W. COBB.

Cooking Range.

No. 6,089.

Patented Feb. 6, 1849.

Fig: 2.

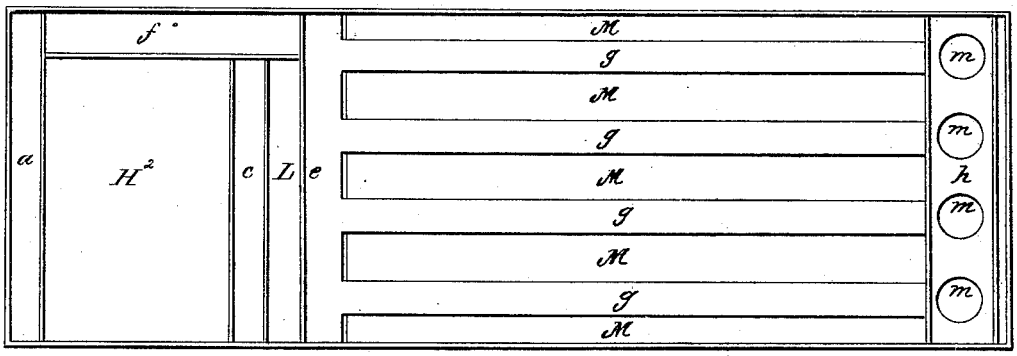
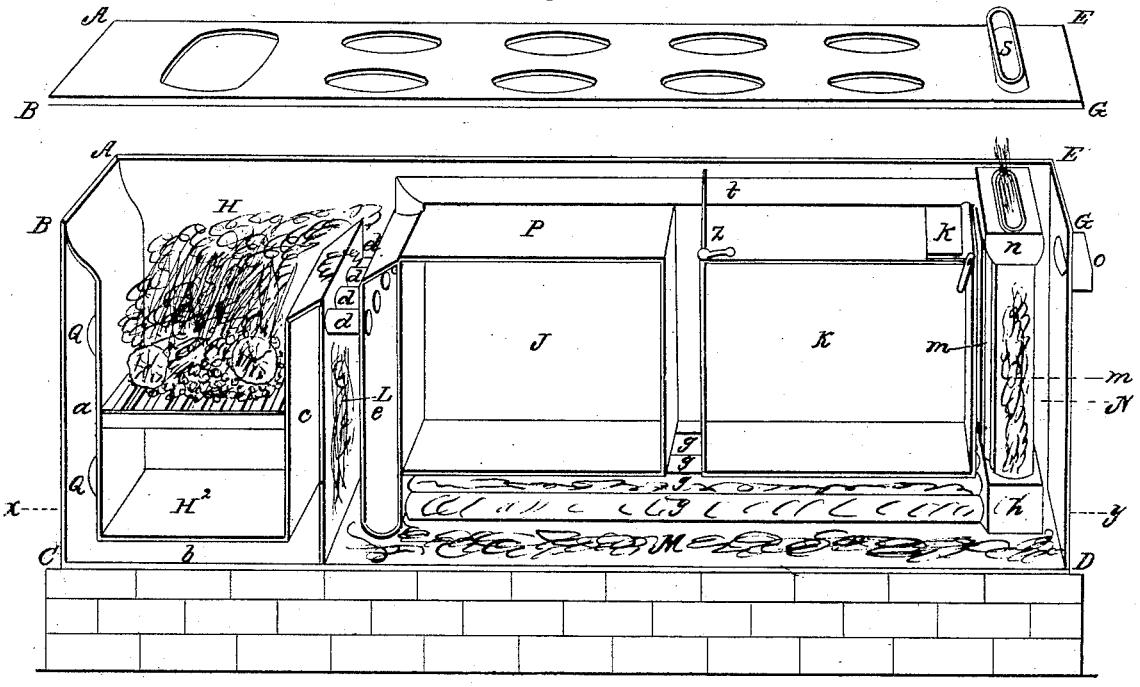


Fig: 1.



UNITED STATES PATENT OFFICE.

WILLIAM COBB, OF ALBANY, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 6,089, dated February 6, 1849.

To all whom it may concern:

Be it known that I, WILLIAM COBB, of the city of Albany and State of New York, have invented a new and Improved Method of Constructing Cooking-Ranges, which I call Cobb's Cooking-Range and Hot-Air Furnace, whereof the following specification, with the drawings attached hereto forming part of the same, is a full and perfect description, viz:

In the drawings Figure 1 represents a front view of the range having the front plate, containing the doors of the furnace and ovens, removed, and the top plate raised up directly above its place, for the purpose of showing the interior construction of the apparatus. Fig. 2 represents a horizontal section through the range in the line of the axis of the lower air flues.

In both figures the channels for the flame smoke &c are colored red and the flues for heated air colored blue.

A, B, C, D, E, G represents the body of the range rectangular in shape, of cast iron. Its dimensions to depend upon the extent of its employment, whether for small or large families and private houses—or for hotels &c. It is to be divided into furnace, ovens, five channels and hot air flues in the manner shown in the drawings, which are sufficiently plain and obvious to enable any mechanic to understand its arrangement and construction; by various iron partition plates and tubes; and its practical operation is as follows:

H is the furnace with its ash-pit H^2 constructed for the consumption of either wood or coal. Fire being made therein, the flame and heated gases turning over the top of the air flue *c* passes downward by the channel L to the bottom channel M thence along it to the end channel N up which to the nozzle O by which they are led to the chimney, or house flue.

The air to be heated is to be introduced (by proper pipes or tubes leading from the open air when convenient) into either or both apertures Q Q and passes into the chamber or flue *a*, *b*, *c*, *f* surrounding the furnace; from this chamber it goes by the pipes or cylindrical flues *d*, *d*, *d*, *d*, into the chamber or flue *e*, from the bottom of which by the pipe flues *g*, *g*, *g*, *g*, it is conducted to the box flue *h*,—thence by upright pipe flues *m*, *m*, *m*, *m*, to box flue *n*, and thence through the orifice S through the top of the range, whence it can be carried by proper conductors to any part of the premises to be warmed. There is also from the top of chamber *e*, a pipe flue *t*, lying in the angle formed by the back of the range and the top of the ovens and extending to box *n*. By means of the registers at *z* and *k* in the channel over the ovens, the flame &c can be distributed and regulated to the ovens J and K and the boilers placed as usual through the top plate of the range.

It will be seen from this description that the air taken in at Q is in its passage through the apparatus exposed to a very large heating surface; first from the walls of the furnace then from both the sides of fire channel L and in its passage through the pipes *d*, *d*, *d*, *d*, which are surrounded by flame; thence in its passage through the flues *g*, *g*, *g*, *g*,—*h*,—*m*, *m*, *m*, *m*, and *n*,—as well as through *t*, which are also entirely enveloped in the flame and heated gases from the furnace. It is obvious therefore that in addition to the ordinary functions of cooking &c this range has the means and facilities of heating a large volume of air for the purpose of warming a house—uniting in an eminent degree the qualities of an economical cooking apparatus and a hot air furnace.

I do not claim the construction of air flues or passages whether below or back of the fire chamber nor hot air flues surrounded by fire or heated gases as original with me; but

I claim—

The special combination and arrangement of hot air and fire and heated gas channels and flues in connection with the heating and culinary apparatus of a cooking range or stove as herein described; not limiting myself narrowly to the proportion nor precise form of parts set out in this specification.

WILLIAM COBB.

Witnesses:
RICHD. VARICK DE WITT,
JAMES B. SANDERS.