JOHN McCOY.

Improvement in Heating-Stoves.

No. 115,079. Patented May 23, 1871.

Fig. 1.

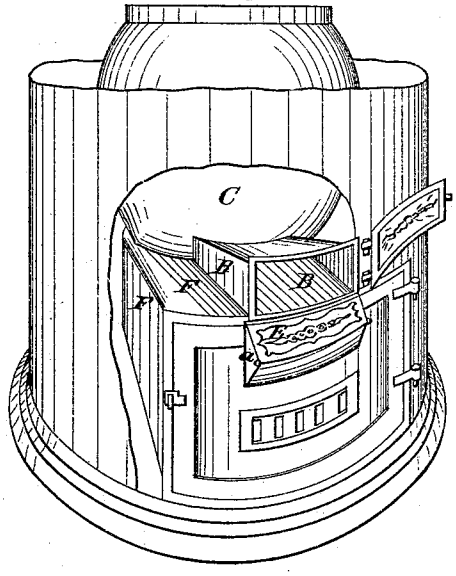


Fig. 3.

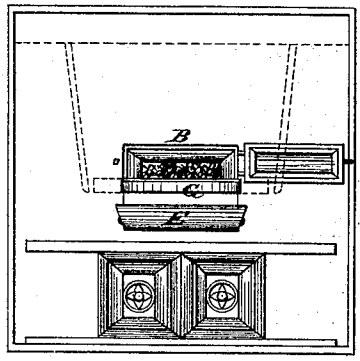


Fig. 5.

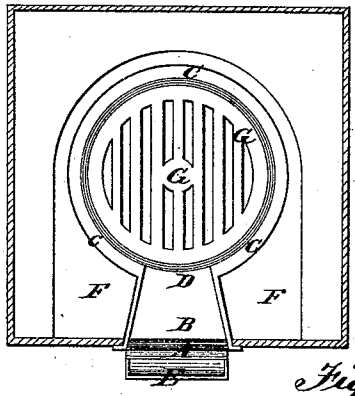


Fig. 2.

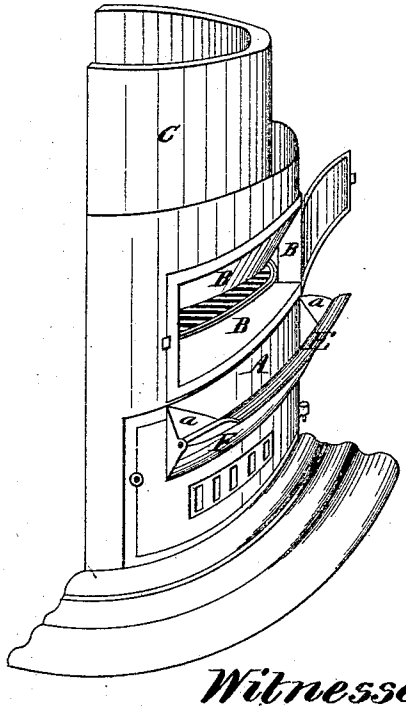
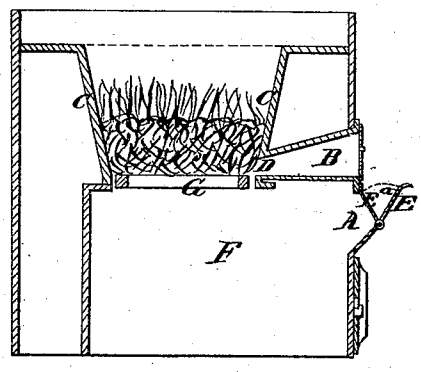


Fig. 4.



Witnesses.

Saml. P. Jones, Jr.

John K. Brown

Inventor.

John McCoy

UNITED STATES PATENT OFFICE.

JOHN McCOY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO SAMUEL TRAQUAR TYSON, OF SAME PLACE.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. 115,079, dated May 23, 1871.

To all whom it may concern:

Be it known that I, JOHN McCOY, of the city of Philadelphia and State of Pennsylvania, have invented an Improvement in Stoves, Hot-Air Furnaces, and Cooking-Ranges; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

The object of my invention is to provide a more convenient and better method for cleaning the fires of stoves, hot-air furnaces, and cooking-ranges, and in such a manner that the cinders, slate, and slag can be removed and deposited in the ash-pit or ash-drawer without the necessity of dropping or turning the grate, or allowing the waste substances to fall outside of the stove, furnace, or range.

To more fully explain my invention, I refer to the accompanying drawing and letters marked thereon forming a part of this specification.

Similar letters of reference in each of the figures indicate like parts.

Figure 1 is a front elevation of a hot-air furnace with my invention attached. Fig. 2 is a part of the front elevation of either a stove or furnace, showing an enlarged representation of my invention and the connecting parts of the stove or furnace. Fig. 3 is a part of the front elevation of a cooking-range with my invention attached. Fig. 4 is a vertical section of a cooking-range, showing the relative positions of the grate G, the inclosed opening B, and the improvement herein claimed. Fig. 5 is a horizontal section of a stove or furnace cut through on a level with the upper surface of the grate, as seen from above.

My invention consists in constructing the fronts of stoves, hot-air furnaces, and cooking-ranges with an opening or hole, A, corresponding in width with the inclosed passage B, where the latter connects with the front of the stove, furnace, or range. This opening or hole A is made with its top nearly on a level with the bottom of the inclosed passage B, and must extend down far enough to allow of the unobstructed passage through it of the cinders, slag, and slate that may be removed from the fire-pot. This opening is provided with a lid or door, E, which, for convenience, is made to open and close on a hinge placed at the lower edge of it. When the lid or door is opened it stands at about an angle of forty-five degrees, and is retained in that position by rests provided for that purpose. The door or lid E is provided with rectangular projections or attachments *a a*, placed at or near the ends, which move out and in through the opening A when the lid or door E is opened and closed. The inclosed passage B extends from the front of the stove, furnace, or range, as the case may be, its sides and roof contracting as they approach the fire-pot until it terminates in an opening left in the front of the fire-pot. The floor of the passage B is placed nearly on a level with the upper surface of the grate.

The manner of using my invention is as follows: When the accumulation of the refuse from the fuel interferes too much with the working of the fire in the stove, furnace, or range, instead of dropping or turning the grate to clean the furnace or fire-pot, the dead and incombustible substances are to be raked off the grate through the opening D, Figs. 4 and 5, and along the passage B and out through its front termination. The door or lid E having been opened, the ashes, slate, and slag in falling strike its inclined surface, and slide from it into the ash-pit or ash-box instead of falling out in front of the stove, furnace, or range.

If the opening D and the inclosed passage B are of suitable dimensions there will be no occasion to drop or turn the grate or to allow the fire to go out in order to clean out the fire-pot. Neither will there be the annoyance of dust and dirt attending this method of disposing of the waste substances which accumulate in fires used for domestic purposes.

I do not claim the opening D in the front of the fire-pot, or the inclosed passage B that leads to it, as I know that those devices have been long used for the purpose above described. Neither do I claim, broadly, an opening made in the fronts of stoves, hot-air furnaces, and cooking-ranges below the front opening of the passage B, and provided with a lid or door for closing the same, as I am aware that similar

appliances have been used for giving access to the bar or handle of shaking-grates.

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

1. The door E, when constructed either with or without the rectangular projections *a a* and with rests or stops to hold it when open, sloping in the direction of the ash-pit or ash-box, and this whether it works on a hinge, as described, or is removable as a lid or cover for the opening A, substantially as described.

2. The opening A and the door or lid E, in combination with the inclosed passage B and the opening in the front of the fire-pot D, when constructed and used substantially in the manner and for the purposes above described.

In witness whereof I have hereunto set my hand.

JOHN McCOY.

Witnesses:
SAML. P. JONES, Jr.,
JOHN K. BROWN.