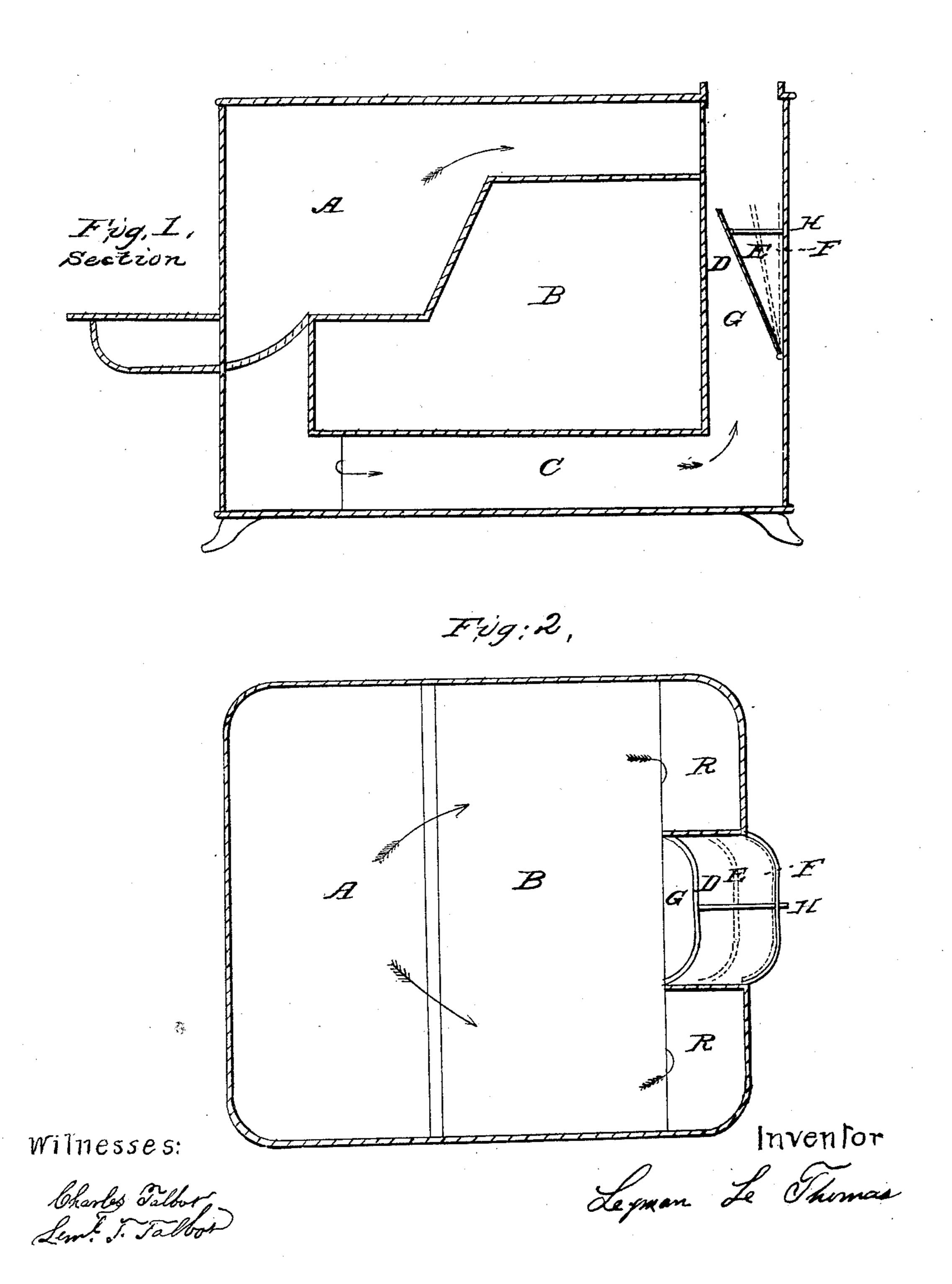
L. L. THOMAS.
Cooking Stove.

No. 24,849.

Patented July 19, 1859.



## UNITED STATES PATENT OFFICE.

L. L. THOMAS, OF DIGHTON, MASSACHUSETTS, ASSIGNOR TO THE DIGHTON FURNACE COMPANY, OF SAME PLACE.

## DAMPER FOR COOKING-STOVES.

Specification of Letters Patent No. 24,849, dated July 19, 1859.

To all whom it may concern:

Be it known that I, Lyman L. Thomas, of Dighton, in the county of Bristol and State of Massachusetts, have invented a new and useful Damper for Cooking-Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a sectional view, through the center of the stove from front to back; and Fig. 2, a bird's-eye view of the stove

with the top-plate removed.

15 My invention, which is particularly applicable to stoves with diving and return flues, consists in providing the upright portion of the return flue with a damper by which the draft may be regulated; the heat retained longer under the oven; and by its peculiar form and position keeping the heat in contact with the back plate of the oven.

To enable others skilled in the art to make and use my invention, I will proceed to de-

25 scribe it.

I construct my stove of iron, in any of the known forms, but with the diving and return flues somewhat larger than those commonly in use; and in order to adapt it to drafts of different degrees of strength, and to give to the one using it, more command over the heat, I insert into the upright portion of the return flue the damper D. This damper is made of such a form as to correspond to the back side of the flue, so that, when fully opened, it shall present but a very slight obstruction to the passage of the heat and smoke.

It is a well known fact to those accustomed to the use of cooking stoves, that
where the draft is feeble, the flues of the
stove should be larger than where the draft
is very strong; and, as stoves are usually
made, the size of the flues is adapted to
drafts of medium strength, consequently
when used where the draft is feeble, the
complaint is made that "the stove will not
bake or heat well," and when used where the
draft is very strong, that "it consumes too
large a quantity of fuel." To remedy both
of these difficulties I increase the size of the

flues to such an extent as to insure a proper and sufficient circulation of the heat even where the draft is feeble, and by introducing into such a stove the damper herein described, it (the stove) may be used equally as well where the draft is strong.

In the accompanying drawings A is the fire-place or grate; B, the oven; C, the return flue, whose upright portion is shown 60 at G; D, the damper herein described; E and F, different positions of the damper; and H, the rod or handle by which the damper is regulated, and which has upon its under edge, notches or catches to hold the 65 damper as shown in the positions D, E or F. The arrows show the course of the smoke and heat. From the fire A the heat passes over the oven B to the diving flues K, K, on either side of the return flue G-then down 70 these flues, under the oven from back to front where they unite and the heat returns through the flue C to the back side of the stove and passes off through the portion G. In this upright portion of the return flue the 75 damper D is placed, and being hinged at its lower end to the back side of the flue, whenever it is closed or partly closed, the heat in its passage upward strikes against the damper and is thrown by it against the back 80 plate of the oven, so that the oven receives the full benefit of the heat until it passes off

into the pipe or chimney.

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

The damper D substantially as herein set forth or in other words, I claim a damper placed in the "out-let" of the return flue of a cooking stove, near the termination of said flue, and of such a form that when secured or hinged, at its lower end, to the side of the flue opposite the oven, and when partially or fully closed, it shall stand in a position more or less diagonal across the flue; and of such a length that it can never 95 be moved more than twenty-five degrees from a perpendicular.

## LYMAN L. THOMAS.

Witnesses:

CHARLES TALBOT, LEML. T. TALBOT.