

(No Model.)

M. W. BAILY.

STOVE GRATE.

No. 341,209.

Patented May 4, 1886.

Fig. 1.

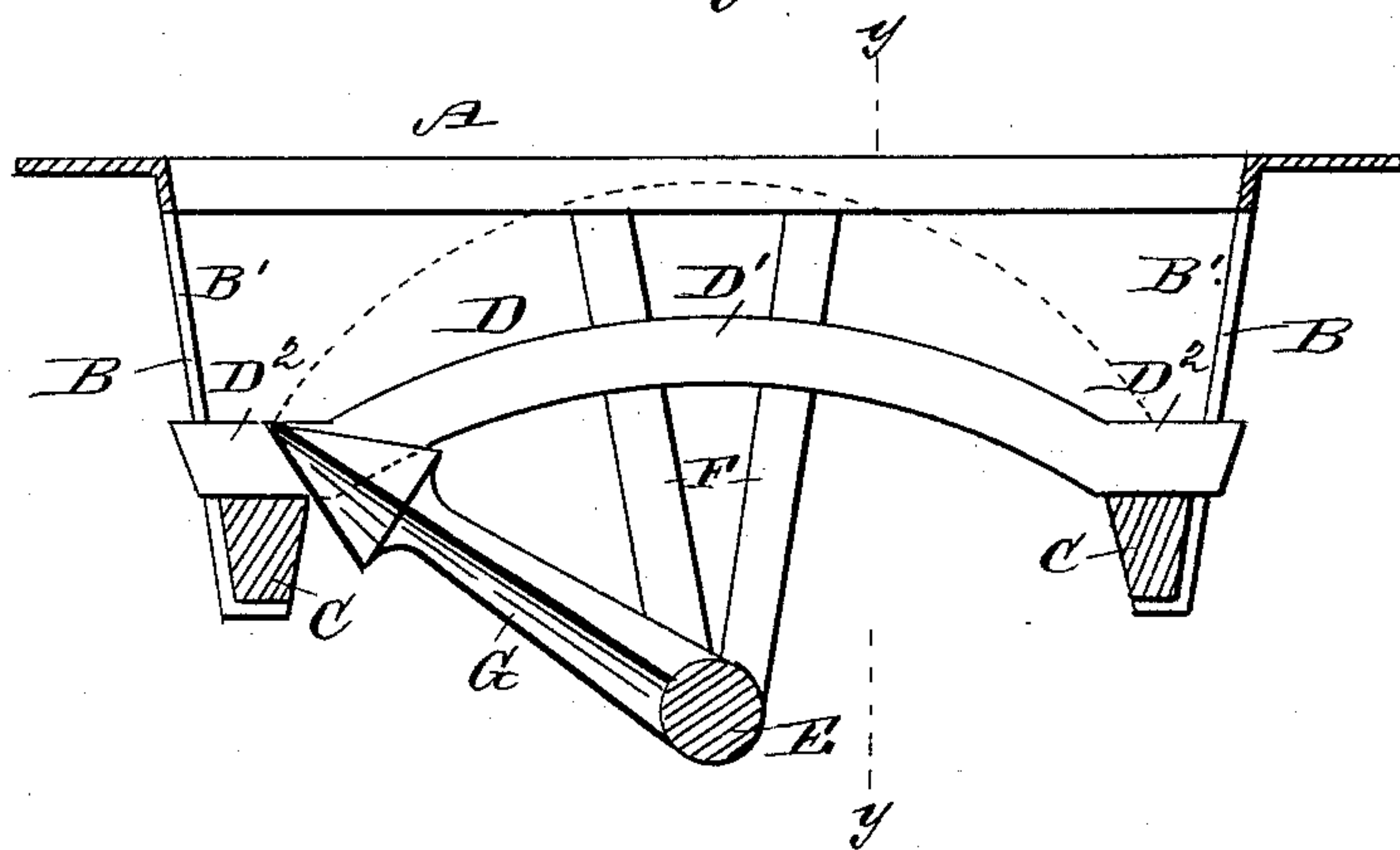


Fig. 2.

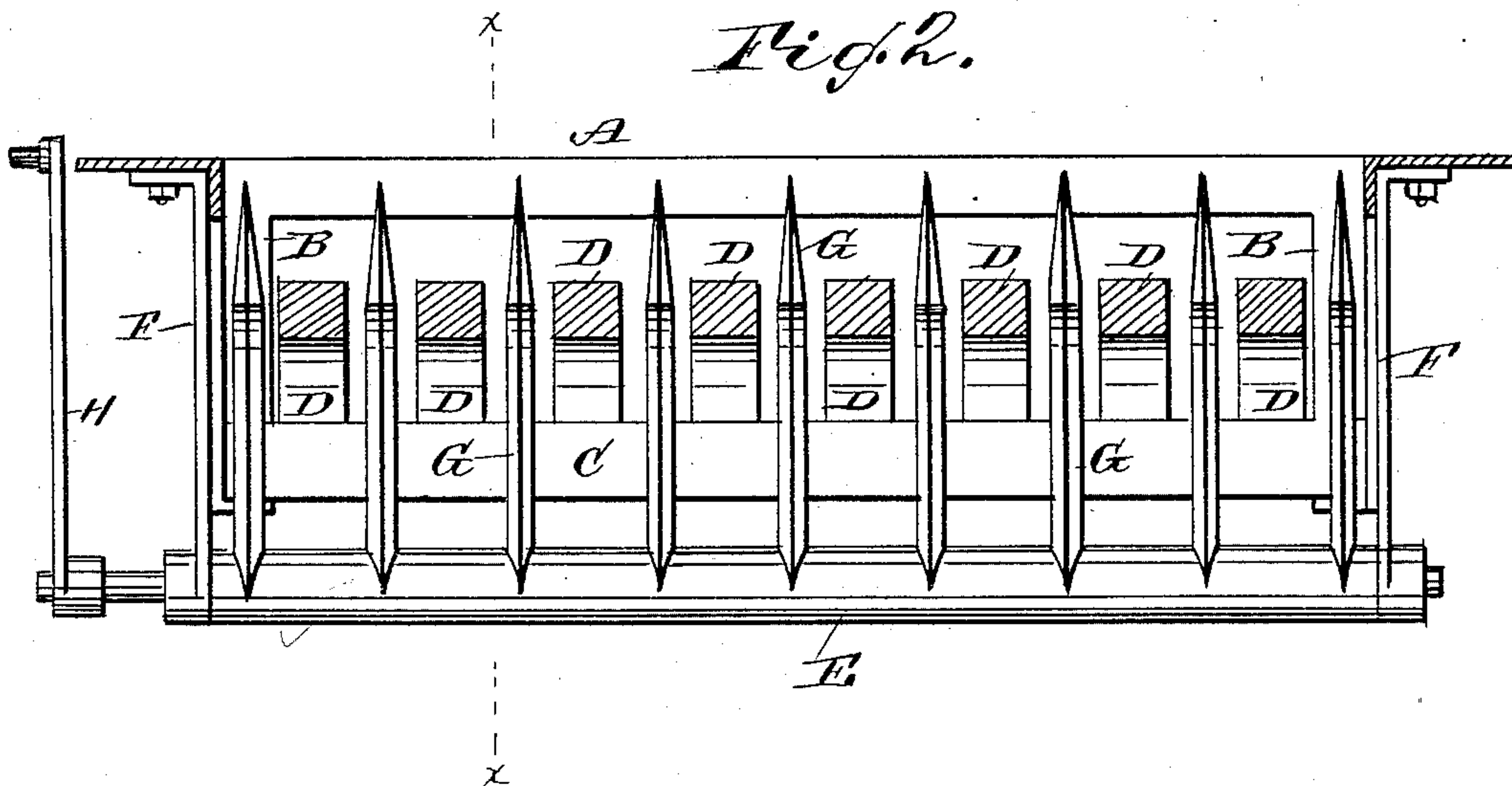


Fig. 3.

WITNESSES:

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MIFFLIN W. BAILY, OF POTTSTOWN, PENNSYLVANIA.

STOVE-GRATE.

SPECIFICATION forming part of Letters Patent No. 341,209, dated May 4, 1886.

Application filed August 24, 1885. Serial No. 175,213. (No model.)

To all whom it may concern:

Be it known that I, MIFFLIN W. BAILY, of Pottstown, in the county of Montgomery and State of Pennsylvania, have invented a new and Improved Stove-Grate, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved stove-grate which facilitates the easy removal of ashes, cinders, &c.

10 The invention consists in arched grate-bars with horizontal outer edges for the retention of the coal, of a shaft provided with spear-shaped fingers between the grate-bars, and of a device for moving the spear-shaped fingers
15 between the grate bars.

The invention also consists of various parts and details hereinafter more fully set forth and described.

20 Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

25 Figure 1 is a vertical cross-section of my improvement on the line *x x* of Fig. 2. Fig. 2 is a longitudinal-vertical section of the same on the line *y y* of Fig. 1, and Fig. 3 is a cross-section of one of the spear-shaped fingers.

30 The fire-box A is provided with the downwardly-extending arms B, on the lower edges of which rest the side bars, C C, on which are mounted the grate-bars D. The grate-bars D consist of the arched part, D', terminating at each side in the horizontal parts, D², which rest with their lower edges on the side bars,
35 C C.

40 Between the top edge of the horizontal parts D² of the grate-bars D and the bottom edge of the fire-box A is formed a space, B', of sufficient height to allow the discharge of the cinders over the edges of the horizontal parts D² of the grate-bars D. The space B' is formed between the arms B, the top edge of the grate-bars D', and the bottom edge of the fire-box.

45 Centrally below the grate-bars D is mounted the shaft E in hangers F, secured to the ends of the fire-box A in any suitable manner. The shaft E is provided with the diamond or spear shaped fingers G, placed in the spaces
50 formed between the grate-bars D. The upper end of the fingers G rest on either of the side bars, C, and can be moved from one side bar C to the other, by oscillating the crank-

arm H, attached to one outer end of the shaft E.

55 When the fingers G are at rest, as shown in Fig. 1, the upper ends of the same do not extend beyond the top edge of the grate-bars D; but when moved toward the center of the arched part D' the upper ends of the fingers G project beyond the top edge of the grate-bars, but do not quite reach to the bottom of the fire-box A. It will thus be seen that when the shaft E, and consequently the fingers G, are oscillated by means of the crank-
60 arm H, the sharp edges of the upper end of the fingers G will easily cut through the fuel on the top of the grate-bars D and effectually clean the fuel, causing the ashes and cinders to fall between the grate-bars D, or be pushed
65 through the space B', over the edges of the horizontal parts D² of the grate-bars D, and fall into the ash-pit.

By providing the fingers with spear-shaped heads, or heads which are diamond shape
75 in cross-section, cutting-edges are formed which will cut easily through the fuel, thereby permitting them to be more easily oscillated between the grate-bars. The contraction of the fingers at their upper ends, 80 and forming heads thereon of the character described, also permit the ashes to more readily escape to the ash-pit.

Having thus described my invention, I claim as new and desire to secure by Letters Patent— 85

1. In a stove-grate, the grate-bars D and the side bars, C C, in combination with the shaft E, and the diamond or spear shaped fingers G, substantially as shown and described.

2. In a grate-bar, the combination of a fire-
90 box having a space, B', the side bars, C, and the arched grate-bars D, with diamond or spear shaped fingers E, mounted on a shaft and extending between the said grate-bars, substantially as shown and described. 95

3. In a stove-grate, the combination of the arched grate bars D with the oscillating shaft E, and the spear-shaped fingers G, mounted on said shaft E and placed alternately between the grate-bars D, substantially as herein shown
100 and described.

MIFFLIN W. BAILY.

Witnesses:

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