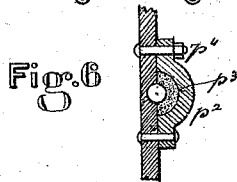
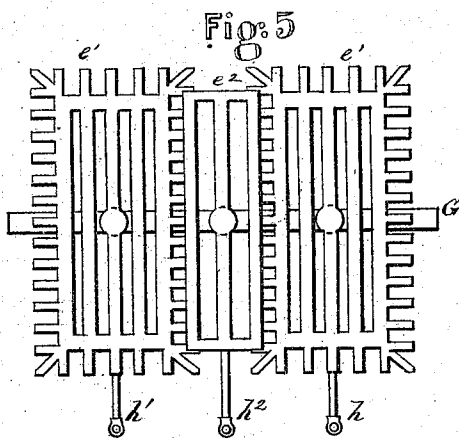
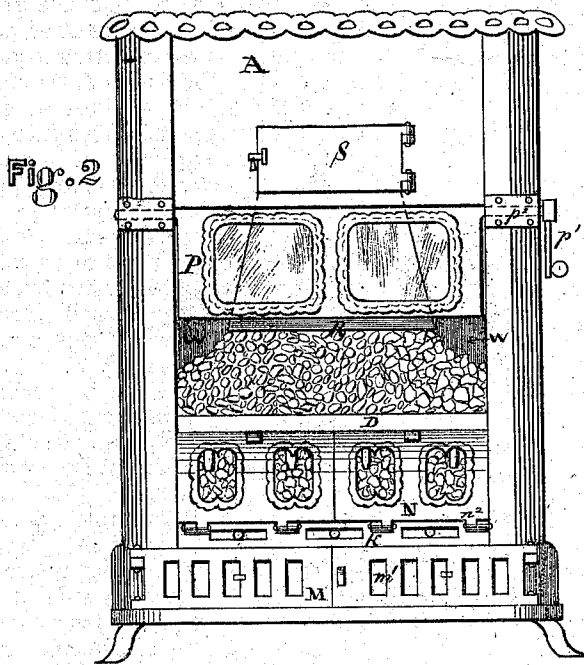
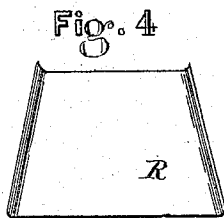
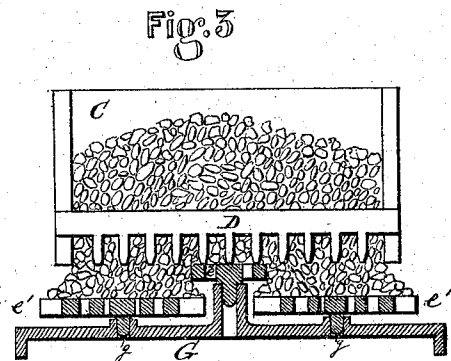
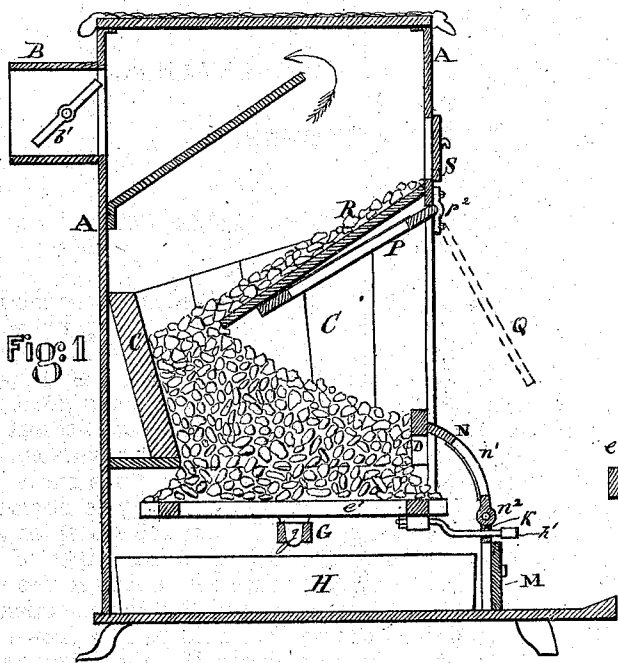


E. BROWN.
Parlor-Stove.

No. 129,711.

Patented July 23, 1872.



Witnesses { Parks M. Fairland Jr.
John A. Grant

Edw. Brown

UNITED STATES PATENT OFFICE.

EDWARD BROWN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PARLOR-STOVES.

Specification forming part of Letters Patent No. 129,711, dated July 23, 1872.

Specification describing certain Improvements in Parlor-Stoves, invented by EDWARD BROWN, 311 Walnut street, Philadelphia, Pennsylvania.

This invention, an improvement on my patent of March 5, 1872, relates to the construction of the grate and the arrangement of a feeding-reservoir, the devices being designed especially for open grates or open-grate stoves. Open grates, as now constructed, have no convenient arrangement for cleaning the grate of ashes without the dust passing into the room, spoiling the furniture and injuring the sale of the stoves for parlor use. My improvement consists in inclosing the front of the grate or stove below the front fire-bars, and in making a grate vibrating in sections, so that any portion of the grate may be shaken by itself and the ashes liberated from the center of the fire as well as at the sides. The coal is fed to the fire upon an inclined plate, down which it slides and falls upon the fire at the rear.

Referring to the drawing making part of this specification, Figure 1 is a section through the stove. Fig. 2 is a front view. Fig. 3 shows the front of the fire-pot with the grate in section. Fig. 4 is a view of the inclined chute or plate. Fig. 5 is a plan of the grate. Fig. 6 is a cross-section through the friction-bearing of the door.

A is the stove-casing, of sheet-iron; B, the stove-pipe; b' , the damper. C is the fire-pot, of iron or fire-brick, with front bars D of iron. The grate is made in sections e^1 e^1 e^2 . The sections e^1 are placed far enough below the fire-pot to permit the ashes to fall over the side of the grate between it and the fire-pot. The space left between these two sections at the center of the fire is covered by a stationary or vibrating grate, e^2 , which is raised a little above the other sections. Both this center grate and the outside ones e^1 e^1 are pivoted centrally by the pins g upon the pivot-bar G. Each section has a separate handle, h h^1 h^2 , passing through slots in the front plate K, so that each section can be vibrated independently of the other, although, from the position of the center one, its motion is more limited than that of the others. Open-grate fires are generally larger in area and shallower than fires inclosed in cylinder-stoves; consequently

the fire is not supported so much by the fire-pot, and lies with greater weight upon the grate. Also, in cases where the grate is very long, as in low-down grates, the shaking of the grate in one piece would give a great motion at the extreme ends and very little at the center. Any number of these sections are used, according to the length of the grate. By my improvement this difficulty is obviated, and the ashes freed from the center as well as at the ends. On vibrating either of the end sections the ashes will fall over the outside edges and through the central opening into the ash-pan H. This pan is drawn out through the open doors M, in which are sliding registers m' for admitting air to the grate. N are doors having mica windows n^1 in them, so that the fire can be seen upon the grate. They are hinged at the lower edge at n^2 , so as to open for the purpose of inserting a poker above the grate. P is the door of the stove, hinged at the top edge by a pivot at each side. A handle, p^1 , moves the door into any position required. The cap p^2 is cored out so as to hold a packing of asbestos at p^3 , (see Fig. 6,) which, when tightened upon the pivot of the door by the nut p^4 , gives sufficient friction to keep the door in any position in which it may be placed—either perpendicular, as a blower, or outward, as at the dotted lines Q. This door has also mica windows in it, so that the fire may be seen in whatever position it may be. Above the door P is an inclined chute, R. Its upper edge is secured to the stove just below the door S; its lower edge terminates at the top of the fire at such an inclination that the coals will only just slide down the plate and be deposited upon the surface of the fire. The bottom of the plate is rather wider than the top, leaving a passage for the air above the fire at each side at W. The edges of the chute are slightly curved up, as shown at Fig. 4, to prevent the coals sliding off the side. This chute is only intended for use in this stove when it is to be left for a long time unattended. Usually the coals are put on under the door P. When the grate is shaken the door P is placed perpendicular, and at night, when no draught is required, it is placed as at Q. This construction of grate, inclosed at the front, in combination with the

inclined door P and inclined reservoir-plate R, gives facilities for managing an open-grate fire heretofore unattained.

When my invention is applied to low-down grates close to the floor of a parlor the pan H and door M are dispensed with, and the ashes fall at once into the cellar.

I claim—

1. The grate, constructed of the centrally-pivoted sections $e^1 e^1$, in combination with the stationary or vibrating plate e^2 , so arranged as to cover the interstice between the two sections, as and for the purpose described.

2. The inclined plate or chute R connecting the door S with the top of the fire, and so constructed that the air can pass over the fire on each side of the chute, substantially as herein shown.

3. The combination of the inclined shoot R with the adjustable pivoted door P, operating as described.

4. The combination of the inclined and adjustable door P with a vibrating pivoted grate inclosed in front, as herein described.

5. The combination of the fire-pot C and front bar or bars D with an inclosed front, in which are the hinged doors N for access to the grate, as herein described.

6. The combination of the fire-pot C, the front bar or bars D, and the hinged doors N with a vibrating pivoted grate, as herein described.

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Witnesses:

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