R. D. GRANGER.

Cooking Stove.

No. 4,567. Patented June 13, 1846.

Fig: 2.

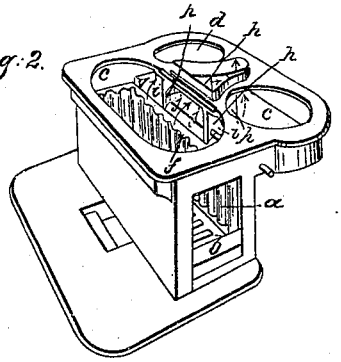


Fig: 3.

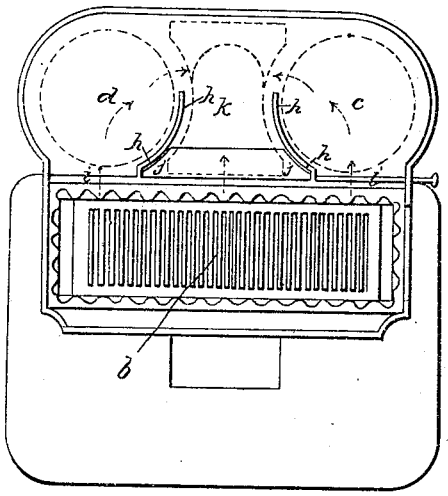


Fig: 1.

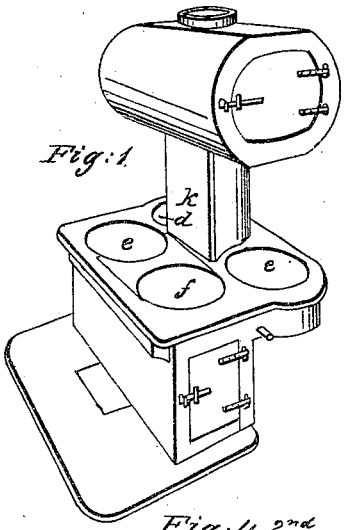


Fig: 4.

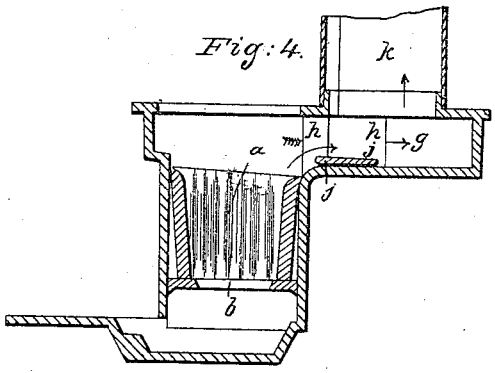
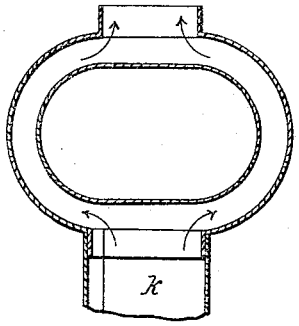


Fig: 4. 2nd



UNITED STATES PATENT OFFICE.

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

COOKING-STOVE.

Specification of Letters Patent No. 4,567, dated June 13, 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, useful, and Improved Parlor 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.

Figure 1 is a perspective view of one of my stoves entire. Fig. 2 is a perspective view intended to show the construction of the interior parts of the stove. Fig. 3, is a top view, supposing the upper plate removed. Fig. 4 is a transverse vertical section, and Fig. 4² is a section of the elevated oven attached to the stove.

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

The nature of my invention consists in so constructing parlor cooking stoves, having elevated ovens attached, that they may be provided with four boiler holes, and at the same time the pipe connecting with the elevated oven and conveying the heat thereto, may be located near the fire-vault and either receive the heated current directly therefrom, or after it has passed under the rear boilers;—and also, in forming this connecting pipe of such a horizontal section, that the portion nearest the fire-vault, may offer a broad passage to the hot air, for the purpose of more readily and effectually heating the elevated oven.

a is the fire-vault;—*b*, the grate;—*c*, *d*, *e*, and *f*, the boiler holes, two of which are placed directly over the fire vault,—and the two others open into a horizontal flue *g* (Fig. 4) formed immediately under the hinder part of the top plate which projects back from the body of the stove. This flue is subdivided by the curved division-strips *h h*, *h h*, which, when the damper *j j*, (Figs. 3 and 4) which is located between them, is closed,—serve to prevent the heat from passing into the pipe *k*, leading to the oven, (Fig. 4²) before it has acted upon the rear boilers. These division strips should extend from near the front edge of the fire box, sufficiently far back to effect the object before mentioned; and may be curved so as to form a portion of a circle concentric with the boiler-holes. When it is desirable to throw as great a portion of the heat as possible upon the oven, the damper *j j* is opened, and the hot air passes directly into the connecting pipe *k*, as indicated in the drawings by full lined red arrows. When the heat is to be concentrated upon the two rear boilers, the damper *j j* in the middle flue is shut, and the hot air reaches the pipe *k*, by passing through the two side flues *i*, *i*, and around the back ends of the division strips *h h*, *h h*, as indicated by the dotted red arrows.

The connecting pipe *k* may have any convenient horizontal section,—being either round, flattened or triangular;—but I prefer the form exhibited in the drawings as affording the largest passage to the products of combustion, at the smallest expense of room. The sides contiguous to the boiler holes are formed with curves corresponding thereto, and the front portion presents a broad passage to the heated current. The hinder portion may be either semi-cylindrical, or of the same form as the front.

The rear boiler holes and the form and position of the connecting pipe *k* are indicated upon Fig. 3 by red lines.

I claim—

1. Locating the pipe communicating from the body of the stove to the elevated oven,—between the two back boilers, so that its front lower edge shall be contiguous to the fire,—in combination with the division strips *h h*, *h h*, and the damper *j j* arranged and operating as herein described and shown, viz, so as to form one center flue beneath the connecting pipe *k* which flue may be closed at pleasure by the damper *j j* in order to throw the heat through two side flues *i i*, and cause it to pass under the rear boilers before it escapes into the connecting pipe *k*.

2. I further claim forming the connecting pipe of the horizontal section herein shown and described,—that is to say having the pipe made broad on its front side next the fire for the purpose of obtaining a large capacity of pipe, and also to bring the broadest portion of its section in contiguity with the fire and accommodate the boilers in the rear.

R. D. GRANGER.

Witnesses:

R. S. G. BANCROFT,

S. O. SHEPARD.