

N. A. BOYNTON.

Self-Closing Door for Stoves.

No. 165,297.

Patented July 6, 1875.

Fig. 1.

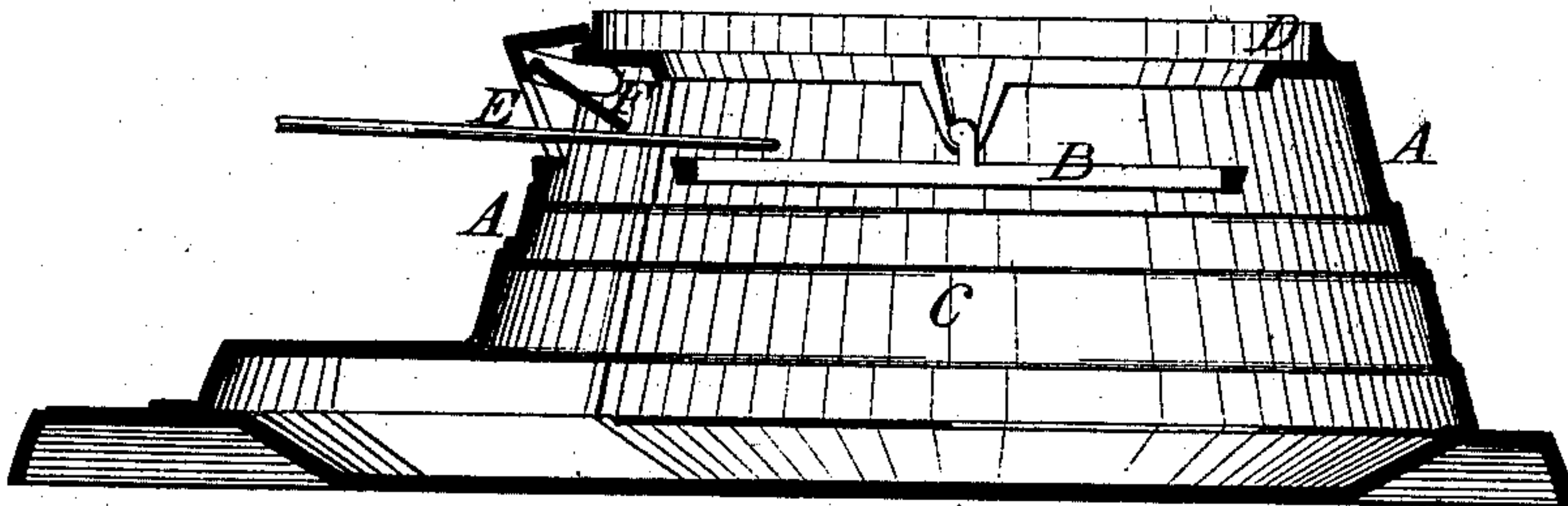


Fig. 2.

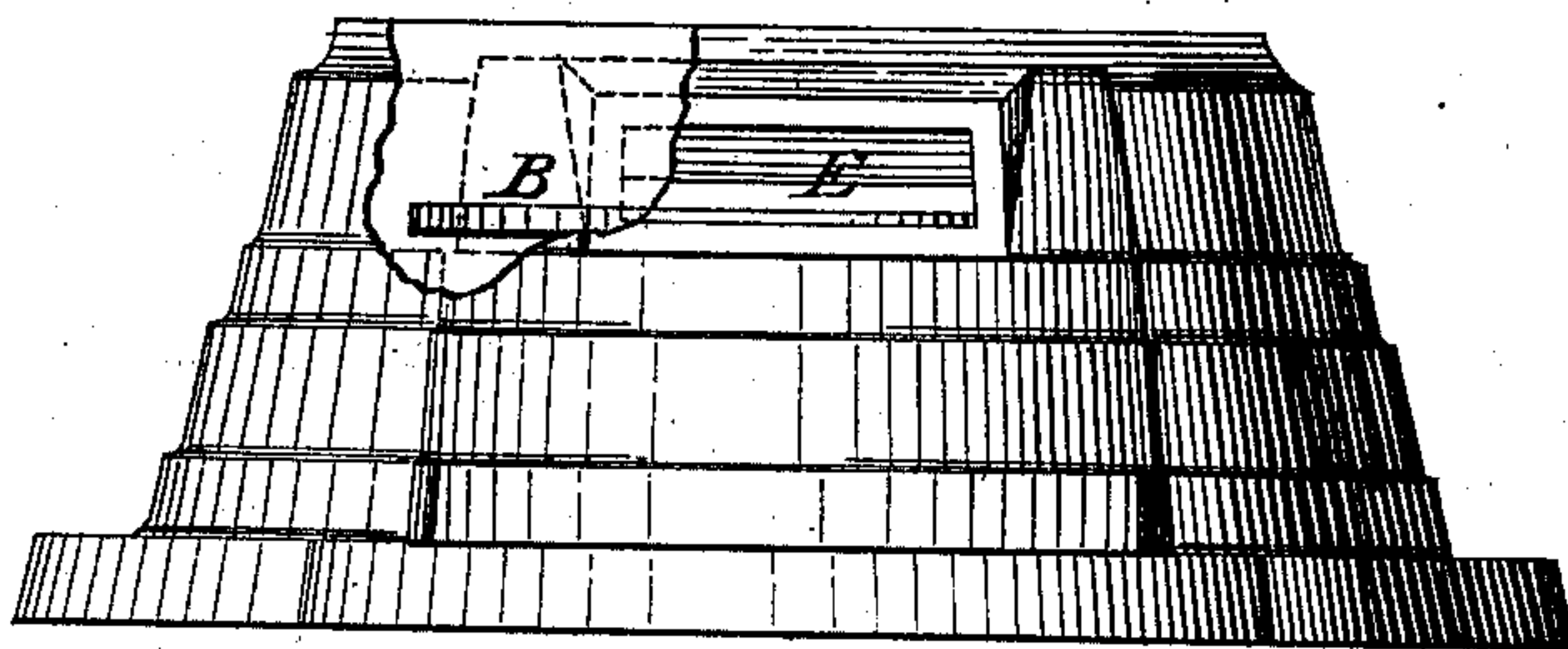
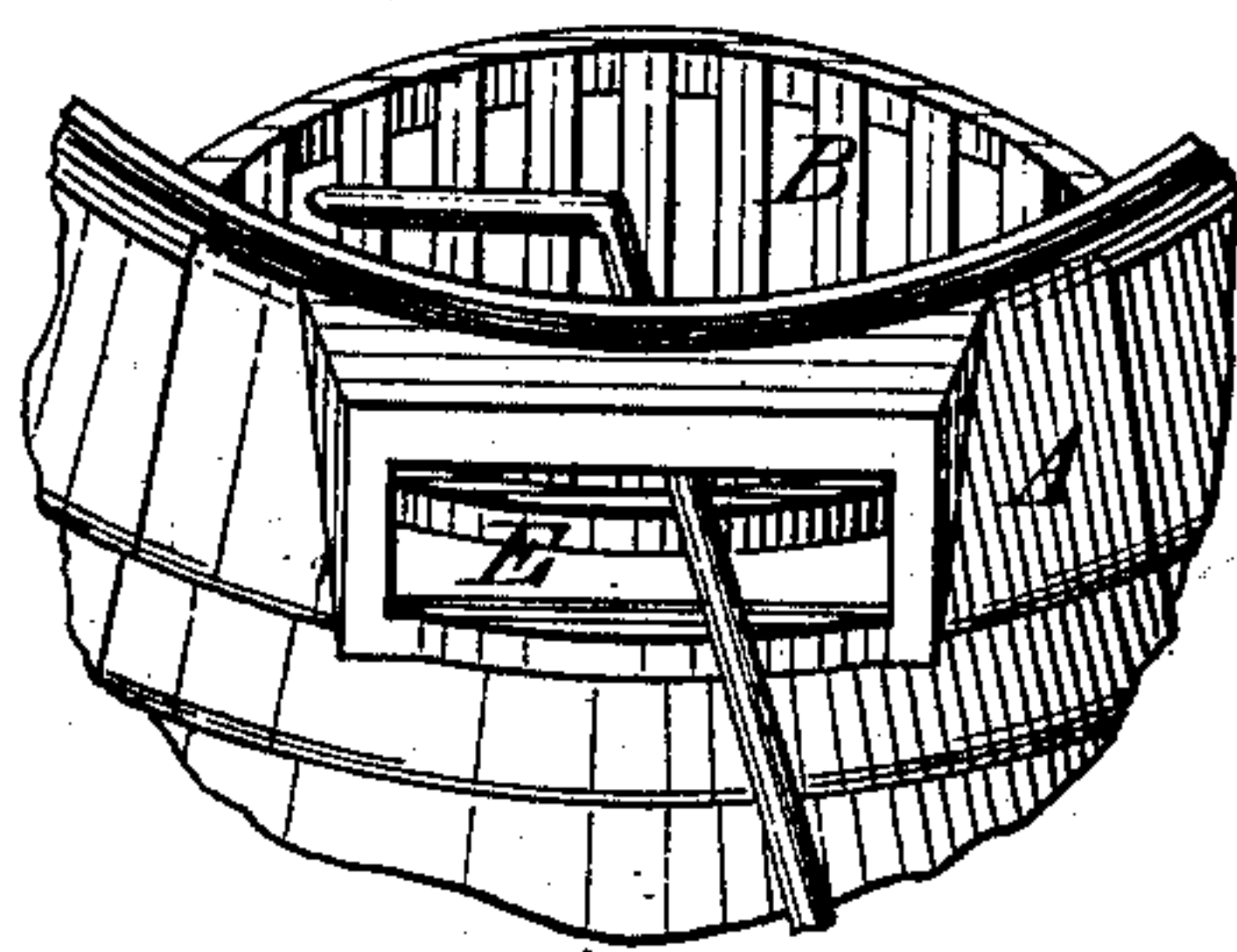


Fig. 3.



Attest:

*L. H. Felt*  
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Atty.



# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN SELF-CLOSING DOORS FOR STOVES.

Specification forming part of Letters Patent No. **165,297**, dated July 6, 1875; application filed April 16, 1875.

*To all whom it may concern:*

Be it known that I, NATHANIEL A. BOYNTON, of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a vertical section from front to rear. Fig. 2 is a front elevation with a portion of the stove-wall broken away. Fig. 3 is a detail in perspective.

It has been usual in stoves having the anti-clinker or clinkerless grates, so called, to provide for the apertures or opening in the wall opposite the space between the ends of the fire-pot and the surface of the horizontal grate hinged or sliding covers or doors. While these can be readily opened or closed at will, it happens occasionally that the said openings remain at times uncovered, through the neglect or forgetfulness of the persons having charge of the stove; hence, the dust from the grate and ash-pit readily escapes into the room; hence, also, the draft of the stove is in some degree left open, and various other annoyances and troubles arise.

The object of this invention is to provide a self-closing door for such opening, all as will be now more fully set forth.

In the drawings, A denotes the base or body of the stove, the lower section only of which is now shown; B, the grate; C, the ash-pit; D, the ledge on which the lower end of the fire-pot rests. In the wall of the stove, at such convenient point or points in relation to the annular space between the lower ends of the fire-pot and the horizontal grate as taste or design may dictate, are the opening or openings E, one or more, of any suitable shape, style or construction, their use and purpose being merely to afford access through the wall or body of the stove to the said space between the fire-pot and grate. To afford a suitable cover for said openings I have provided a self-closing door, F. In the present instance I have shown the frame of the opening E constructed with walls that slope upwardly and

outwardly, so that the said door F, being hinged to the upper and inner edge of said frame, will close automatically after the means used for raising and opening it have been withdrawn. But I by no means limit myself to this special manner of carrying out the present invention, since it is obvious that this door or cover can be adjusted or applied in various ways to accomplish this same end—for instance, the lower edge can be weighted, or the said door or cover may, in a construction of base somewhat the reverse of the present, be hung or applied to the outside. In these and various other equivalent ways I may accomplish the end now arrived at.

As thus made and constructed, when it is desired to gain access to the fire or coals in the space between the fire-pot and grate, it is only necessary to thrust the poker or slicer through the opening E in the body of the stove. This movement throws the cover or door F away from the said opening only sufficiently far to admit the easy play of the slicer or poker in the operation upon the fire or coals, and when the said poker or slicer is withdrawn the cover immediately falls down automatically into its proper position, and closes said opening.

In the method of construction now used for illustrating the above-described invention, the lower edge of the door operates to scrape off all the dust or ashes from the poker or slicer as it is being removed from the opening, after it has been used to stir or agitate the burning coals in the fire-pot and on the grate.

Having thus described my invention, which I consider new, and desire to secure by Letters Patent, is—

In combination with a stove body or base, having an aperture in its wall opposite the annular space between the grate and fire-pot, a self-closing door applied to said opening, substantially in the manner and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

NATHL. A. BOYNTON.

Witnesses:

HENRY T. RICHARDSON,  
D. S. RICHARDSON.