W. C. DAVIS.

Door for Stoves and Ranges.

No. 221,793. Patented Nov. 18, 1879.

Fig. 1

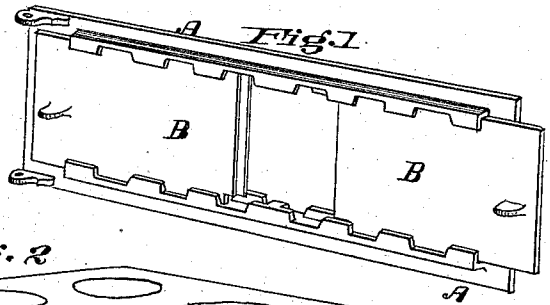


Fig. 2

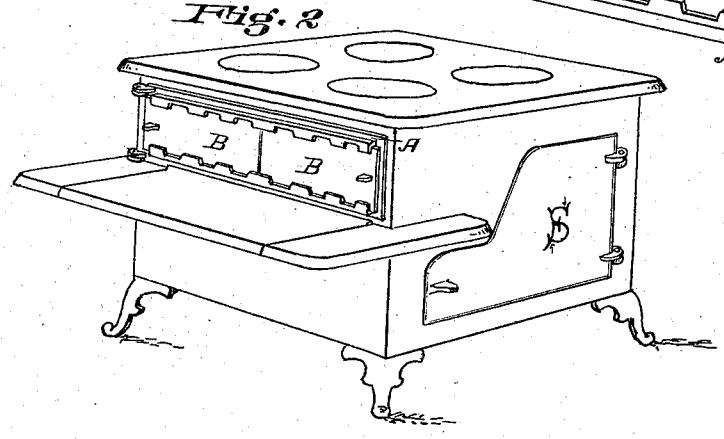
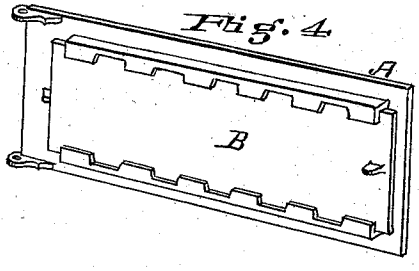


Fig. 3



Fig. 4



Inventor

Wm C. Davis

By Howes & Ellsworth

His Attys.

Attest

Edgar J. Gross

W. H. H. Knight

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM C. DAVIS, OF CINCINNATI, OHIO.

IMPROVEMENT IN DOORS FOR STOVES AND RANGES.

Specification forming part of Letters Patent No. **221,793**, dated November 18, 1879; application filed May 16, 1879.

To all whom it may concern:

Be it known that I, WILLIAM C. DAVIS, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Door for Stoves and Ranges; and I do hereby declare the following to be a full, clear, and exact description of the same, which will enable others skilled in the art to which it relates to make and use it, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a stove or range door constructed in accordance with my invention. Fig. 2 is a similar view of the door applied to the front of a stove over the hearth. Fig. 3 is a transverse section of the door; and Fig. 4 is a perspective view of a door with a single sliding plate.

Similar letters of reference denote the same parts in the several figures of the drawings.

My invention relates to the doors of stoves and ranges; and it consists in providing a door which can be opened for access to the interior of the stove either by swinging on hinges or by sliding along the stove without swinging, the opening being as complete in one case as in the other.

I am familiar with the fact that sliding doors have been used upon stoves and ranges as well as doors which are removable wholly or in part, and that draft and air registers are common in all classes of stoves; but neither of these embodies the principle of my invention, because it does not combine the merits of a swinging door with those of a sliding door, in such a manner that the effect in permitting access to the interior of the stove shall be the same, whether the door is opened by swinging or sliding.

The invention is especially valuable when the door is placed over the hearth of a stove or range, because it permits the stove to be opened for complete access to the fire for cooking and other purposes without removing cooking-utensils or other articles supported on the hearth, and which would have to be lifted off if the door were swung open. It also dispenses with the use of a cross-bar in the front plate of the stove, against which the lower edge of an ordinary swinging door rests when closed. The cross-bar interferes with the easy removal of the ash-pan, but without it the ash-pan can be lifted out in a horizontal position when the door is swung open and the ashes prevented from falling out.

In the accompanying drawings, A represents the frame of the door hinged to the stove, and formed with a groove or guide in the upper and lower rails to receive one or more sliding plates, B B. The double plates slide to and from each other, their outward movements being limited by stops on the back of each striking against the ends of the frame A, and their inward movements being arrested midway of the frame by a stop, preferably on the bottom rail. The edge of one plate may also be formed with a rabbet, C, upon which the edge of the other fits when the two are brought together for the purpose of forming a close joint.

The single plate moves to one side of the frame only, and its movements to open and close the door may be arrested by a single stop striking against opposite ends of the frame.

Any other suitable means for regulating the movements of the doors may be adopted without departing from the spirit of the invention.

By this construction of the door it can be opened for any purpose in two ways with the same effect, either by turning it on the hinges or sliding the plates in the frame A. In the latter case the interior of the stove is just as completely exposed as in the former, while the door is prevented from sagging or springing on its hinges, and from dragging over the hearth if used in connection therewith.

The opening formed by the sliding plates is not barred or grated as in a register, but is clear and unobstructed within the area of the hinged guide-frame, and hence forms an open door instead of a barred opening.

Having thus described my invention, what I claim is—

1. A door for stoves and ranges, consisting of a guide-frame, A, hinged to the stove or range, and one or more plates, B, adapted to slide to and fro in said frame, whereby the door can be completely opened and closed by swinging on its hinges, or by sliding the plates in the frame without swinging it, the effect

being the same in both cases, substantially as described, for the purpose specified.

2. A door for stoves and ranges, composed of a frame, A, hinged to the stove or range, and one or more plates adapted to slide in said frame, in combination with the hearth of a cooking-stove or range, substantially as described, for the purpose specified.

In testimony of which invention I have hereunto set my hand this 17th day of February, A. D. 1879.

W. C. DAVIS.

Witnesses:
E. A. ELLSWORTH,
W. BLACKSTOCK.