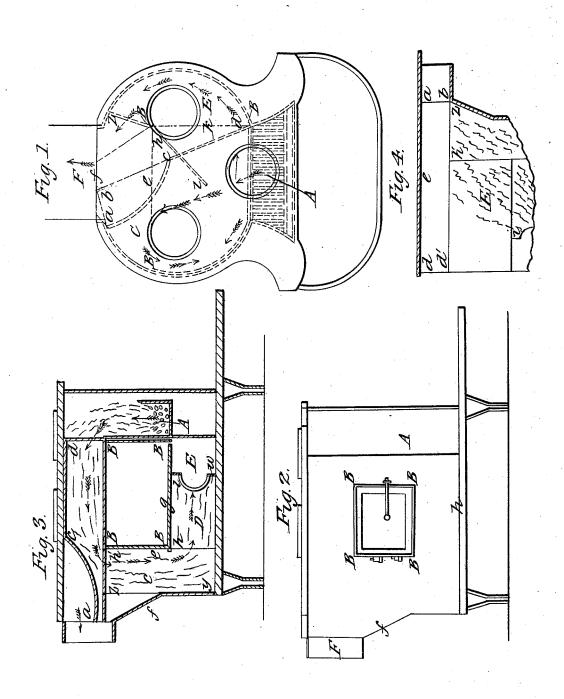
## J. L. LATHROP.

## Cooking Stove.

No. 1,464.

Patented Dec. 31, 1839.



## UNITED STATES PATENT OFFICE.

JOHN L. LOTHROP, OF PROVINCETOWN, MASSACHUSETTS.

MODE OF ARRANGING THE DRAFT OF COOKING-STOVES.

Specification of Letters Patent No. 1,464, dated December 31, 1839.

To all whom it may concern:

Be it known that I, John L. Lothrop, of Provincetown, in the county of Barnstable and State of Massachusetts, have invented a new and useful Improvement in Stoves for Culinary and Such other Purposes to which

the Same May be Applied.

The said improvement, the principles thereof, and manner in which I contemplate 10 the application of the same by which it may be distinguished from other inventions, together with such parts I claim as original and new, I have herein set forth and described in the following words and accom-15 panying drawings herein referred to, which, taken in connection, form my specification.

My improvement consists chiefly in such an arrangement of flues as to cause the heated air and smoke to pass over and around 20 the sides and exterior of the oven, thus communicating to the same, an equal heat, which is an acknowledged desideratum in the process of baking.

The stove I use is generally known by the 25 name of the "Open Fire Place Franklin," and will be fully understood by the differ-

ent drawings.

Figure 1 is a plan or top view on which the diagonal partitions, and such other parts 30 as are hidden or contained in the interior are represented by red lines. Fig. 2, is a side elevation and Fig. 3, a perpendicular section. Fig. 4, is another detailed section.

A, Figs. I and 3, is the fireplace or grate 35 for fuel constructed in the ordinary manner. Directly behind it is the oven B B B B, Figs. 1, 2, 3. This oven is a rectangular box properly inserted and supported in the body of

the stove.

a b c d d', Figs. 1 and 3, represent a diagonal partition suitably shaped as seen in the drawing, and extending between the top of the oven and that of the stove.

By Fig. 4 the curved portion,  $a \ b \ c$ , of the 45 diagonal partition is represented in eleva-tion, and its connection with the top plate of the stove, the said diagonal partition being colored blue as seen in Figs. 1, 3 and 4.

Between the back e of the oven and that f 50 of the stove is a space or diving flue C which is shown in Figs. 1, and 3, and shaded as there represented. Directly underneath the oven or between the lower plate g and bottom h of the stove Fig. 3, is another space 55 or flue D, which space is formed by a diagonal and vertical partition h i w x y z h'

Figs. 1, 3 and 4. The object of the part h iw x of this last partition is to deflect the smoke and heated air, and thereby distribute it more equally throughout the space be- 60 neath the oven.

A third space or flue E exists between and is formed by the end k of the oven and side lof the stove and portion h z y x of the dividing plate the flue E being, shaded as seen in 65 Figs. 1, and 3. This flue is continued over the top of the oven to the smoke or discharge pipe F the portion thereof above the oven being formed partly by the diagonal partition a b c d d'. Now it will be observed that 70 as the smoke and heated air leaves the fireplace it passes over the top of the oven as denoted by the arrows in Figs. 1, and 3, thence downward through the space C to the space D under the oven, thence around the 75 part h i w x of the diagonal partition, upward by the end of the oven or through the space E, passing again over the remainder of the top of the oven and escaping through the discharge pipe F. Thus without the in- 80 tervention or agency of dampness I effect a complete passage of the smoke and heated air over and about the oven equalizing or distributing the heat in a much more regular manner than has ever been effected hereto- 85 fore.

In the top plate of the stove I form openings over which boilers of various shapes and sizes may be placed according to the pleasure of the purchaser.

I do not confine myself to any particular formation of the above parts, neither shall

I to the exact shape of stove represented by the drawings, but shall vary the same as cir-

cumstances may require.

In the above I claim as my invention— The combination or arrangement of the upper diagonal partition a b c d d' with the lower diagonal partition h i w x y z h' for the purpose of causing the smoke to pass 100

around the oven in the manner above described.

In testimony that the above is a true description of my said invention and improvement I have hereto set my hand this six- 105 teenth day of December in the year of our Lord eighteen hundred and thirty nine.

JOHN L. LOTHROP.

95

Witnesses:

THOS. LOTHROP. Solomon Rich.