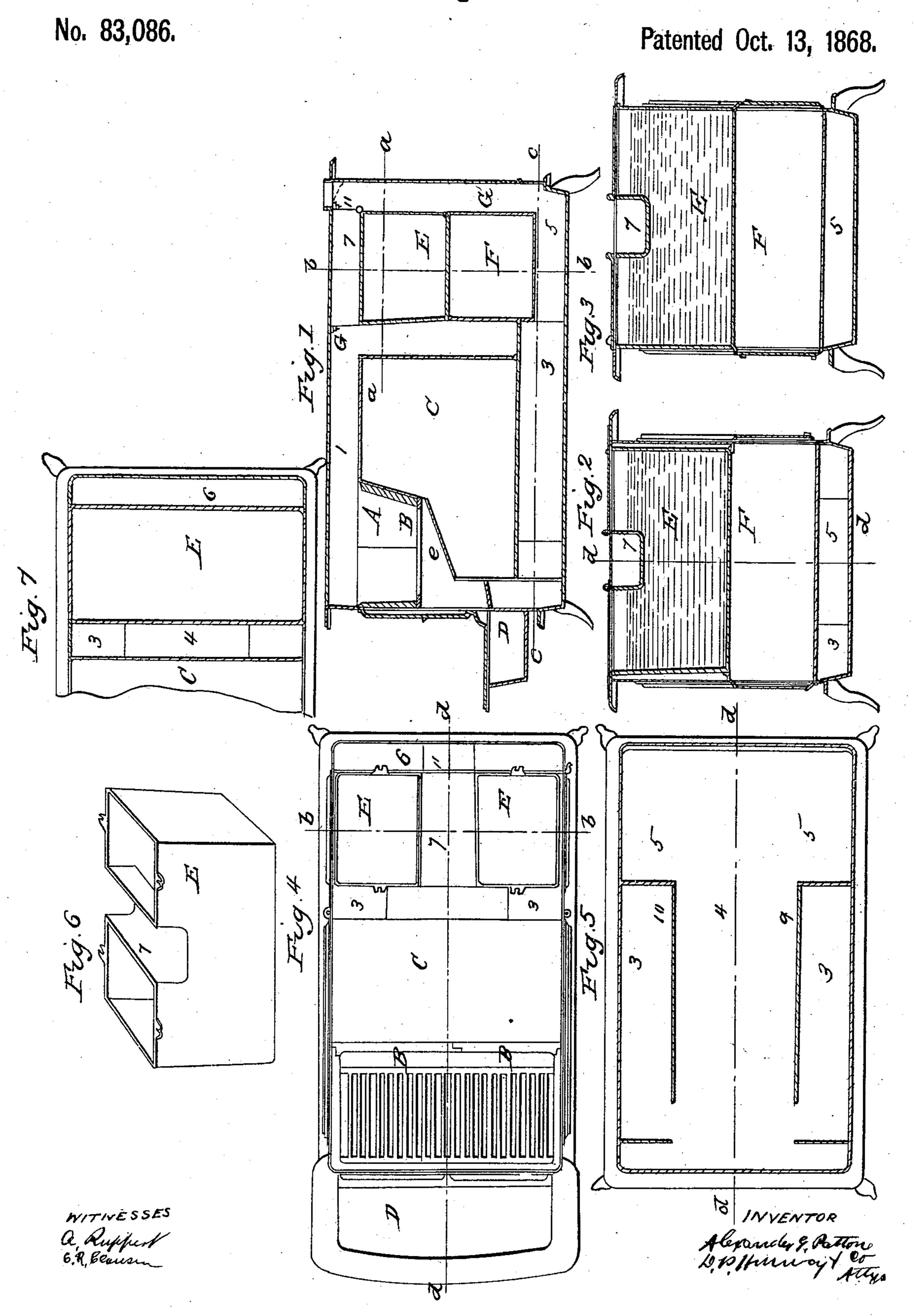
A. G. PATTON.

Cooking Stove.





ALEXANDER G. PATTON, OF TROY, NEW YORK.

Letters Patent No. 83,086, dated October 13, 1868.

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

To all whom it may concern:

Be it known that I, ALEXANDER G. PATTON, of Troy, in the county of Rensselaer, and State of New York, have invented a new and useful Improvement in Cooking-Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which-

Figure 1 is a vertical longitudinal section, on the

line \bar{d} d of fig. 4.

Figure 2 is a vertical transverse section, on line b b of fig. 1.

Figure 3 is a vertical transverse section, on line b b of fig. 1.

Figure 4 is a plan view.

Figure 5 is a horizontal section, on line c c of fig. 1. Figure 6 is a perspective view of the water-reservoir. Figure 7 is a horizontal section, on line a a of fig. 1.

Corresponding letters and figures represent corre-

sponding parts in the several figures.

The object of this invention is an improvement in cooking-stoves, and may be described as consisting of a stove having a water-heating reservoir, and an extra or second baking-oven, arranged therein, and forming a constituent portion thereof.

I am aware that cooking-stoves have been constructed having a water-heating reservoir and an extra or second oven as appendages thereto, but I am not aware that, previous to my invention, there has ever been constructed or invented a stove having these appliances within, and forming a constituent part thereof.

A represents the fire-box, which is lined with firebricks in the usual or any convenient manner.

C is the oven, which may be arranged as shown in fig. 1, or in any other suitable manner.

B is the grate, which is of ordinary construction.

D is the hearth, with its receptacles for ashes, which pass through the grate, and fall upon plate 8, by which they are conveyed thereto.

The above-named parts may be of any approved construction, but, as they do not constitute any part of my present invention, thev need not be more particularly described here.

E is a water-heating reservoir, which is formed or placed within the rear portion of the stove, or that portion which extends rearwards from the first or principal oven. This reservoir extends throughout the entire width of the stove, as shown in fig. 3, or it may be shortened, so as to leave a hot-air chamber on each part of it, as shown in fig. 2. By reference to figs. 1 and 4, it will be seen that a considerable space is left next to the front and rear sides of this reservoir, for the passage of the heated gases.

F is the second or extra oven, formed within the

stove, and arranged directly in the rear of the principal one, and beneath the water-reservoir, it being surrounded on its front and rear sides, and at its bottom, by the flues 2, 3, 5, and 6. This oven, like the principal one, is formed, in the usual way, by plates of iron, secured to the outer plates of the stove, in the usual manner.

G is the top plate of the stove, and is of ordinary construction, except that it extends rearwards sufficiently far to cover the water-reservoir, and project slightly beyond the rear end of the stove, in the usual manner. It also has apertures formed in this rear portion, corresponding to the portions of the waterheater or reservoir, which are situated on either side of flue 7, which passes through it. These apertures are closed by covers, hinged to the plate G of the stove.

1 represents the horizontal flue in the top of the stove, formed by the top and side plates thereof, and by the top plates of the ovens. Through this flue, the heated gases pass to the vertical flue 2, which is formed by the rear plates of the oven, and the front plate of the water-reservoir and extra oven. After passing down this flue, and imparting a portion of their heat to the two ovens, and to the water reservoir, they pass into the lower horizontal flues 3 3, formed by the plates 9 and 10, as shown in fig. 5. Through these flues, they pass forward to, or nearly to, the front end of the stove, where they are directed into the central flue 4, through which they return to space or flue 6, at the rear end of the stove, up which they pass, in contact with the extra oven and water-reservoir, to the outlet.

The above description of the passage of the heated gases from the point of their generation to the point of escape from the stove is regarded as a sufficient description of the flues through which they pass.

7 is a flue, constructed in the top of the water-reservoir, extending from front-to rear thereof, which flue is controlled by a damper, 11, arranged, at its lower end, so that, when desired, the heated gases can be permitted to pass directly from the fire-box to the outlet without enveloping either of the ovens.

Upon reference to the drawings, figs. 1 and 2, it will be seen that the bottom of the water-reservoir forms the top of the extra or second oven, and this is regarded as one of the important features of my invention, inasmuch as it is believed that, in consequence of the abovedescribed construction, it will be quite impossible, or nearly so, to burn or blacken any article of food which may be placed within said extra or second oven, as the temperature thereof will be so modified, by having one of its plates in contact with water, as to prevent such a result.

Having thus fully described my invention,

What I claim, and desire to secure by Letters Pat-

1. A stove, having combined within it a second or extra oven and a water-heating reservoir, which form constituent parts thereof, substantially in the manner shown and described.

2. The combination of the water-reservoir E and the second or extra oven F, when forming fixed or permanent parts of a cooking-stove, and arranged substantially as and for the purpose specified.

3. The arrangement of the flues 1, 2, 3, 4, 5, 6, and 7, with reference to the ovens C F and water-reservoir E, when constructed as herein shown and described.

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

ALEXANDER G. PATTON.

Witnesses:

D. P. HOLLOWAY, J. M. BLANCHARD.