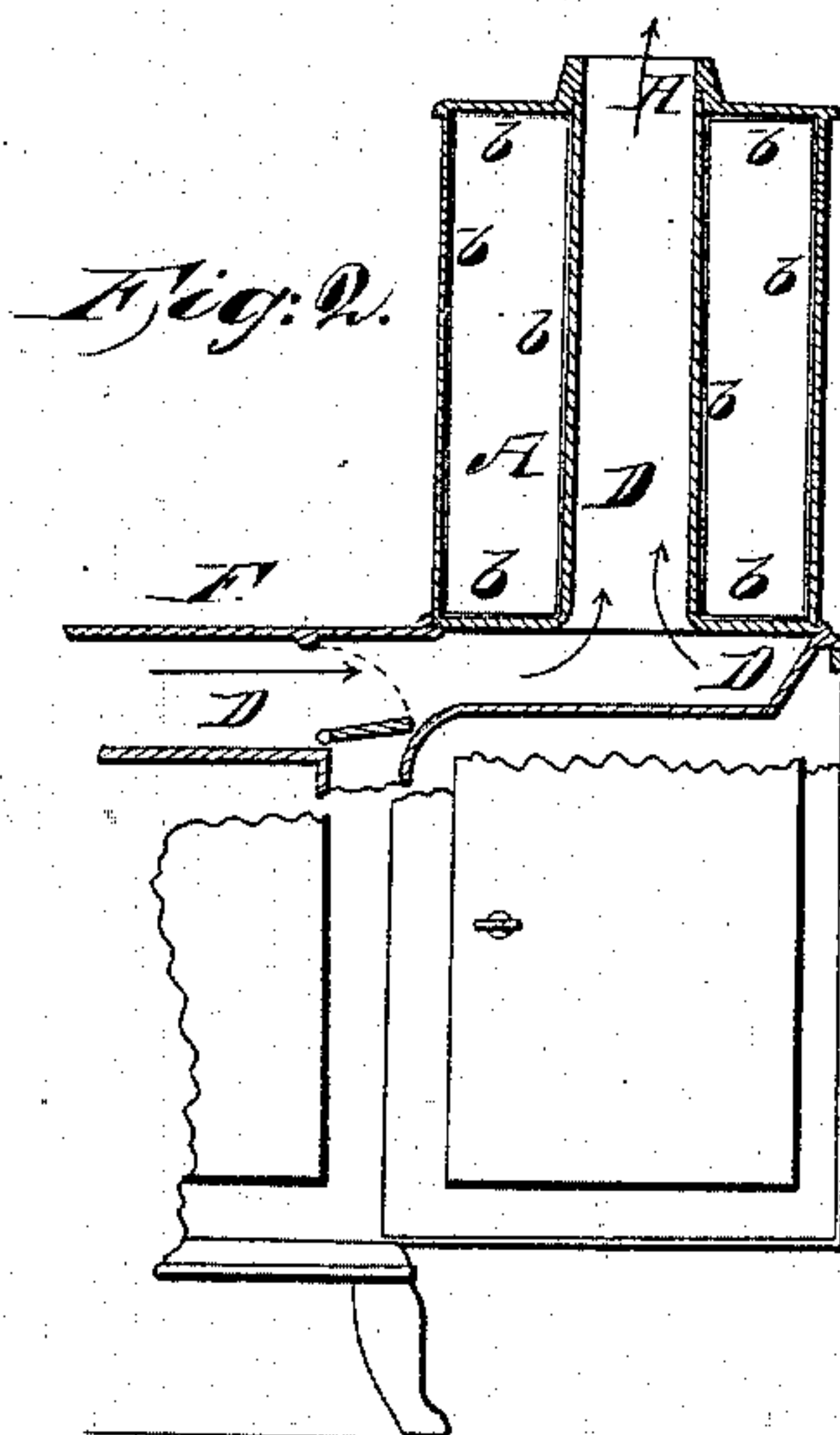
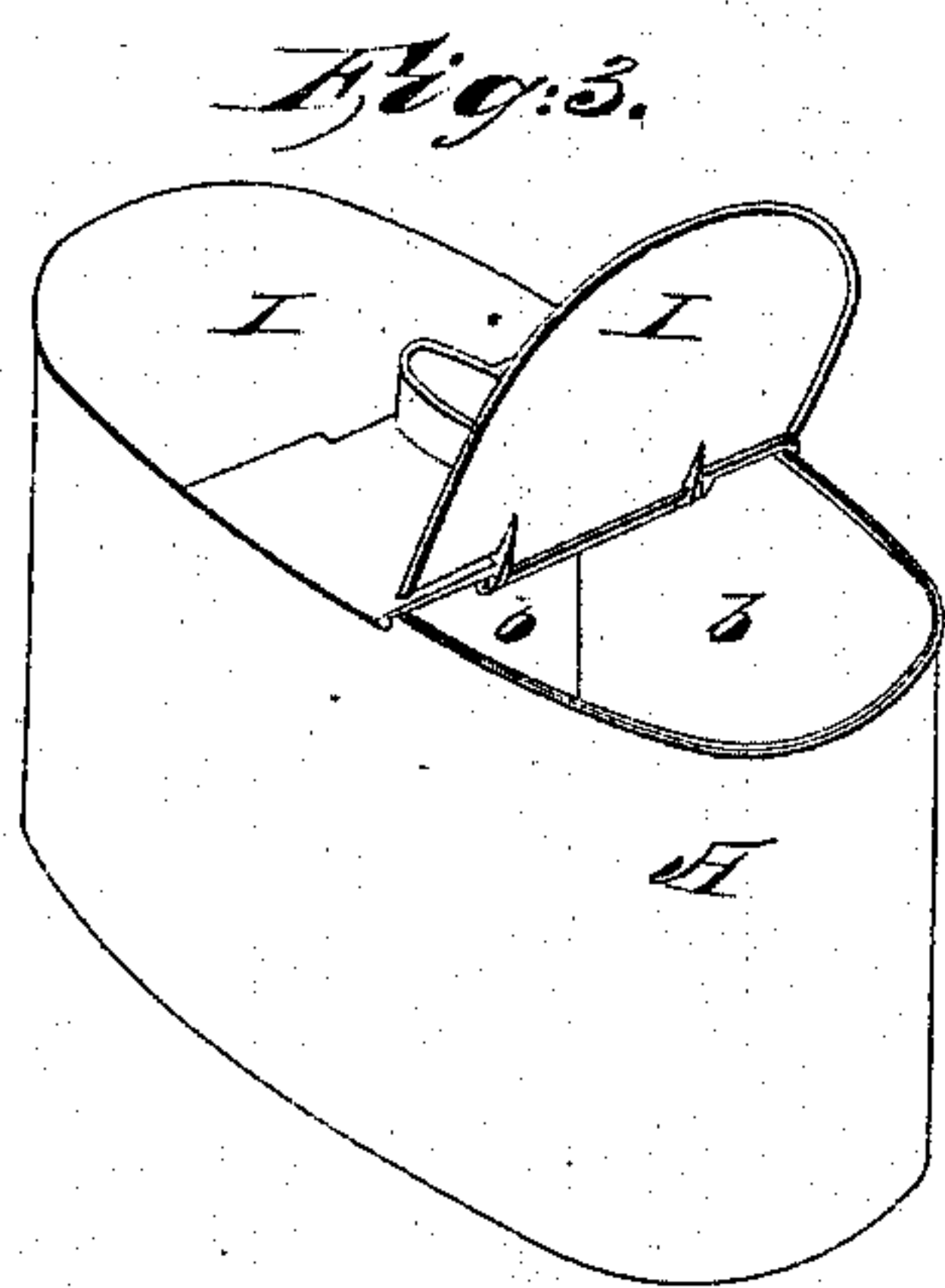
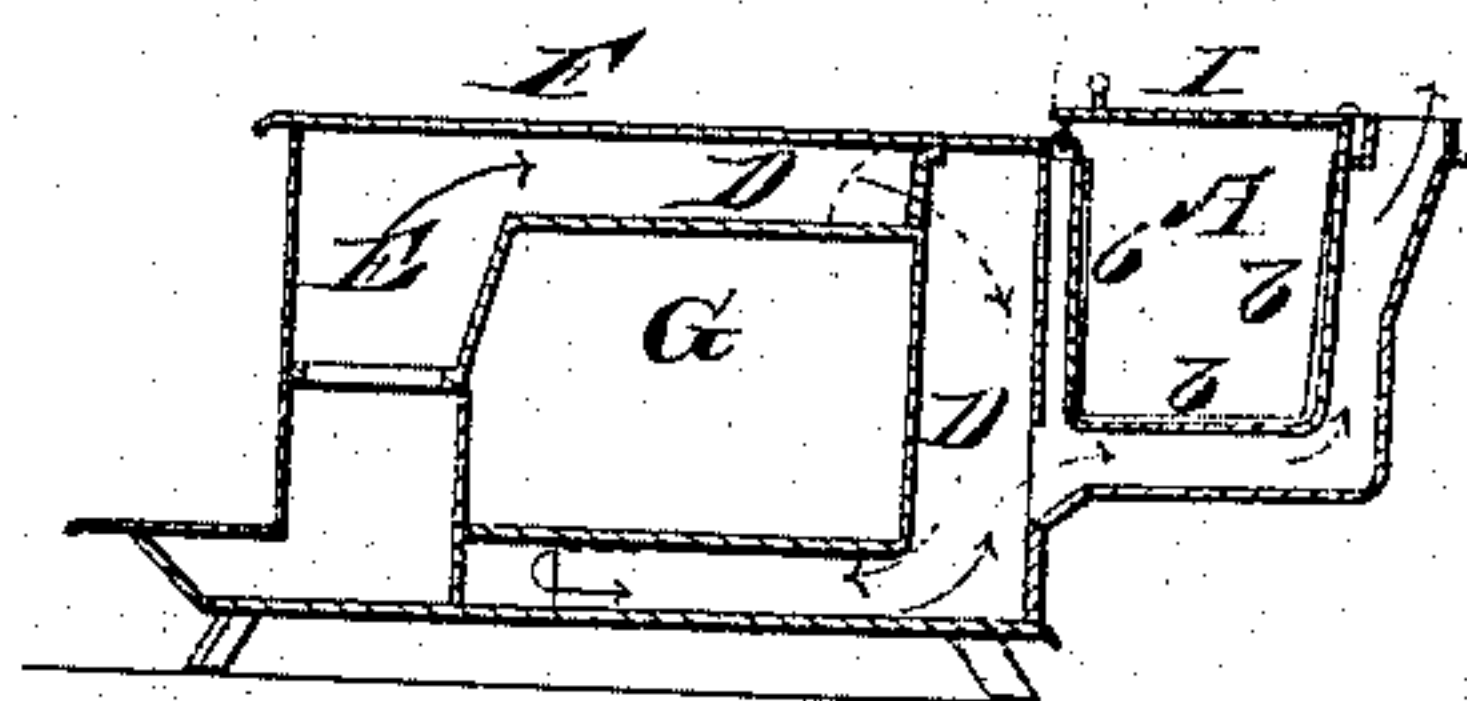
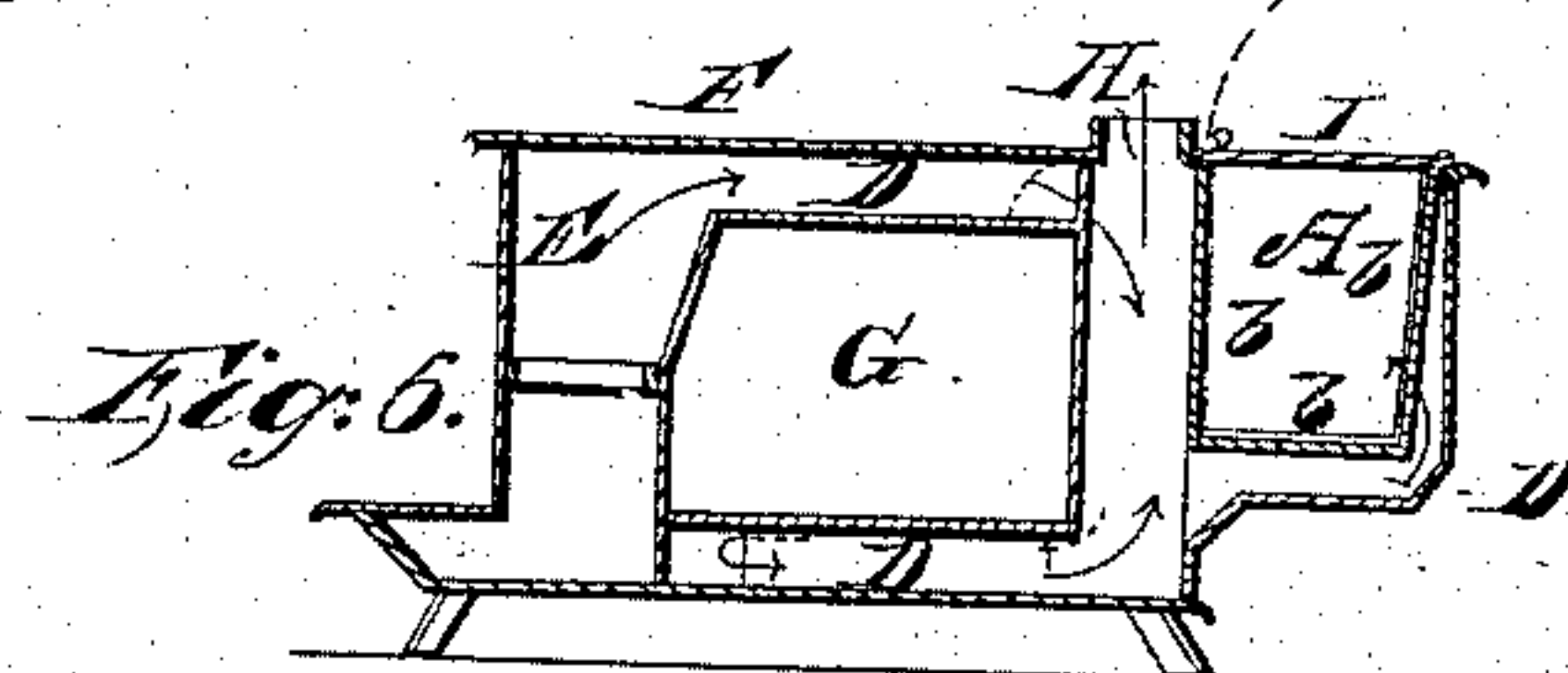
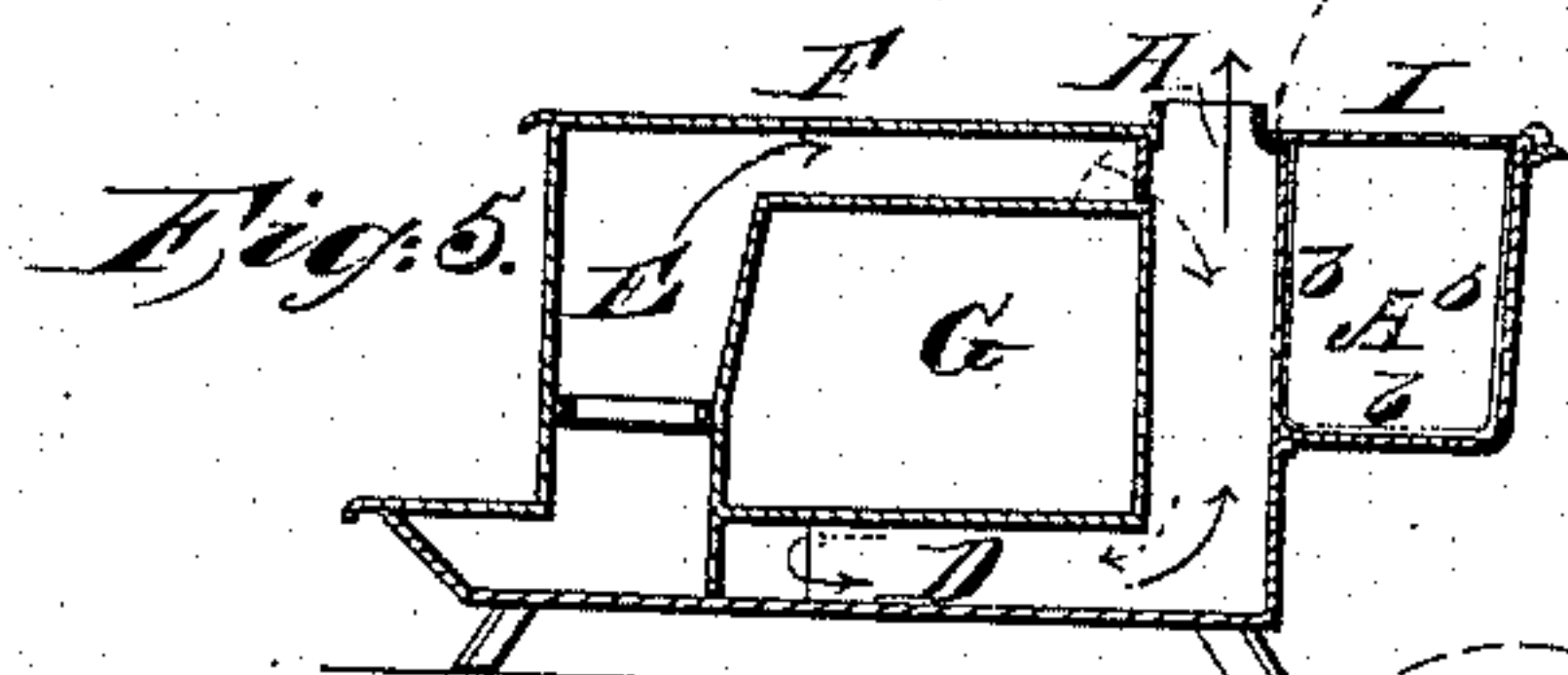
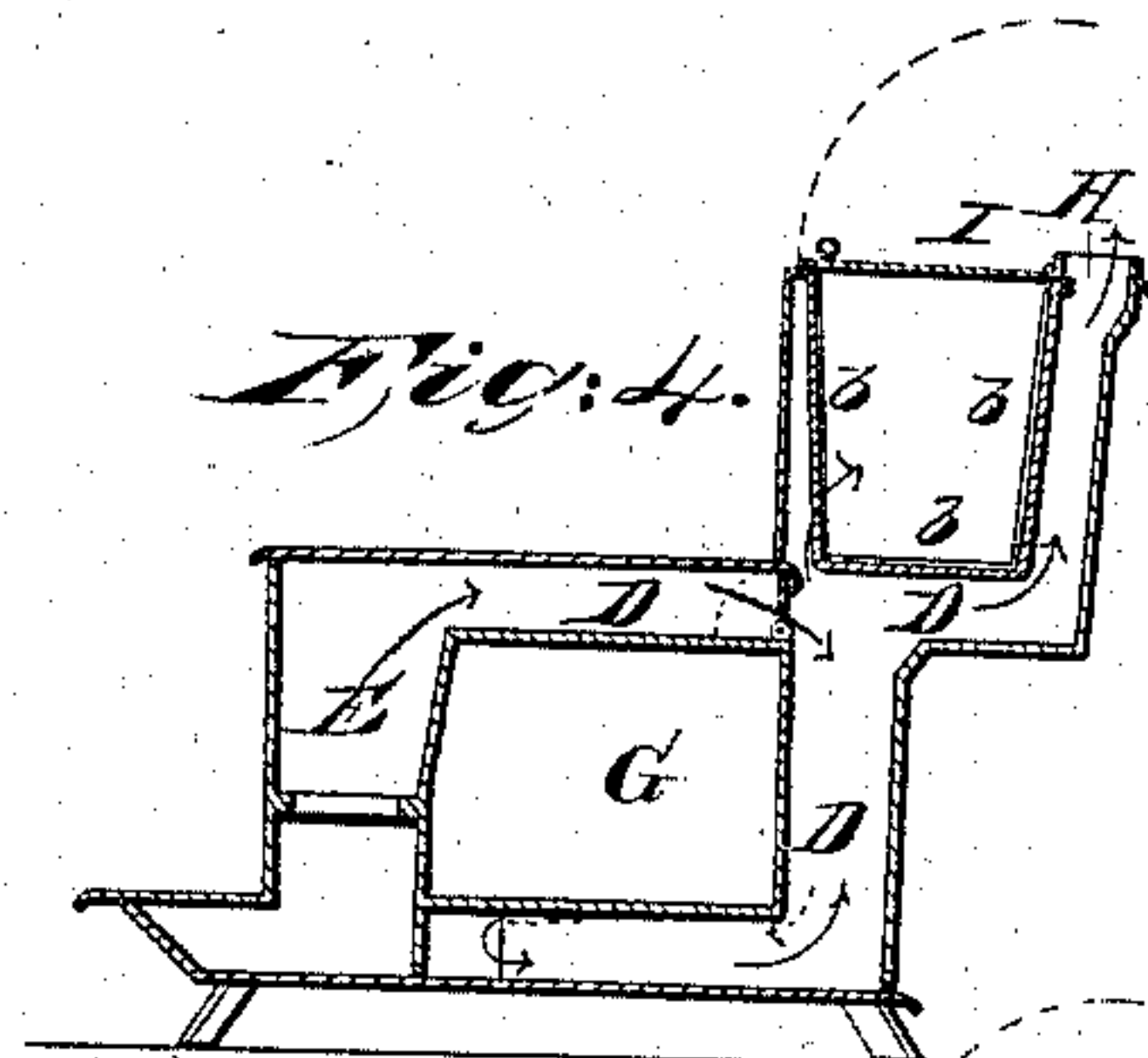
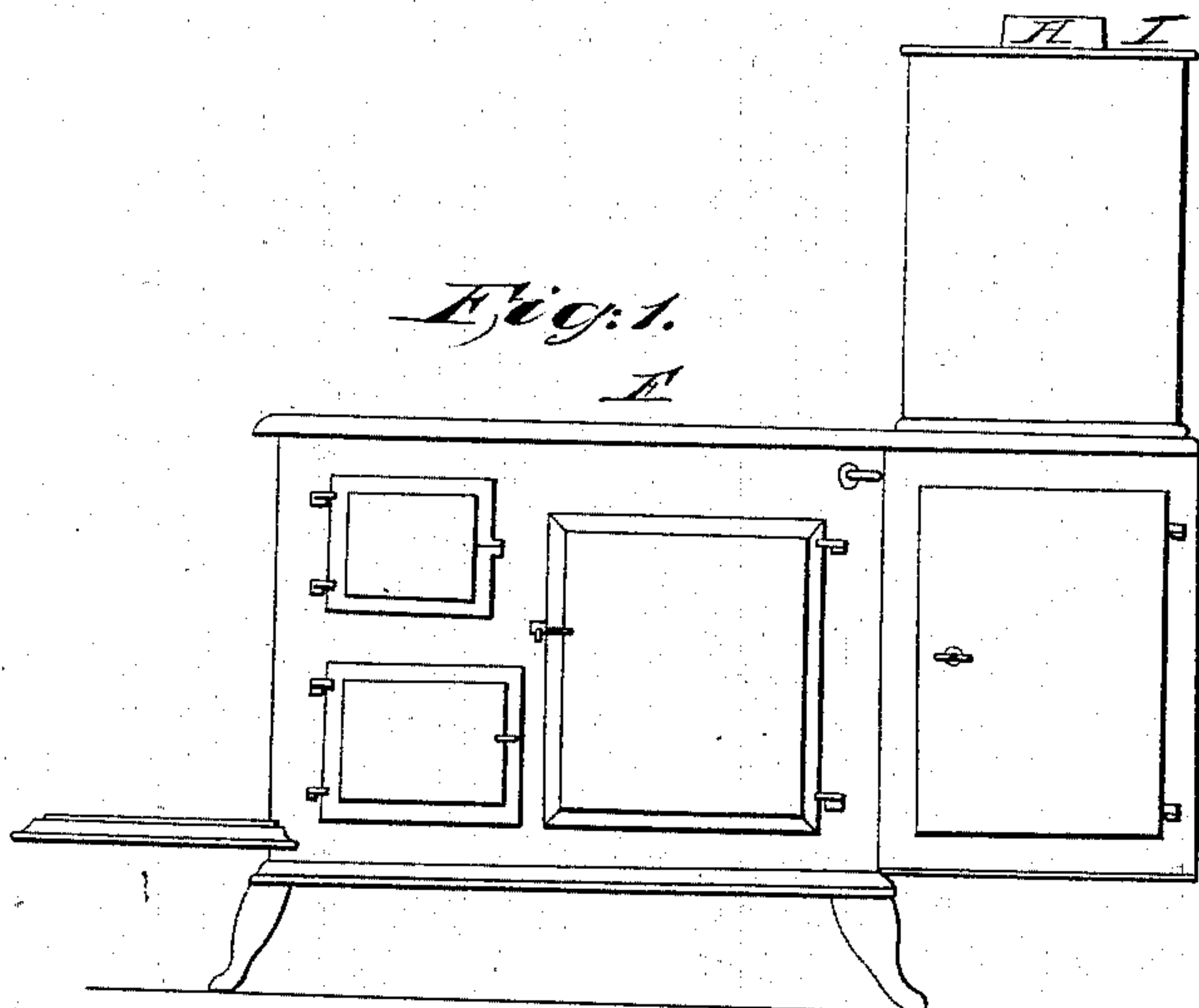


E. BUSSEY.

Water Reservoir for Cooking Stoves.

No. 57,060.

Patented Aug. 7, 1866.



Witnesses:

J. M. Phillips
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Inventor:

E. Bussey
by Marcus P. Norton
his Attorney

UNITED STATES PATENT OFFICE.

ESEK BUSSEY, OF TROY, NEW YORK.

IMPROVEMENT IN WATER-RESERVOIRS FOR COOKING-STOVES.

Specification forming part of Letters Patent No. 57,060, dated August 7, 1866.

To all whom it may concern:

Be it known that I, ESEK BUSSEY, of the city of Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Water Reservoirs or Boilers for Cooking-Stoves, and in combination therewith; and I hereby declare that the following is a clear, full, and exact description of the same, reference being hereby had to the accompanying drawings and to the letters of reference marked thereon, and making a part of this specification.

Like letters represent and refer to like or corresponding parts of the said invention and improvements.

Figure 1 is a side elevation. Fig. 2 represents a partial central longitudinal sectional elevation. Fig. 3 represents a perspective view of a detached water reservoir or boiler of a cooking-stove, illustrative of my aforesaid-named invention and improvements, and more fully described hereinafter. Figs. 4, 5, 6, and 7 are central longitudinal sectional elevations, of four other stoves, illustrating my aforesaid-named invention and improvements, similar parts being marked by like letters in each and all of the figures, and the arrows therein being indicative of the courses in which the gases of combustion pass through the stove, and also showing the combination of the said water reservoir or boiler, more fully described hereinafter, with a cooking-stove, and which combination of said reservoir or boiler with a cooking-stove may also be in the manner substantially as hereinafter described and set forth.

The nature of my invention and improvements consists in the employment of a water reservoir or boiler constructed of cast-iron and containing upon the inside thereof an enamel substance over and upon the entire surface of such inside part of said reservoir or boiler in the manner and for the purposes substantially as herein described and set forth, and the combination of such reservoir or boiler with a cooking-stove in the manner substantially as shown in the accompanying drawings.

In carrying my said improvements into operation, I cover the entire inner surfaces, *b*, of the cast-iron body *A*, Figs. 3, 4, 5, 6, and 7, of the reservoir or boiler with and by an enamel substance by any suitable means and in any suitable manner. The said enameling is put upon

such inner surfaces of said boiler or reservoir in the usual way, manner, or process of putting enameling upon cast or other iron for other and different purposes. The said enamel is represented at *b*, Figs. 2, 3, 5, 6, and 7, and it may be of any suitable thickness which will answer the purposes required, while the said boiler or reservoir *A* may be of any size or shape which may be required.

The said water reservoir or boiler *A*, constructed of cast-iron and enameled upon the entire inner surfaces of the same, in the manner substantially as aforesaid, I combine with a cooking-stove, so that it may form any suitable part or portion of the casing of the fire flue or flues, as indicated by examples in Figs. 5 and 6, or such combination may be made substantially as indicated by examples in Figs. 1, 2, 4, and 7.

D is a fire-flue or fire-flues, as the case may be, by and through which the heated air or escaping products of combustion are brought against and into contact with all that part or portion of such water or other reservoir or boiler *A* immediately connected therewith and exposed thereto, in the manner substantially as shown and represented in the accompanying drawings, and herein described and set forth.

In the drawings, *I* is a hinged cover or lid upon and attached to the open top of the said reservoir *A*, or of the extended and open top plate of the cooking-stove. *H* is the exit-passage leading to the chimney. Any part or portion of the said boiler *A* may form a part or portion of the outer casing of any of the fire flue or flues ordinarily used in cooking-stoves, or it may be suspended upon the back or rear end of such stove through or by means of the outward extension of the top plate, and by so doing heat the water or other material therein.

By my said invention a very durable reservoir or boiler is produced and combined with a cooking-stove in such manner that, while costing but a little more than if the same were made of cast-iron alone and of equal weight, strength, and capacity, it has the inner surface thereof much less liable to become rusty or dirty by the oxidizing action thereon of the water, steam, or air in the said reservoir or boiler, and such inner surface so enameled is very much less liable to become corroded by

the oxidizing action of the water or steam or air in the said reservoir or boiler, and thus and thereby the said boiler or reservoir will always be in good condition for ready and satisfactory use, and it will endure use and wear to a much greater length of time than if the same were made only of cast-iron or in the ordinary way of making reservoirs or boilers for cooking-stoves.

By my said invention and improvements a combined cooking-stove and hot-water reservoir or boiler is produced which will cost much less to manufacture than if the said reservoir or boiler were made of zinc, brass, copper, or an alloy of zinc and tin, or tin and copper, and it would be much less liable to become oxidized or rusted on its inner surface by the water, steam, or air therein; and a permanent water reservoir or boiler is combined with a cooking-stove in which water or other material is heated more directly and to a greater degree, as well as more economically, than would be the case in a cooking-stove having a reservoir or boiler composed of cast-iron enameled upon its inner surfaces and arranged or placed upon the stove with a metal plate or casing between the outer surface of the said reservoir or boiler and the flame or heated and escaping products of combustion in the stove, so that such flame or escaping products of combustion could not come in direct contact with the outer surface of the said boiler or reservoir constructed of cast-iron and covered upon its inner sur-

faces by an enamel in the manner and for the purposes substantially as hereinbefore described and set forth.

A reservoir or boiler for cooking-stoves constructed and combined therewith in the manner aforesaid may contain upon its outer surfaces an alloy of zinc and tin, or it may be coated over and upon by any other suitable material, if deemed best so to do, in order that the same may be made more permanent and durable for use and wear when combined with a cooking-stove in the manner substantially as represented in the accompanying drawings, and herein described and set forth.

Having thus described the nature, construction, and the manner of combining my said improvements with a cooking-stove, what I claim, and desire to secure by Letters Patent, is—

The reservoir, boiler, or tank A, constructed entirely of cast-iron or other cast metal, and covered or coated upon the inner surfaces thereof with or by an enamel, *b*, when applied to and combined with cooking-stoves in the manner substantially as and for the purposes herein described and set forth.

In testimony whereof I have on this 17th day of July, A. D. 1866, hereunto set my hand.

ESEK BUSSEY.

In presence of—

CHAS. A. MCLEOD,
H. WARREN.