

L. F. OSTRANDER.
STOVE DOOR.
APPLICATION FILED MAY 12, 1910.

991,079.

Patented May 2, 1911.

Fig. 1.

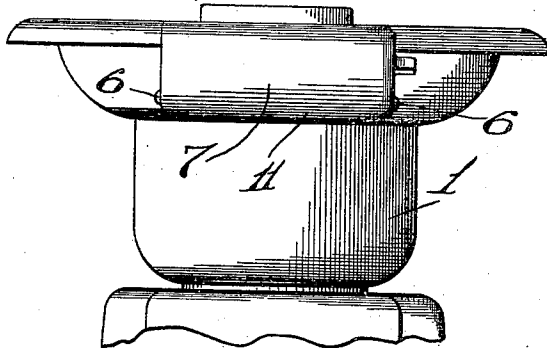


Fig. 2.

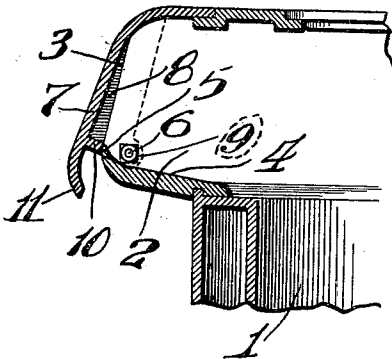


Fig. 3.

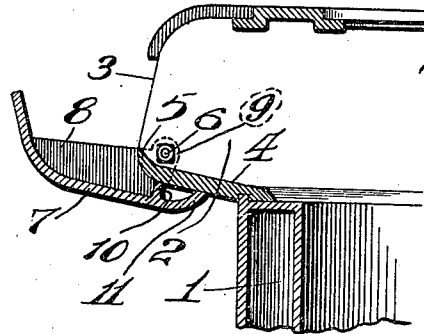
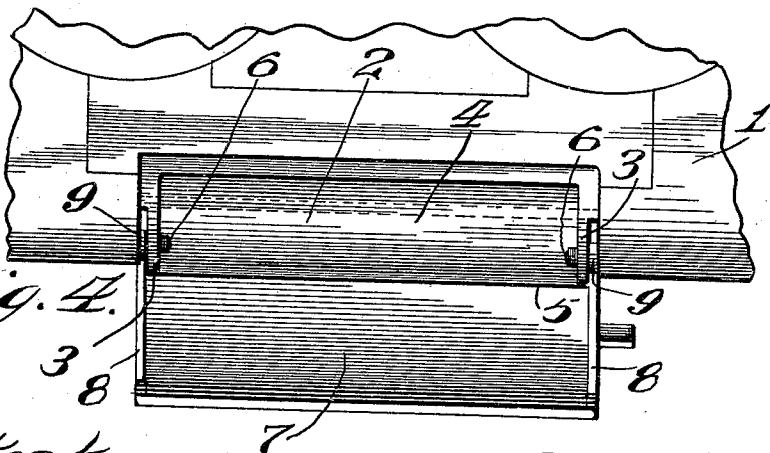


Fig. 4.



attest:
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UNITED STATES PATENT OFFICE.

LEWIS F. OSTRANDER, OF DECATUR, ILLINOIS, ASSIGNOR TO CONTINENTAL RADIATOR & FOUNDRY COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

STOVE-DOOR.

991,079.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed May 12, 1910. Serial No. 560,790.

To all whom it may concern:

Be it known that I, LEWIS F. OSTRANDER, a citizen of the United States, and resident of Decatur, Macon county, Illinois, have invented certain new and useful Improvements in Stove-Doors, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in stove doors, the object of my invention being to construct a drop door for stoves which will eliminate the annoyances and danger incident to the dropping of ashes and live coals or coal dust, when replenishing the fire, from the stove when the door is opened.

For the above purposes my invention consists in certain novel features of construction and arrangement of parts as will be hereinafter more fully described, pointed out in the claims and illustrated by the accompanying drawing, in which:

Figure 1 is a front elevation of a stove having my improved door applied thereto, a portion of the base section being removed; Fig. 2 is a transverse, sectional elevation of a portion of the stove top and the fire pot, illustrating my improved door in a closed position; Fig. 3 is a view similar to Fig. 2 illustrating the door in an open position; and Fig. 4 is a plan showing a portion of the stove top and the door in an open position.

Referring by numerals to the accompanying drawing: 1 designates the stove proper and 2 the chute forming the fuel opening. The forward margins 3 of the chute incline inwardly and upwardly for a portion of their height and are round at their top portions. The bottom 4 of the chute inclines upwardly and outwardly from the top of the fire pot and is provided with an integral, up-turned lip 5. The side walls of the chute are perforated to receive the pivotal bolts 6. The lower face of the lip 5 describes an arc drawn from the center of the perforations in the side walls of the chute.

7 designates the body portion of the drop door which is shaped to approximately conform with the margins 3 of the chute.

8 designates integral flanges constituting the ends of the door, each of which is provided with an integral, perforated extension

9 through which the bolts 6 are passed for supporting the door.

10 designates an integral web formed on the inner face of the door and extending between the sides 8 and is of a height sufficient to engage with the lower face of the lip 5 at all times and when the door is in various positions.

11 designates an integral extension of the door beyond the web 10 which is curved so that its under margin lies in a plane above the door proper when the door is in an open position, thereby holding the door by reason of its engagement with the lower face of the chute.

The door, as shown, is especially designed for a fuel opening on a laundry stove, but it is obvious that the same may be used as an ash door.

By reason of the construction and positioning of the door relative to the opening, it is obvious that the web 10 will engage the curved lower face of the lip 5 in any position and thus prevent the ashes or coals and coal dust, when replenishing the fire, from dropping when the door is moved.

I have found that coal may be supplied to the door when in an open position and held between the end walls 8, web 10 and lip 5, and when the door is closed the coal carried by the door will be thrown into the stove, thus the fuel may be measured in quantities sufficient for the proper feed of the fire and the feeding of the fire is thus accomplished without dropping coal around the fuel opening.

I claim:

1. In combination with a stove having a feed chute provided with a curved, forward lip, of a door hinged to the chute and provided with a web arranged to be moved concentric to said lip and engage therewith at all times.

2. In combination with a stove, having a chute provided with a curved, forward lip, of a door having a web arranged to engage with said lip, said door being provided with end walls, means for pivotally connecting the end walls of the door with said chute, and said door also having an integral extension beyond said web for engagement with said chute to limit the movement of the door in one direction.

3. In combination with a stove, having a chute provided with a forwardly curved lip, the forward side margins of the chute inclining inwardly and upwardly and thence
5 curved inwardly and upwardly, of a door arranged to conform with said chute, said door being provided with a right angled web adapted to engage with the curved lip of the chute, and, with end walls arranged
10 to overlie the sides of said chute, said end walls being provided with integral, perfo-

rated ears and means for pivotally connecting said ears with the sides of said chute for the purposes stated.

In testimony whereof, I have signed my 15 name to this specification, in presence of two subscribing witnesses.

LEWIS F. OSTRANDER.

Witnesses:

EDWARD E. LONGAN,
E. L. WALLACE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
