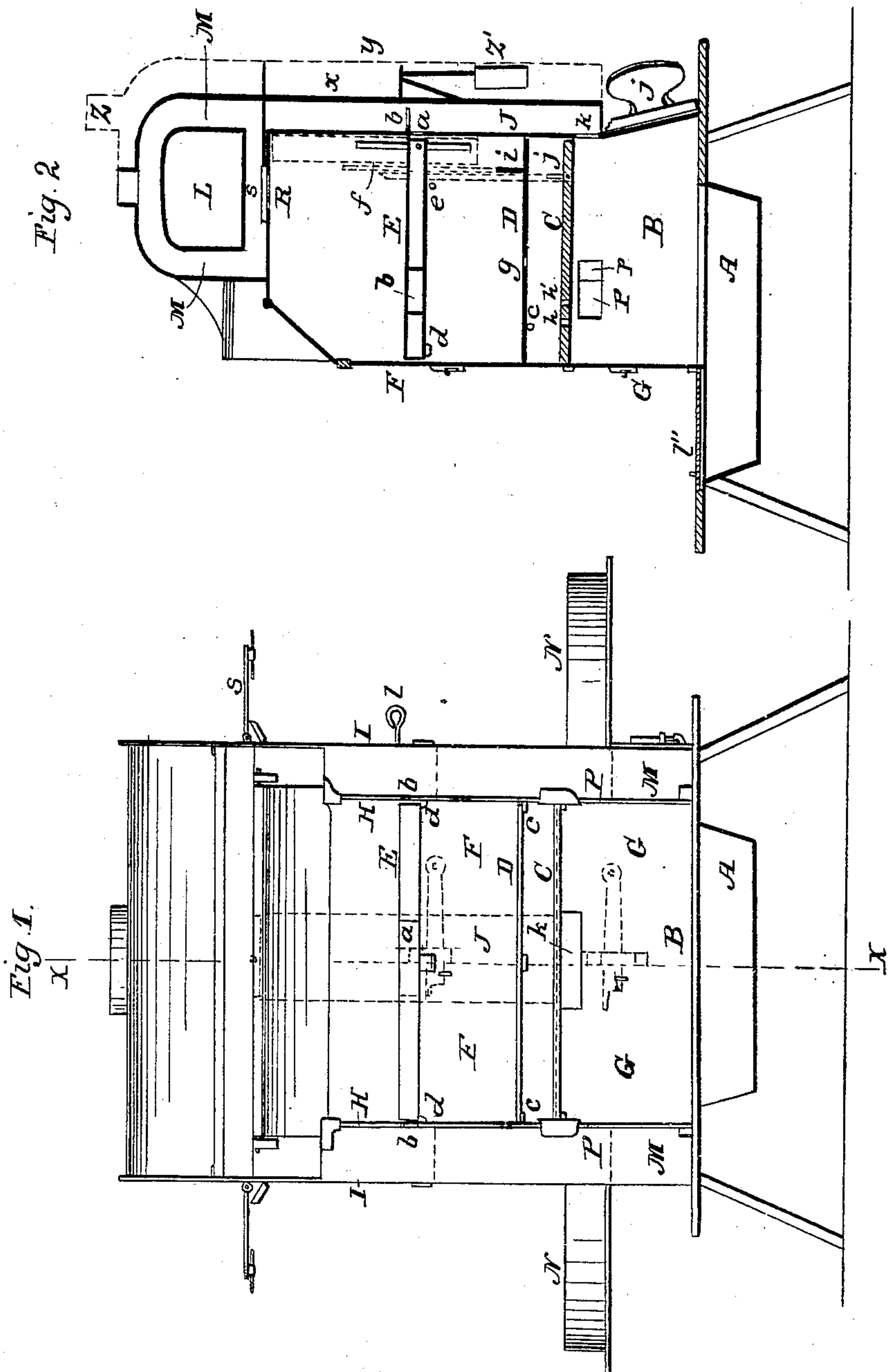


G. W. CARLETON.

Cooking Stove.

No. 8,542.

Patented Nov. 25, 1851.

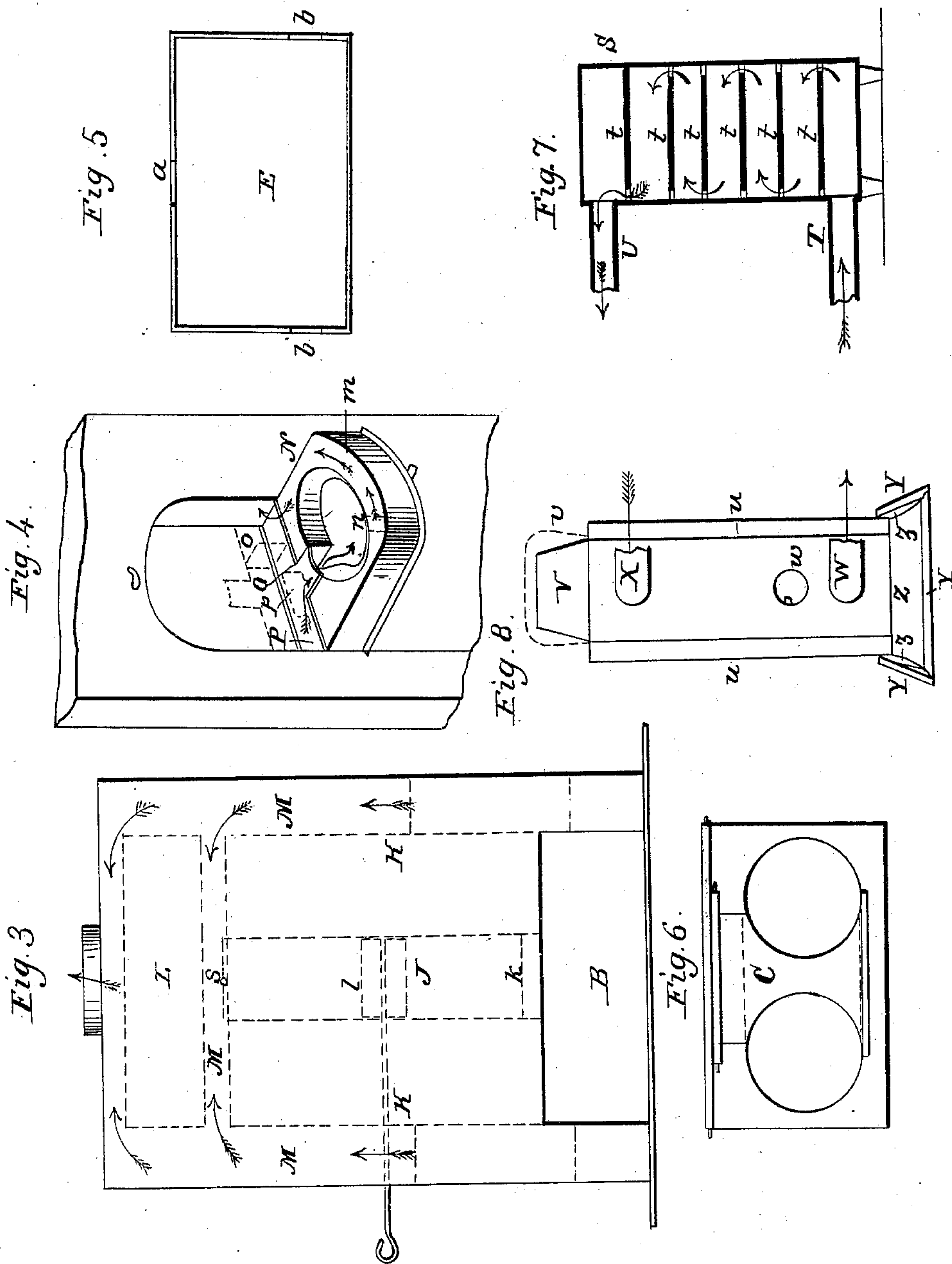


G. W. CARLETON.  
Cooking Stove.

2 Sheets—Sheet 2.

No. 8,542.

Patented Nov. 25, 1851.





# UNITED STATES PATENT OFFICE.

GEO. W. CARLETON, OF BRUNSWICK, MAINE.

## COOKING-STOVE.

Specification of Letters Patent No. 8,542, dated November 25, 1851.

*To all whom it may concern:*

Be it known that I, G. W. CARLETON, of Brunswick, in the county of Cumberland and State of Maine, have invented a new and improved stove for cooking and heating purposes and by certain arrangement of flues, drums, &c., rendering the stove applicable for warming other apartments than the one in which the stove is placed; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation. Fig. 2 is a vertical section taken at the line  $x-x$ , Fig. 1. Fig. 3 is a back view in elevation. Fig. 4 is a section in perspective showing one of the side drops and the self adjusting clout. Fig. 5 is a horizontal section of a hollow plate by which additional ovens are obtained in the interior, the heat passing through it. Fig. 6 is a plan of the plate that sits directly over the fire chamber. Fig. 7 is a side elevation of an air retaining stove or drum, with the side removed for the purpose of showing the partitions and the direction of the current of hot air. Fig. 8 is a perspective view of a metallic flue.

Similar letters of reference indicate corresponding parts in each of the several figures.

The nature of my invention consists in constructing a stove in such a manner that it may be changed, by adjusting some of its parts, into an air tight, or draft, wood, or coal cooking stove; cooking range; or a wood or coal draft or air tight radiating stove; or into a Franklin stove for wood or coal.

A, Figs. 1 and 2, is the ash pit.

B, is the fire chamber.

C, is a plate placed directly over the fire and having suitable holes for cooking implements as seen in Fig. 6.

D, is a second plate placed in the stove above the plate C, in about the position as seen in the figures.

E, is the third plate placed above the plate D. The plate E is hollow and has an opening  $a$  in its back end and openings  $b$   $b$  in its sides as seen in Fig. 5. The plate C rests upon a bead on the inner sides of the stove. The plate D rests upon pins  $e$ , one on each side of the stove and the plate E, upon dogs  $d$ ,  $d$ , and pins  $e$ ,  $e$ ; all the plates

have a wire or rod passing along the back ends, the ends of the wires fitting in slots; these are seen in Fig. 2. By this means the several plates may be raised in a vertical position as seen by red lines in Fig. 2. The upper plate E having longer slots  $f$ ,  $f$ , than the others and the pins  $e$ ,  $e$ , serving as fulcrums to the plate E as it is raised, the ends of the wire at the back descending in the slots as  $f$ ,  $f$ , the plate approaches a vertical position. The second plate D has small recesses  $g$  (see Fig. 2) cut out of its sides so as to enable it to clear the pins  $e$ ,  $e$ , when the plate is raised.

$i$ ,  $i$ , are the slots of the plate D. The first plate C, has two recesses  $h$ ,  $h'$ , cut out of each side, the forward recesses  $h$ , to clear the pins  $e$ , and the others  $h'$ , to clear the pins  $e$ ,  $e$ .  $j$ ,  $j$ , are the slots of the plate C. The plates are secured vertically by the pins  $e$ ,  $e$ , as will be seen by referring to Fig. 2, see the red lines, for when each plate is raised it settles in its slots and its recesses below the pins  $e$ ,  $e$ .

F, F, Fig. 1, represents the upper doors; and G, G, the under doors; they are represented in blue.

H, is the inner casing between which the plates just described are placed.

I, is the outer casing.

J, Figs. 1, and 3, is a flue or passage indicated by red lines having its vent  $k$ , back of the fire chamber and running up vertically and communicating with the opening  $a$  in the hollow plate E when not cut off by the damper  $l$ , as seen in Figs. 1, 2, and 3.

K, K, are vents which lead into the space or passage M, between the inner casing H, and outer casing I. This space or passage M, encompasses the oven L, which is in the upper part of the stove, and is shown in Figs. 2, and 3.

N, N, Fig. 1, are side drops; when not in use they fit in the space (M) or passage between the inner and outer casing, a metal strip passing around the space they occupy in the passage as shown by the red lines. The principle of their construction will be seen by referring to Fig. 4, the drop being down and ready for use. They are made sufficiently deep to allow a passage for the heat to pass around a kettle, pot, or other article, the circular opening being for the reception of the same, the arrows indicate the direction of the draft or heat from the fire chamber. A self adjusting clout O, falls



with the drop when it is let down and a projection *o*, prevents the heat from passing directly into the passage M, but compels it to take the direction of the arrows, viz., under and around the vessel placed in the aperture and into the passage *m*, in the drop through the opening *n*, and so around into the passage M; the red lines show the clout when it is raised and the projection *o*.

P, is a vent through which the draft or heat passes from the fire chamber into the drop; it will be understood that there is one on each side of the stove. These vents have slides *p*, which cover them and cut off the communication when necessary.

R, is a vent leading into the space or passage M, underneath the oven L, as seen more particularly in Fig. 2.

S, is a damper to the vent R.

*i*, is the hearth in front of the stove which may be moved backward or forward so as to communicate air to the fire or otherwise.

The several parts of the stove being now described, I will explain the manner in which it may be changed into the different kinds of stoves before mentioned.

With the doors F, F, and G, G, closed and the plates C, D, E taken out or raised in the vertical position as shown by the red lines in Fig. 2, and before described, it is a wood or coal air tight or draft stove, for radiating heat the draft added or stopped by closing or opening the hearth *i*; when coal is used a grate is inserted in the chamber B. Said grate being portable and if necessary cast into one piece and of suitable form and shape. The doors F, F, and G, G, open, it becomes an open fire place or Franklin stove for either wood or coal. By lowering the first plate C, and letting down the side drops N, N, it becomes a cooking range, the oven L, for baking, the drops for boiling or frying, wash boiler inside of stove on plate C, over the fire, roasting in front of stove, broiling in ash pit A. Flat irons may also be heated as represented in Fig. 2, the irons *j*, resting against the inclined niche or recess at the back. With the wash boiler out of stove and the plate D, lowered, the top doors F, F, closed the same process may be going on, and an oven besides L, the one mentioned, is added, D forming the bottom of it; by lowering the hollow plate E, another oven is added making three ovens of different degrees of heat, the heat passing up the passage J, into the hollow plate E, through the opening *a*, and passing out of

the plate into the passage M, through the side openings *b*, *b*, in the plate, by this means the interior ovens are more effectually heated. When the drops N, N, are used the vents P, P, are opened by shoving back the slides *p*, *p*. When a direct draft is desired and when the stove is used as a Franklin or open fire place the vent R is opened by operating the damper *s*, see Fig. 2. This vent is also opened when cleaning out the flues through the vents K, K, P, P, and *k*, as the dust is carried up by the draft through the vent R.

The drops N, N, may be covered with sheet metal and so arranged as to carry off the smell of the victuals while cooking, the covers inclosing the vessels on the drops, and so arranged as to be removed when it is desired to place the drops in the recesses in the sides of the stove. If cooking is done on the plate C, in the interior of the stove, and the top doors F, F, closed, the scent of the victuals cannot escape into the apartment.

When all the plates of the stove are in a vertical position a bar may be placed across the front, and rest upon the beads upon which the plate C, rests when down, this bar is for the doors to bear against, and its use will be readily understood.

The principal advantages of my invention are: The different forms into which the stove is capable of being converted so as to render it subservient for the various kinds of cooking, and also forming different kinds of stoves for radiating the heat; both air tight and draft.

What I claim as my invention and desire to secure by Letters Patent is—

The employment of the three movable plates C, D, E, constructed and arranged as described, viz., the plate E being hollow and affording a passage or flue, when not cut off by the damper, through which the heat passes, warming the ovens formed by the plates, the plates being capable of being withdrawn from the stove or varied in a vertical position by which arrangement the stove can be converted into an air tight, or draft wood or coal cooking stove; cooking range, or a wood or coal draft or air tight radiating stove or into a Franklin stove substantially as set forth.

GEO. W. CARLETON.

Witnesses:

JOS. F. DUNNING,  
GEORGE L. RICHARDSON.