I.M. Collina.

Cont Stove. Patented Sept. 20. 1839. No. 1330. 97.6. E.

UNITED STATES PATENT OFFICE.

ELBRIDGE McCOLLUM, OF WEARE, NEW HAMPSHIRE.

COOKING-STOVE.

Specification of Letters Patent No. 1,330, dated September 20, 1839.

To all whom it may concern:

Be it known that I, ELBRIDGE McCOLLUM, of Weare, in the county of Hillsboro, in the State of New Hampshire, have invented a 5 new and useful Improvement in Stoves, by which the ordinary open, or Franklin, stove is made convertible into a close cookingstove, and combined with ovens on each side thereof in such a manner as to combine econ-10 omy in the use of fuel, with convenience in the application of heat, either to the purpose of cooking or of heating apartments; and I do hereby declare that the following is a full and exact description thereof.

Figures 1 and 2, in the accompanying drawing, are perspective representations of my stove, with the ovens combined therewith. Fig. 3 is a ground plan of the same, when the doors and ovens, to be presently 20 described, are made curvilinear. Fig. 4, is an inside view of one of the jamb plates of the stove, with the respective openings therein for the passage of heated air, and vapor.

In each of these figures, where like parts 25 are represented, they are designated by the same letters of reference.

A, is the top plate of the stove, and A', A'. the jamb, or side, plates; made, as are most of the other parts, of cast-iron. The top, 30 A, is made long enough to extend several inches beyond the jamb plates at each end, and has attached to it, at its ends, a face plate B, extending along from front to rear, and reaching down to a distance of six or 35 eight inches, more or less, so as to form a hood, or mantel, under which the steam arising from any cooking apparatus placed above the ovens may pass, and thence escape through openings a, a, in the upper ends of 40 the jamb plates, shown distinctly in Fig. 4, and designated by the dotted lines a, a, in Figs. 1 and 2.

C, is the back plate of the stove, as seen in Figs. 1 and 2; and in Fig. 4, c, designates the 45 groove into which this plate is received, in the ordinary way; it terminates, as usual, a sufficient distance below the top plate to leave a throat for the escape of the smoke and gases from the fire.

50 There may be a bottom plate of cast-iron to receive the jamb and back plates, and to form a hearth upon which to make the fire, as in the ordinary open stove; or there may be a grooved rim, such as is shown at D, D, 55 Fig. 3, laid upon the ordinary brick hearth, D², D², Figs. 1, and 2, to receive them, and

the doors, to be presently described. The back edges of the top and jamb plates are to be built into the fire place of a chimney, in

the ordinary way.

I convert the lower part of the open, into a close stove in the following manner. F, Figs. 1, and 2, is a bar, or band, of iron extending from one jamb to the other, to receive the upper edges of the doors by which 65 the lower part is to be inclosed, their lower edges being received in grooves, or ledges, formed in D, D. This board is shown in the drawing as semicircular, but this form may be altered, if preferred.

J, J, are doors which may be made to slide in grooves on the lower edge of the band F. and in the rim D, or they may be hinged to the jamb plates, as may be preferred. In Fig. 1, they are represented as removed, and 75 placed under the fronts of the ovens I, I, on each side of the open stove, a rim D', D', being prepared to receive them. In Fig. 2, they are shown in place when employed to convert the open into a close stove.

K, is a plate, which, when in place, forms the upper, or boiler, plate of the close stove. It is to be furnished with covers, and rims, which may be removed, and replaced by cooking utensils, the whole being managed 85 by means of bails in the ordinary way.

K', is a face plate making part of the boiler plate, and fitting on to the bar, or band, F; and said plate rests at its back and sides on ledges b, b, cast on the back and a0 jamb plates for that purpose. Through the jamb plates, immediately below the boiler plate, there are openings L, L, which lead into flues under the ovens I, I.

G, G, are two vertical bars, extending 95 from D to F, giving support to the latter, and also to two horizontal, or dog, bars, E, E, extending from front to back, and which may serve to support the fuel.

I, I, are the top plates of two ovens fur- 100 nished with doors at I', I', in the construction of which there is not anything peculiar. They have flues under them, formed by double plates, into which the openings L, L, lead; these flues are continued up, at the 105 outer ends of the oven, into the upper horizontal flue above the oven under the top plates I, I; from the upper flue, the draft passes through the opening M, in the jamb plates, behind the back plate of the stove 110 into the chimney. Sliding shutters, or dampers, may be employed to open and close

these openings, and govern the draft at pleasure. The top plates of the ovens are perforated for the reception of cooking utensils.

To my stoves as above described, I sometimes add a heater for heating air, which air may be then conducted, by means of tubes, wherever it may be wanted. The manner in which I effect this is shown in 10 Fig. 4. In addition to the back plate C, of the fire-place, I employ a second back plate at N, the two being connected by a top plate at O; thus forming an air-chamber, into which the cold air, from without, or within, 15 the room, may be admitted through a narrow opening between the plates at c. In passing up between these plates, it is heated, and escapes through an opening H, in the jamb plates, to which are adapted tubes H, 20 H, Figs. 1, and 2, through which it may be conducted, as desired.

Having thus fully described the manner in which I construct my combined, or convertible, open and close stove, and explained the

operation of the same, I do hereby declare 25 that I do not claim to be the inventor of either of the parts so described, taken in its individual capacity; but

I do claim so to have combined these parts together as to constitute a stove substantially new; that is to say, I claim—

In combination, the manner set forth of converting an open into a close stove, with the respective openings in the jamb plates leading into flues under two ovens on the 35 sides of the open stove, the draft returning through two other openings in said jamb plates, so as to lead into the chimney; there being, also, in combination therewith, openings in said jamb plates situated behind 40 hoods, or mantels, at each end, for the escape of fumes arising from cooking utensils used on the top plates of said ovens.

ELBRIDGE McCOLLUM.

Witnesses:

John L. Hadley, Parker Boynton.