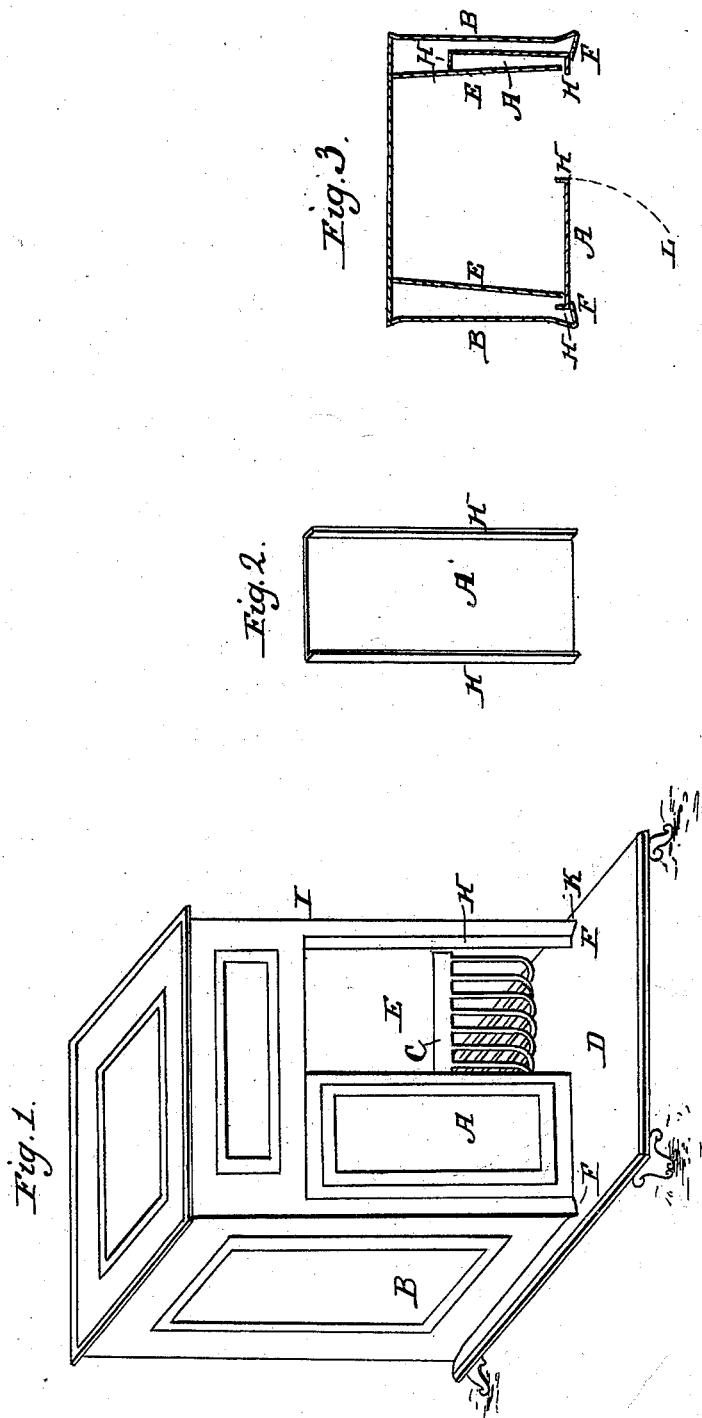


G. H. THATCHER.

Heating Stove.

No. 7,909.

Patented Jan'y 21, 1851.



UNITED STATES PATENT OFFICE.

GEORGE H. THATCHER, OF ALBANY, NEW YORK.

STOVE.

Specification of Letters Patent No. 7,909, dated January 21, 1851.

To all whom it may concern:

Be it known that I, GEORGE H. THATCHER, of the city and county of Albany, in the State of New York, have invented a new and useful Improvement in Cast-Iron Stoves; and I do declare that the following is a full and exact description thereof, reference being had to the annexed drawings, which are to be taken as a part of this specification.

Figure 1 represents a perspective view of the stove. There are two front doors; one of which, being shut, is seen, marked A; the other, being open, is concealed, as hereinafter described, and no part of it is seen doors are open, the fire and grate are entirely exposed, as in an ordinary fireplace, and the doors are not observed. When the doors are shut the fire and grate are concealed, as in a close stove. B represents the side of the stove. This is made double; E being the inner plate of the other side of the stove. C is the grate. D the hearth.

Fig. 2 represents one of the doors A, seen from the inside of the same. Each of these doors, as seen in the drawings at H, H, has a perpendicular flange running the whole length of each side of the door, and at right angles, or nearly so with the door. These flanges are on the inside of the door.

Fig. 3 is a horizontal section of the stove (omitting the grate) made at any point between I and K in Fig. 1. B, B, are the outer the doors and H, H, H, H, the flanges. The dotted line L shows in part the movement of the door in opening or shutting the same. F, F, are parts of the front of the stove, seen also in Fig. 1, and marked with the same letters. These parts F, F, are made of such width that the inner edges are nearly but not quite in a line with the inner plates E, E, of the sides of the stove, as seen in Fig. 3. These inside plates E, E, do not extend quite to the front of the stove, but leave a sufficient space, so that the door A may slide easily between E and F into or out of the space between E and B. The doors A, A, have no hinges, but slide; and when open are concealed from view between the outer and inner sides of the stove, B, B, E, E, showing nothing but part of one of the flanges, as seen at H, Fig. 1.

These doors slide on the bottom plate of the stove; and if it is necessary, rollers can be placed between E and B, for the doors to slide upon. When a door is open and it is

desired to close it, the door is drawn forward from between E and B, until it is out nearly or quite its whole length; and then it is turned upon the flange which still remains between B and E, as upon a hinge.

The object of the arrangement above described is to combine the advantages of an open grate and a close stove.

It will be seen that in the place of the inner plates E, E, there might be substituted a flange on the bottom plate of the stove occupying the same position with the inner plate, on each side, and also a similar flange on each side running from the front to the back of the stove near the top of the doors A, A. These flanges would keep the sliding doors steady, nearly as well as the inner plates E, E.

It is also obvious that where the proportions of the stove admit of it, a single door might be made covering the entire front of the stove, in the place of the two doors seen in the drawings.

A modification of the arrangement above described may also be effected by sliding and concealing the doors in spaces above and below the fire instead of spaces at the side of it; thus having the doors turn in a vertical instead of a horizontal direction, as in the present drawings. In this case there would be one upper door sliding in a space above the fire and drawn out and down to close up the front of the stove; and another under door sliding in a space below the fire and drawn out and up for the same purpose. Or again only one of the last mentioned doors might be used; and a part of the front of the stove might be permanently closed.

It will be seen that the doors in turning to their places, by means of the above mentioned flanges, revolve upon the edge of the inner plates E, E, which answer in some degree the place of hinges, the doors being also confined in their places by the parts of the front marked F, F.

Having thus described my improvements in the combined and air tight stoves and shown the advantages of the same, I wish it to be understood that I do not claim the device of sliding doors between parallel jambs or plates for the purpose of concealing the same, but

What I do claim as new and desire to secure by Letters Patent is—

1. The providing of the sliding doors A,

with flanges H, H, on their vertical edges. The rear flanges serving the purpose of hinges in opening and closing the same; and also serving to form air tight joints when the doors are closed; and the front flanges serving in connection with the projecting ends E E of side plates B, B, to relieve the appearance of a joint when the doors are opened as before described.

10 2. I also claim the providing of the side plates B, B, with projecting front plates F, F, for the purpose of forming fronts

to the spaces into which the doors are slid when open to conceal the same; and in connection with the rear flanges H, H, to form the hinges of the doors when closing the same; and also to conceal a portion of the front flanges when the doors are opened and slid back as described.

GEORGE H. THATCHER.

Witnesses:

WM. P. ELLIOT,

A. E. H. JOHNSON.