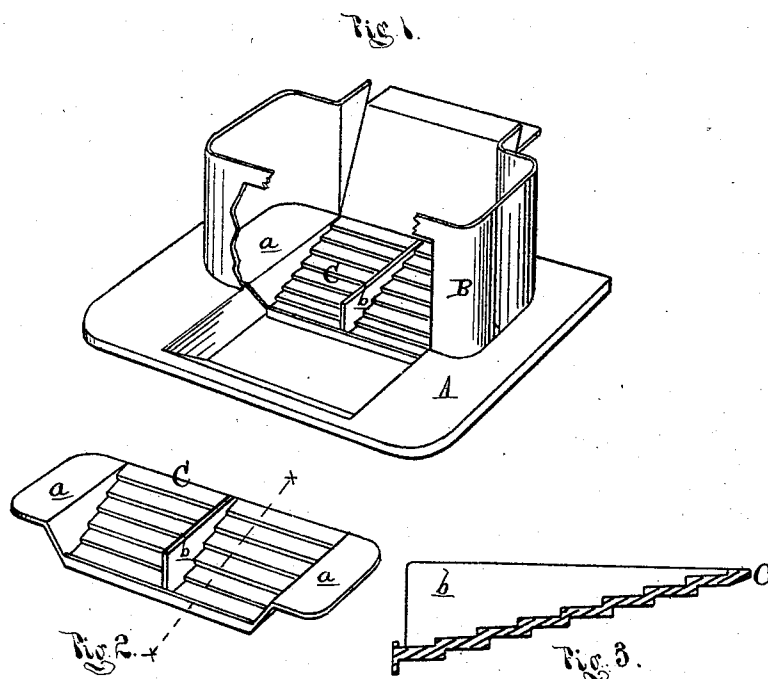


J. DWYER.
Lining Plates for Fire-Boxes of Cooking-Stoves.

No. 146,890.

Patented Jan. 27, 1874.



ATTEST:
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By Attorney
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UNITED STATES PATENT OFFICE.

JAMES DWYER, OF DETROIT, MICHIGAN, ASSIGNOR TO DETROIT STOVE-
WORKS, OF SAME PLACE.

IMPROVEMENT IN LINING-PLATES FOR FIRE-BOXES OF COOKING-STOVES.

Specification forming part of Letters Patent No. **146,890**, dated January 27, 1874; application filed
December 10, 1873.

To all whom it may concern:

Be it known that I, JAMES DWYER, of Detroit, in the county of Wayne and State of Michigan, have invented an Improved Bottom Plate for Cooking-Stove Fire-Boxes, of which the following is a specification:

In wing-plate cooking-stoves—that is, those in which the oven is carried forward under the fire-box or combustion-chamber—it is found, in practice, that the wing-plate is extremely liable to crack from the greater expansion of its central part than of its front and sides, due to the intense heat from the fire, which is built directly upon it in wood-stoves, and from hot coals dropping on it through the grates of coal-stoves; and the object of this invention is to provide a plate to protect the wing plate from too great a temperature, and which will also prevent an undue temperature in the fore part of the oven; and in wood-stoves a central rib will afford a better support to the fuel.

Figure 1 is a perspective view of a portion of a wood cooking-stove provided with my improved bottom plate. Fig. 2 is a detached perspective view of the bottom plate. Fig. 3 is a cross-section of the same at *xx* in Fig. 2.

In the drawing, A represents the wing-plate of a cooking-stove, cast with depression, which serves as a receptacle for ashes. B is the fire-

box, of ordinary construction. C is a bottom plate, longitudinally stepped or terraced, with a flange, *a*, at each end, to rest upon the sides of the wing-plate within the fire-box. The body is inclined to the front, to facilitate the discharge of the ashes, and protects the surface of the wing-plate within the fire-box from the intense heat to which it would otherwise be subjected, and which would crack it by expanding the central part, while the front and sides, being exposed and cool, would resist such expansion. Across the middle of the plate C is molded an upward-projecting rib, *b*, having its top edge in the same horizontal plane as the end flanges *a*, which serves to support the wood, when such is used as fuel, as well as to strengthen the plate.

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

The herein-described plate C, provided with the end flanges *a a* and the central rib *b*, for protecting the surface of the wing-plate A within the fire-box of a cooking-stove, substantially as set forth.

JAMES DWYER.

Witnesses:

H. F. EBERTS,
C. E. HUESTIS.