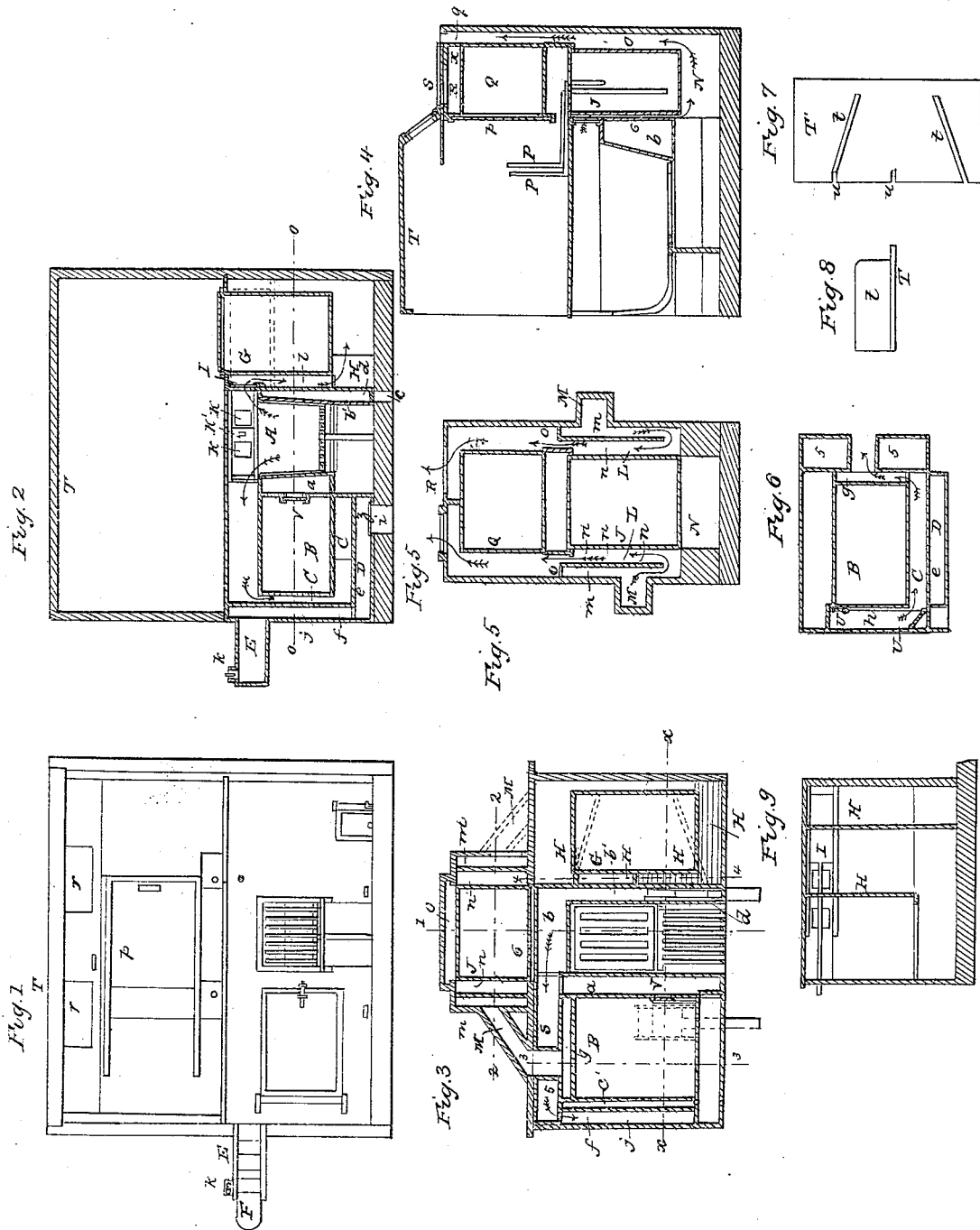


N. MASON.
Cooking Range.

No. 6,923.

Patented Dec. 4, 1849.



UNITED STATES PATENT OFFICE.

NICHOLAS MASON, OF ROXBURY, MASSACHUSETTS.

COOKING-RANGE.

Specification of Letters Patent No. 6,923, dated December 4, 1849.

To all whom it may concern:

Be it known that I, NICHOLAS MASON, of Roxbury, in the county of Norfolk and State of Massachusetts, have invented a new and
5 useful Improvement in the Cooking-Range, which is described as follows, reference being had to the annexed drawings of the same, making part of the specification.

Figure 1, is a front elevation of the range.
10 Fig. 2, is a vertical longitudinal section of ditto at the line *x x* of Fig. 3. Fig. 3, is a horizontal section of ditto at the line *o o* of Fig. 2. Fig. 4, is a transverse section of ditto at the line 1, 1, of Fig. 3. Fig. 5 is a
15 section through the back part of the range at the line 2, 2, of Fig. 3. Fig. 6, is a cross section of the oven and parts surrounding the same at the line 3, 3, of Fig. 3. Fig. 7, is a top view of a horizontal plate having
20 oblique plates secured to its upper surface designed to be attached to the range for guiding the heat around a boiler. Fig. 8 is an end view of ditto. Fig. 9 is a section at the line 4 4 of Fig. 3.

25 Similar letters in the several figures refer to corresponding parts.

The nature of this invention and improvement consists in combining and arranging a series of boilers, ovens, flues, dampers, and
30 (their) necessary attachments in such relation to each other and the fire chamber (as) to form a compact and convenient cooking range capable of supplying all the wants pertaining to the culinary department, as
35 well as to form a heater to warm the rooms of the house in which it is situated, with a slight amount of fuel considering the benefits accomplished.

To enable others skilled in the art to make
40 and use my invention I will proceed to describe its construction and operation.

A, is the fire chamber situated near the center of the range and provided with an oblong grate and hinge.

45 B is the oven arranged on the left of the fire chamber, and a sufficient distance from the same to form a flue (*a*) between the two, extending from the top to the bottom of the oven, and from front to back of the same,
50 communicating at its back part with a flue (*b*) back of the fire chamber, which communicates with a flue (*b'*) on the opposite side of the fire chamber somewhat similar to the one next the oven, extending to the bottom of the range where it communicates with
55 an opening (*c*), leading to the cellar for the

admission of cold air, covered when desired by a valve (*d*). The design of the flue (*a*) on the side of the fire chamber, is to keep a body of air between the fire chamber 60 and side of the oven B in order to give a uniform degree of heat to this side of the oven, and to prevent it from being heated to the extreme (it would were the fire chamber situated directly next the same) as well 65 as to form a chamber for a body of heated air which may if desired be allowed to enter the oven through the valve V in order to impart heat to the edibles being cooked by coming in direct contact with the same. 70

C, is the horizontal flue formed immediately below the oven by a horizontal plate (*e*) and communicating with a flue C' on the side of the oven, formed by a vertical plate *f* and with flues (*g*, *h*) at the back 75 and front of the range.

D, is another flue formed immediately below the flue C communicating with the cellar through an opening (*i*) covered by a valve when desired and with an upright flue (*j*) 80 formed between the flue C' and end of the range, and also one 5 back of the flue (*g g*) next the back part of the oven.

E is a horizontal trunk secured to the end of the range and communicating with the 85 flue —*j*— having a pipe on its top containing a valve (*k*) to which is attached a pipe leading to any part of the house for conveying the air brought from the cellar through the openings *l*, *c* and made hot in its 90 passage through the flues on the sides, and back parts of the fire chamber and oven, to rooms to be heated.

F is a register plate or damper moving in slides on the sides of the trunk, in front 95 of openings in the same, for allowing the heated air passing through the trunk to escape into the room where the range is situated, if desired.

G is a copper boiler designed for washing 100 purposes, made of a rectangular form inserted in a corresponding opening in the top plate of the range on the right side of the fire chamber, so as to bring its lower part in a space or chamber formed by the vertical 105 plate (*l*) and end of the range and front and back parts of the same.

H are narrow plates projecting from the side of the plate *l* to the boiler, one of which (the one nearest the back of the range) 110 extends to the brick work on which the range rests, and a short distance under the boiler

(while the others) terminates in a horizontal portion at the bottom of the boiler, so as to direct the heat to the front of the boiler.

I is a valve for opening or closing the passages between the fire chamber and the space or chamber in which the boiler is situated.

J is another rectangular boiler designed for bathing purposes, arranged immediately back of the fire chamber and a sufficient distance from the same to form a diving flue (6) between the two.

K are openings through which the fire chamber communicates with the diving flue 6 mentioned above, opened and closed when desired by a damper K'.

L L are upright plates arranged midway between the sides of the boiler just mentioned and the brick work of the back part of the range extending back the full depth of said boiler in such a manner, as to form flues —m—n— on either side of the same.

M, are horizontal brick trunks or flues communicating with the space or chamber in which the boiler G is inserted and with the back flue of the oven and extending obliquely back and communicating with the outer flues —m— formed by the upright plates L.

N is a flue formed by the bottom of the boiler J and the brick work below, communicating with the diving flue back of the fire chamber and with an upright flue (o) back of the boiler leading to the chimney.

O are valves turning on pivots at either end immediately above the upper edges of the upright plates L and having handles on their front ends by which they can be turned so as to either close the top of the outer flues —m— or inner flues —n— and cause the heat to pass through the flues n next the boiler or through the outer flues m as desired.

P P are pipes or tubes passing through the top of the boiler J and extending the usual distance below the surface of the water contained in the same and extending to the bathing apartment for conveying cold water to the boiler to be heated and afterwards conveying it in a heated state to the bathing apartment.

Q is an oven designed for heating meats &c., or preserving them warm, arranged above the boiler J a sufficient distance to leave a space between its bottom and the boiler J and resting on rabets formed on the upper edges of upright plates, secured to the brick work being provided with a door, p, in front moving between suitable slides.

R is an oblong plate secured on edge to the under surface of a horizontal plate x forming the top of the back part of the range and extending from the front to the back part of the oven where it is secured to

a similar plate q running at right angles of the same.

S is a valve moving between slides on the upper surface of the plate for opening and closing the opening in the same as desired.

T is a horizontal plate covering the top of the range and forming in connection with the brick work at the end a hood for catching the stream &c. arising from the boilers and conducting it through openings r opened and closed at pleasure by a valve into the chimney.

T' is an oblong plate having oblique plates t secured on its upper surface, and slots u formed on its edge to admit the edges of the plates H projecting from the upright plate. This plate is designed to be placed in the space or chamber at the right end of the range in the position represented by dotted lines in Figs. 2 and 3 in case the rectangular boiler is removed and a small circular one is inserted in its place so as to direct the heat all around the same.

U are the dampers arranged and turning on pivots above and below the double doors and operated in a similar manner to the valves used for the same purpose in the oven of my improved heater.

Operation: The fire being built in the fire chamber and the valve K' closed and the valves I opened, a portion of the heat and smoke will be caused to pass over the oven B and through the flues surrounding the same and another portion caused to pass around the boiler G from whence the two portions will be conveyed by the trunks or flues M into the outer flues m (and in case of the tops of the same being closed by the valves as represented in Fig. 5) thence under the upright plates L and through the flues n next the boiler J and thence into the chimney through the openings in the plates x as indicated by arrows in Figs. 2 and 5.

When it is desired to heat the boiler employed for bathing purposes quickly or when the oven and wash boiler are not in use the openings back of the fire chamber may be opened by moving the valve K' in which case the greater portion of the heat will be caused to take the route indicated by arrows in Fig. 4.

I claim—

1. The arrangement of the flues, m, n, o and N on the sides, front, back, and bottom of the boiler J, formed by the sides, front, back, and bottom of the boiler J and the upright plates L provided with valves at the top and brick work of the range in the manner and for the purposes herein set forth.

2. I also claim the arrangement of the flues, a, b', b on the sides and back of the fire chamber, and the flues D, j, 5, under and at the back part and side of the oven and horizontal trunk E with valve (k) and communicating with the apartments to be

heated for heating the air admitted from the cellar or other place by the valves *d* and *z* to the proper degree to be conveyed to the apartments, as described.

5 3. I likewise claim the arrangement of the plates *H* projecting from the plate *l*, and openings in said plate *l* for dividing the heat and causing one portion to be car-

ried around the front part of the wash boiler *G* and the other portion around the 10 back part of the same as described.

NICHOLAS MASON.

Witnesses:

ABNER B. BENNETT,
JOHN BENNETT.