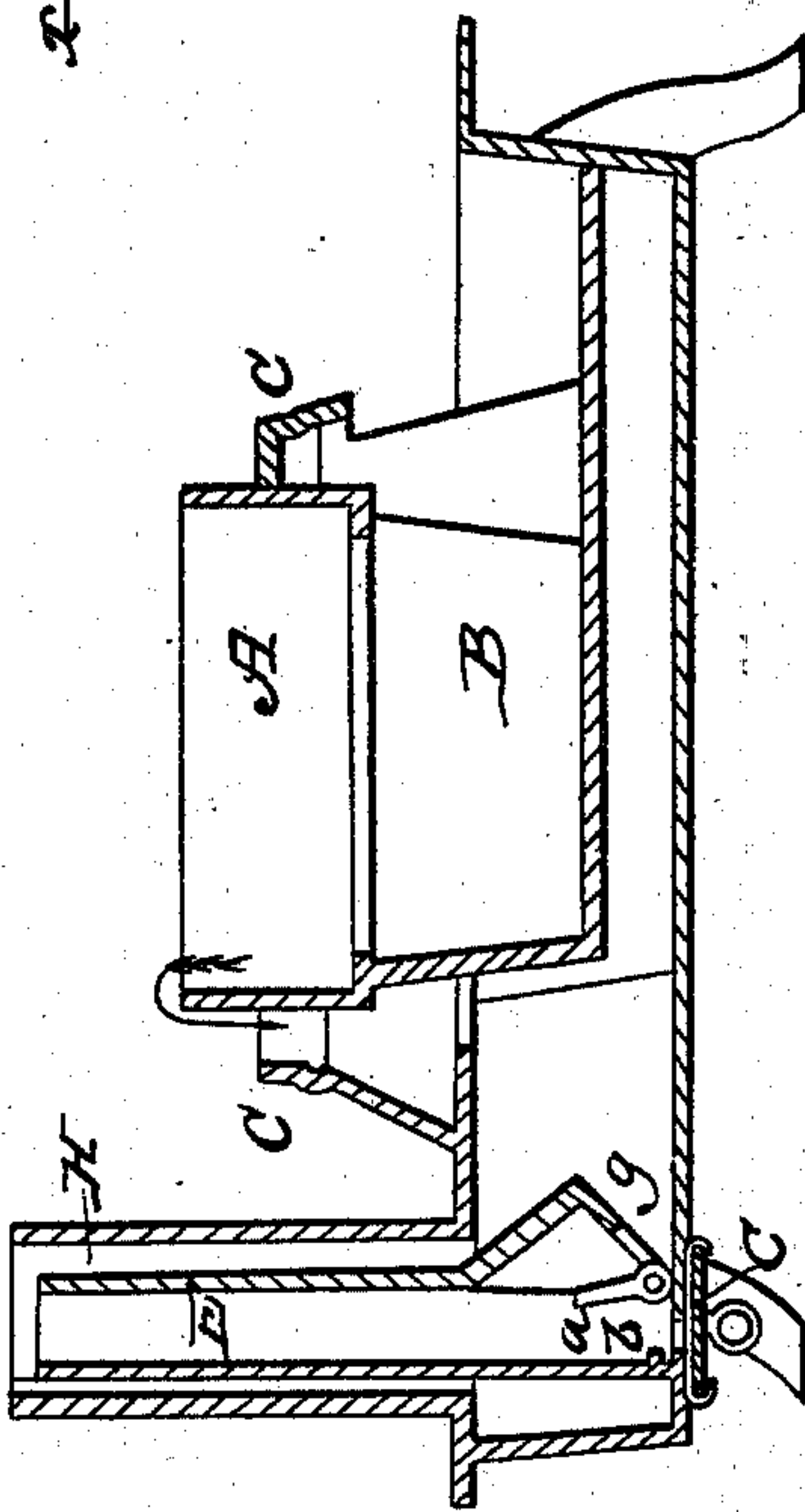
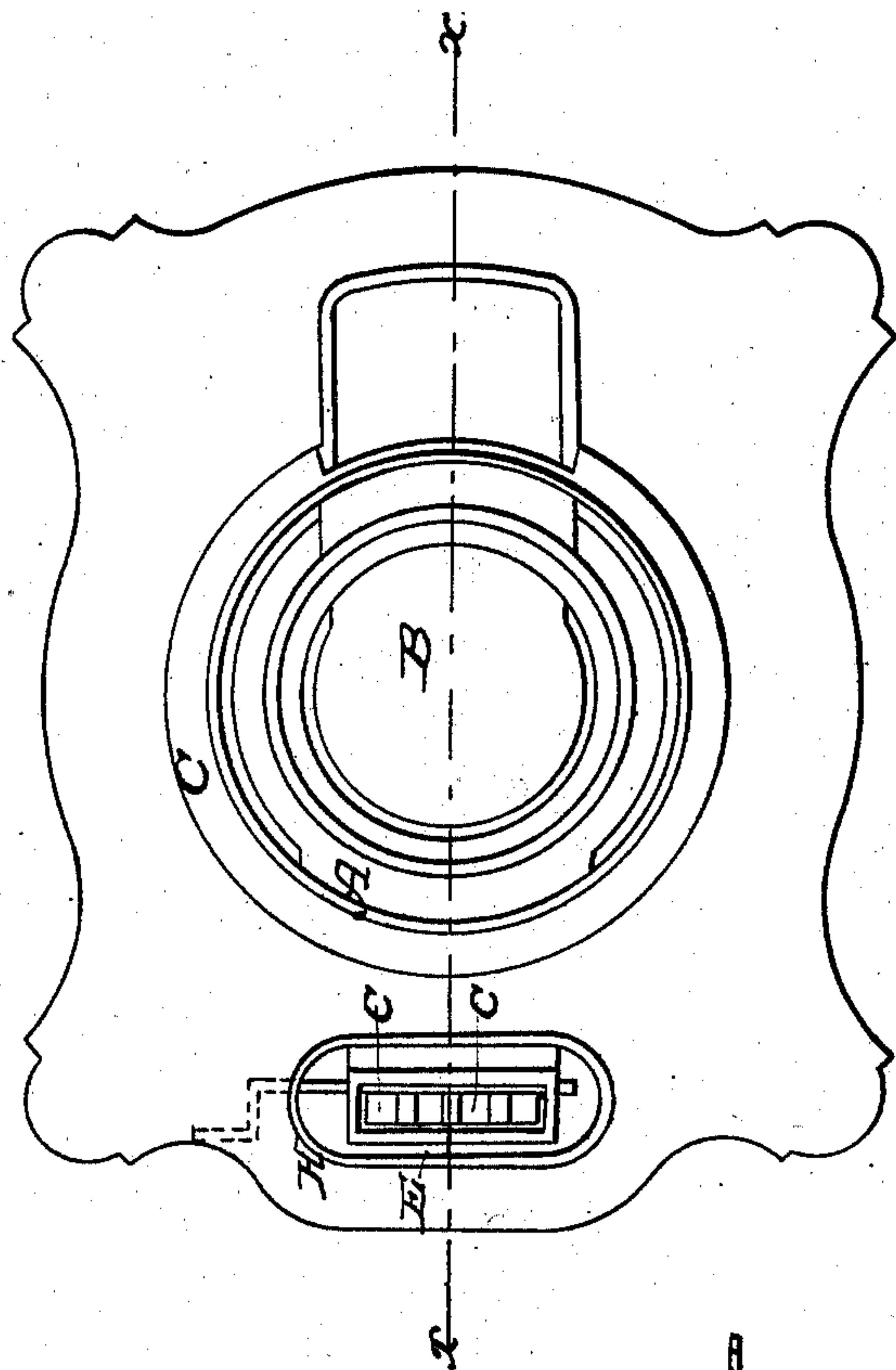


J. G. TREADWELL.

Stove Ventilator.

No. 26,631.

Patented Dec. 27, 1859.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN G. TREADWELL, OF ALBANY, NEW YORK.

STOVE.

Specification of Letters Patent No. 26,631, dated December 27, 1859.

To all whom it may concern:

Be it known that I, JNO. G. TREADWELL, of Albany, in the county of Albany and State of New York, have invented certain
5 new and useful Improvements in Ventilating-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 represents a plan of a stove embracing my improvements. Fig. 2 represents a vertical section of the same on the line $x x$ of Fig. 2, showing the draft and ventilating flues.

15 The nature of my invention consists in the arrangement of two flues of unequal capacity, in connection with the employment of two dampers by means of which said flues may be used independent of each other,—the
20 smaller one as a smoke flue, and the larger one as a ventilating flue which may be closed without or by converting it into a smoke flue,—for the purpose of regulating the heat of the stove and ventilating the room in
25 which it is placed.

By reference to the accompanying drawings my invention will be readily understood. In the present instance the stove to which my improved ventilator is attached,
30 is arranged in such relation to the ventilating and draft flues that the draft is conducted from above the fire down below the fire box, but the flues may be arranged to communicate with the stove above the fire.

35 The fire box A is separated from the ash box B in the usual manner by a grate.

C represents the cast iron frame on which the cylindrical body of the stove is constructed, between which and the fire box
40 surrounded by it, is a space of requisite dimensions through which the draft from the fire is established in the direction of the arrow, by the communication of the flues therewith.

45 The ventilating flue E is secured to the bottom of the stove and passes up through the center of the smoke pipe or draft flue, communicating with the external air through an opening in the bottom of the
50 stove, and is provided with a sliding valve or damper c at this point, by means of which

the draft is regulated or entirely cut off. The opening g in the side of the ventilating flue extends across its entire width, and is closed by the damper a . Through this open- 55
ing the ventilating flue communicates with the draft flue H, and when closed the space between the exterior of the ventilating flue and the surrounding smoke pipe forms an independent draft flue. The space within 60
the smoke flue around the ventilating flue is insufficient of itself to create and establish a strong draft from the fire—the object of it being, when used independent of the ventilating flue, only to carry off the products 65
of combustion from a slow fire; but when the ventilating flue is converted into the smoke flue by means of the damper employed for that purpose the smoke flue, thus enlarged, is sufficient to carry off the prod- 70
ucts of combustion from a lively burning fire—and when the communication between the two is cut off by the damper; the draft from the fire, through the independent smoke flue, is greatly diminished, by which 75
means the heat of the stove is regulated and an independent ventilating draft established from the room which may be shut off without affecting the stove draft.

A projecting lip b is formed on the inte- 80
rior of the ventilating flue which serves as a rest for the damper (a) when the ventilating draft is cut off, in which case it will be seen, the ventilating flue is converted into a draft flue. The ventilating flue may be 85
opened into the draft flue without closing its communication with the exterior of the stove, as represented in the drawings.

Having thus fully described my invention what I claim as new and desire to secure by 90
Letters Patent is—

Arranging the dampers a ; and c , with the ventilating flue E, and with the draft flue, in such a manner that the ventilating flue may be opened or closed, while the draft flue 95
is either open or closed or vice versa, the damper a , being made to subserve a double purpose substantially as set forth.

JNO. G. TREADWELL.

Witnesses:

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