R. D. GRANGER.

Cooking Stove.

No. 4,394. Patented March 7, 1846.

Fig. 2

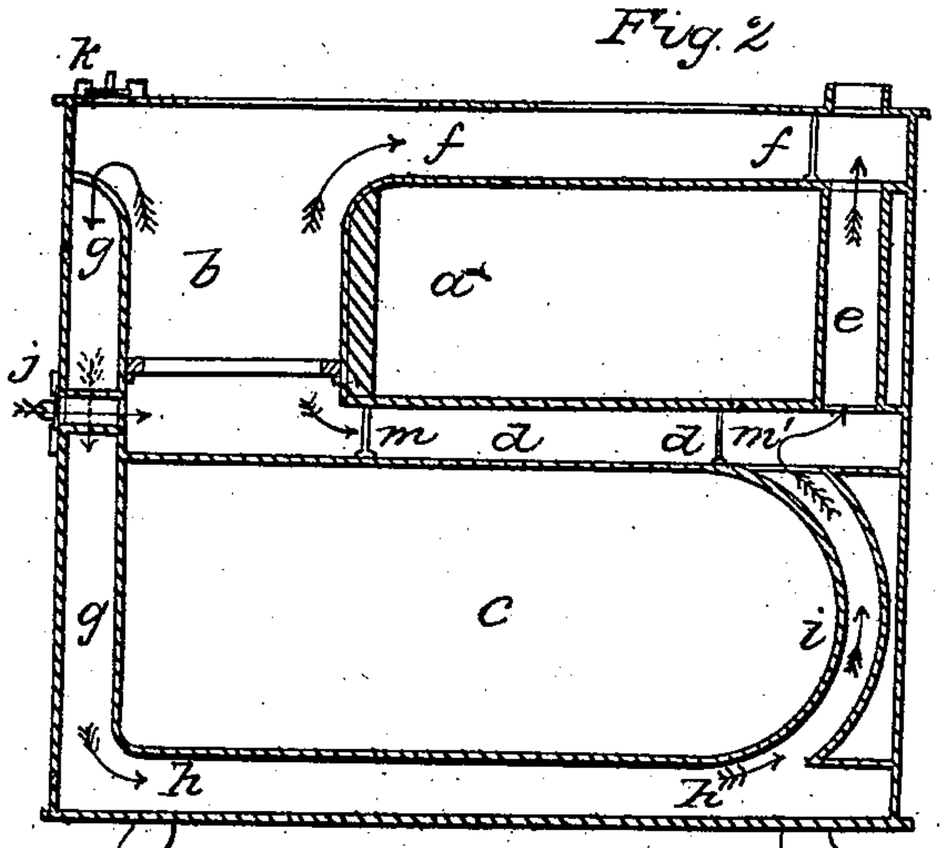
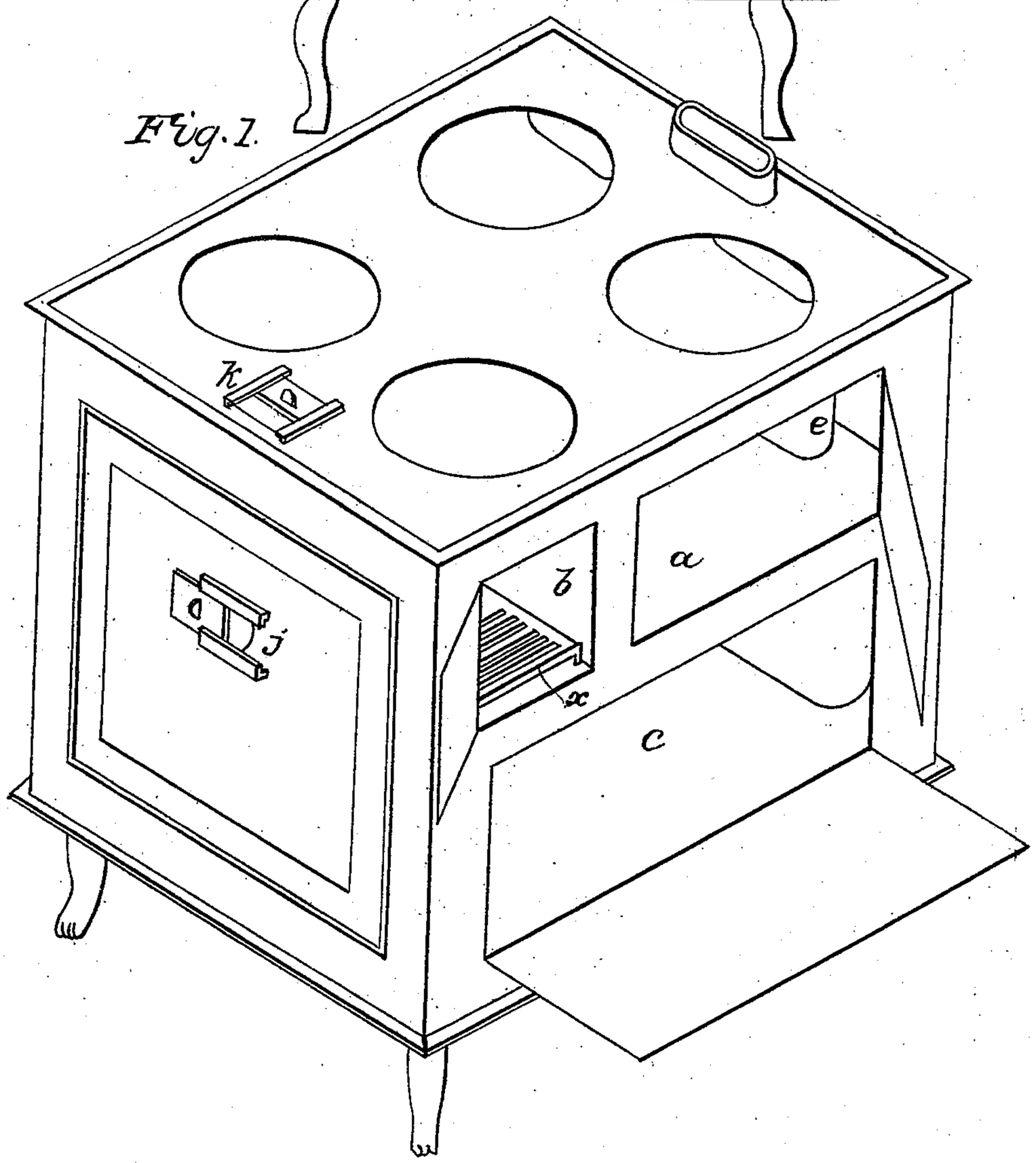


Fig. 1.



UNITED STATES PATENT OFFICE.

R. D. GRANGER, OF ALBANY, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 4,394, dated March 7, 1846.

To all whom it may concern:

Be it known that I, RENSSELAER D. GRANGER, of Albany, in the county of Albany and State of New York, have invented a new and Improved Double-Oven Cooking-Stove; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents an isometrical view and Fig. 2 a vertical longitudinal section.

The same letters refer to the same parts in both figures.

a is the upper oven placed upon a level with the fire-box *b*.

c, is the lower oven divided from the upper by the flue *d d* formed by the upper plate of the lower, and the bottom plate of the upper oven.

e is a pipe or flue placed in the hinder part of the upper oven *a*, forming a communication between the flue *d d* beneath the upper oven and the flue *f f* above the same.

g g is a diving flue descending in front of the fire box and between it and the front plate of the stove, communicating with the flue *h* beneath the lower oven *c*.

i is a broad curved flue, the horizontal section of which may be an oblong parallelogram, ellipse or any other convenient form,—making a communication between the flue *h h* beneath the bottom oven, and the flue *d d* above the same.

j is a tube passing from the front of the stove, (the end opposite the smoke pipe being considered the front,)—through the diving flue *g g* without communicating therewith into the fire chamber *b*, and serving to introduce the draft of air necessary to support combustion. It enters below the grate *x*.

k is a register placed upon or near the top of the stove in front intended also to introduce a draft of air from above upon the fuel in the firebox.

The operation of the stove is as follows: If it be intended to use the upper oven only the fire having been placed in the fire-box *b* the damper *l* is opened and a draft admitted at *j*. To cause the current of hot air to pass under the bottom of the upper oven, the damper *l* and the register *j* are closed and the dampers *m m'* and the register *k* opened. When the lower oven is to be used, the dampers *l* and *m* are closed and the register *j* opened. The current of hot air then passes down the diving flue *g g* in front of the fire box,—beneath the lower oven through the curved flue *i*, and thence by the flue *c* to the smoke pipe; as indicated by the arrows upon the drawings. The object of curving the flue *i* is to promote a greater degree of radiation in the oven and throw the heated current farther forward beneath the upper oven *a*.

I claim:—

1. The curved flues in the rear of lower oven herein shown and described serving to throw the heat somewhat backward upon the bottom plate of the upper oven.

2. I also claim combining with the two ovens, and their respective flues the upper and lower draft, J and K arranged and operating substantially as set forth.

RENSSELAER D. GRANGER.

Witnesses:

AMOS B. LITTLE,

Z. C. ROBBINS.