J. BRERETON.

Range.

No. 2,569.

Patented April 21, 1842.

Fig. 3.

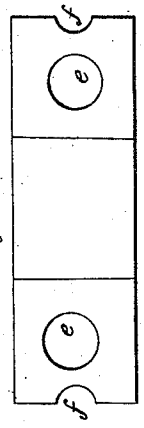


Fig. 2.

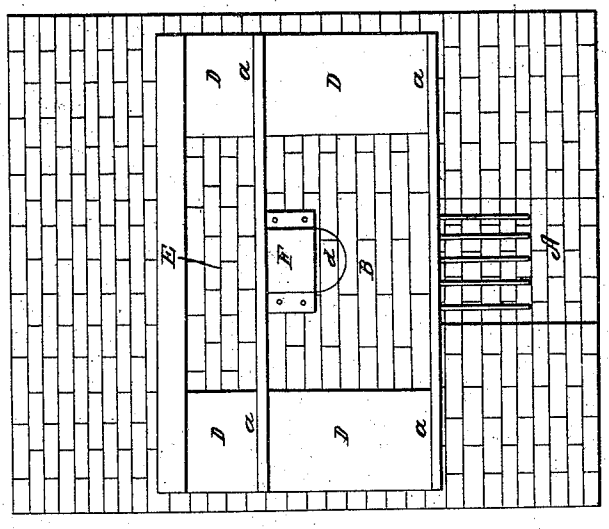


Fig. 5.



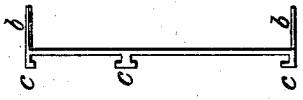


Fig. 4.

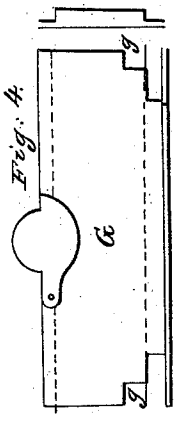
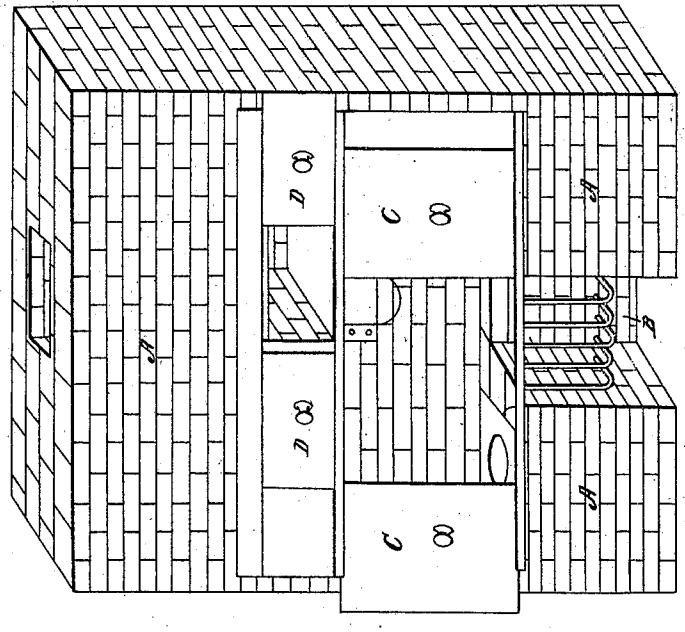


Fig. 1.



N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN BRERETON, OF NEW YORK, N. Y.

COOKING-RANGE.

Specification of Letters Patent No. 2,569, dated April 21, 1842.

To all whom it may concern:

Be it known that I, JOHN BRERETON, of the city, county, and State of New York, have invented a new and useful Improvement in the mode of Constructing an Apparatus for Cooking and also for Heating Apartments, which I denominate the "Housewife's Assistant"; and I do hereby declare that the following is a full and exact description of the same.

The object of my said invention is to furnish a cheap and simple apparatus, which may serve conveniently for the purpose of a common fire place or grate for warming an apartment, and at the same time, serve with equal convenience for all the common culinary purposes, having also, due regard to the greatest economy of fuel.

The plan I have adopted will it is presumed be clearly understood by the following description, reference being had to the annexed drawings, making part of this specification.

Figure 1, is a perspective view of the establishment entire, with the fire burning; the right hand blower or sliding door is open, as far as the opening below, as both would be, when used as a common fireplace. The left hand blower is open, so far as to show the entire opening of the chimney on that side, and partly showing the boiler or pan on that side—that on the other side being hid by the blower. A A A A represent the brickwork of the chimney; B, a grate, nearly in the common form, placed in a recess of suitable shape; C C, sliding doors or blowers, which are closed when necessary in kindling a fire or to increase the draft when the fire is burning; D D, the doors, one of which is shut, the other, partly open. These when shut, like the blowers, meet in the center.

Fig. 2 shows a horizontal view of the front with the oven doors and blowers removed, in order to show the form of the main plate, which constitutes the entire front, except the doors, showing also the horizontal projections, which form the bottoms and backs of the grooves in which the doors slide, which projections are marked *a a a a*. This plate has shanks or tangs at the corners as shown in the profile on the right of this figure. This profile shows the edge of said plate with the tangs *b b*, projecting back and also in profile, the ends of the grooves, *c c c*. D D D D, the main or front plate on each side of the fire place, the two parts of which are connected by the grooves above described, extending across. A shows the grate as seen in front; B, the back of the fire place or recess; *d*, the flue, which is a semicircular recess, through which the heated air and smoke pass up behind the plate F to the top of the oven, and thence, into the chimney. The two parts of the front plate, and the bars which connect them, forming the backs and bottoms of the grooves in which the doors slide, are all cast together forming but one casting.

Fig. 3 shows the bottom of the main opening or cooking recess, with the two holes or openings, *e e* in which the pots or pans are placed for cooking. A thin open space is left for the heated air to pass under these plates, and in order to give it free circulation, the semicircular openings *f f* are left through which it can pass up.

Fig. 4 shows the plates which form the bottom of the oven. G is the upper or main plate, under which is another plate, which two form a double bottom having a space of confined air between the plates, to prevent articles being baked in the oven from burning at the bottom. These plates rest upon two rods which are placed lengthwise of the oven; their ends inserted in the brickwork, their situation shown by the dotted lines on the plate G. The lower plate has its edges turned by swaging, or it may be of cast iron, cast in its proper form, having flanges projecting from each side, to rest upon said rods; the upper plate resting upon the edges of the lower one, both being, of course, supported by said rods. The lines at the right hand of this figure show a sectional profile of the form of the two plates.

To complete the grooves in which the doors slide, the backs and bottoms being formed in the bars *a*, *a*, &c., Fig. 2, the front of said grooves is formed of strips of wrought iron, fastened on with rivets or screws *h*, Fig. 5, is a sliding valve attached to the oven bottom.

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

The combination herein set forth as forming a heated air chamber, over, under, and around the cooking utensils by the sliding doors *c c*, thereby retaining and confining the heat given from the grate below. The oven with the double bottom, and other details herein given I do not claim.

JOHN BRERETON.

Witnesses:

JOHN D. HOYT,

SAML BLYDENBURGH.