A. P. HAWLEY.

HEAT RETAINING OVEN.

APPLICATION FILED JUNE 3, 1914.

1,140,154. Patented May 18, 1915.

Fig. 1.

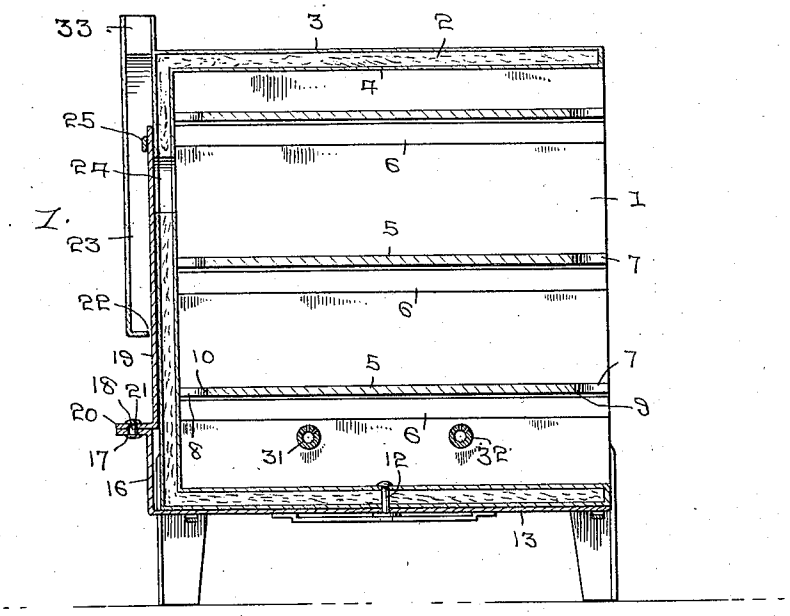
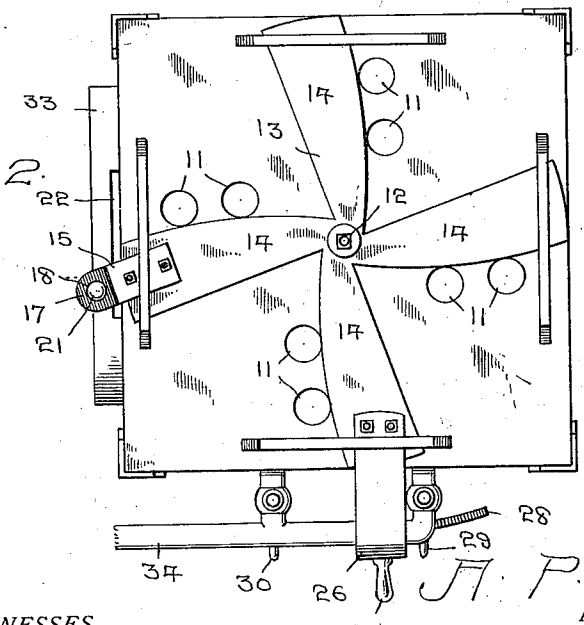


Fig. 2.



WITNESSES

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HEAT-RETAINING OVEN.

1,140,154. Specification of Letters Patent. Patented May 18, 1915.

Application filed June 3, 1914. Serial No. 842,578.

To all whom it may concern:

Be it known that I, ANNE P. HAWLEY, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Heat-Retaining Ovens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to ovens and more particularly to gas range ovens having insulating sides and damper attachments.

An object of this invention is to conserve the heat within said oven, yet allowing it to freely flow to all portions thereof.

Another object of this invention is to have a damper arrangement whereby said dampers are opened when in use and closed when not in use. And still another object of this invention is an automatic arrangement whereby the supply valves are guarded according as to whether the stove is in use or not.

These and further objects in view will be developed as the specification proceeds and I will now proceed to disclose the preferred embodiment of my invention.

I do not desire to be limited to the structure shown which is but a preferred form, but claim whatever can be included within the scope of the claim appended hereto.

Similar characters of reference refer to similar parts throughout the several views, in which,

Figure 1 is a sectional side elevation of my device. Fig. 2 is a bottom plan view showing the damper attachment in open position.

1 is my oven proper showing the insulator 2 between double walls 3 and 4 thereof, said insulators being of any preferred material, preferably of asbestos. Within said oven are positioned a number of shelves 5 which are retained in position by means of the flanges or brackets 6 as can clearly be seen in Fig. 4 of the drawings. The front and rear edges 7 and 8 respectively of these shelves are recessed or offset as at 9 and 10, the purpose of this being to allow the heat to pass from the burner flue up around the shelves so that the heat can reach all parts of the oven. A number of apertures 11 are spaced at desired points in the bottom of the oven while centrally of said bottom is an aperture through which a bolt or other suitable fastening means 12 is run, on which is pivotally mounted my damper device 13, this damper device having a multiplicity of blades 14 suitably positioned to close the said apertures 11. The ends of the blades 14 are guided and protected by means of slotted brackets 14′ which project downwardly from the bottom of the stove, the ends of the blades playing between the bottom of the stove and the inner surface of the brackets forming the slot therebetween. From one of said blades 14 is connected a coupling member 15 or, if it is desired, the arm 14 is extended and bent upward at right angles to play along the rear side of the oven as at 16 in Fig. 1. The end 16 of this arm or of the coupling member 15 is bent outward at right angles having the aperture 18 running therethrough. A damper attachment 19 having an outturned flange 20 is rigidly connected to the parts 17 by means of a rivet or other suitable fastening device as can clearly be seen in Fig. 1 of the drawings. This member 19 runs through a suitable slot 22 through the smoke flue 23 and is adapted to cover the vent 24 in the back of the oven. The end of the member 19 is guided into operative position by the bracket 25.

Attached to the member 14 which covers the apertures 11 near the front of the bottom of the oven, is an operating arm 26 having a manipulating handle 27 thereto. To the top portion of my member 26 I attach a guard or check device 28. This guard or check device controls the operation of the supply valves 29 and 30 respectively.

In operation when the oven is desired to be used, the handle 27 is grasped and thrown to one side thereby moving the damper 13 to open the apertures 11 in the bottom of the oven as can clearly be seen on perusal of Fig. 2. This act, at the same time throws over the guard 28 thereby freeing the check valves 29 and 30, allowing them to be turned to supply gas to the burners 31 and 32 which are centrally placed near the bottom of the oven as shown in Fig. 1. This movement of the damper 13 at the same moment moves the damper member 19 at the back of the oven thereby opening the vent 24. From its construction this damper has not a pivoted motion but a shifting motion moving in unison with the damper 13. These devices allow air to en-

ter the oven, supplying the necessary oxygen to the fuel burning from the member 31 and 32, thereby supplying heat to all parts of the oven, the same passing through the offset portions 9 and 10 of the shelves 12 and then out through the vent 24 and exhausted through the pipe 33.

When the oven is not desired to be used, the supply valves 29 and 30 are given a 90° turn thereby cutting off the supply of gas to the dampers from the feed pipe 34. The manipulating handle is then grasped and thrown in the opposite direction. This act closes all the apertures in the front of the oven and the vent in the back of the oven at the same moment, and simultaneously throws the guard 28 in front of the supply valves 29 and 30 so that these can not be manipulated while the dampers are closed.

Having described my invention what I claim as new and desire to secure Letters Patent upon is:

A device of the character described comprising a stove having a plurality of groups of apertures through the bottom thereof at widely separated points, each group consisting of a plurality of apertures positioned approximately at right angles to the edge of the bottom, a bracket having a slotted portion and two offset attaching end portions positioned adjacent each group at approximately right-angles thereto and parallel with said edge, and a plurality of oppositely disposed damper blades adapted to close the apertures in each group, the ends of each blade playing in said brackets.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANNE P. HAWLEY.

Witnesses:
CORNELIA B. HAWLEY,
GEORGE W. HAWLEY.

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