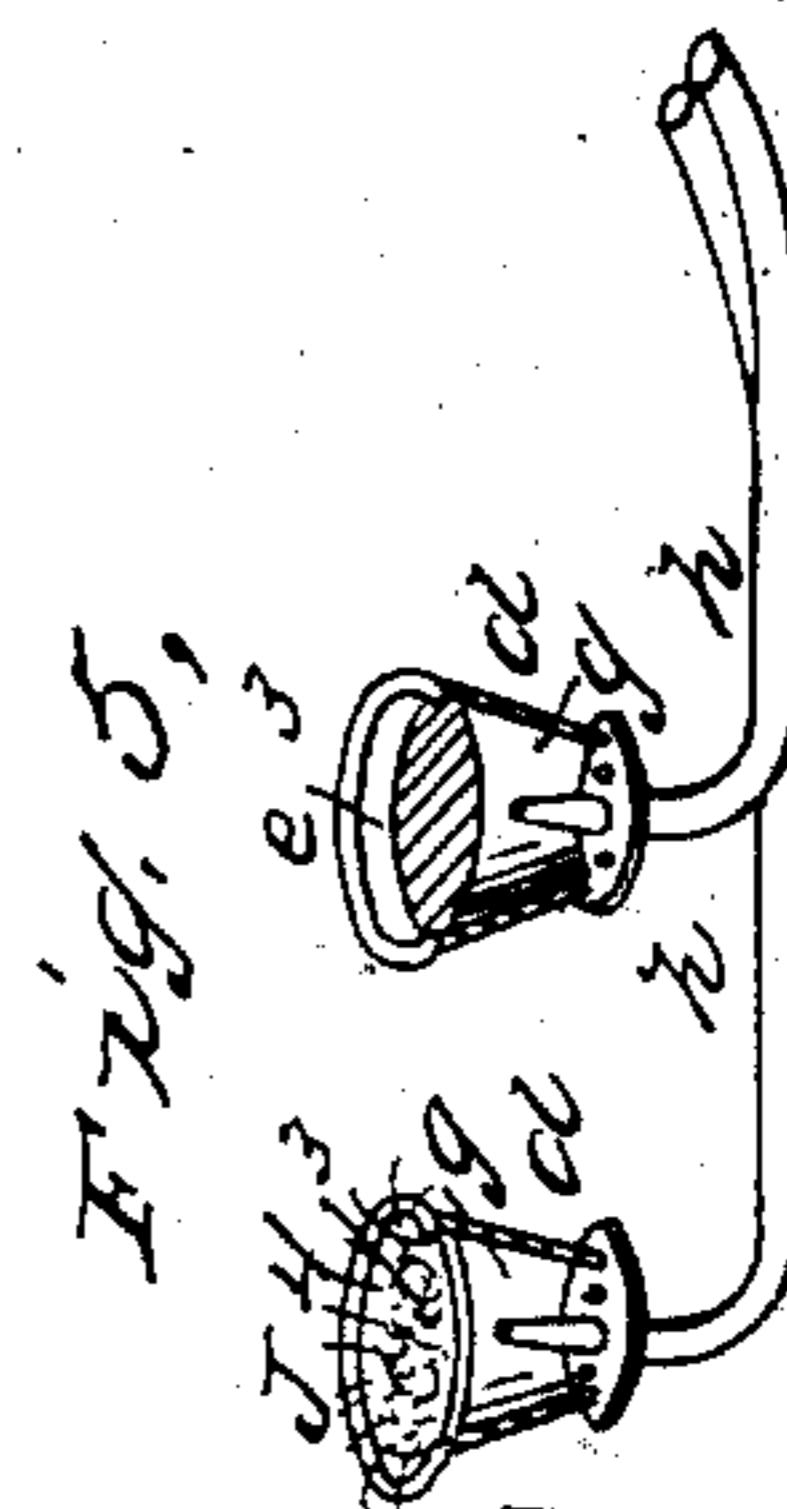
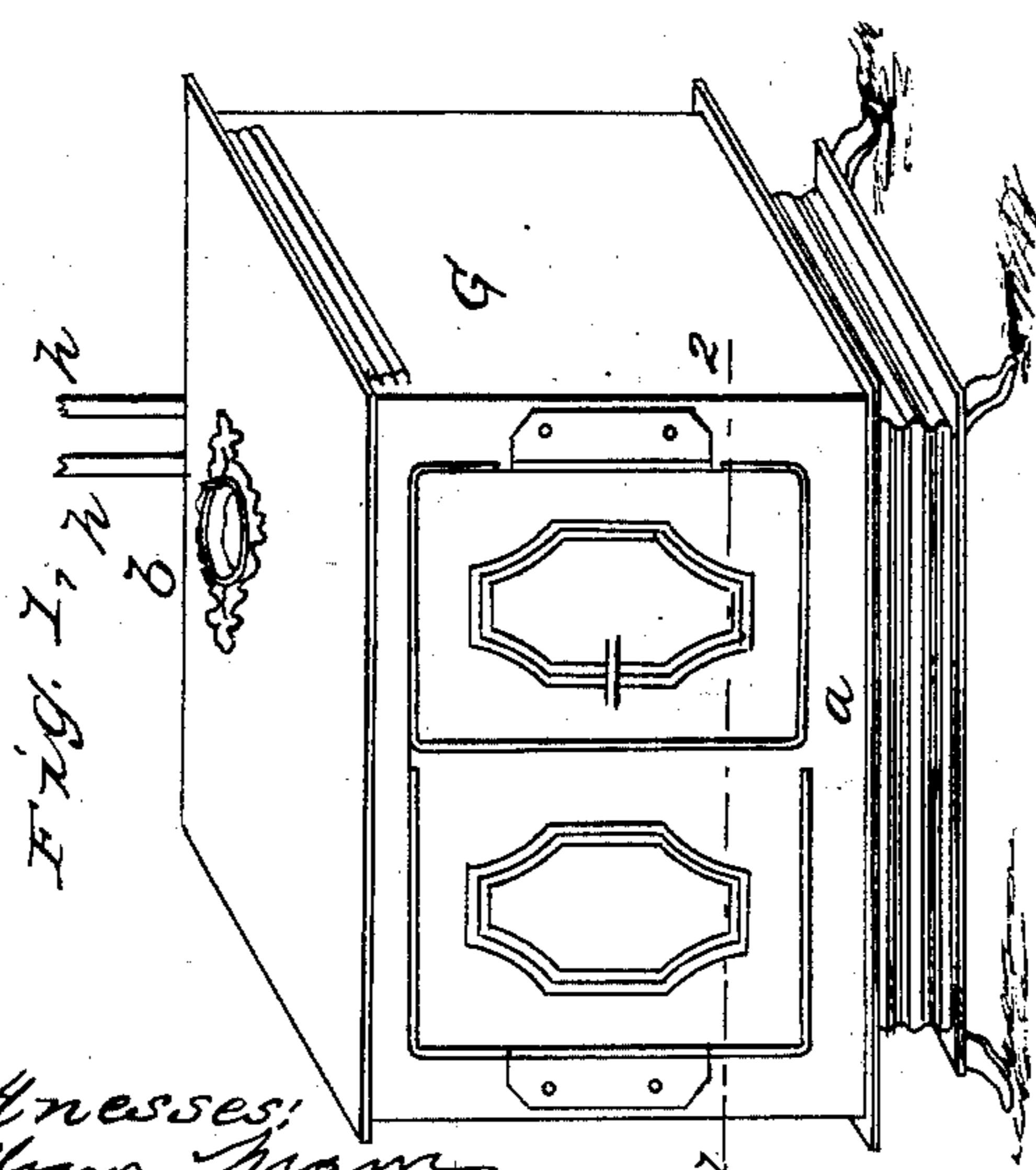
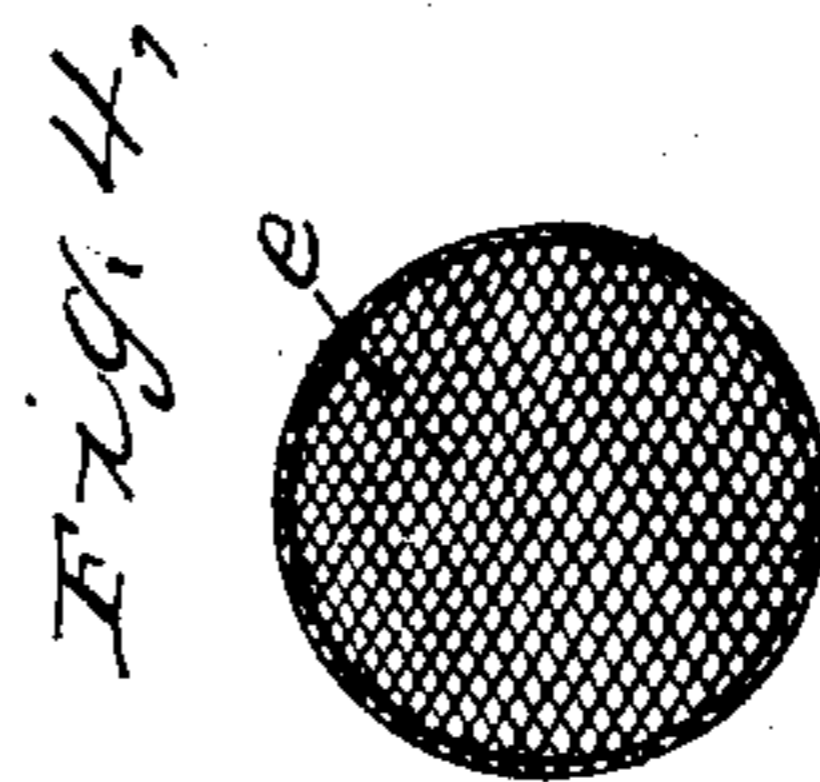
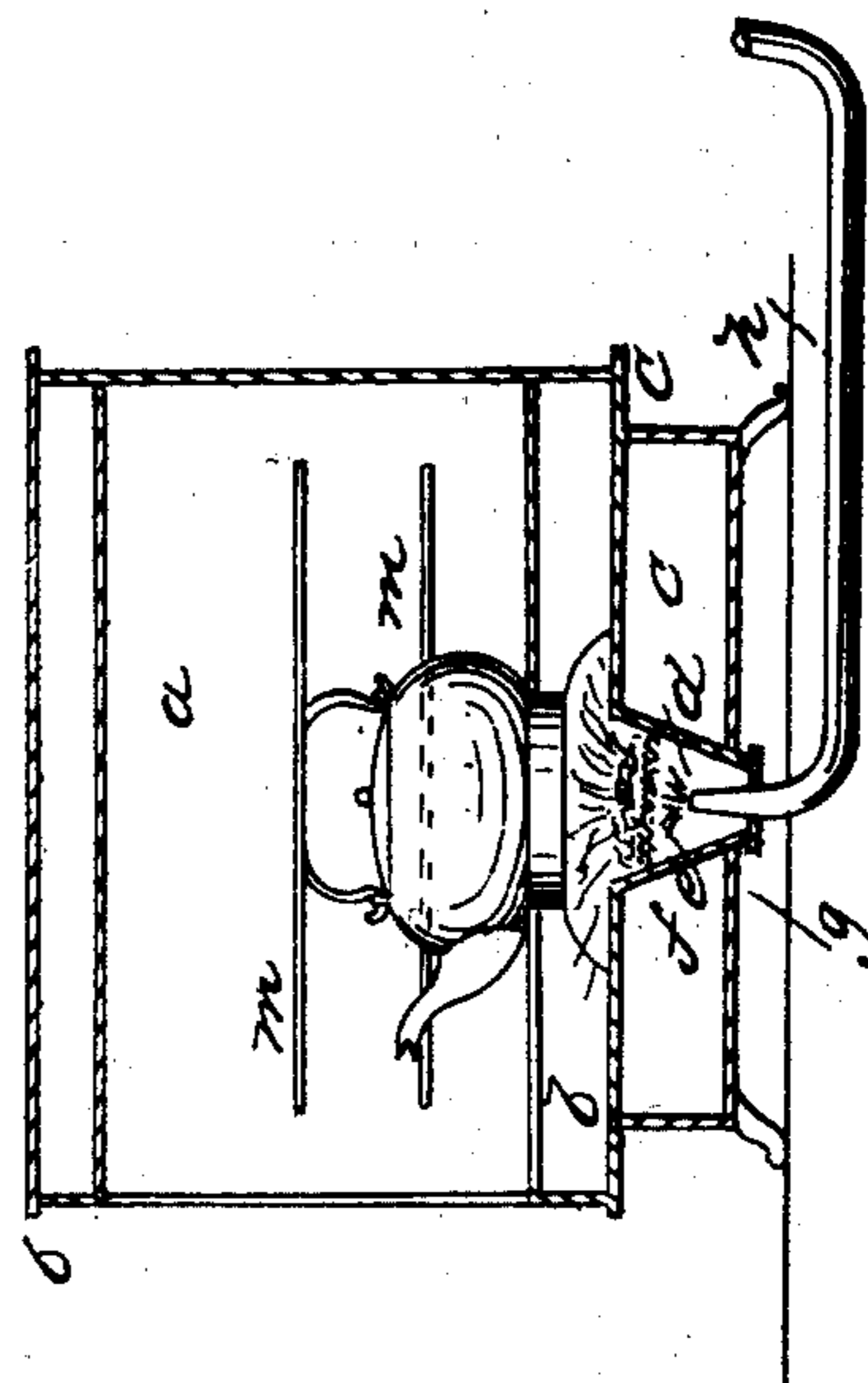
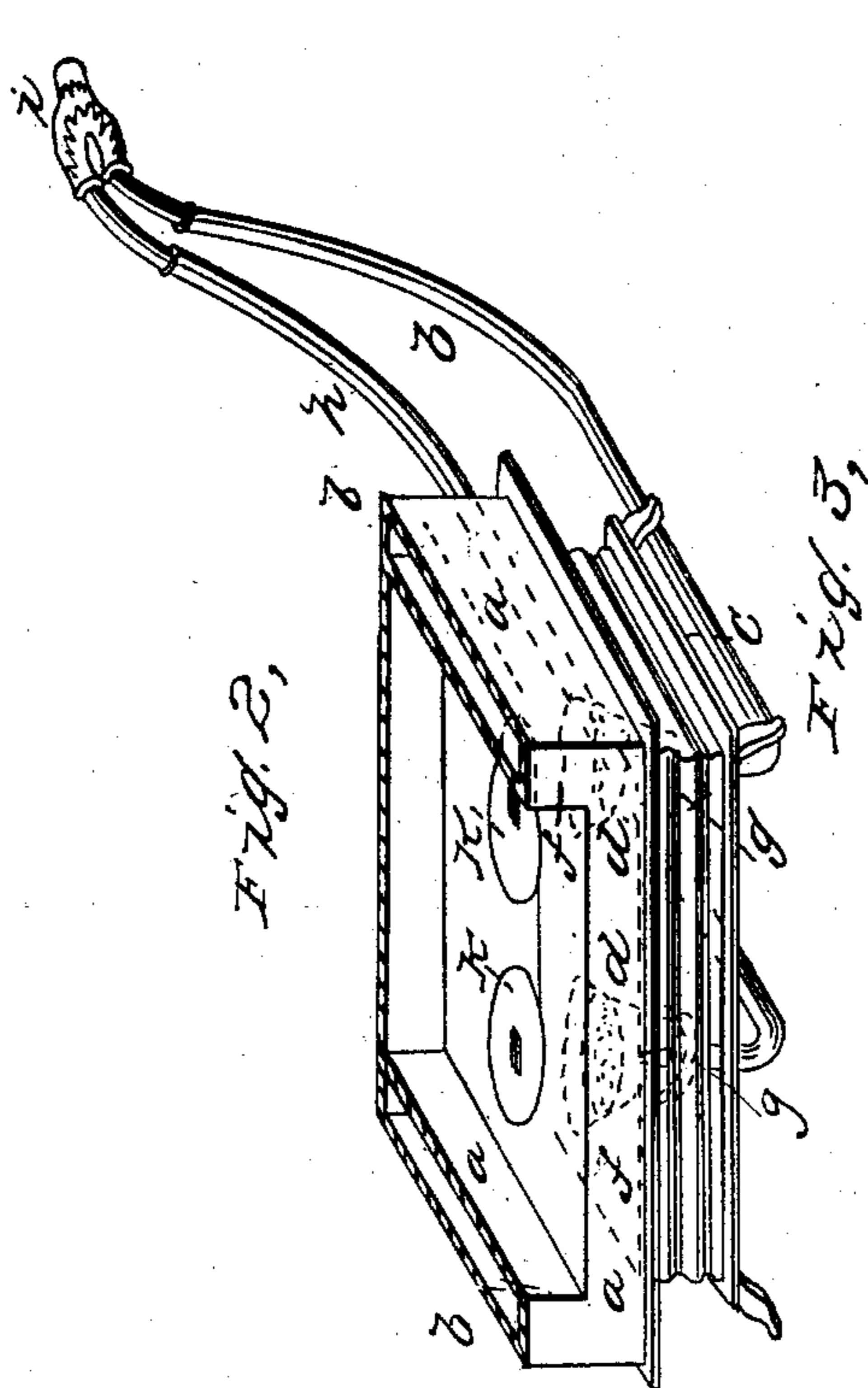


I. CRESSMAN.

Gas Stove.

No. 30,669.

Patented Nov. 20, 1860.



Witnesses:
William Ham
Jacob Bruster

Inventor:
Isaac Cressman

UNITED STATES PATENT OFFICE.

ISAAC CRESSMAN, OF PHILADELPHIA, PENNSYLVANIA.

GAS-STOVE.

Specification of Letters Patent No. 30,669, dated November 20, 1860.

To all whom it may concern:

Be it known that I, ISAAC CRESSMAN, of the city of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Gas-Burning Stove; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view of the stove. Fig. 2 is a sectional view on the line 1—2 Fig. 1, also in perspective. Fig. 3 a transverse section showing the arrangement of the fire &c. Fig. 4, a plan of the circular fire grate. Fig. 5, a perspective view, partly in section, of the conical cups, containing the gas burners, fire grate and pumice; in the cup marked 3, the grating shows, the pumice being removed for that purpose.

Like letters refer to like parts.

Letter *a* the outside or frame of the stove, in which I also include the inside casing as shown in Figs. 2 and 3 and also marked *a*; *b* hot-air passages on each side of the stove, the same being carried over the top, and connecting with the regulator *l*; *c*, a casing or double bottom, containing the cups *d*; *d* conical cups; *e* fire grate; *f*, pumice, see Figs. 2, 3 and 5; *g*, burners; *h*, flexible tubing connecting with the gas-pipe by means of the double gooseneck *i*; *k k*, covers similar to what is in all stoves; *l* regulator; *m* projections for shelves.

The nature of my invention consists in the arrangement hereinafter described at two opposite sides and top and bottom, of double wall or plates so as to constitute a continuous jacket or hot air chamber in which the products of the combustion of gas may be allowed to circulate, and in combination therewith providing a number of conical cups as shown in Figs. 2, 3 and 5; letter *d*, which takes the place of the fire box in coal and wood burning stoves; the burners *g*, passing through the bottom of the conical shaped cups is connected with the most convenient gas pipe by means of the flexible tubes *h h* and the gooseneck *i*, said gooseneck having as many branches as required, each pipe should also be provided with a cock, so that if but one burner is to be used the gas can be shut off from the others. In the bottom of the cup *d*, are holes, as shown

in Fig. 5, for the purpose of supplying fresh air to the burners; the pumice stone is added in this arrangement for the purpose of increasing the intensity of the heat; of this fact any one may satisfy himself by experimenting with and without the pumice. The other arrangements are so very similar to all other stoves that a full description of the same is not required.

Its operation is as follows, the gas being lighted, and the grating *e* being put in its place in the cup *d*, as shown in the several figures, or more particularly in the cup marked 3, Fig. 5, a quantity of broken pumice stone is put upon the grating, (the covers *k k* being first removed). A kettle or any required cooking utensil being put in its place, as shown in Fig. 3, it will be found that but a limited time will be requisite to boil the water. Should it be desired to bake or roast it will be necessary to light more burners, when the result will be equally satisfactory, the cooking being done at a much less cost, and certainly more cleanly than by either wood or coal of course the expense will be increased as we increase the number of burners, but not to the same extent as in the gas-burning stove already before the public. The addition of the pumice renders this the only truly economical gas-burning stove, as by its means we dispense with the great number of jets used in all other stoves, one jet will be found sufficient with the pumice to boil in a very short time a kettle of water, while without the pumice it would be almost impossible.

I do not confine myself to any particular shaped stove, as the bare shape is not material, nor do I limit myself to any particular number of burners or cups, as the same may be increased to any desirable extent.

I do not claim the invention of a gas-burning stove, there being many of that kind before the public, nor do I claim separately all the parts used in my invention; but what I do claim as my invention and desire to secure by Letters Patent, is—

The combination with gas stoves, oven or heaters having double walls or plates, at two opposite sides and top and bottom thereof, so as to constitute a continuous jacket or hot air chamber in which the products of the combustion of gas may be allowed to circulate at pleasure of a burner or burners

surmounted with inverted truncated cone-shaped caps having air openings in the bottom and a flange on the top, so that the said cups may be supported in corresponding holes in the bottom plate of the oven in such a manner as that it or they shall be flush or nearly so with said bottom plate and that an

unobstructed circulating medium for the heated gases may be obtained.

ISAAC CRESSMAN.

Witnesses:

WILLIAM MAURO,
JACOB BUSSEE.