

G. W. WALKER.

COOK STOVE.

No. 387,274.

Patented Aug. 7, 1888.

Fig. 1.

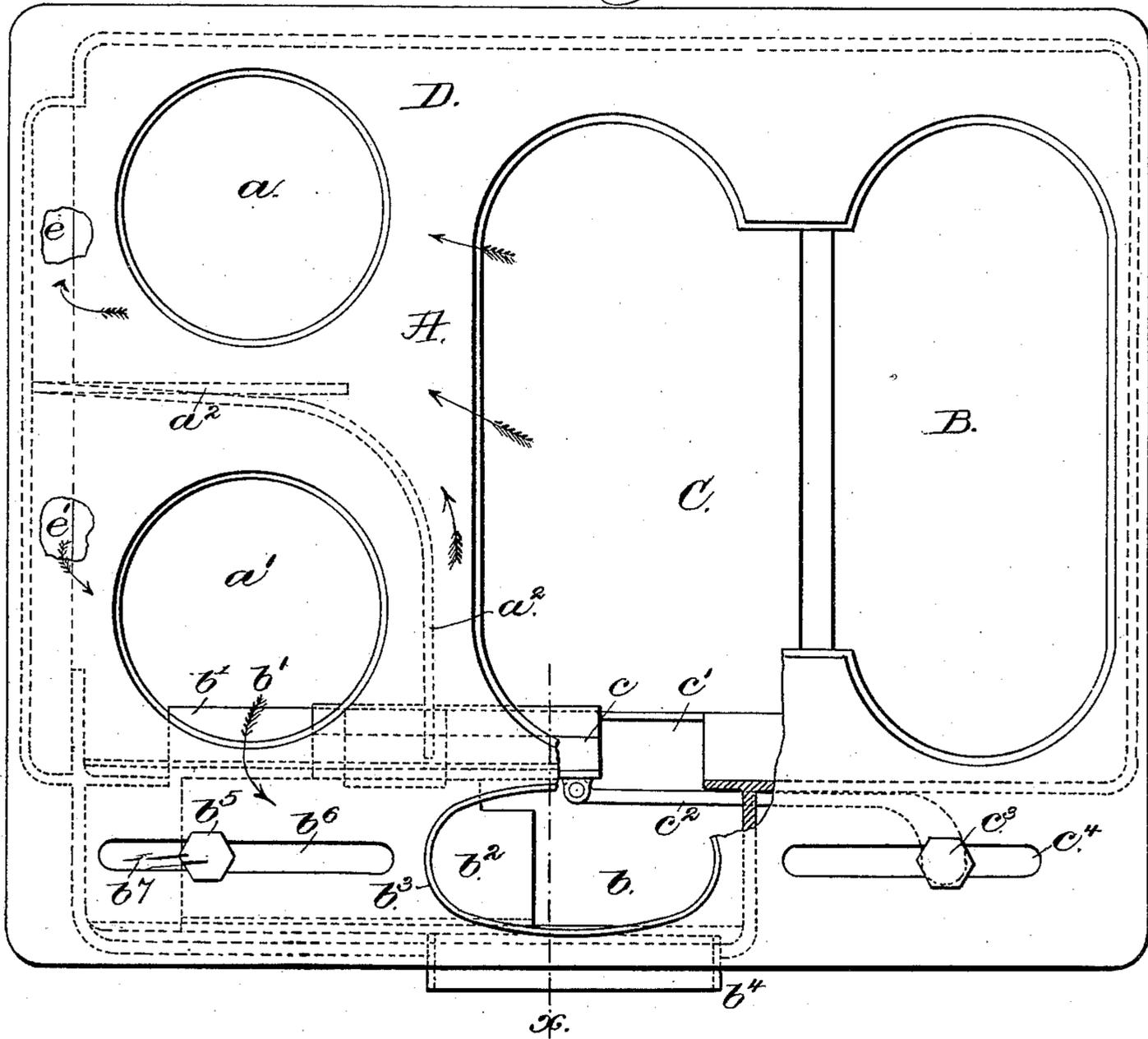
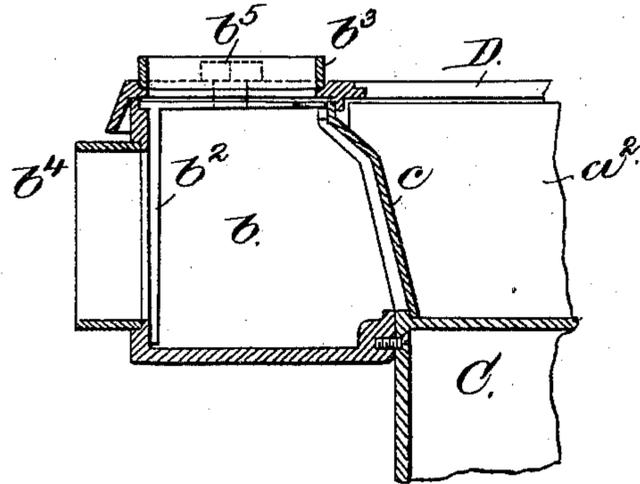


Fig. 2.



Witnesses.

Fred. S. Mumford,
Frederick L. Curry.

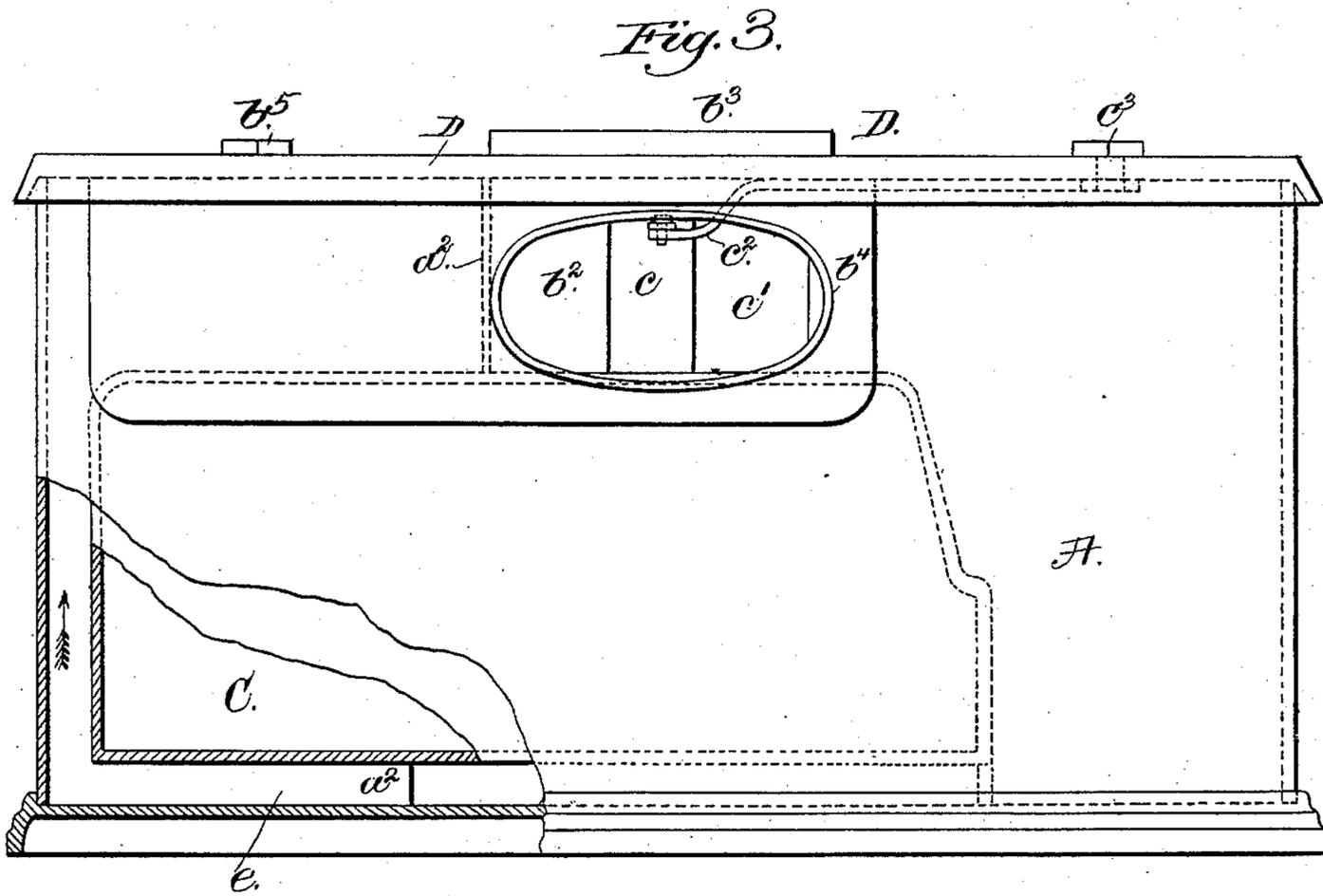
Inventor,
George W. Walker,
by Leroy & Gregory Attys.

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Frank H. Emery

Inventor.
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UNITED STATES PATENT OFFICE.

GEORGE W. WALKER, OF MALDEN, MASSACHUSETTS.

COOK-STOVE.

SPECIFICATION forming part of Letters Patent No. 387,274, dated August 7, 1888.

Application filed March 1, 1888. Serial No. 265,837. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WALKER, of Malden, county of Middlesex, State of Massachusetts, have invented an Improvement in Cook-Stoves, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve that class of stoves employed for cooking purposes, the improvements relating chiefly to the flues and dampers controlling them, whereby the products of combustion are placed under better and more complete control.

In accordance with my invention the kindling-damper and the draft-checking damper co-operate with the same flue, and both dampers are arranged to slide horizontally.

Figure 1 is a top or plan view of a cooking-stove embodying my invention, much of the top plate of the stove being omitted and a portion being broken away to show the dampers under it. Fig. 2 is a section in the line *x*, Fig. 1; and Fig. 3, a partial rear side view of the stove shown in Fig. 1.

The body *A* of the stove is and may be of any desired shape.

B is the usual fire-pot, *C* the usual oven, and *D* the top plate. The holes *a a'* at the rear part of the top plate, *D*, are separated by a partition, as *a²*, which, extended from the side of the stove around the hole *a'*, is continued down between the back plate and oven in usual manner, terminating, as shown in Fig. 3, below the oven, thus leaving two flues, *e e'*, the products of combustion from the fire-pot crossing the hole *a*, descending in the flue *e*, circulating below the bottom of the oven, rising in the flue-space *e'*, crossing the hole *a'*, and entering the flue *b* through the passage or opening *b'* in one of the vertical plates or sides of the stove-body, as indicated by the arrow *b^x*, the casting forming the main body of the said flue being attached to the side plate of the stove by suitable screws or bolts, in usual manner.

The escape of the products of combustion from the flue *b* depends upon the position of the sliding draft-checking damper *b²*, it being substantially such a damper as described in

Patent No. 202,205, issued to me, and dated April 9, 1878, the said damper being shaped to close the openings in both the top collar, *b³*, and the side collar, *b⁴*, the stove in practice having two collars, so as to enable it to be piped in either direction, at the desire of the user.

The sliding draft-checking damper *b²* is moved by a knob, *b⁵*, in a slot, *b⁶*, in the top plate, *D*, it covering the flue *b*, the damper, when moved toward so as to close or partially close the said collar-openings *b³ b⁴*, to check the usual draft of the stove, uncovering the rear end of the slot *b⁶*, and leaving a portion thereof, as *b⁷*, through which cold air may enter the flue *b*.

The flue *b*, at the side thereof nearest the center of the stove, is provided with a damper, *c*, which is denominated the "kindling-damper," it being free to slide within and against suitable guides of the body of the stove and at the under side of the top plate, (see Fig. 2,) so as to cover or uncover at will a passage, *c'*, leading directly through the side plate of the stove into the flue *b* next to the pipe-collars *b³ b⁴*.

When the kindling-damper *c* is open, as in Fig. 1, which is the case when the fire is being kindled, then the products of combustion, instead of passing around the oven, pass directly from the fire-box *B*, through passage *c'*, into the flue *b*.

The kindling-damper *C* has jointed to it a rod, *c²*, provided with a knob, *c³*, which is passed through a long slot, *c⁴*, in the top plate of the stove.

I have so arranged the two dampers *c* and *b²* that the opening of the damper *c* will also open the damper *b²*, and so, also, the closing of the damper *b²* to check the draft will close damper *c* in case the user of the stove had neglected so to do. For instance, when the fire is to be kindled, the movement of the damper *c* to open the passage *c'* crosses the inner end of the damper *c*, to meet the inner end of the damper *b²* and push it back to uncover the pipe-collars and leave free passage for the products of combustion, and, the fire having been properly started, the attendant will close the kindling-damper *c*, and thereafter the products of combustion will pass about the oven, as described.

The arrangement of both dampers substantially in line and so as to slide, instead of having one damper slide and the other turn, as usual, is a matter of convenience as to construction, and enables the positions of the two dampers and their purposes to be better seen and understood.

The two slots b^6 and c^4 constitute guides for the damper knobs or handles b^5 c^3 .

10 I claim—

1. The stove-body, the flue b , flues e e' , the sliding draft-checking damper, the sliding kindling-damper, and their knobs or handles, combined with the top plate having guides for
15 both the said knobs or handles, substantially as described.

2. In a cook-stove, the body, flues e e' , having openings b' c' in one of its vertical plates, the flue b , into which enter the products of
20 combustion passing through the said openings

b' or c' , the oven, the top plate, and wall a^2 , dividing the space between the top plate and the body of the stove on one side and the oven on the other side, combined with the draft-checking damper and the kindling-damper, 25 both arranged to slide in the same direction, substantially as described.

3. The combination, with the stove-body, top plate, and flue b , of the sliding draft-checking damper and the sliding kindling-damper, 30 both arranged at the same side of the stove and made movable in the same direction, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two sub- 35 scribing witnesses.

GEO. W. WALKER.

Witnesses:

GEO. W. GREGORY,
B. DEWAR.