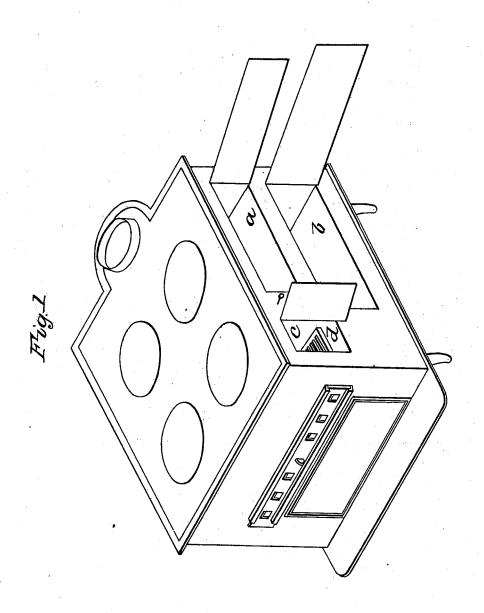
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Cooking Stove.

No. 4,585.

Patented June 16, 1846.

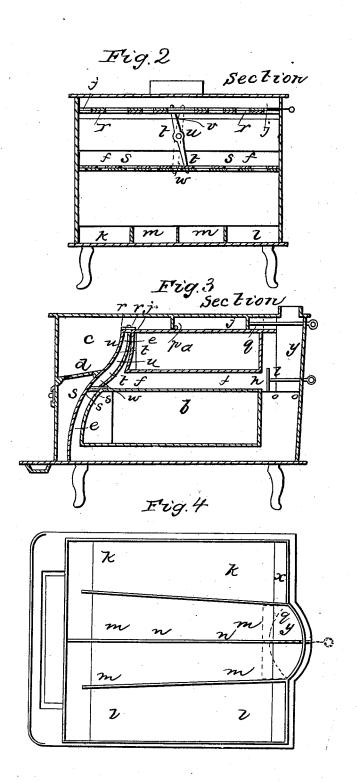


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## UNITED STATES PATENT OFFICE.

WILLIAM COBB, OF ALBANY, NEW YORK.

## COOKING-STOVE.

Specification of Letters Patent No. 4,585, dated June 16, 1846; Antedated January 16, 1846.

To all whom it may concern:

Be it known that I, WILLIAM COBB, of Albany, in the county of Albany and State of New York, have invented a new and use-5 ful Improvement in Double-Oven Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specifica-10 tion, in which-

Figure 1 represents a double oven stove in perspective, Fig. 2, a front elevation of the same, the front plate of the stove and the back of the fire chamber being supposed 15 to be removed, in order to show horizontal flues, dampers, &c. Fig. 3 is a vertical longitudinal section, and Fig. 4 a view of the bottom plate with the division strips forming the flues beneath the oven.

The same letters refer to the same parts

in all the figures.

a is the upper oven with a larger one b situated immediately below it.

c is the fire chamber on a level with the 25 upper oven.

d is the grate.

e e is a diving flue descending at the back of the fire box and extending downward so as to communicate with the flues beneath 30 the lower oven but having also communication with the flues f between this latter and the upper oven at g.

The rear of the flue f f has an opening hcommunicating with the middle flue at the 35 back of the stove, leading to the smoke pipe; which opening may be wholly or partially closed by the sliding damper i. The upper and middle flues j j and f f extend the whole breadth of the stove, without parti-40 tion or division. The space between the bottom plate of the oven and the bottom of the stove, may be considered as divided into three flues k k, l l, and m m, the center one m m being subdivided into two by the dia-45 phragm or dividing plate n n which extends upward in the rear, no farther than the top of the lower oven, as shown at o o Fig. 3. The object of this diaphragm is merely to more fully equalize the heat upon the 50 lower oven. At p in the upper flue j j is a damper serving to cut off the direct communication from the fire box to the smoke pipe, as well as to the side flues k k and l l.

While the damper p is yet open, the com-

55 munication with the smoke pipe may still

be cut off by the curved, vertical sliding damper q (Figs. 3 and 4) being brought to the position indicated by the dotted line in Fig. 4. The top of the front diving flue e e is closed by a sliding register damper 60 r r. Another similar damper s s is placed. in the same flue at the level of the top of the lower oven.

t t is a lever moving about a center pin u attached to the front plate of the upper  $^{65}$  oven. The two ends of this lever v and w, work respectively, in slots in the movable plate of the registers or sliding dampers r rand s s. It will be readily seen that when the damper r r is drawn open, s s will be 70 shut, and vice versa.

The operation is as follows. The fire being kindled in the fire box, and the dampers p and q being opened and r r shut, the products of combustion pass directly through the upper flue j j to the smoke pipe. When it is required to throw the heated current beneath the upper oven only, either one or both the dampers p and q are closed and r r, and i opened. The current then passes down e e to g thence through the middle flue f f to, and up the rear flue y to the smoke pipe. When in this last case the damper r r is opened, it is evident that by 85 the action of the lever t t, (as before described) s s will be shut, and the current thus be prevented from passing beneath the lower oven. When the lower oven is to be heated, the damper r r is closed, and s s consequently opened. The damper q is also closed and i opened. The current then descends the two outer flues x x at the rear of the stove and after passing beneath the lower oven, ascends through e e into f f 95 and thence by the middle rear flue y to the smoke pipe.

What I claim as my invention and desire to secure by Letters Patent is,

The connecting the upper and lower dam- 100 pers r r and s s by a lever t t in such a manner that when one damper is opened, the other will be shut, in combination with two ovens placed one above the other with flues between and around them; the whole being 105 arranged and operating as herein described and shown.

WILLIAM COBB.

Witnesses: OWEN OTT.

WM. R. CANTINE.