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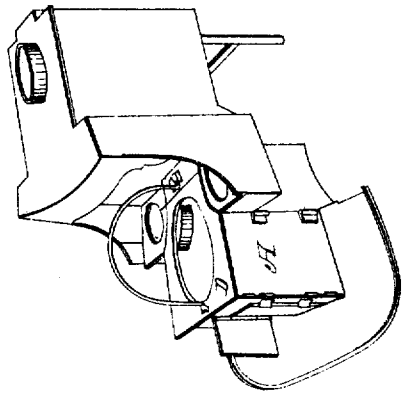
E. G. CURRIER.

COOKING STOVE.

Patented June 2, 1836.

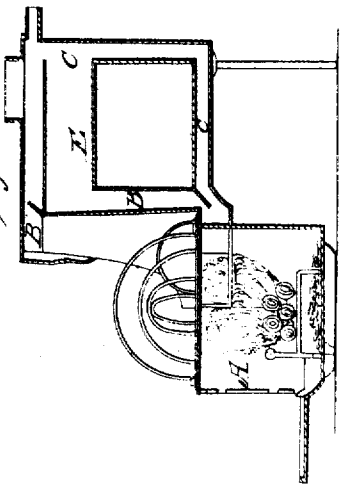
Perspective View of Stove closed.

Fig. 2.



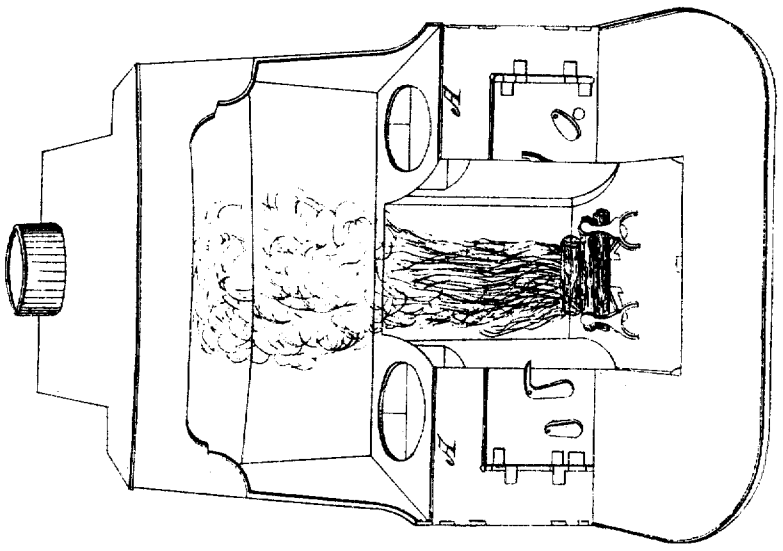
Section of Stove closed

Fig. 3.



Front View of Stove opened

Fig. 1.



1670X June 2, 1836

Ezekiel L. Currier of Warner State of New Hampshire

Letters Patent. Stove No 1

The schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Ezekiel L. Currier himself of his improvement on the Open and close Cooking Stove No. 1.

To all to whom these presents shall come,

Be it known that I Ezekiel L. Currier of Warner, in the county of Merrimack and State of New Hampshire, have invented a new and useful improvement in the "Open and Close Stove, designated as No. 1." By the manner of arrangement and combination I produce either an Open or a close stove, as circumstances may require, in a manner better suited to domestic convenience, than has heretofore been done. It presents in appearance the front of the ordinary Franklin open stove, having the jambs on each side extended or widened horizontally, from that part intended to contain the fire, and to form the body of the close stove, and on a line with what may be the desired height thereof. These extensions are to serve for the support of a cooking vessel on each side, and for that purpose have a circular hole on the top and are made hollow, with a flue communicating with the interior or body of the stove, so that the draught from it passes under the vessel and out at the back of the hollow space, into an apartment at the back of the Franklin, which reaches from the horizontal line of the extensions at the sides, to the top of the Franklin and also comes as far as desired backwards, thereby forming a square enclosure intended to surround the same, which is formed of four other plates constituting the top, bottom and sides of it, leaving of course a space between them & the corresponding ends of the apartment above described, for the circulation of the draught of heat & smoke around it; the ends of the oven are formed by the sides of the apartment & are not double, one containing the door to it. The aperture for the draught from the back of the hollow spaces at the sides, leading

into the apartment, is furnished with a damper, to each, so fastened to the lower angle of the oven bottom, as to close up the space left between it, & the bottom of the apartment; or that between the back of the Franklin & the adjoining side of the oven, according to which over direction the rotation of the axis of the damper is conducted, by means of a handle which is placed for that purpose, projecting convenently through that side of the apartment, and these the draught can be managed, as to throw the heat either under the oven and up the back side thereof into the escape pipe for the smoke (at the top of the apartment,) or by closing that opening beneath the oven, to conduct it up the space behind the Franklin & thence over the top of the oven, to the said escape pipe. The heat may also be directed equally in its distribution by opening different apertures, so as to send a portion of the heat above and another below the oven, as may be found most expedient. Above the oven, and between it & the top of the apartment are placed two other plates in a horizontal position; the upper one extending from the draught opening in the back of the Franklin, to about the center of a circular opening in the top plate of the apartment; which is intended to receive a vessel for heating water, &c & is made with a rim around it, on which to set the vessel; & also to receive the pipe by which the smoke is to escape; for which reason said rim & hole, are placed as far back, on the top plate as is practicable, and the upper plate turns up by a perpendicular edge so as to meet it, & thus bring all the heat from the Franklin or open stove under said vessel when the close one is not wanted to be used.

The plate beneath the upper one, is extended from one side of the apartment to the other, leaving a space open only between it, & the back of the Franklin, & between it & the back of the apartment, for containing the draught; and these openings are each furnished with a damper, so as to regulate it, for it will be seen that on opening the damper first described, behind the hollow space, by closing that beneath the oven, the draught will rise behind the Franklin & the damper at the place last described, above the oven, which it may be allowed to pass, and continue on to the vessel of water & finally escape, or the damper placed there, may be closed on the plate, & then send the draught up over the

top of the oven, to the opposite one, which being opened allows a passage up again to the escape pipe; or again, the first damper being removed, in position above the aperture leading up the back of the Franklin, & shuts the draught under the oven, and up the back side thereof, to the last described damper which may be either opened and allow the passage on to the escape pipe; or it may be closed & continue the draught over the oven, to the opposite damper, at the back of the Franklin, whence it will be allowed to escape; & in all or either of the situations, the recess of water at the top, receives the heat previous to its escape. At the bottom plate of the stove, upon which the fire is to be placed, is formed a hearth by sinking a bed: and across this, drawn two folding sides; which close by a hinge joint, & shut up against the side extensions of the jambs, when not wanted for the close stove, & thereby form a finish to the open stove, connecting the side extensions with the bottom or bed plate, But when drawn around the sunken bed, by unfolding the joints they are secured at the proper angle, by short flanges at the edge of the bed on the inside, the front leaves, or folds, containing the doors of the close stove, as usual, and the whole secured together by the top plate, having proper flanges for that purpose, & the surface containing the usual arrangements for cooking as before. In order to remove this plate & fold up the close stove duly while yet warm; I use a semicircular handle, which is to be attached in a moment to the top plate, by an ear left open at one of its sides, & cast into the plate, so that it may be slipped into it sideways, & at the other end, or the back of the plate I use a forged flat staple cast into it, in which I first thrust the broad flattened end of the handle which in that shape prevents the possibility of falling; & then slip in the other small end into the side of the ear, by which means the hot plate can be removed safely, & the handle applied at a moments notice

In order to get rid of the steam which may be produced in the operation of baking in the oven, I perforate the top plate of it in two or more places, so as to allow it to escape into the draught of the flue; proper legs are to be used to support the apartment & same as over as the stove & also rods, and doorpins are to be used for cleaning out the soot as is usual,

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What I claim as my invention is not the principle of changing an open to a close stove or the contrary, but the arrangement of the folding sides connected by the movable top pieces as described, to form the close stove from an open one, or Franklin and also the peculiar adaptation of the flues & dampers, as set forth in order to conduct the circulation through the jambs, and around the oven, to be managed at pleasure according to the description thereof, the whole forming a combination to the best of my belief new, & not before used, In testimony whereof I have hereunto set my hand this eleventh day of April Eighteen hundred & thirty six

Witness
Frank. Pierce
D. A. Hale

Ezekiel G. Carrier

Ent
W.K.

[1664 W.E.]

(Patented June 2. 1836)