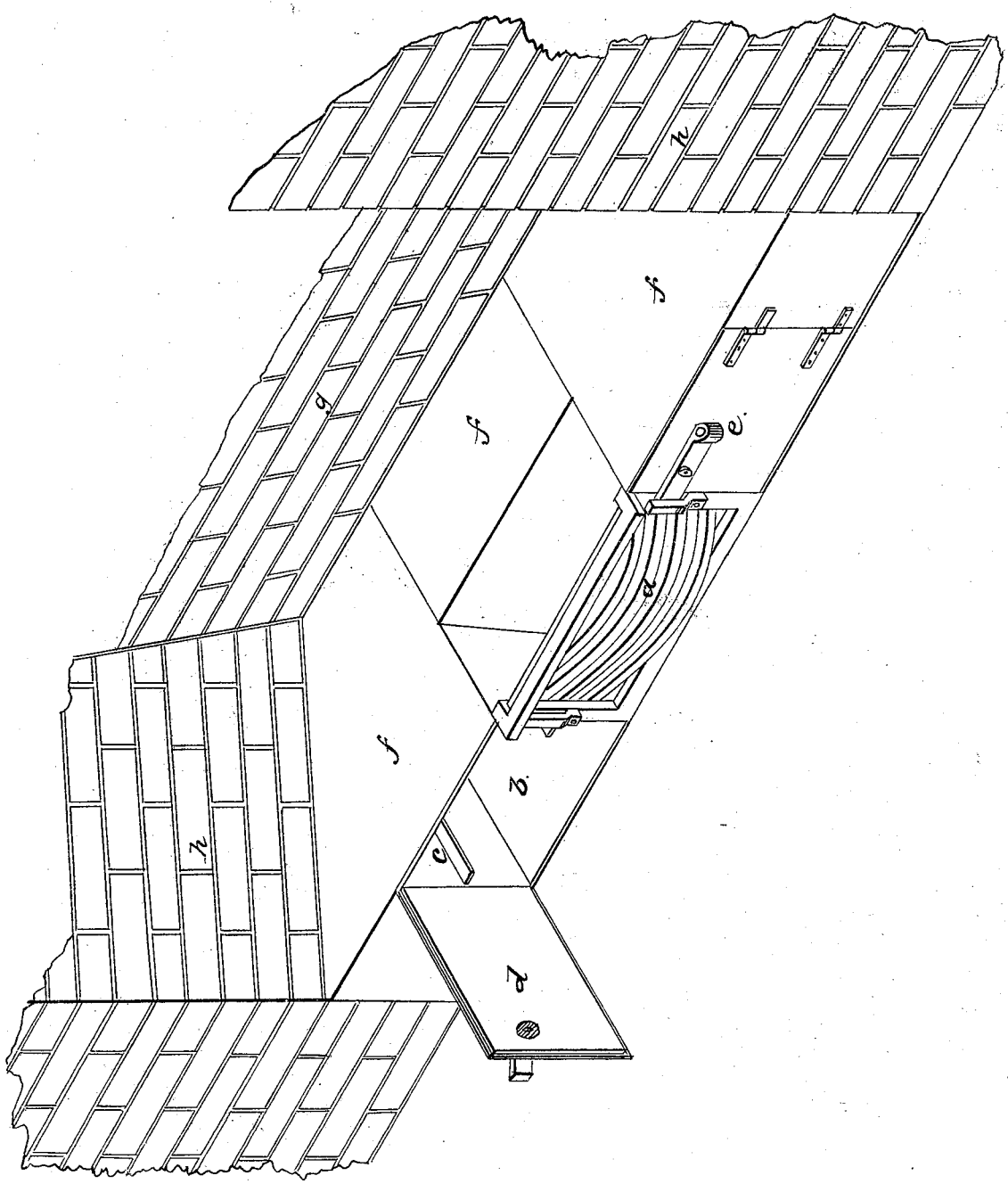
W. W. PARROTT.

Cooking Range.

No. 142. Patented March 11, 1837.



UNITED STATES PATENT OFFICE.

W. W. PARROTT, OF BOSTON, MASSACHUSETTS.

COOKING APPARATUS.

Specification of Letters Patent No. 142, dated March 11, 1837.

To all whom it may concern:

Be it known that I, the undersigned, W. W. PARROTT, of Boston, in the county of Suffolk and State of Massachusetts, merchant, a citizen of the United States, have invented a new and Improved Apparatus for Cooking, of which the following is a true, full, and exact description.

The fire place used for the inventor's cooking apparatus is a fire grate set into the hearth on a level with the hearth, to which the air is admitted from beneath, from the cellar or exterior atmosphere, or from another apartment, or it may be admitted from the same apartment in which the fire place is situated by a communication opening from any part of the room to the space beneath the grate. The fire grate is, in its front and bottom bars and back of the common construction used for burning anthracite coal and which may be used for burning bituminous coal, coke, charcoal or dry wood or other fuel that will produce a strong heat. The inventor deems the anthracite coal to be the best fuel for the purposes of his improvement, this being the kind he has mostly used in his experiments with his apparatus, and being that for which it is more particularly intended. The back of the fire grate may be of iron, stone, bricks, or other material suitable for the back of a fire grate.

At the back of the fire grate may be formed an air chamber for heating air brought into it from the cellar or exterior atmosphere, or from another apartment in the building than that in which the fire place is situated, or from the same apartment, to be discharged when heated into the apartment in which the fire place is situated, or into any other apartment as the constructor may choose.

The ends of the grate should not flare like the jambs of a common fire place and make oblique angles with the front and back, but should make right angles with the front and back. This is deemed by the inventor to be the best construction, but precise accuracy in this respect will evidently not be material. It will answer all practical purposes if those angles are not right angles. The length of the fire grate from right to left to one facing it in front, in order to adapt it to the apparatus for cooking of the dimensions and construction about to be described, may be nineteen inches or about that measure, its breadth from front to rear from seven to nine inches, and its height from the bottom bars to the top bars of the grate the same as its breadth from the front to its back; an inconsiderable variance in this respect will not be material and it may be compensated for by the greater or less intensity of the heat.

At one end, or at each end to the right and left, to a person facing the grate is placed an oven or baker of cast or wrought iron, forming the end of the fire grate. This oven is from twelve to fifteen inches in length and breadth horizontally, the sides and ends of which should be about at right angles with each other and with the top and bottom, precision in these angles evidently however not being material, and the horizontal form of the oven may be varied and made circular, quadrangular, triangular, octagonal or of any number of sides and angles, or in part straight and in particular, or otherwise regular or irregular, so that the horizontal area be not too great for the degree of heat that can be produced in the grate upon the part of the oven exposed to the direct action of the fire, the dimensions above given for the quadrangular form being found by use and experience to be practically suitable and convenient.

The height of the oven is the same as that of the fire grate, so that the ignited fuel, when the grate is filled and the whole of the fuel ignited, is in contact with one side of the oven or one side of that part of it, which forms the end of the fire grate. The height of the oven from the top to the bottom is the same as that of the fire grate, and both the bottom and top of the oven are plane and level so that the top is in the same plane on a level with the top of the grate. The bottom of the oven should rest on bricks or clay or stone, the best substances or materials for the purpose being those which are the worst conductors of heat, so the sides excepting the front where the door is situated, and also that part which forms the end of the grate, should be backed up with similar substances or materials; and if an air chamber is formed at the back part of the fire grate, the part of the oven adjoining may be cased by a greater or less thickness of such bad conducting materials to prevent the temperature of the oven from being effected by that of the air passing through the air chamber or the pipe by which the air is conducted into this air

chamber may be furnished with a valve to stop the admission of cold air into the air chamber, if necessary, at the time of using the oven for cooking.

The oven may have flanges, projections or other supports on the inner side to rest one or more horizontal plates or frames, upon which to support the articles to be cooked, when more are to be cooked at once than the bottom will afford room for, and the number of those division plates or frames will of course depend upon the height of the oven and grate.

Where the apparatus has an air chamber at the back of the grate to heat air to be discharged for warming an apartment, such air chamber may communicate with the ovens by means of sliding or other valves, to be opened, and the admission and discharge air valves of such air chamber closed when the ovens are in use for cooking. Instead of such air chamber at the back of the grate, a water vessel may be substituted to generate steam, or heat water for the purpose of heating by means of a communication pipe the water in a large vessel or boiler situated as near as convenient to the fire place.

It is best to have the oven cast in one piece except the door in front if it be of cast iron, and if of wrought iron or if it be cast in different pieces, the joints should be as close as may be, and so ought the door to be fitted as well as may be to prevent the circulation of air through the oven and the loss of heat thereby.

This grate and cooking apparatus may be set in any fire place of common form bringing the front of the grate and of each oven about on a line with the front of the jambs. And the jambs toward the back of the chimney, or in their whole length from front to rear according to the greater or less extent of area left open will rest upon the oven, the constructor taking care of course, that the strength of the oven shall be sufficient to support the weight made to rest upon it. A space or platform is left open and free, back of the fire grate, between that and the back of the common fire place when the apparatus is set in such a fire place, or between the back of the grate and that of the chimney, of three or four up to ten or twelve inches wide, more or less, on the same level as the top of the oven and grate and so a part of the top of the oven on each side, or of the oven on one side and the brick or other material or masonry on the other is left open to place vessels upon and support them over the fire for boiling, frying or broiling and the breadth and extent of this platform at the ends and on the back of the fire grate is to be determined by the size of the vessels intended to be used for the purpose of cooking or heating. Roasting is done in front of the grate.

The fire grate, ovens and the extent of such platforms may be all proportionably enlarged or diminished according to the degree of heat needed and quantity of cooking to be done. If only one oven is used the other end of the fire grate may be formed of brick, stone, iron or other suitable material. The smoke passes off by a flue in a chimney of ordinary construction, or by a funnel.

The accompanying drawings are referred to by the inventor in explanation and illustration of this description.

The inventor claims as his invention and the subject of a patent—

The combination of the oven constructed, placed and heated as above described, with such a grate as above described with such a platform at the top of the grate, and ovens as is above described.

WM. W. PARROTT.

Witnesses:
WILLARD PHILLIPS,
H. G. GORHAM.