(No Model.) 2 Sheets—Sheet 1.

W. J. KEEP.

STOVE.

No. 543,305. Patented July 23, 1895.

Fig. 1.

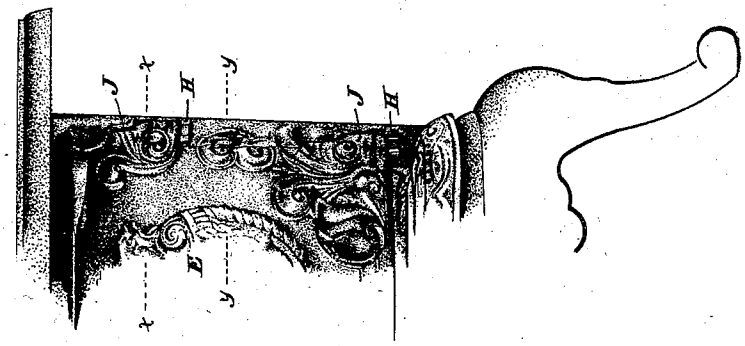


Fig. 2.

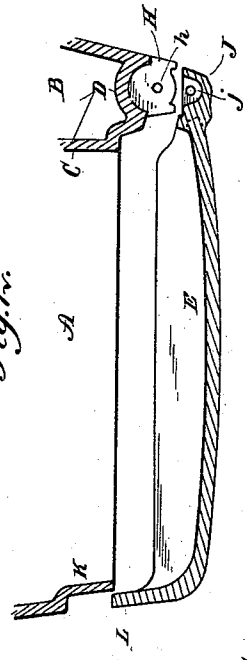


Fig. 3.

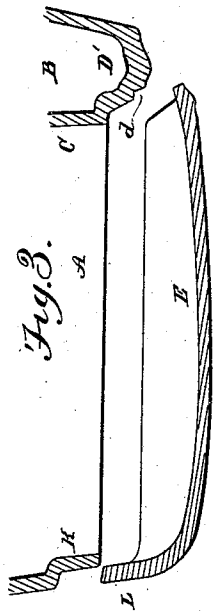
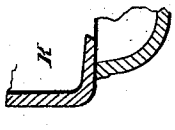


Fig. 4.



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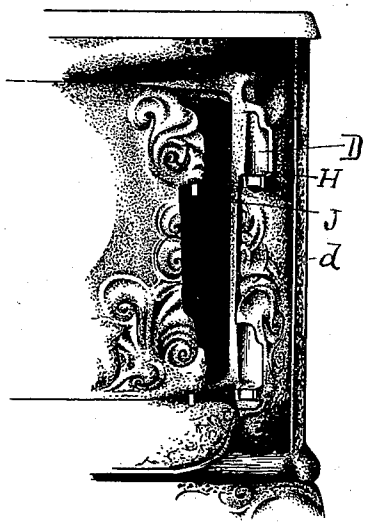
(No Model.) 2 Sheets—Sheet 2.

W. J. KEEP.

STOVE.

No. 543,305. Patented July 23, 1895.

Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM J. KEEP, OF DETROIT, MICHIGAN, ASSIGNOR TO THE MICHIGAN STOVE COMPANY, OF MICHIGAN.

STOVE.

SPECIFICATION forming part of Letters Patent No. 543,305, dated July 23, 1895.

Application filed May 31, 1893. Serial No. 476,046. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. KEEP, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Stoves; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to stoves, and has for its object an improvement in the door-frame, especially the oven-door frames of stoves, by means of which the opening through the frame is made to correspond more nearly to the interior space of the oven, and by means of which also the door at its attached or rear part is made to fit more nearly to the rear post or framework of the door, so as to make the outside of the post or framework and the outside of the door on substantially a continuous line, concealing the hinges, or nearly concealing them, and giving to that portion of the stove an even and unbroken surface, which may be either left plain or finished with ornamental scrolls that run across the meeting-line between the door and the post, while the meeting-line itself is nearly invisible.

Another object of the invention is to so shape the front post or framework of the door by bending it outward at the edge and producing a flange over which the door shuts that increased width to the opening into the oven is obtained, while the requisite strength to the frame is retained and boldness or apparent depth is given to the door.

In the drawings, Figure 1 shows the rear corner of a stove or the meeting between the rear of the door and the post, the figure showing to what an extent the hinges and the meeting-line between the door and the post are concealed. Fig. 2 is a section at the line *x x* of Fig. 1. Fig. 3 is a section at the line *y y* of Fig. 1. The two last-named figures show, also, the means of securing a close joint at the front edge of the door. Fig. 4 indicates the manner of closing the door against the front door-post as it has been commonly heretofore made. Fig. 5 is a perspective showing the rear attachment of the door, the parts being disassembled.

A indicates the oven-space; B, the flue at the rear of the stove.

C indicates the partition-wall between the oven-space and rear flue, and C′ the rear outer walls of the stove.

D indicates the side walls of the flue B at the point of section *x x*, and D′ indicates the side walls of the flue B at the point of section *y y*. The form shown in Fig. 3 continues in substantially the same shape from the top of the lower hinge to the top of the upper, and the form shown in Fig. 2 is adopted at both the upper and lower hinges.

The end wall of the flue B, at the part where the hinge is formed, is concaved back of the vertical line to which the main part of the door E extends, and at these points a lug or knuckle extends rearwardly from the door. At the middle part, between the hinges, the wall of the flue is formed with a vertical abutment *d*, against which the rear edge of the door E abuts, and to the rear of the vertical abutment *d* the wall of the flue B is a continuation of the wall of the door E—that is, the outer surface of one is substantially flush with the outer surface of the other.

Below the concave part D, and between that and the full or convex part D′ that lies between the hinges, is a horizontal ledge perforated with a pintle-hole *h*, and the ledge forms a knuckle affixed to the frame. At the part of the door which engages with the stove just above the ledge H is a rearward projection J, and across this is a perforated flange *j*, which forms the knuckle attached to the door. The projection J extends back from the center of the perforation through the flange *j* just far enough to swing freely in the concavity in the wall D, and the pintle which holds the knuckles of the hinge together is entirely within the hollow projection J and concealed from sight. The lower hinge is made in substantially the same way, and thus both hinges are practically unseen, and the door opens outward, disclosing the entire length of the oven A.

At the front post the frame is provided with a flange K, which, instead of turning back to the rear of the stove, as is shown in

Fig. 4, and is common in stoves as constructed at present, turns out to the side, and the front edge L of the door reaches beyond and closes in over the side projection K.

The flange K sets back from the front end of the stove about the thickness of the lip L of the door, so that the door of the stove when the door is closed presents a substantially flush and unbroken surface at this end of the stove also.

What I claim is—

1. In a stove, the combination of the rear door post, having alternate concave and convex portions, and a door having rearwardly extended hollow projections adapted to engage in the concave portions of the door post, and perforated pintle ledges, for the reception of the hinge pintles, substantially as described.

2. In combination with an oven door, a door frame having an irregular seat for said door; the said seat being at the rear substantially flush with the main surface of the door, and the top and front being removed back and the top and front of the door being dished or bent inward to correspond therewith, substantially as and for the purpose specified.

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIAM J. KEEP.

Witnesses:
S. E. WIDDIFIELD,
ISAAC S. FILER.