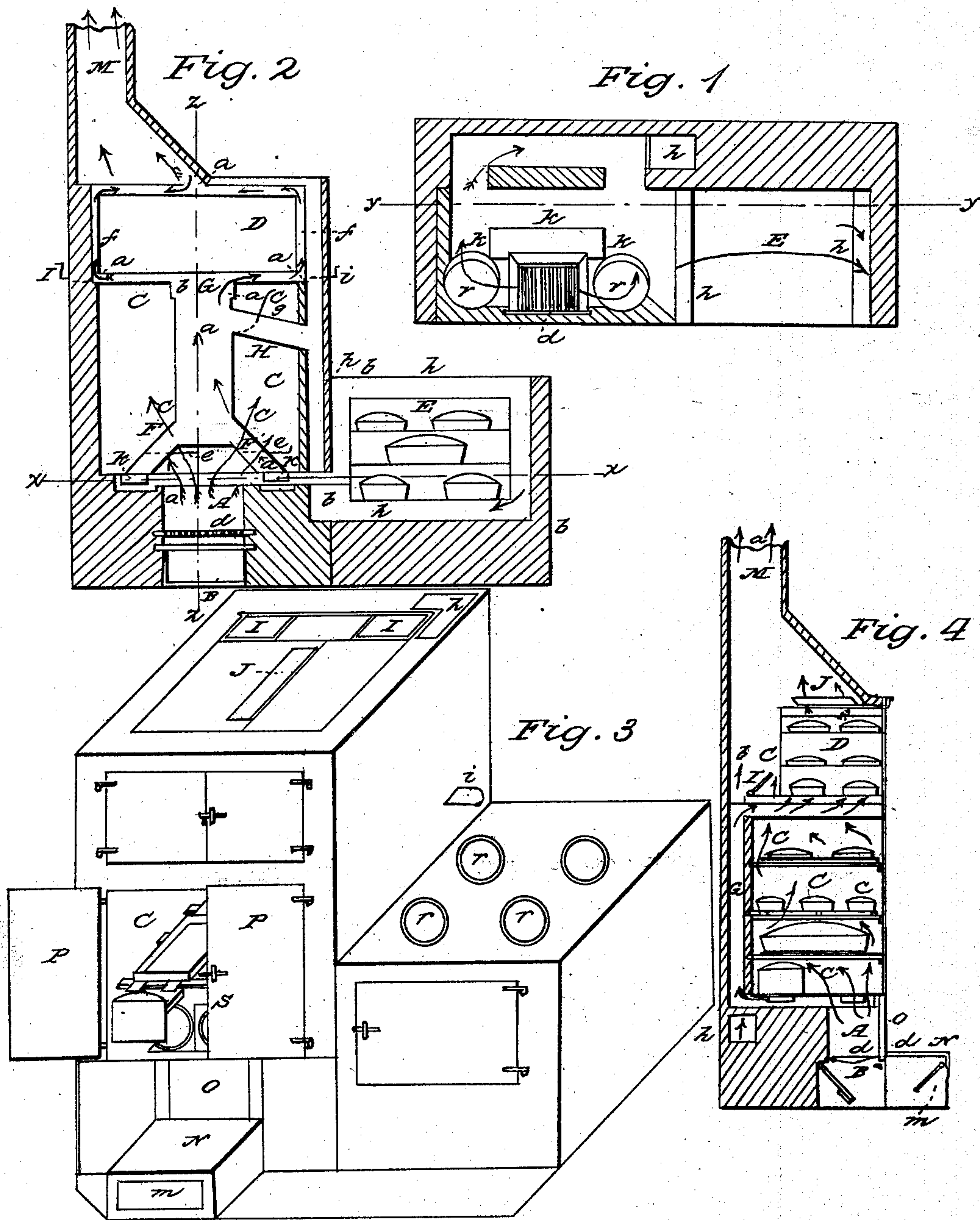


T. C. WALTER.

Range.

No 62,169.

Patented Feb. 19, 1867.



Witnesses:
C. W. Smith
Geo. H. Strong

Inventor:
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United States Patent Office.

THOMAS C. WALTER, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 62,169, dated February 19, 1867.

COOKING RANGE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS C. WALTER, of San Francisco, San Francisco county, State of California, have invented certain new and useful improvements in Cooking Ranges; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment.

The nature of my invention is to provide a cooking range of such construction that either wood, coke, or bituminous coal may be used; if bituminous coal, it will be coked in the grate. It has also ovens so arranged that by means of dampers the heat can be directed around either or both. The central compartment is lined with either porcelain or any substance to retain and reflect the heat, and is situated directly over the grate, so that, when desirable, the heat may be made to pass directly through it, and all cooking be done by the direct action of the heat instead of its being radiated, as in the case of ordinary close ovens.

A register projects in front of the range near the floor, having a damper, and may supply air for combustion as desired, either in the ordinary manner, or by feed pipes directly from the open air, and with the damper below the grate serves to form the coke. This register may also support an apparatus for cooking by means of the radiated heat from the front of the range when necessary. In order to more fully explain the operation of my invention, reference is had to the drawings forming a part of this specification, in which—

Figure 1 represents a horizontal sectional view taken through $x x$, showing the grate and a portion of the flues leading therefrom.

Figure 2 is a vertical sectional view taken in the line $y y$, showing the relative position of the flues and ovens, and the grate in front.

Figure 3 is a perspective view of the whole range.

Figure 4 is a transverse sectional view taken through the line $z z$, showing the relative positions of the parts in fig. 2.

Similar letters of reference indicate like parts in each of the figures.

A is the receptacle for the fuel, which lies upon the grate d . Below this is the ash-pit. B is a damper or movable bottom for the furnace, which may be closed when the fuel is sufficiently consumed, so that a thoroughly ignited mass of coal remains, which then consumes slowly. In using the bituminous coal, the false bottom or damper B is closed so as to coke it, also to rarefy the air before combustion takes place, and may be applied to other furnaces. This bottom also serves to keep the fine coal from being lost or scattered into the ash-pit. In using wood, by closing the bottom B, the wood will be formed into charcoal, and may be used in cooking without making smoke. C is the central compartment, situated directly over the grate, and connecting it by means of a cover, S, which may be removed so as to allow the heat to pass directly through the compartment, as indicated by the red arrows $c c c$. The dampers I I, shown at the top of fig. 3, connect C with the chimney M, so that all gases or odors evolved from the fire or the cooking will be carried off immediately. K K are flues connecting with the furnace A, by openings at its sides, and so connected with flues F and F', and $h h$, that by dampers $e e$ the heat may pass through either F or F', or both, and thus through the flue G, around the oven D, through $f f$, as shown by the black arrows $a a a$, or the damper g in the flue G, may be closed, so that all the heat will pass through the flue $h h$, around the oven E, as shown by yellow arrows $b b b$. The heat may then either pass directly to the chimney, or, by closing the damper i , be made to pass around the oven D. J is a damper to regulate the draught around the oven D. N, the register containing the regulating damper m . Upon N may be set a baker to cook meats by the heat radiated from the furnace front, o .

In using my range, the fire is kindled in the furnace A. While the fire is burning down so that the coal has become thoroughly ignited, or at any other desired time, the ovens E and D, one or both, may be used. If necessary more ovens may be added, similar to E, or the range may be constructed with only the oven D. When it is desired to use the compartment C, the damper B is opened, the dampers g and i are closed, and the top removed from the furnace so that the heat all passes through C to the chimney. The interior of C is lined with iron plate and porcelain, or any substance to reflect the heat and make it sufficient for cooking. There are bars across from side to side, to support whatever may be placed within, and the doors $p p$ may be closed. All products of the fire or cooking pass directly through the dampers I I, and thus many different kinds may

be cooked at the same time without losing their distinguishing flavor, or becoming impregnated with that of the others. This compartment is to be used only when the fire is clear, with but little smoke, and in the use of bituminous coal it is coked first by closing the damper B. The openings *r r r* are to be used when needed. The advantages to be gained by the use of my range are, an economy in the use of the heat, and principally the benefit derived from cooking with the direct heat of the fire, in the use of the compartment C.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The furnace A, and the ovens D and E, with the flues K, F, *f*, and *h*, with their regulating dampers, constructed as described for the purpose set forth.
2. The compartment C, in combination with the furnace A, arranged as described.
3. The register N, with the damper *m*, and the damper B, combined with the furnace A, as described.
4. The arrangement of the furnace A, with the damper B, and the register N, the ovens D and E, with their flues and the compartment C, all operating together, substantially as and for the purpose set forth.

In witness whereof I have hereunto set my hand and seal this 9th day of August, 1866.

THOMAS C. WALTER. [L. S.]

Witnesses:

C. W. M. SMITH,
GEO. H. STRONG.