(No Model.)

O. J. BACKUS.

BLOWER FOR STOVES OR GRATES.

No. 374,334. Patented Dec. 6, 1887.

Fig. 1.

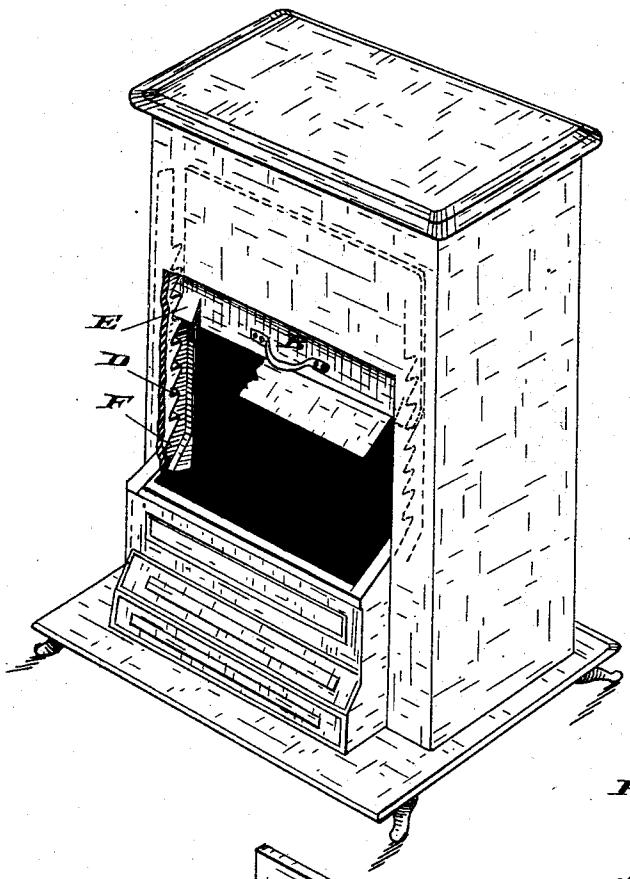


Fig. 2.

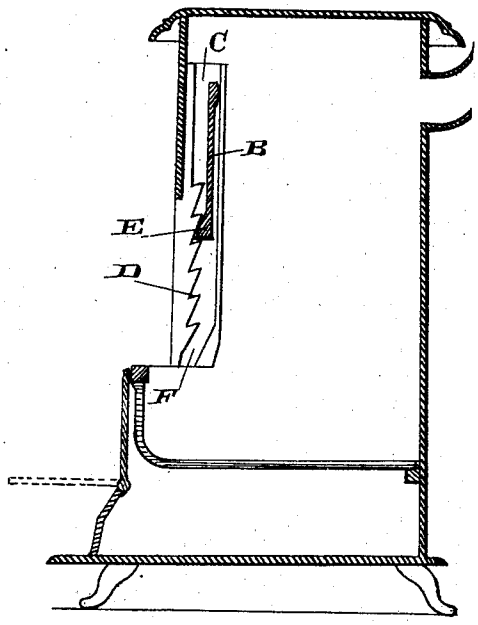


Fig. 3.

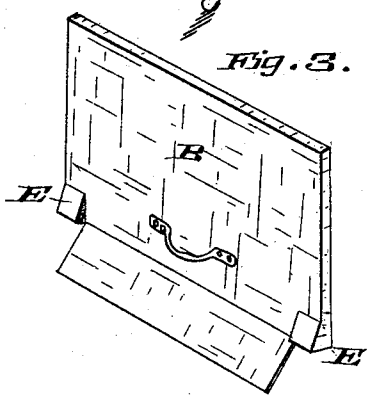
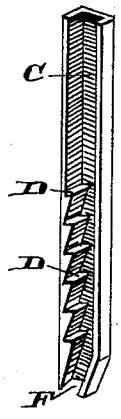


Fig. 4.



Witnesses,
J. L. Towner
H. C. Lee.

Inventor,
O. J. Backus.
By Dewey & Co
attys

N. PETERS. Photo-Lithographer. Washington. D. C.

UNITED STATES PATENT OFFICE.

OSCAR J. BACKUS, OF SAN FRANCISCO, CALIFORNIA.

BLOWER FOR STOVES OR GRATES.

SPECIFICATION forming part of Letters Patent No. 374,334, dated December 6, 1887.

Application filed July 14, 1887. Serial No. 244,349. (No model.)

To all whom it may concern:

Be it known that I, OSCAR J. BACKUS, of the city and county of San Francisco, State of California, have invented an Improvement in Blowers for Stoves or Grates; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improved adjustable blower for stoves or grates; and it consists in the improved blower hereinafter described and claimed.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view showing the application of my blower to an open-front stove or grate. Fig. 2 is a transverse vertical section. Fig. 3 is a separate view of the plate. Fig. 4 is a view of one of the guides with the ratchet-teeth or supports.

In the present case I have shown my invention as applied to an open-front stove or grate.

B is the movable front or "blower," so called, by which the open front is closed when it is desired to induce a strong draft through the ash-pit and up through the grate upon which the fuel is placed. This blower or plate travels in a channel, C, between guides upon each side, sufficiently separated to hold the edges of this plate B, and yet having a width between the guides which will allow the plate to move freely up and down in the channel. Upon the forward edge of each of the guides are a series of projections or steps, D, and the lower edge of the blower is provided with outwardly-projecting lugs, or is bent outwardly, as shown at E, so that these projections E may be allowed to rest upon any one of the steps D, as may be desired. The lower parts of the channels C are curved outwardly, as shown at F, so that when the blower or plate B is at its lowest point the projections E follow these curves, and this throws the front of the blower against the front edges of the guides, thus holding it closely and making a tight joint at these edges.

The operation will then be as follows: When the blower is in use, it will be drawn to the lowest point, as just described, the channel C being of sufficient width to allow the lugs E to travel up and down without resting on the steps or lugs D, unless desired. Whenever it is desired to raise the blower any distance, it is simply pushed up and the lower edge drawn forward sufficiently for the projections E to rest upon the steps D. By this construction a blower may be supported upon any pair of the steps, and at any desired height from the bottom, or it may be pushed up entirely out of the way, thus leaving the front of the fire entirely exposed and clear.

I am aware that vertically-sliding blowers have been employed using counter-weights; and I am also aware that similarly-moving blowers have been employed in which springs were used to hold them at any desired elevation; but the heat of the fire takes the temper out of a spring and makes it very undesirable, and counter-weights are liable to break the cords and get out of order.

My device is simple, economical, and durable.

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

In combination with an open-front stove or grate, the vertically-moving slide or plate by which said opening may be closed, said plate having outwardly-projecting lugs on its lower edge, guides or channels within which the edges of the plate travel, and steps or projections upon which said lugs may be supported when desired, said guides or channels being curved outwardly at the bottom, so as to throw the lower edge of the blower toward the front when it is at its lowest point, substantially as herein described.

In witness whereof I have hereunto set my hand.

OSCAR J. BACKUS.

Witnesses:

WM. A. TAYLOR,

L. M. KELLOGG.