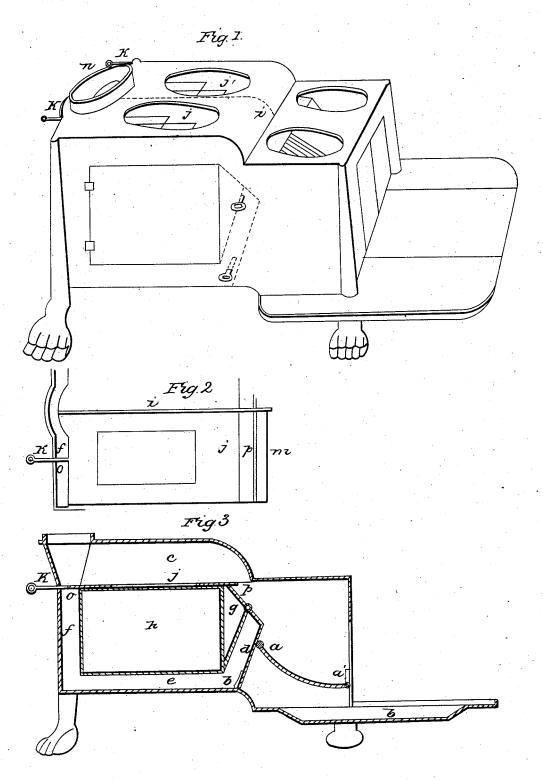
No. 917.

Patented Sept. 12, 1838.



N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

PHILIP WILLCOX, OF SPRINGFIELD, MASSACHUSETTS.

MANNER OF CONSTRUCTING COOKING-STOVES.

Specification of Letters Patent No. 917, dated September 13, 1838.

To all whom it may concern:

Be it known that I, Philip Willcox, of Springfield, in the county of Hampden and State of Massachusetts, have made certain Improvements in the Manner of Constructing Stoves for the Purpose of Cooking, in which either wood or coal may be used as fuel; and I do hereby declare that the following is a full and exact description thereof.

Figure 1 in the accompanying drawing represents the exterior appearance of the stove, in which it resembles many others. Fig. 2 is a sectional view from front to back, parallel to and at a little distance from, one of its sides; and Fig. 3 a top view of the sliding shutter or damper j.

The top, it will be seen, is perforated for

four cooking utensils.

The fuel, whether wood, or coal, is to be sustained upon a grate, in the fire compartment, and behind this there is an oven around which the draft from the fire may be directed, in a manner to be presently decreived.

25 scribed.

a, a', Fig. 2, represents the bars of the grate, which curve down from the back toward the front of the fire place, in such a manner as to cause the burning fuel to descend toward the front, and thereby to give its heat the more directly to the utensils which are immediately over it. The bars rise in front, as at a', to such height only as is necessary to retain the fuel.

b is a sunk hearth, or ash pit, such as is

commonly employed in stoves.

c, d, e, f, are flues which surround the stove, and g an air chamber formed by the back plate of the fire place, and the front 10 plate of the oven h. The upper flue c is divided into two parts by a partition at the place of the dotted line i, Figs. 1 and 3. Each of these compartments produced by this partition has in it a sliding shutter, or 15 damper j, j', which may be moved by the rods k, k, so as to close either of the openings o or p, or to close them both partially.

I and m are hinged dampers, the lower one of which, I, reaches the whole length of an 50 opening leading into the flue e, which may

thereby be closed or opened at pleasure.

The damper m is in two divisions each reaching to the partition i or the middle of the opening leading into d, and each of these is opened or closed by its appropriate 55 rod.

n is the opening to receive the smoke pipe. When this stove is used, the fuel is to be placed on the grate, and ignited; if it is then wished not to heat the oven, and to 60 occupy all the openings with cooking utensils, the dampers m and l are to be closed, and those j, j' drawn back, which will give a strong draft under each of the boilers. If it is wished to stop the draft under one of 65 the boilers, the dampers j or j' may either of them be slid forward, which will direct the whole of the draft under the opposite boiler, as will be readily understood. Should it be desired to turn a part of the 70 draft under the oven, and another part over it, the dampers j or j' with the aid of the dampers m, which are divided for that purpose, afford a ready means of so doing. When it is desired to bake, without using 75 the boilers over the oven, the dampers j, are slid forward, and the dampers m opened. If greater heat is required under the oven, the damper l may be opened; and to increase it over the oven, the dampers j, j' may be 80 drawn back to a small distance. To bake with a small quantity of fuel, slide the dampers j, j' forward, so as nearly to close the flues in front, close the dampers m and open l; this will turn the draft directly 85 down through the grate and under the oven.

What I claim as my invention and wish

to secure by Letters Patent, is-

The particular manner in which the grate bars are made to curve down from the back 90 to the front of the fire place, as above described; and in combination therewith the respective dampers located and operating as above set forth. I do not claim the arrangement of either of these dampers individues ally, but only the combination of the whole of them, and the fire plate on which they shut down, with the grate, in the same stove.

PHILIP WILLCOX.

Witnesses:

GEORGE W. CALLENDER, W. B. CALHOUN.