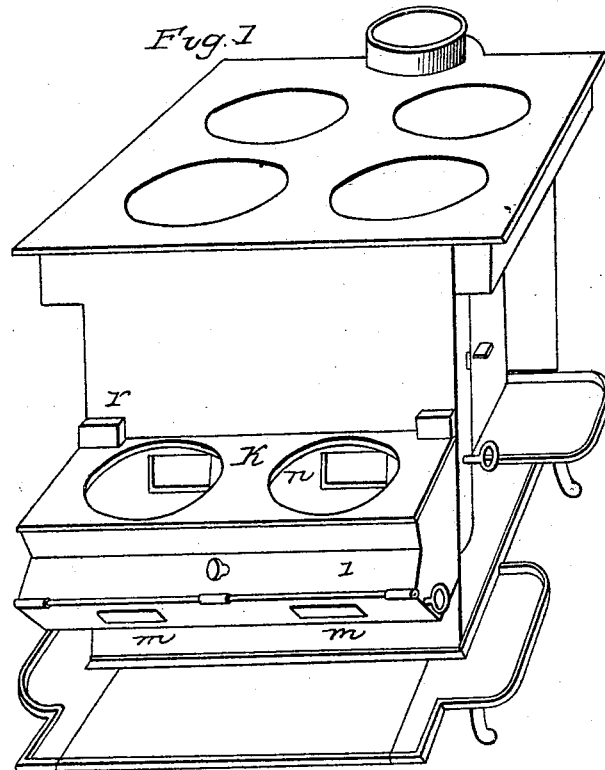
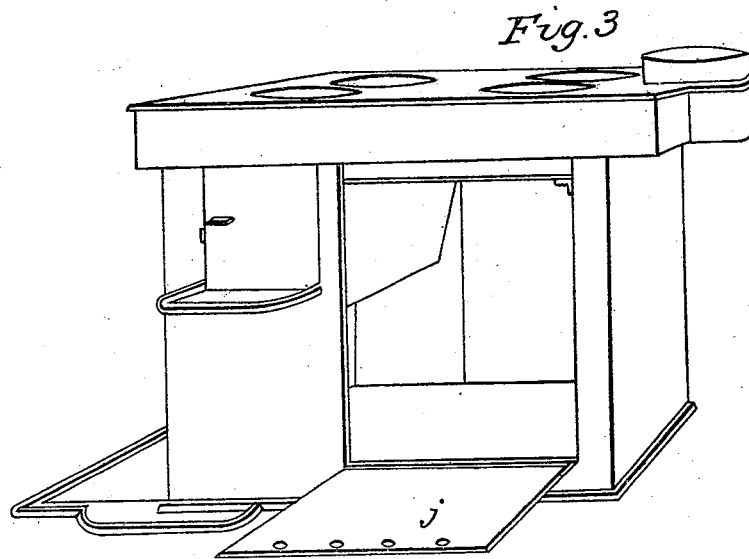


E. C. ROBINSON.

Cooking Stove.

No. 4,284.

Patented Nov. 26, 1845.



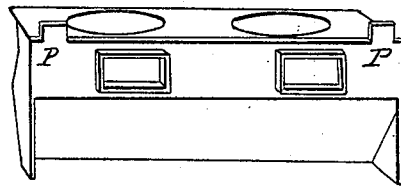
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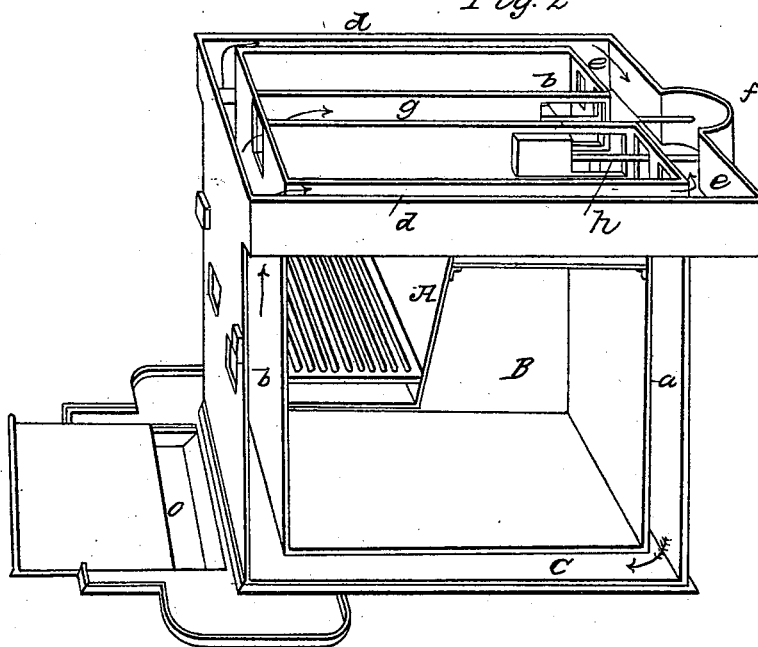
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*Fig. 4*



*Fig. 2*



# UNITED STATES PATENT OFFICE.

ELI C. ROBINSON, OF TROY, NEW YORK.

## COOKING-STOVE.

Specification of Letters Patent No. 4,284, dated November 26, 1845; Antedated August 30, 1845.

*To all whom it may concern:*

Be it known that I, ELI C. ROBINSON, of the city of Troy, in the county of Rensselaer and State of New York, have invented new and useful Improvements in Stoves; and I do hereby declare that the following is a full and exact description, reference being had to the annexed drawings, making part of this specification.

10 In the drawings referred to Figure 1 is a perspective front view of the stove to which these improvements have been applied. Fig. 2 is a side view of the same, with the top and one of the side plates off, 15 showing the fire chamber at A; the oven at B, extending the entire length and breadth of the stove with the exception of a flue at each end, as at *a* and *b*. These flues, in connection with the horizontal passage *c* under the oven, from a continuous flue passage for the fire and heated air from the fire chamber, after passing over the intermediate section of the oven to be carried entirely around it and up in front of the fire place 25 to the top of the flue *b*, from which a passage is provided on each side, as at *d*, *d*, and as a continuation of the same flue along the top of the stove to the cross passage at the back end with which they communicate, as there shown at *e e*, and thence directly to the stove pipe which is placed over the circular projection at *f*. This cross passage as shown by the drawings is made to project to the extent of its width back beyond the upright part of the back plate of the stove, which of course leaves the entrance or draft from the fire into the descending flue *a* on the inside of the inner side plates of this passage, so that by means of the openings as shown in those plates and common sliding dampers by which they are closed and regulated the draft from the fire place is directly through the openings to the stove pipe, or by closing them turned into the descending flue and around the oven in the manner above pointed out. The side passages extending along the top of the stove are represented in the drawings as projecting over the upright part of its side plates to the extent also of their width, notwithstanding which I construct them at my option so as to project more or less on one side or the other or both of the upright parts of the side plates of the stove, the object of the improvement in this particular being to provide for a continuation of the flue or draft

from the top of the vertical flue *b*, in front to the cross passage in rear and thence to the stove pipe without any prejudicial interference with the boiler openings in the top plate. 60

It may here be explained that the middle passage *g* is intended to represent, as an alternative improvement, a central passage across the stove to be used or not with or without the others at discretion. If used 65 without and as a substitute for the side flues the cross back flue with which they communicate is also dispensed with and the middle passage made to terminate directly under the stove pipe and in immediate communication with it. In which case a direct passage for the draft from the fire to the stove pipe will be through the openings shown in the side plates of this middle passage at *h*, *h*. By closing these by means of dampers with which they are to be supplied the draft is turned down around the oven as in the other case. If, however, the middle passage is omitted altogether the openings in 80 and out of the same as represented in the plates with which it is connected at each end are omitted also; and in that case the openings and dampers of the inner plate (as it will then be in one) of the back flue are to be adapted to each other for the purposes of the improvement accordingly. 85

In Fig. 3 at *i* is shown a plate extending horizontally across the oven made to rest at each end upon cleats so as to be easily taken out or replaced. This with the small openings in the door of the oven as shown at *j* in the same figure and which when the door is closed come against the space between the plate and the top of the oven constitutes 95 what I call (from the free admission of air through these openings, the like being provided on each side) a cold air chamber for the purpose of regulating the temperature of the oven or guarding against the effects 100 of too much heat from its top plate.

At K, Fig. 1, is an article connected as an appendage to the front plate of the stove, with boiler openings and the usual provisions inside for fire, &c. At *l* is an opening closed with a lid for the introduction of fuel. *m*, *m*, are openings in front with dampers for supplying and regulating the draft to the fire. At *n*, *n*, as seen through the boiler openings are openings for a draft 110 from the fire place of this appendage into the ascending flue in front of the stove.

When the appendage is taken off these openings are closed by dampers. The sunk hearth in the projecting bottom plate of the stove underneath shown at *o*, Fig. 2, is provided as receptacle for ashes and other droppings from the fireplace of this appendage. Fig. 4 is a back view of the same article representing the openings through its back plate fitted to those provided for them in the front plate of the stove, the former being made to project so as to set therein as in a socket in support of the entire article while the small vertical projections from the upper edge of its back plate at *p*, *p*, Fig. 4, by being introduced into the inverted sockets provided for them at each edge of the front plate of the stove as shown at *r* *r*, Fig. 1, serve to keep the whole in place when at-

tached to the plate for use and to allow it to be taken off and removed when not wanted. It may also be attached and secured in its place when required by any other common mode of fastening.

What I claim and desire to secure by Letters Patent are—

The flue passages across the top of the stove for the fire and heated air, after the same have been made to pass around the oven and up to the top of the flue *b* in front of the fireplace to be continued to the stove pipe as above described.

ELI C. ROBINSON.

Witnesses:

P. T. WOODBURY,  
DANIEL WHITING.