

J. W. PARNELL.

Grate.

No. 30,182.

Patented Sept. 25, 1860.

Fig. 1.

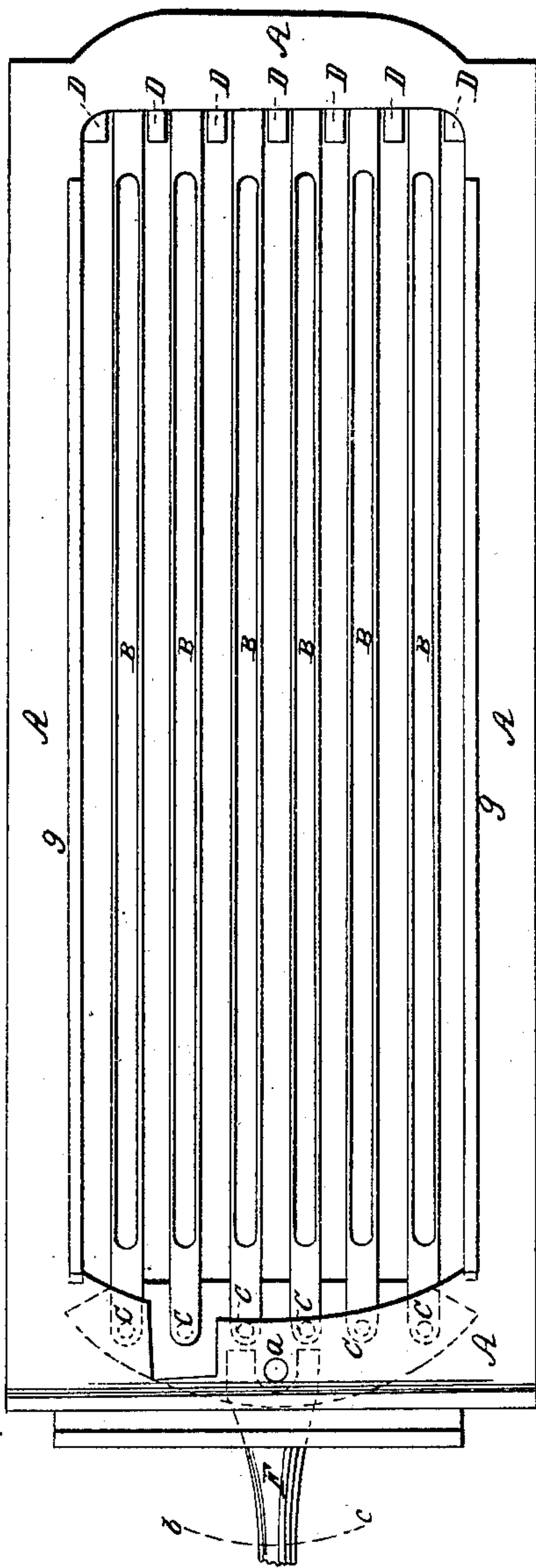
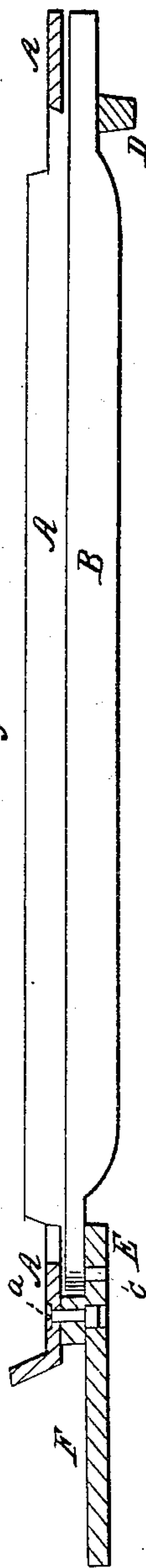


Fig. 2.



Witnesses:

Marcus P. Norton
James Morrison Jr.

Inventor:

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UNITED STATES PATENT OFFICE.

JAMES W. PARNELL, OF TROY, NEW YORK, ASSIGNOR TO JAMES MORRISON, JR., OF TROY, NEW YORK.

STOVE-GRATE.

Specification of Letters Patent No. 30,182, dated September 25, 1860.

To all whom it may concern:

Be it known that I, JAMES W. PARNELL, of the city of Troy, county of Rensselaer, and State of New York, have invented a new, 5 useful, and Improved Shaking Fire-Grate for Stoves; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1 shows the fire grate completed and ready for use. Fig. 2 is a vertical section through one of the parallel bars composing the fire grate as hereinafter described.

15 The nature of my invention consists in so constructing and combining parallel bars lengthwise of, and to the frame of the fire grate and with the said frame as to form a "shaking fire grate" in a cheap and durable 20 manner, and that will work easy and effectual with little liability to get out of repair, while at the same time one half of the said bars move, by the use of the shaking handle hereinafter described, in the same direction 25 lengthwise with the said frame hereinafter described, while the other and opposite half of the said bars move in the same manner and by the same means in a different and contra direction.

30 To enable others skilled in the art to make and use my invention, I will here proceed to describe its construction and arrangement of parts.

I construct my shaking fire grate for 35 stoves of cast iron of any sufficient size and strength to answer the required purpose. It may contain any desired number of bars hereinafter described.

40 (A) Fig. 1, is the frame in which, and to which the movable and parallel bars (B) are connected and attached. This frame is constructed with a projection downward at the end opposite that containing the rocker (E). In this projection there are mortises 45 cast for the purpose of receiving the said bars (B). Between the said bars at the said end of the said frame, there are guides (D) which aid in forming the said mortises and thereby keep the said bars apart from each

other. At the other end is connected the 50 rocker (E) which turns upon a point at (a). To this rocker the other ends of the said bars are attached by means of small pins (c) cast upon and with the said bars so as to allow a turning point between the said bars and 55 the said rocker. The rocker (E) is made with an arc or circular side so as to allow of the moving of the said bars by shaking &c., and not interfere with that part of the stove next adjoining the same, while on the side 60 opposite the said arc or circular portion, are small holes made to receive the said pins in the said bars as hereinbefore stated. This rocker has a turning point at the center of the same so as to move or vibrate the said 65 bars. In this rocker there is cast a mortise of any desired size so as to receive the handle (F) for the purpose of shaking, moving, or vibrating the said bars (B). The bars (B) are made of cast iron and of any desired 70 size to answer the purpose. At one end are small pins, cast thereon for the purpose of making separate and distinct connections with the said rocker (E), thereby allowing each of the said bars to move parallel to, and 75 with each. At the other end of the said bars there is a tenon to fit the aforesaid named mortises for the purpose as aforesaid.

This grate is operated by means of the handle (F) connected with the rocker (E), 80 and by moving the said handle in the direction of (b) one half of the bars move in one direction endwise while the other half in contra direction and vice versa.

What I claim and desire to secure by Let- 85 ters Patent is—

An improved fire grate for stoves—consisting of the frame (A); the separate and parallel grate bars (B); and the rocker (E) constructed and arranged as herein de- 90 scribed and set forth.

In testimony whereof I have on this 27th day of July 1860, hereunto set my hand.

JAMES W. PARNELL.

In presence of—

MARCUS P. NORTON,
JAMES MORRISON, Jr.