

H. BROWN.  
Cooking Stove.

No. 83,688.

Patented Nov. 3, 1868.

Fig. 1.

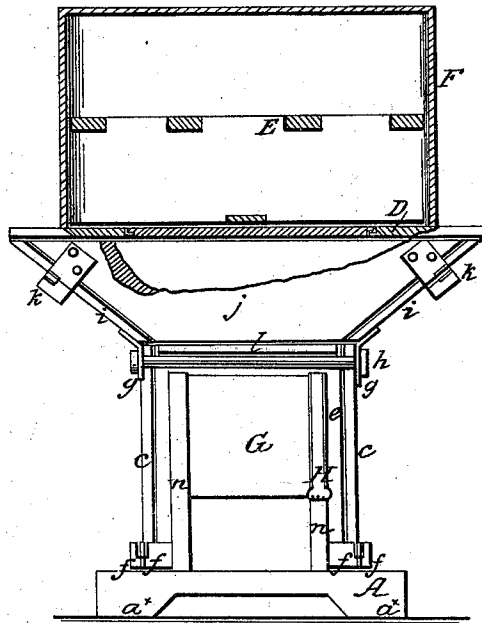
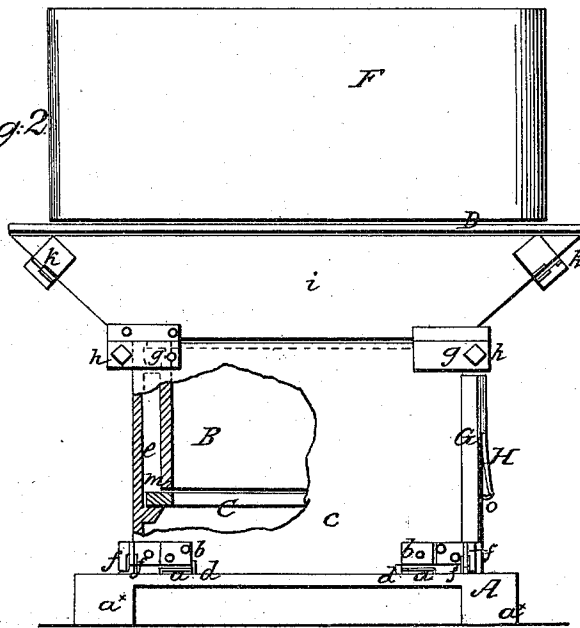


Fig. 2.



WITNESSES.  
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HARVEY BROWN, OF HARLEM, NEW YORK.

Letters Patent No. 83,688, dated November 3, 1868.

## IMPROVEMENT IN COOKING-STOVES.

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, HARVEY BROWN, of Harlem, in the county of New York, and State of New York, have invented a new and useful Improvement in Cook-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 make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of my invention, partly in section.

Figure 2 is a side view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved cook-stove, and has for its object simplicity of construction, facility in adjusting the several parts together and taking them apart, the obtaining of an oven of large capacity in proportion to the dimensions of the stove, economy in fuel, the preservation of the fire-chamber from heat, and general adaptability for household-use.

In the accompanying sheet of drawings, A represents the base of the stove, which base is of oblong form, and provided with pendent projections or feet, *a*<sup>x</sup>. This base may project out from the body of the stove, entirely around, or at its front only, to form a suitable hearth-plate. I do not confine myself to any particular shape or configuration of the base.

Upon the base, A, there are secured, or cast with it, four cleats, *a*, slightly elevated at one end, to admit of corresponding cleats, *b*, being fitted under them, the cleats *b* being attached to or cast with the side plates C of the body of the stove. (See fig. 2.) The cleats *b* may be prevented from sliding out from underneath the cleats *a* by means of pins, *d*.

The body of the stove is of quadrilateral form, composed of the upright sides *c c*, and front and rear upright plates *e e*, the lower ends of the plates *c e* being connected by notched cleats, *f*, hooking into each other, as shown in both figures, and the upper parts of the side plates *c c* have plates or lugs, *g*, attached near each end, and through which horizontal bolts, *h*, pass.

By this means the upright plates of the body of the stove are firmly connected together, and the body of the stove secured to the base.

The upper part of the stove, above the upright plates *c e*, is of flaring form, and composed of two side plates, *i i*, and front and rear plates, *j j*, connected at their upper parts by cleats, *k*, hooking or catching into each other. The lower parts of the flaring side plates *i i* are connected with the plates or lugs *g*, through which the bolts *h* pass.

The bolts *h* are directly underneath lips, *l*, which extend nearly the whole width of the upright end plates *e e*.

The side and end plates, *i i, j j*, of the stove have such an inclination that the space included between their upper edges will be equal in area to twice the

area of a horizontal section of the lower part of the stove.

B represents the fire-box of the stove, which is cast or otherwise made separately from the body of the stove, and rests upon a grate, C. A space, *m*, is allowed between the fire-box and the plates *c c, e e*, to admit of air passing up between, into the top part of the stove.

This current of air prevents the fire-box from burning out, and at the same time feeds the upper part of the flame with oxygen, and insures the consumption of the inflammable gases in the upper part of the stove, the flaring form or which gives the upper part of the stove sufficient capacity to utilize a large volume of heat.

D represents the top plate of the stove, which is fitted on the tops of the sides and ends *i i, j j*, and may be secured in position by cleats.

This top plate is provided with holes and lids, so that the ordinary cooking-utensils may be used for boiling, stewing, &c.

The oven is on the top of the stove, and it consists of a rack, E, covered with a box, F, of sheet or cast-iron. The former material would probably be preferable.

The rack E is composed of two upright plates, connected together by a series of parallel slats, and is of sufficient size to fit with easy contact within the box F.

In using the oven, the rack is first placed upon the top of the stove, with the article to be cooked upon it, and then covered with the box F.

By this arrangement, the article is raised above the stove about midway of the box, in which position it receives the heat from the plate D, and that radiated from the top of the box, in about equal proportions.

The upper flaring part of the stove admits of an oven of large capacity being used, as will be fully understood by referring to figs. 1 and 2.

G is the ash-pit door, which is fitted and works between guides, *n n*, at the front side of the stove, and H is a spring, attached to one of said guides, and provided, at its lower end, with a projection, *o*, to fit into any of a series of perforations in the door G.

By this arrangement, more or less air may be admitted to the fire-box, as required, or the draught shut entirely off, with the greatest facility.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The cleats *a b*, attached respectively to the sides *c c* of the body of the stove, and the base, A, for the purpose of securing the body of the stove to its base, substantially as shown and described.

2. The combination of the hooked cleats *f k* with the lugs *g* and bolts *h*, for the purpose of securing together the plates *c c, e e, i i, j j* of the stove, substantially as set forth.

3. The pins *d*, or their equivalents, in combination with the cleats *a b*, arranged substantially as and for the purpose specified.

4. The oven, placed upon the top of the stove, consisting of elevated rack *E*, covered with the closed box *F*, whereby the article to be cooked is raised above the stove, to receive the heat from the plate *D*, and that radiated from the top of the box, in about equal proportions, as herein shown and described.

5. The combination of the upper flaring or inclined plates *i i, j j*, of the stove, with the upright plates *c c, e e*, of the lower part of the same, when used in connection with the rack *E* and cover *F*, substantially as and for the purpose set forth.

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Witnesses:

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