

J. M. DEARBORN.
Cooking Range.

2 Sheets—Sheet 1.

No. 6,198.

Patented March 20, 1849.

Fig. 1

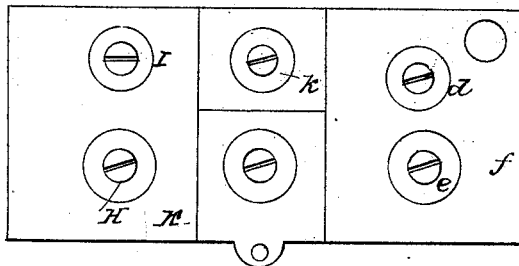


Fig. 2

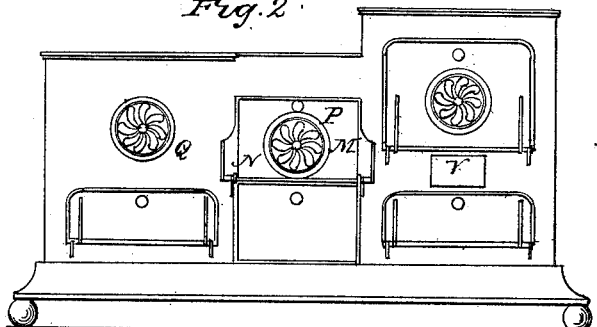


Fig. 3

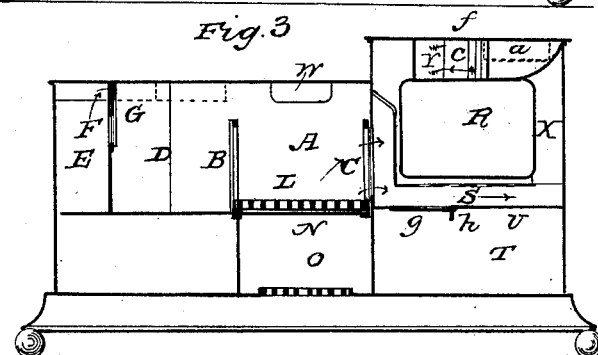


Fig. 4

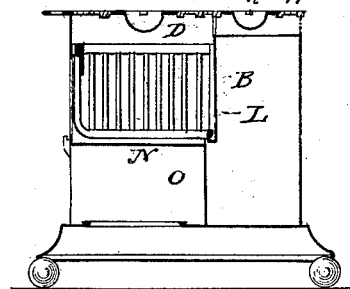


Fig. 5

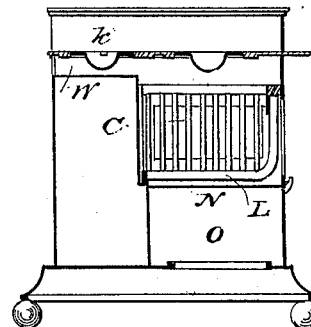
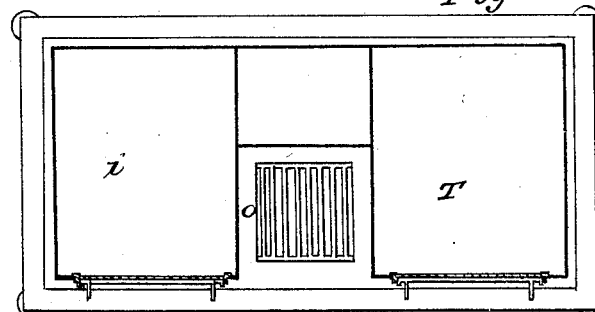


Fig. 6

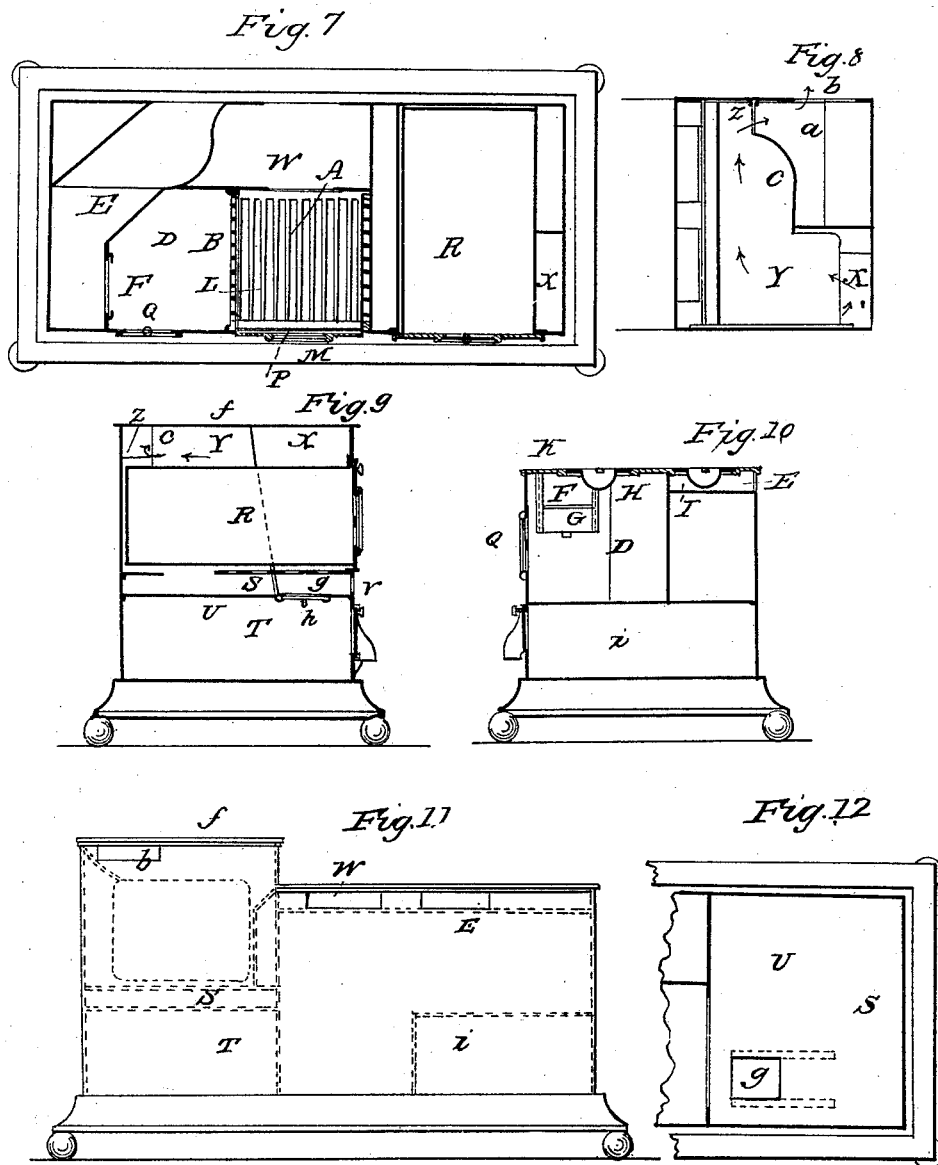


J. M. DEARBORN.
Cooking Range.

2 Sheets—Sheet 2.

No. 6,198.

Patented March 20, 1849.



UNITED STATES PATENT OFFICE.

JOHN M. DEARBORN, OF BOSTON, MASSACHUSETTS.

COOKING-RANGE.

Specification of Letters Patent No. 6,198, dated March 20, 1849.

To all whom it may concern:

Be it known that I, JOHN M. DEARBORN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Cooking-Ranges; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of said drawings Figure 1 exhibits a top view of my improved range, Fig. 2 a front elevation, Fig. 3 a central vertical and longitudinal section, Fig. 4 a central vertical and transverse section exhibiting the parts toward the left half of the range, Fig. 5 is a central vertical and transverse section taken so as to exhibit the parts on the right of it, Fig. 6 is a horizontal section taken through the middle of the auxiliary oven and ash pit, Fig. 7 is a horizontal section taken through the fireplace and main oven, Fig. 8 is a horizontal section taken through the flue above the main oven, Fig. 9 is a vertical and transverse section taken through the center of the main oven, Fig. 10 is a vertical and transverse section taken through the central part of the two boiling apertures on the left side of the range, Fig. 11 is a rear elevation, Fig. 12 is a horizontal section of the secondary fire-place directly under the main oven.

In said figures A denotes the fire chamber used for the combustion of coal, its sides being formed of two grates or grated partitions B, C, each of which should be made or applied so as to be readily removed or taken away when necessary. On the left of the said coal fireplace and separated from it by the grate B, is a chamber D, which communicates with a discharge flue E, through an opening F, which may be increased or diminished by a door or valve G, Fig. 10. The course of the main draft of the range is through a flue W situated as seen in Figs. 3, 4, 5, 7, 11, which flue W, in its extension to the chimney should be provided with a damper by which it may be opened or closed at pleasure.

H, I, are boiler openings made through the top plate K, the former being arranged directly over the chamber D, and the latter at the back part of the flue E. By removing the vertical grate B, the chamber D, and coal fire-place A may be united into one long

chamber which may be used for burning wood.

L is the grate of the coal fire-place. It is made in the usual form, and has a front blower M, applied to it in such manner as when turned up into a vertical position to close the whole of its front. A sliding plate N, is disposed directly under the grate, and so as to slide out and in on proper ledges applied to the walls or sides of the ash pit O, serves to close the bottom of the grate when necessary, or when it may be desirable to burn the fuel by the process of slow combustion, adopted in what is usually termed the air tight stoves.

P, Q, are register valves to regulate the supply of air to the fuel chamber and chamber D, R, is the main oven situated on the right of the fireplace, and having beneath it, a secondary fireplace or flue space S, and an auxiliary oven T, arranged directly under the said fireplace, and made to receive its heat from the combustible matters which may heat the top plate U of it, which constitutes the bottom plate of the secondary fire-place.

V is the secondary fire place opening through which the fuel is introduced into said fireplace. That side of the main oven which is next to the grate C, is heated by radiation from the fuel within the coal fireplace. When the damper of the central discharge flue W, or that of the main fireplace is closed, part of the smoke and volatile products of combustion are caused to pass underneath the main oven or through the secondary fireplace S, thence up the flue space X (Figs. 3, 7, 8 and 9) on the right of the oven, thence into the flue space Y on the top of the oven thence through an opening Z, and into a flue space *a*, and thence through the discharge flue or opening *b*. The two flue spaces Y, and *a*, on top of the oven are separated from one another by a partition *c*, arranged so as to cause the smoke to pass around in contact with the boiling vessels which may be made to project through the openings *d*, *e*, of the top plate *f*.

The secondary fireplace has an opening *g*, made through its bottom plate, which opening has a sliding door *h*, adapted to it. The ashes from the secondary fire place, may be made to drop through the opening *g*, into the auxiliary oven T, beneath, from whence they may be readily removed. Another

auxiliary oven *i*, is made underneath the fire chamber D, as seen in the drawings, and receives its heat from the smoke or fuel which may come in contact with the bottom plate of the fire-chamber. The auxiliary ovens are more properly, simple warming chambers. They are not intended for baking to such extent as is the main oven. The spaces occupied by them, have, in all ranges I have heretofore seen, been filled with brick. The said warming chambers will be found very useful for simply warming pies bread or other matters when the main oven may be in use, and filled with articles in process of being baked. A boiler opening *k*, is made in the top of the central discharging flue, and rear of the main fireplace. Each of the discharging flues, should be made to communicate with the chimney, and have a damper or slide valve disposed in it. By such dampers, the smoke may be made to pass through one or more of said discharge flues at pleasure. Should it be desirable to bake

in the main oven, without making up a fire in the main fireplace, a little fuel may be kindled in the secondary fire-place. Thus an important saving of fuel may be oftentimes effected.

My range is admirably adapted for the economic use of fuel, perhaps more so than any other one heretofore made.

What I claim is—

The combination of the auxiliary heating chamber T, and secondary fire place and flue S, with the main fireplace specified; the said secondary fireplace being made to receive its air from its side, and through the main fireplace.

In testimony whereof I have hereto set my signature this twenty-seventh day of May, A. D. 1847.

JOHN M. DEARBORN.

Witnesses:

R. H. EDDY,

EDWIN P. LORD.