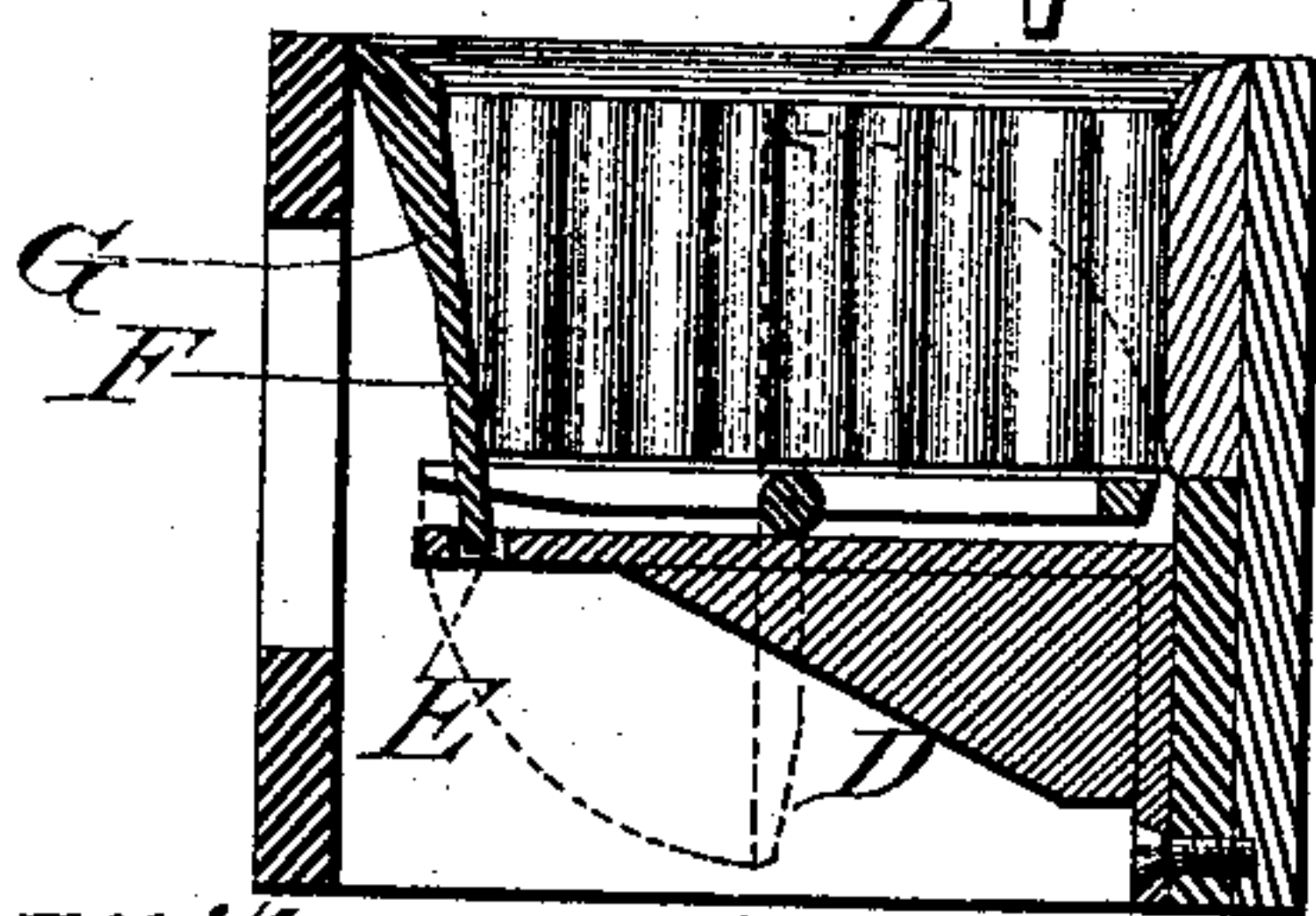


Fig. 4.

Witnesses:

H. H. Gibbs
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JOSIAH JEWETT, OF BUFFALO, NEW YORK, ASSIGNOR TO SHERMAN S. JEWETT & CO., OF SAME PLACE.

STOVE-GRATE AND BEARINGS.

SPECIFICATION forming part of Letters Patent No. 236,036, dated December 28, 1880.

Application filed September 17, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH JEWETT, of the city of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Stove-Grates and Bearings, of which the following is a specification.

The invention relates to grates and bearings for cooking and other stoves.

Heretofore such grates have been constructed without reference to a central bearing, which is objectionable for the reason that the action of fire is apt to warp or bulge the grates and render them useless for the purposes intended.

The object of my invention is to provide a system of bearings that will prevent warping of stove-grates while in use.

The invention consists in supplying a brace or bracket so arranged in combination with certain plate or plates of a stove that it will serve to support the central portion of the grate and at the same time to engage, by certain mechanical devices hereinafter described, with other portions of the fire-box, whereby displacement by action of fire will be rendered difficult.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a perspective of a fire-box part or portion of a stove. Fig. 2 is a plan view of the grate and grate-frame; Fig. 3, the same view of the front fire-plate; Fig. 4, a perspective of the brace or bracket. Fig. 5 is a vertical central cross-section of the grate and its connections.

The grate A is suspended in the fire-box B, as is usually the custom, by means of the rounded bars *c c*, resting in corresponding recesses in the grate-frame C. In addition to these bearings I provide a third bearing at the central point of the grate, directly in line with the two end bearings, which rests on the horizontal bar of the bracket D. This portion of the bracket D is extended sufficiently to the front of the fire-chamber to (and being provided with the opening E) engage with the tooth F, extending downward from the front fire-plate, G. The bracket D, to secure the

necessary rigidity, is bolted or otherwise secured to the front oven-plate, or to the outer wall of the stove, as may be necessary for the adaptation of the invention to different styles or kinds of stoves.

I do not confine myself as to the number of these bearings, as the length or dimensions of the grate demanding the use of this invention would determine that point; neither do I confine myself to the particular shape of the bracket D, as many forms may be used to accomplish the same object.

The operation of the device is as follows: A crank or shaker is placed on the shank H, projecting from the fire-box, by means of which the grate may be made to rotate, or by the peculiar construction of the crank or shaker, not necessary to herein describe, a horizontal motion may be imparted to the grate, the space in which the central bearing is placed being constructed with that object in view.

The central space of the grate A is left open at the front, as shown in Fig. 2, to allow the grate to turn and clear the horizontal portion of the bracket D, while at the rear it is closed, the same as the other spaces of the grate.

The tooth F secures the central portion of the front fire-plate by passing quite through the opening E, or it may be made so as to project far enough on the under side to admit of a pin being driven through it. This support or brace tends to prevent the bulging of the front fire-plate, so frequent in the use of stoves.

I am aware that prior to my invention grates have been constructed with central bearings, but in all such cases the grate, in dumping, necessitates a rotary motion of the bearing, substantially forming a part of the grate itself.

What I claim is—

The combination, with the grate A, having front central opening, of the end journals, *c c*, and the auxiliary central bracket, D, as herein fully set forth and described.

JOSIAH JEWETT.

Witnesses:

H. H. GIBBS,
J. O. MUNROE.