A. W. WALKER & F. WILL.

STOVE DAMPER.

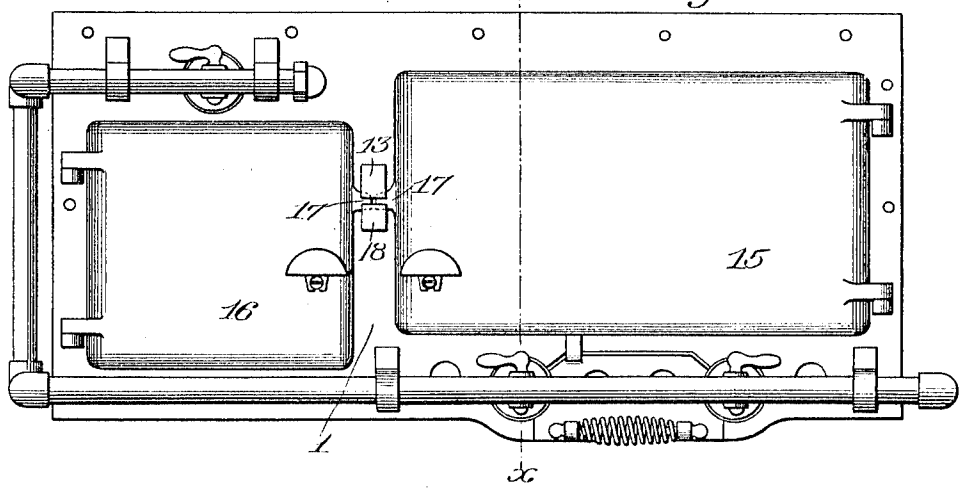
APPLICATION FILED JUNE 26, 1911.

1,066,962.

Patented July 8, 1913.

2 SHEETS—SHEET 1.

Fig. 1



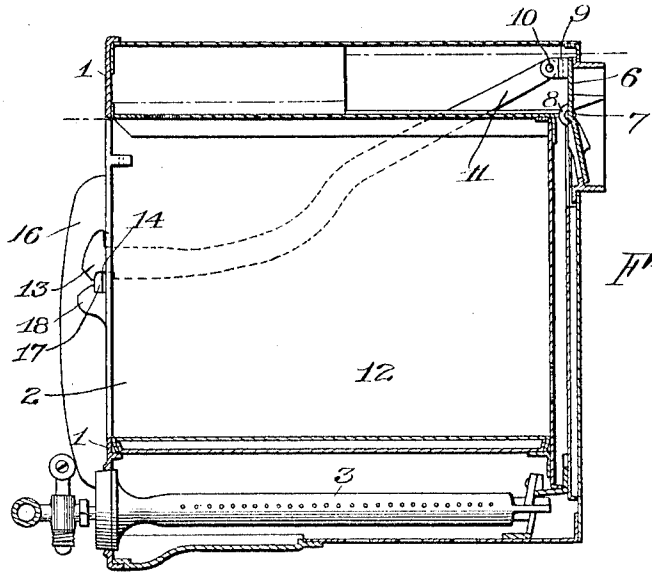


Fig. 2

Witnesses

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2 SHEETS—SHEET 2.

Fig. 3

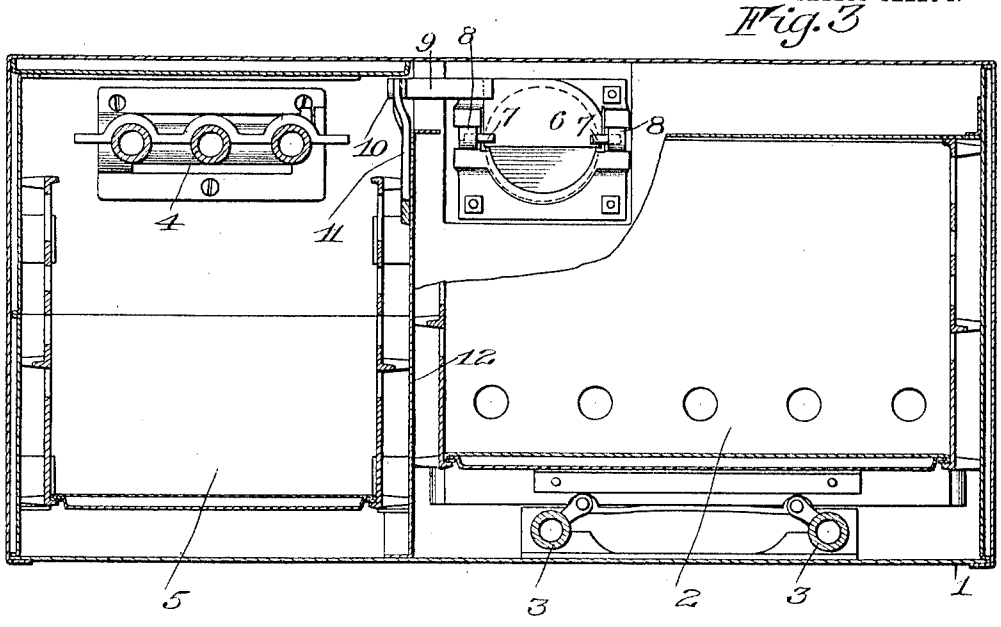
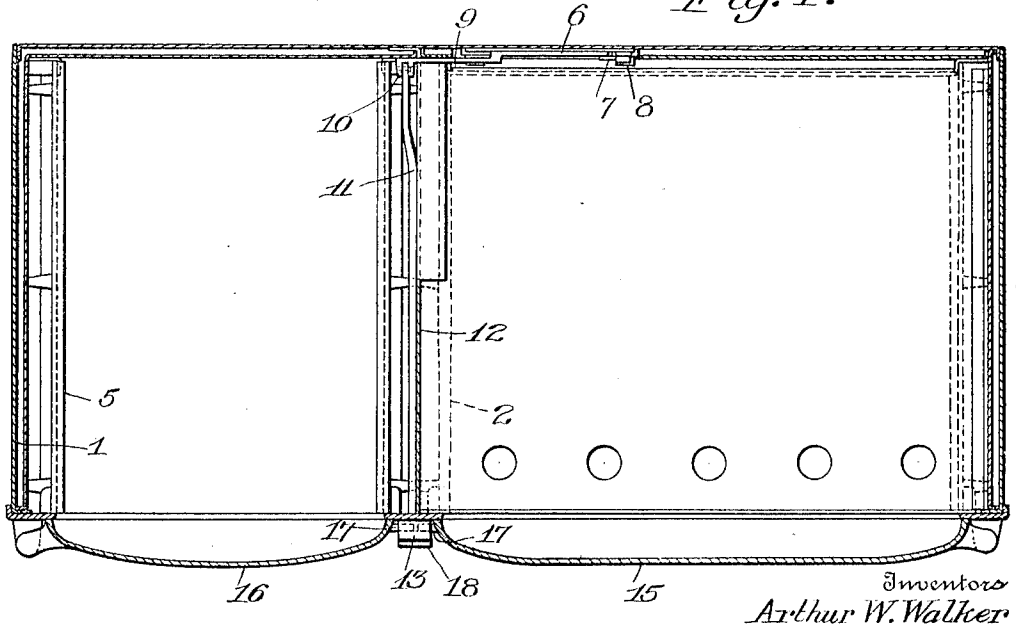


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR W. WALKER, OF BOSTON, MASSACHUSETTS, AND FREDERICK WILL, OF ROCHESTER, NEW YORK.

STOVE-DAMPER.

1,066,962. Specification of Letters Patent. Patented July 8, 1913.

Application filed June 26, 1911. Serial No. 635,381.

To all whom it may concern:

Be it known that we, ARTHUR W. WALKER, of Boston, in the county of Suffolk, State of Massachusetts, and FREDERICK WILL, of Rochester, in the county of Monroe, State of New York, have invented certain new and useful Improvements in Stove-Dampers; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

The present invention relates to stove dampers, being especially adapted for use in connection with gas ranges employing one or more ovens, whether the gas range be arranged in connection with a coal stove or separately therefrom, and it has for its object to provide means for relieving the stove of the products of combustion and for preventing the obnoxious gases which are sometimes produced, from passing out into the room in which the stove is positioned.

A further object of the invention is the provision of means whereby a stove or oven is automatically connected with a chimney or suitable flue, upon the opening of the oven door.

To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a view in front elevation of a stove embodying one form of our invention; Fig. 2 is a transverse vertical sectional view on the line x—x of Fig. 1; Fig. 3 is a longitudinal vertical sectional view of the stove, and Fig. 4 is a longitudinal horizontal sectional view of the same.

Similar reference numerals throughout the several figures indicate the same parts.

The invention is illustrated, in the present embodiment, as applied to a gas range comprising the stove body 1 provided with the baking oven 2, adapted to be heated by means of the burners 3. The stove is further provided with a broiler 4 and a warming oven 5 arranged therebeneath.

The stove, as shown, may be connected up with a coal stove, as usual in the use of this class of ranges, or may be used independently, but in either case, it is desirable that there be a proper outlet for the products of combustion, and to this end, in the present embodiment, the stove body 1 is provided at the upper central portion of its rear wall with a damper 6, preferably constructed as shown in Fig. 2, and provided with the trunnions 7 supported in the bearings 8. The damper carries a laterally extending arm 9 provided with ears 10 between which there is pivotally secured the lever 11, which constitutes the damper actuating means of the present embodiment, although it will be understood that other arrangements than the one disclosed may be had with equal efficiency in carrying out the object of the invention. The lever 11 preferably extends downwardly and forwardly, as shown, to the front of the body portion, being arranged adjacent to the wall 12 which separates the respective ovens, and is provided at its forward end with a lug 13, a notch 14 being formed in the lower edge of the arm adjacent to the lug 13, for a purpose which will presently appear.

The ovens are provided with doors 15 and 16 respectively, which have formed thereon the projections 17 arranged to engage the lug 18 formed on the stove body, and arranged, preferably, in vertical alinement with the lug 13 at the forward end of the arm 11. The lug 18 serves to hold the doors in closed position by means of the projections 17, as usual in the construction and operation of stove doors, and when so closed, the lug 13 is engaged by the projections 17, as shown in Figs. 1 and 2. In case either one of the oven doors are opened, the respective one of the projections 17, which are in engagement with the lug 13, moves the lever 11 forwardly, and causes the damper 6 to be opened. Owing to the construction and disposition of the lever 11, as it extends downwardly from its point of connection with the damper, to the front of the stove body, there is a tendency for it to move forwardly of its own motion after its movement is started by the opening of one of the doors, such tendency being due to the weight of the rear end of the arm and the upper end of the damper acting in a downward direction. This arrangement insures a free and easy movement of the damper actuating

member, or lever, so that no unusual effort is required in opening the oven door to secure the operation of the damper. When the oven is to be used again, the door is first closed, and the damper actuating member then pushed rearwardly until it engages the projection of the door.

The opening controlled by the damper 6 may lead to the chimney of a coal stove in any convenient manner, or may be connected to an independent flue for carrying off the products of combustion from the gas burners, and one of the chief advantages of the present invention lies in providing such a damper, so as to obviate the possibility of gas collecting within the ovens. Further, the invention is characterized by the automatic operation of a damper when one of the oven doors is opened, so that it is impossible for carbon monoxid or any of the other obnoxious gases to enter the room containing the stove, for as soon as an oven is opened the damper is simultaneously operated and any gases produced by combustion pass out to the chimney, instead of entering the room through the oven, as frequently happens in the absence of an automatically actuated damper.

It will be observed that the damper is capable of adjustment independently of the oven doors, that is, it may be opened or closed without opening either of the doors by manually operating the lever 11, but the latter is so arranged that it is impossible to open either of the oven doors without insuring the operation of the damper. It will be also noticed that the outer end of the lever is so arranged that it may be elevated and that the outer edge of the lug 13 is rounded to permit the door latches 17 to pass beneath it in the event the lever is pushed inwardly to close the damper before the oven door is closed. This feature is advantageous as it frequently happens that it is desired to use one or both of the ovens as warming closets, and as the burners are not then lighted the means of ventilation afforded by the damper is not required.

We claim as our invention:

1. In a stove, the combination with an oven and a door for closing the same, of a damper pivotally mounted at the rear of the stove, a damper actuating member connected to the damper, said damper actuating member extending downwardly at an angle from the damper and thence forwardly and having an abutment at its forward extremity adapted to engage in front of the door when the latter is closed, and means for moving the damper actuating member upwardly out of the path of the door when the latter is opened.

2. In a stove, the combination with a front wall and an oven, of a door for closing the oven, the front wall being provided with an opening, of a damper pivotally mounted at the rear of the stove, a damper actuating member connected to the damper and extending downwardly at an angle therefrom and thence forwardly, said damper actuating member having its forward end extending through the aforementioned opening in the front wall of the stove and provided on its lower edge with a recess adapted to cooperate with said front wall, and an operating portion on the door arranged to engage said recess of the damper actuating member when the door is closed, the damper actuating member being movable upwardly out of the path of the operating portion on the door when the latter is open.

ARTHUR W. WALKER.
FREDERICK WILL.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."