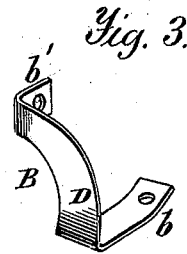
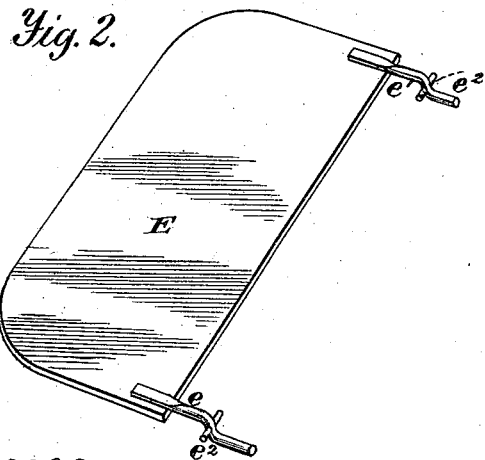
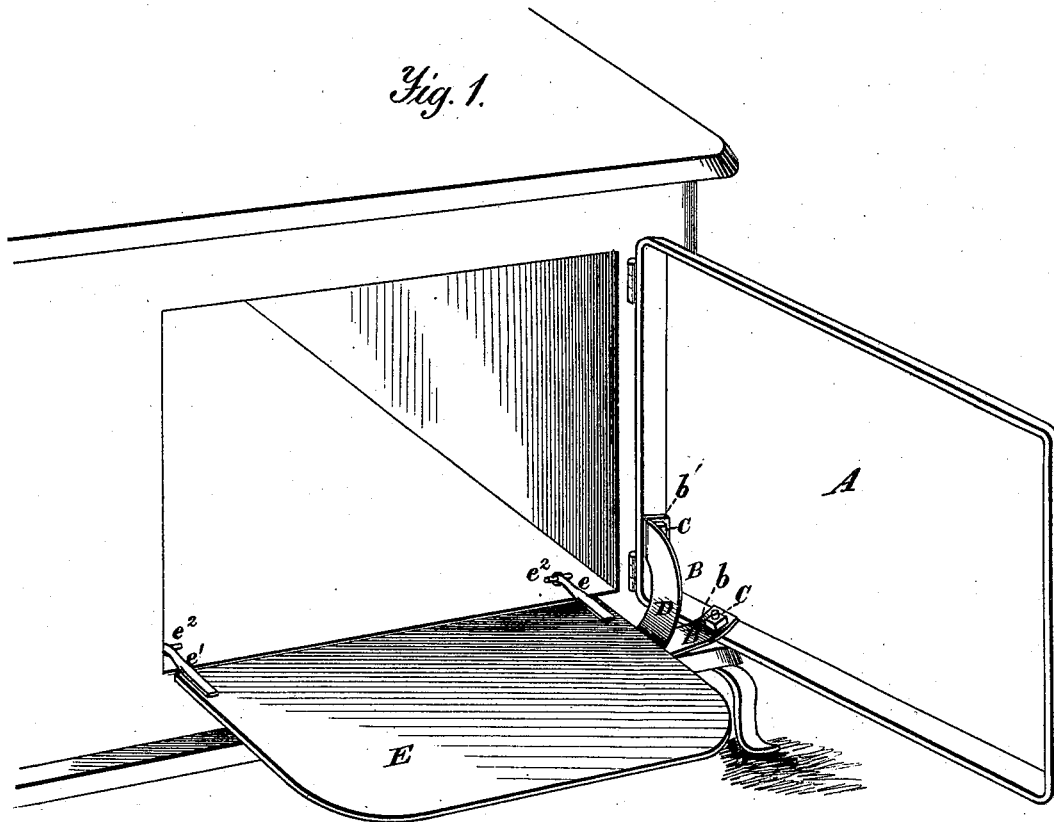


C. W. BRIEDER.
Stove-Oven Door and Shelf.

No. 212,351.

Patented Feb. 18, 1879.



Witnesses.
A. Ruppert,
J. Illason

C. W. Brieder
Inventor.
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Attys

UNITED STATES PATENT OFFICE.

CHARLES W. BRIEDER, OF NILES, ASSIGNOR OF ONE-HALF HIS RIGHT
TO JAMES REED & SONS, OF WARREN, OHIO.

IMPROVEMENT IN STOVE-OVEN DOORS AND SHELVES.

Specification forming part of Letters Patent No. **212,351**, dated February 18, 1879; application filed
January 3, 1879.

To all whom it may concern:

Be it known that I, CHARLES W. BRIEDER, of Niles, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Stove-Oven Doors and Shelves; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of a stove oven and door with my invention attached. Fig. 2 is a perspective view of the oven-shelf and its hinges. Fig. 3 is a perspective view of the cams as attached to the stove-doors.

My invention relates to stoves; and it consists in a cam-formed attachment, designed to be placed on the inside of the common oven-door of a stove, to automatically operate a shelf, which is connected with the oven-bottom by raising and lowering the same as the door is opened and closed.

The same letters are employed to represent identical parts in the drawings.

A is the oven-door of a stove, to which I attach the piece B. This piece B is made of metal, and is so constructed as to be readily attached to the doors of stove-ovens by means of bolts C.

The lower arm, *b*, of the piece B is of suitable length to allow its attachment to the door substantially as shown, so as to extend sufficiently out to project the lower end of the cam D in such a manner as to engage the

lower edge of the shelf E as the oven-door is closed. This shelf is provided with two stems, *e* and *e'*, which are angled, as shown, and provided with the stops *e''*. There are two holes drilled in the oven-bottom, near the front side, suitably located, to receive these angled stems. These devices, when properly constructed, as shown, constitute a hinge, by which the shelf can be readily attached or detached.

In order to attach my invention to a stove-oven it is only necessary to drill the holes for the stems *e* and *e'*, as indicated, and for the bolt C.

By my invention I provide as an article of manufacture an oven-shelf which is automatically lowered and raised by the opening and closing of the oven-door, which may be attached to many stoves.

I am aware that heretofore cams have been cast in connection with the oven-door for raising and lowering the oven-shelves which were hinged by various devices to the oven bottom or sides; but

What I claim as new, and for which I desire to secure Letters Patent, is—

The cam D, formed substantially as shown, with the arms *b* and *b'*, in combination with the oven-door A and the hinged shelf E, constructed and operating together as 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.

C. W. BRIEDER.

Witnesses:

A. T. MAUPIN,
J. C. WILLIAMS.