

(No Model.)

J. G. MECHAM.

WARMING OVEN AND RADIATOR.

No. 311,908.

Patented Feb. 10, 1885.

Fig. 1.

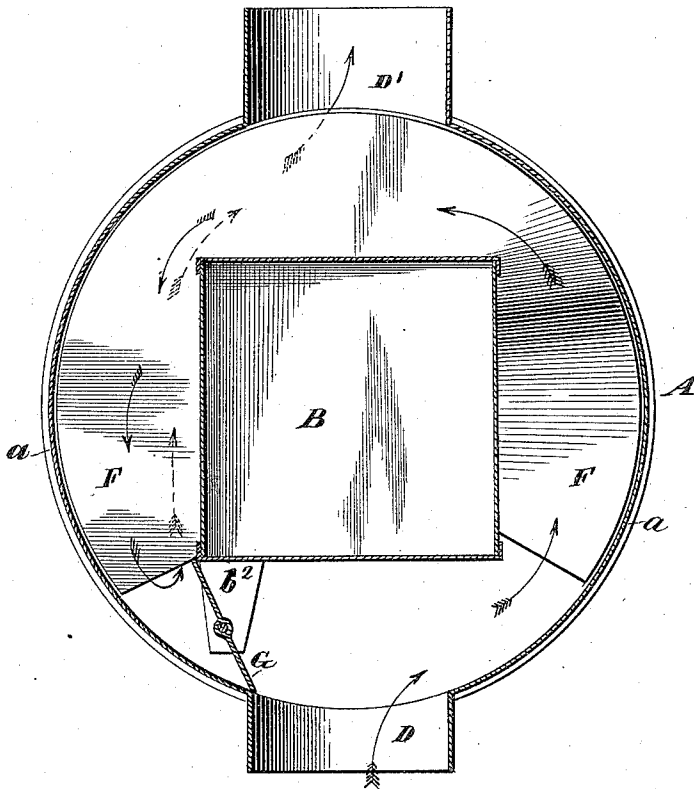
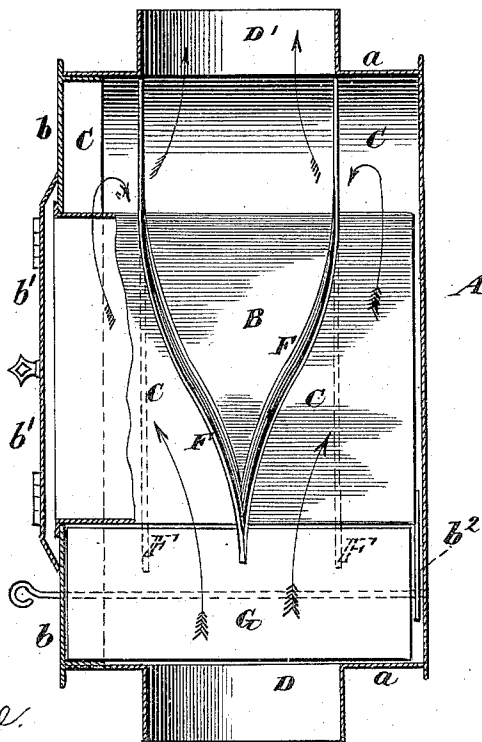


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

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WARMING-OVEN AND RADIATOR.

SPECIFICATION forming part of Letters Patent No. 311,908, dated February 10, 1885.

Application filed July 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, J. G. MECHAM, of Madison, in the county of Madison and State of Nebraska, have invented a Stove-Pipe Attachment for Warming and Heating Purposes, of which the following is a specification.

My invention relates to stove-pipe attachments for radiating heat, warming food, drying fruit, and all other analogous purposes. These are generically old and well known to the public, having been made with ovens or receptacles for the articles to be warmed. These ovens have usually been surrounded by flues passing from the inlet to the outlet of the case. Two dampers have been employed on the ends of a middle-pivoted lever or rod, so as to close the circumferential flues entirely and compel the products of combustion to pass between two ovens to the outlet.

My invention involves several new features of construction, which will first be described in connection with the drawings, and then clearly pointed out in the claims.

Figure 1 of the drawings is a plan view, and Fig. 2 a vertical cross-section through the chamber and vertical projections to which the stove and smoke pipes are jointed.

In the drawings, A represents the case of my stove-pipe attachment; B, the oven or warming-chamber, which I make detachable from the case; and C C, the flues, which are formed between the case A and a plate, *b*, attached to the outlet edge of the oven, so as also to form a detachable side to the case. This enables the operator to close the case as he puts the oven in place, which is convenient and saves time.

b' is a hinged cover for the oven or warming-chamber, and *b''* is the flange which forms a bearing for the vibratory shaft of the damper, while the other bearing is in the plate *b*. The shaft extends outside the case, so that the damper may be conveniently operated. The flues C C pass from the inlet D around the chamber B, and connect with the opening between the flanges F F, which opening leads to the outlet D'. The inlet D connects with the stove-pipe, and the outlet D' with the smoke-pipe, in an old and well-known manner. The flanges F F are attached to the outer side of the oven B, so as to be farthest apart near the inlet-pipe D, and to converge toward each other until they have passed the outlet D' and form a sharp-edged junction on one side of the inlet-pipe D.

G is a damper arranged at one side of the inlet D, so as to shut the opening between the flanges F F when the products of combustion from the stove are to be retarded and caused to give up a portion of their heat. When the fire is being started or the attachment not to be used, the damper is to be left open. When the damper is open, the products of combustion go directly through the space between the flanges F F from the inlet to the outlet; but when the damper is closed, they are compelled to pass around the oven before they enter the space between the flanges. From practical observation I obtain and utilize about one-third to one-half of the escaping heat.

Having thus described all that is necessary to a full understanding of my invention, what I consider new, and desire to protect by Letters Patent, is comprehended in the following claims:

1. The combination, with the case A and oven B, of the plate *b*, made fast to the outlet edge of oven and forming a detachable side for the case, whereby the case is closed as the oven is inserted, as set forth.

2. In a stove-pipe attachment for the purposes described, the combination, with the case A, of an oven, B, provided with two flanges, F F, placed farthest apart near the inlet-pipe D, thence converging as they pass around, and finally coming together at a sharp edge on the opposite side of said pipe, whereby the products of combustion may be conducted, as set forth.

3. The combination, with case A and oven B, having the convergent flanges F F, of a single damper, G, arranged to shut the products of combustion off from the opening between the divergent ends of said flanges F when they first enter the inlet D, as and for the purpose specified.

4. In a stove-pipe attachment, for the purposes set forth, an oven, B, provided with the plate *b* and flange *b''*, in combination with a damper-shaft whose bearings are in said plate and flange, whereby all may be lifted out of the case together.

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Witnesses:

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