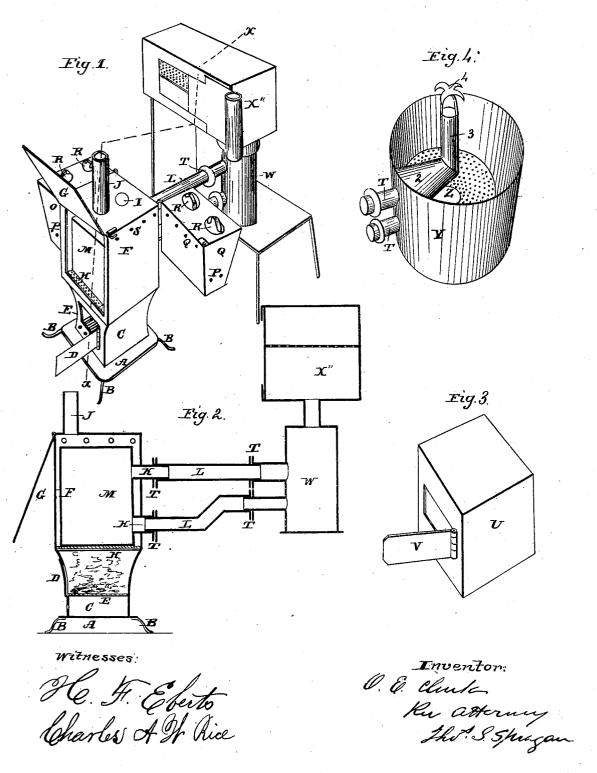
No. 88,011.

Patented March 23, 1869.





ORSON E. CLARK, OF WATERFORD, MICHIGAN.

Letters Patent No. 88,011, dated March 23, 1869.

IMPROVEMENT IN COOKING-STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, ORSON E. CLARK, of Waterford, in the county of Oakland, and State of Michigan, have invented a new and useful Improvement in Cooking and Heating-Stove and Circulating Water-Heater and Boiler; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

Figure 1 is a perspective view of my invention.

Figure 2 is a vertical sectional view of the same on the line X X in fig. 1.

Figure 3 is a plan of my oven, to be inserted in place of the reservoir.

Figure 4 is a view of my boiler.

Like letters indicate like parts in each figure.

The object of this invention is to so construct an apparatus that it can be used as an ordinary cook-stove, a heating-stove, or a steam-generator for culinary and washing-purposes, all combined in one, and provided with portable attachments, that will enable it to perform the various duties above mentioned.

It consists of the base, A, surmounted upon suitable

legs, B.

Above the base is placed the fire-box C, provided

with suitable door, D, and grate, E.

This fire-box is open at the top, and is surmounted by the chamber F, which is provided with a suitable door, G, perforated or grated bottom, H, boiling-places, I, opening, J, for egress of smoke, and openings, K, through which pass the water and steam-pipes L, which lead from the water-tank M, which is made sufficiently smaller than the chamber f to allow of a free passage of heated air and smoke from the fire-box to the smokepipe J.

The necessary draught for the fire is obtained through the openings N, situated below the door in the fire-box.

Hinged to opposite sides of the chamber F, there may be additional fire-boxes, O, provided with openings, P, for the purposes of draught, and other openings, Q, which correspond to similar openings, S, in the chamber F, through which smoke escapes to the

These fire-boxes may be attached to the chamber by any suitable devices, so that they may be removed, when desired, and may be provided with suitable boil-

ing-places, R.

The water-tank M may be withdrawn through the door, as the pipes L, leading from said tank, are provided with flange-joints, T, so that they may be readily disconnected.

The oven U may be inserted in place of the withdrawn water-tank, when baking may be done in the usual manner.

This oven should be of about the same shape and size as the water-tank, and should be provided with

suitable door, V, and proper gratings, upon which to place the article to be baked or roasted.

The auxiliary fire-boxes O and water-tank being removed, the apparatus is converted into a heating, or parlor-stove, and for this purpose it may be ornamented in any desired manner.

The water and steam-pipes L lead into the condenser W, which is connected by a short pipe, leading therefrom to the rectangular box X'', which is designed to be used as an oven, wherein the baking is done by steam.

This box X" may be made double-walled, or single. If double, the steam from the water-tank passes through the upper pipe L and condenser W, into the space between the walls, and affords the required heat to do the baking of the articles within the box. If the box is single-walled, the steam is let directly into the box; and I have demonstrated, by actual test, that baking can as readily be done by open steam as by any other

The steam, on being condensed, returns to the tank M, through the lower pipe L, the whole simply acting as a circulating water-heater.

The box X" may be disconnected, and set aside, and the wash-tub, or boiler Y, may be attached to the steam and water-pipes L by means of the flanged connections.

This tub is provided with a perforated, or slotted false bottom, Z, upon which the clothes to be cleansed

should be placed.

The upper pipe L conveys the steam from the tank into the funnel-shaped tube 2, to the end of which is attached the vertical tube 3, which is surmounted by the cap 4, against which the column of steam and hot water strikes, and from which it is thrown down violently upon the clothes, and, passing down through the garments, is conducted back to the tank through the lower pipe L.

By this means a constant current of hot water and steam is forced through the clothes, effectually cleans-

ing them from all impurities.

The lower pipe L is connected to the tub below the false bottom.

What I claim as my invention, and desire to secure by Letters Patent, is-

1. The stove, with base A, legs B, fire-box C, chamber F, and auxiliary fire-boxes O, when constructed, arranged, and operating substantially as herein described, in connection with the water-tank M and its connecting-pipes L.

2. The rectangular box, or oven X", in connection with said stove and water-tank, when arranged and

operating substantially as set forth.

ORSON E. CLARK.

Witnesses:

L. C. HYDE, CHAS. A. W. RICE.