

Grates.

Patented Nov. 10, 1874.



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BY

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JONATHAN MOORE, JR., OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF
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IMPROVEMENT IN GRATES.

Specification forming part of Letters Patent No. **156,741**, dated November 10, 1874; application filed
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To all whom it may concern:

Be it known that I, JONATHAN MOORE, JR., of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Fire-Place Grate, of which the following is a specification:

The object of my invention is to provide a more practicable and convenient fire-place grate for opening and discharging the ashes and cinders into the space below than the dumping-grates now in use. The ordinary dumping-grates, fixed on trunnions or pivots at the center, are not so convenient for fire-places as is desirable on account of turning one side up while the other goes down, and they turn very hard and require a lever-handle for working them, which it is not easy to apply unless a space is partitioned off from the fire to keep the coal away from the part to which the lever is applied, which is very objectionable for obvious reasons. I therefore propose to construct the bottom portion of the grate in two parts, one being a kind of door to which the other part is a frame, and to hinge the door at the rear side to the other portion, so that said door will swing up into the opening of the frame, and, in connection with the door, I provide a button on the under side of the frame portion to swing under the front of the door and hold it up, and to be swung from under the door to let it fall whenever the grate is to be cleaned. Thus I provide a grate for fire-places that can be opened in the most ready manner for cleaning it out without the aid of a lever, the button being so that it can be readily turned by the fire-hook, shovel, or any little instrument by which one end can be pushed or pulled, or a knob or handle can be applied by which to take hold of it by the hand. The hinges are contrived so as to be covered, and are thus protected from the ashes and cinders, which would otherwise clog and wear the pivots. They are also protected from the heat.

Figure 1 is a sectional elevation of my improved fire-place grate, together with the front bars, which are shown in dotted lines; and Fig. 2 is a plan of the grate inverted.

Similar letters of reference indicate corresponding parts.

A is the frame portion, and B the middle or door portion, of the grate. The portion A has a large open space in the middle, in which the portion B fits to close it for retaining the fuel. C represents the hinges by which the portion B is hinged, at the rear edge, to the frame portion. D is the bottom for fastening the door up in the frame portion.

It will be seen that by this plan the objections to the ordinary dump-grate are avoided, and the cleaning out will be more effectual, for by the quick fall of the door the whole mass of cinders will be precipitated at once, whereas with the other grate one portion is raised, while only a narrow opening is made for the other portion.

The front edge *d* of the grate will rest on the rabbeted lower front bar F in the usual manner of grates made separate from the front bars. The back part will rest on lugs projecting from the wall of the fire-place.

Between the rear frame-bar *a* of part A and the rear frame-bar *b* of part B I have arranged the short grate-bars *e*, so as to prevent the two frame-bars from ranging close together, as they otherwise would, and cutting off the air from a wide area of fuel. The ears J of the door are pivoted between two of these short bars *e*, which are connected by a cover, K, to protect the joints from the fire, cinders, &c.

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

As an improvement in horizontal grates, the outer frame A, having short rear bars *e* J and pivots K K, combined with a door, B, connected therewith by the hinges C C, and held thereon by the pivoted support D, as shown and described.

JONATHAN MOORE, JR.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.