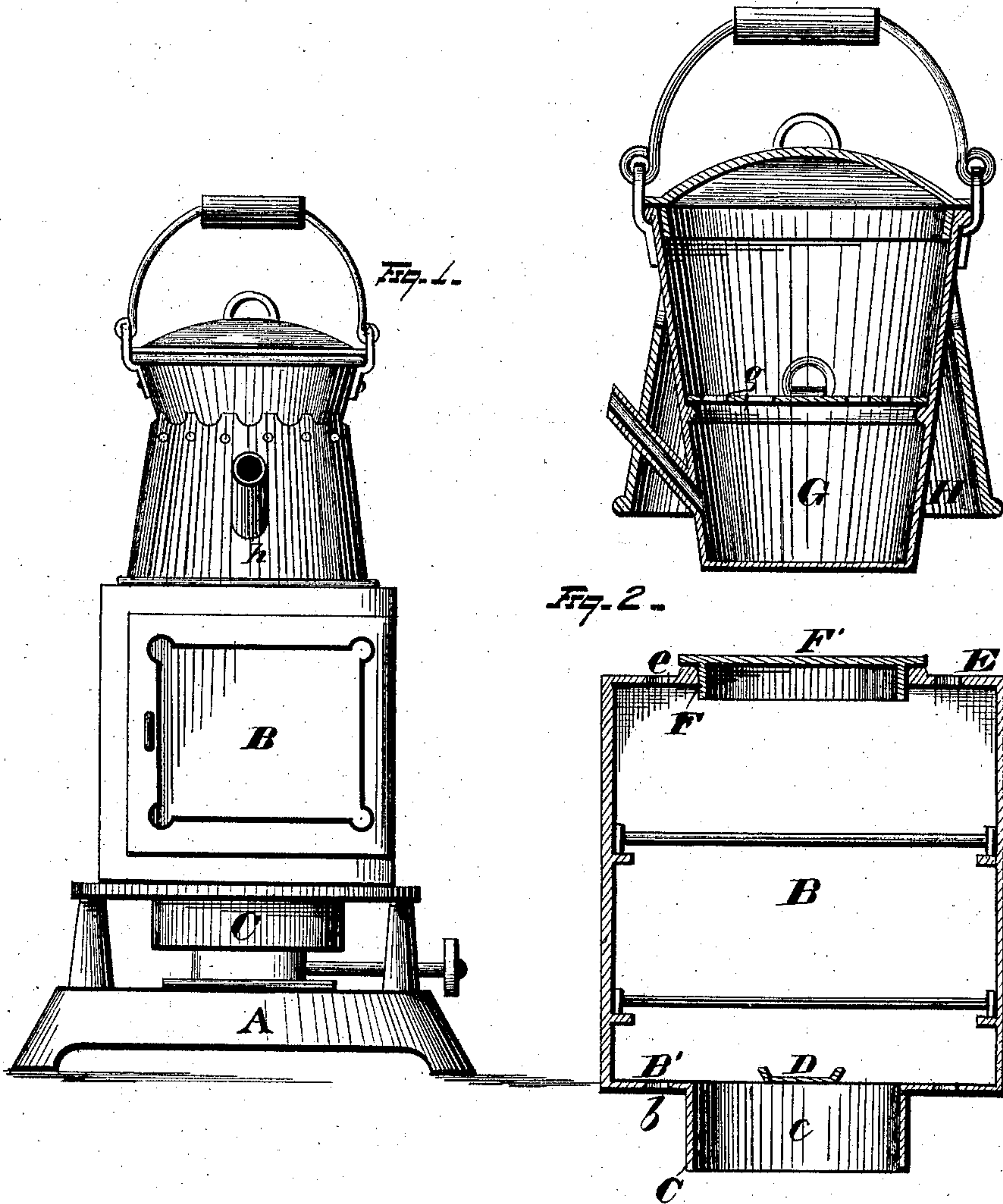


O. EDWARDS.  
OIL AND GAS STOVES.

No. 184,148.

Patented Nov. 7, 1876.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN OIL AND GAS STOVES.

Specification forming part of Letters Patent No. 184,148, dated November 7, 1876; application filed August 31, 1876.

*To all whom it may concern:*

Be it known that I, OLIVER EDWARDS, of Florence, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Oil and Gas Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to oil or gas stoves, and is designed to provide same with such heating attachments as are of frequent need in domestic use, so that by my improvement economy of construction in the articles themselves may be obtained, but most especially will there be a saving in the common processes of different cookery.

My invention consists, first, in the combination, with an oil or gas stove, of independent oven and steamer attachments; second, in the combination, with an oil or gas stove, of detachable oven and steamer attachments, the said steamer constructed with a lateral air-jacket; third, the combination, with an oil or gas stove, of a heating-oven, whose top plate has an annular series of perforations encircling a central opening adapted to receive cooking utensils, and provided with a removable lid.

In the drawings, Figure 1 represents an oil-stove provided with the heating attachments. Fig. 2 is a vertical section of the oven and steamer detached from the stove.

A is the oil or gas stove, the construction of which is immaterial. B is the heating-oven, of square dimension, whose lower or base plate or sheet B' is punctured with orifices *b* about its outer edges, to permit the exterior radiation of heat from the stove to pass directly upward into the oven, instead of impinging against a solid plate, thus wasting a larger proportion of its force. An annular ring, C, projects downward from the central opening *c* in the lower plate B', which surrounds the flame and burners of the stove, and both acts as a supporting circular standard for the oven, and also as a conductor to

carry the heat directly into the oven. A deflecting-plate, D, bridges the opening *c*, and is secured to the interior of the plate B'. It is provided with lateral flaring flanges *d*, extending its length, which throws the heat out angularly into the oven, and causes a thorough breaking up of the volume of heated air and a distribution of same through the oven. The oven is provided with open-work shelves, and such interior appurtenances as are common to such cooking-chambers. The top plate E has a central opening, F, suitable for receiving a steamer, kettle, or other culinary implement, and is provided with a removable lid or cover, F', so that when not used in connection with such a superposed vessel the heat in the oven may be retained by the lid snugly fitted in the aperture. A circular series of orifices, *e*, surround this central opening F in the plate E, and permit the heat from the oven to pass up into the air-jacket H, surrounding the lower and middle portion of the steamer or vessel G, placed on the plate E. This steamer is of any desired construction, and is provided with the supporting-plate *g*, resting on an interior annular projecting bead or flange. It is punctured to admit of the steam passing from the lower water-compartment up into the steaming-chamber. A centrally-located handle allows of its ready removal from its seat. This steamer is further provided with a discharge-spout for its water-compartment and a cover for the vessel entire. A bail is also attached to same. Upon placing both the oven and the steamer on the stove the deflecting-plate D, with its angular lateral flanges, causes the heat, as it passes up through the inclosing ring C, to divide and distribute itself into the different parts of the oven. The orifices *b* also take the exterior radiating particles of heat from the stove, and after the joint volume has traversed the oven, the main portion strikes the bottom of the steamer introduced through the opening F, and heats the water therein contained. Another portion of the heat passes through the openings *e* and enters the air-jacket H, whose out inclosing wall *h* projects downward from near the top of the steamer at a constant-sided angle out from same, so as to form a triangular space between the steamer and such inclosing wall. This hot-



air jacket introduces the heat upon all sides of the steamer, and extends above its water-compartment, so as to thoroughly subject the latter to a hot-air bath, which materially lessens the difficulty of heating the water. A circular series of air-openings, *h'*, are formed in the upper circumference of the inclosing wall *h*, which prevents the chamber from becoming a dead-air jacket, and allows of necessary circulation for same.

By means of this invention a single oil or gas stove can at the same time roast meat, bake potatoes, boil one thing and steam another, and consume no more oil or gas than is now required for use of the oven alone, and by means of the hole and lid in the top of the oven any other cooking utensil can be combined in use with the oven.

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

1. The combination, with a lower oven-chamber, provided with a deflecting inlet-flue, of an upper steaming-chamber seated in the top plate of the oven, which latter is constructed as described, so that the heat is first utilized therein before passing up into the short lateral air-jacket of the steamer, substantially as and for the purpose described.

2. In an oil or gas stove, the combination, with a detachable oven, whose top plate has

a central receiving-opening and a series of lateral heat-conducting orifices, of a steamer provided with a short outer inclosing wall, and constructed so that by placing the same in the central opening of the oven a hot-air chamber will be formed about the steamer, substantially as described.

3. In an oil or gas stove, the combination, with the heating-chamber, having its lower plate provided with a main central and a series of auxiliary flues, of the steamer adapted to be closely seated in a supporting-ring of the top plate of the chamber, and provided with an air-jacket directly communicating with the latter through an annular series of openings, substantially as and for the purpose described.

4. In an oil or gas stove, the combination, with an oven, of an independent steamer, constructed with a lateral hot-air jacket, and provided with a discharge-nozzle passing through same, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

OLIVER EDWARDS.

Witnesses:

HORACE P. DIBBLE,  
WM. H. CUMMINGS.