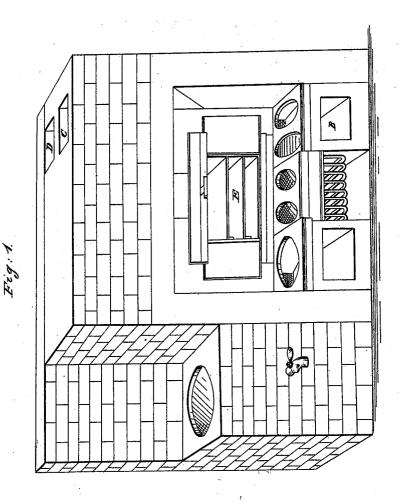
S. PIERCE. Range.

No. 613.

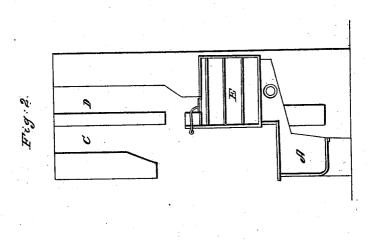
Patented Feb. 21, 1838.

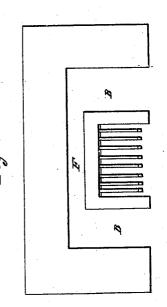


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## UNITED STATES PATENT OFFICE.

SAMUEL PIERCE, OF NEW YORK, N. Y.

MODE OF CONSTRUCTING THE FLUES AND OTHER PARTS OF KITCHEN-RANGES.

Specification of Letters Patent No. 613, dated February 21, 1838.

To all whom it may concern:

Be it known that I, SAMUEL PIERCE, of the city of New York, in the State of New York, have invented certain Improvements in the Manner of Constructing the Flues and other Parts of Kitchen-Ranges, Intended to Facilitate the Object of Cooking Thereby, and that the following is a full and exact description thereof.

My improvements consist first, in the so forming the breast and other parts of the fire place as that the steam from the cooking utensils shall be carried up in a flue entirely separate from that by which the smoke is 15 carried off, thus avoiding the odor from the steam or vapor given out, more effectually than can be done when one flue only is used

for both purposes.

My second improvement consists in con-20 structing the hobs, or jambs of kitchen ranges hollow, so as to constitute compartments to be used for cooking or heating various articles; the two compartments so formed being connected by a flue running from one 25 to the other, behind the fire; and thirdly in carrying a flue to conduct heated air from the last mentioned compartments into an oven above, and at the back of the range.

In forming a flue for steam and vapors 30 which I have said is my first improvement the workman, where fire places are already built the workman must determine upon the best mode of procedure according to circumstances. I usually, however, allow the steam 35 to pass directly up behind the breast of the chimney, into a flue situated like that of an ordinary fire-place, and behind this, in the same stack, erect a smoke flue into which the various flues under the oven by the side, or 40 at the back, of the fire, and under such boilers, stew pans and other utensils which may be employed, lead, as to a common receptacle. The two flues may be divided from each other either by brick work, or by a plate of 45 iron; the latter, probably, being the best mode, as the heat from one flue will, in this case, more directly affect the other, and cause a better draft. Sometimes, a common stove

pipe, or other similar contrivance, may be 50 carried up within the common smoke flue, and serve to carry off the steam. In some

cases, in old fire-places, I erect a separate flue, leading from the kitchen into the flue of an upper fire-place, to carry off the steam. When required, the steam flue may be closed 55

by a valve, or damper.

In the accompanying drawing Figure 1 represents a perspective view of the range and fire place, A being the grate, B, B, compartments in the hobs, or jambs, closed 60 by doors, and serving for cooking or heating. C is a steam flue, and D, the ordinary smoke flue. E is an oven above and back of the fire, not differing in its construction and arrangement from such as have been hereto- 65 fore constructed, excepting in its connection with the compartments B, B, and their connecting flue. Fig. 2, is a vertical section from front to back, showing these flues; and Fig. 3, a horizontal section through the 70 middle of the compartments B, B, and the flue by which they are connected. In this last figure the flue F, is that which connects the two compartments B, B, which are separated from the fire by the brick or other 75 lining only, and consequently receive a large portion of heat therefrom. A flue is allowed to ascend from F, and to pass into the interior of the oven E, so that under the regulation of a valve, or damper the heated 80 air from the compartments B, B, may be admitted, or not, at pleasure.
What I claim as my invention and wish

to secure by Letters Patent, is-

1. The connecting of the compartments B, 85 B, by means of the flue F, running behind the fire. I do not claim said compartments only as thus combined and connected.

2. I claim also, the connecting these compartments and flue with the oven E, in the 90 manner and for the purpose above set forth.

3. And I likewise claim the constructing of a flue for steam and vapor, distinct and separate from the smoke flue, upon the principle, and for the purposes, herein set forth, 95 whether the same be made in the manner described, or in any other similar thereto, and effecting the same purpose.

SAMUEL PIERCE.

Witnesses:

Thos. P. Jones, W. THOMPSON.