

(No Model.)

P. W. LIPPITT.  
FURNACE GRATE.

No. 345,792.

Patented July 20, 1886.

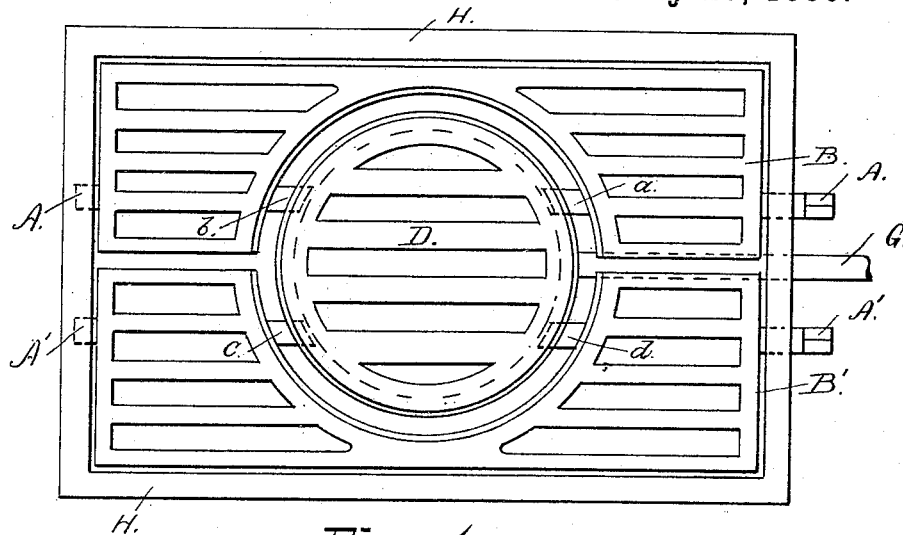


Fig. 1.

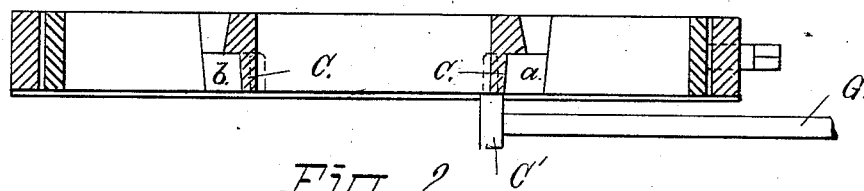


Fig. 2.

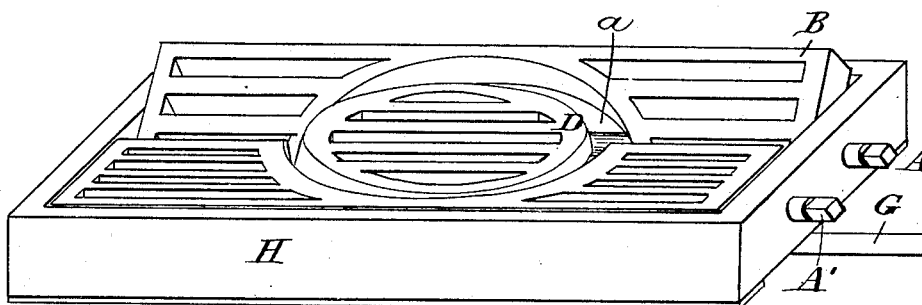


Fig. 3.

WITNESSES.  
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# UNITED STATES PATENT OFFICE.

PELEG W. LIPPITT, OF PROVIDENCE, RHODE ISLAND.

## FURNACE-GRATE.

SPECIFICATION forming part of Letters Patent No. 345,792, dated July 20, 1886.

Application filed February 28, 1884. Serial No. 122,316. (No model.)

*To all whom it may concern:*

Be it known that I, PELEG W. LIPPITT, of Providence, county of Providence, and State of Rhode Island, have invented an Improved Furnace-Grate, as hereinafter fully set forth.

The object of my invention is a cheap grate which can be both shaken and dumped, constructed with especial reference to utilizing the bearings of those now in use.

Figure 1 of the accompanying drawings, which form a part of this specification, is a plan view of my grate, dotted lines indicating parts that would not otherwise appear; Fig. 2, a longitudinal section thereof through the center, and Fig. 3 a perspective view, one section of it being tilted, as when dumping the coal.

It is represented as secured in the frame H H, which frame is intended to represent the sides of the boiler or of whatever constitutes the sides of the fire-box. Upon the pins A A A' A', which are supported therein, the two parts of the grate B B' are free to revolve, as represented in Fig. 3. Out of the center of the grate thus composed of these two parts (which is a common construction) I cut a circular opening as large as the grate will admit of, leaving in each part two bearings, *a b* and *c d*, the top of which are on a line with the center of the pins which support the corresponding portions of the grate, as stated. Upon these bearings I place a circular grate, D, having on the under side thereof a rim, C. (Seen in Fig. 2.) In case an oblong grate be used as the central section, it is essential to have a shield

on each of the side sections, to prevent the coal from getting between the central and side sections when shaking down the ashes. These bearings being thus placed, whether short, as represented, or extended so as to meet and form one continuous bearing, support this part of the grate, while permitting both of the other parts to be turned independent of it, for the purpose set forth.

C' is a depending lug (seen in Fig. 2) having an aperture for securing the rod G, by means of which this portion of the grate is shaken.

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

1. A furnace-grate composed of a central circular shaking section and two longitudinal dumping sections surrounding the shaking section and supporting the same, combined and arranged as described.

2. A furnace-grate having a central shaking section, in combination with two surrounding dumping sections, by which it is supported, but which are left free to turn, substantially as described.

3. The combination, with the two dumping parts B and B' of a furnace-grate, of a central shaking section, D, resting upon the bearings *a b* and *c d*, arranged to operate substantially as described, together with a device for operating the central section.

PELEG W. LIPPITT.

Witnesses:

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