

# N. S. VEDDER. Cooking Stove.

No. 122,871.

Patented Jan. 16, 1872.

Fig. 1.

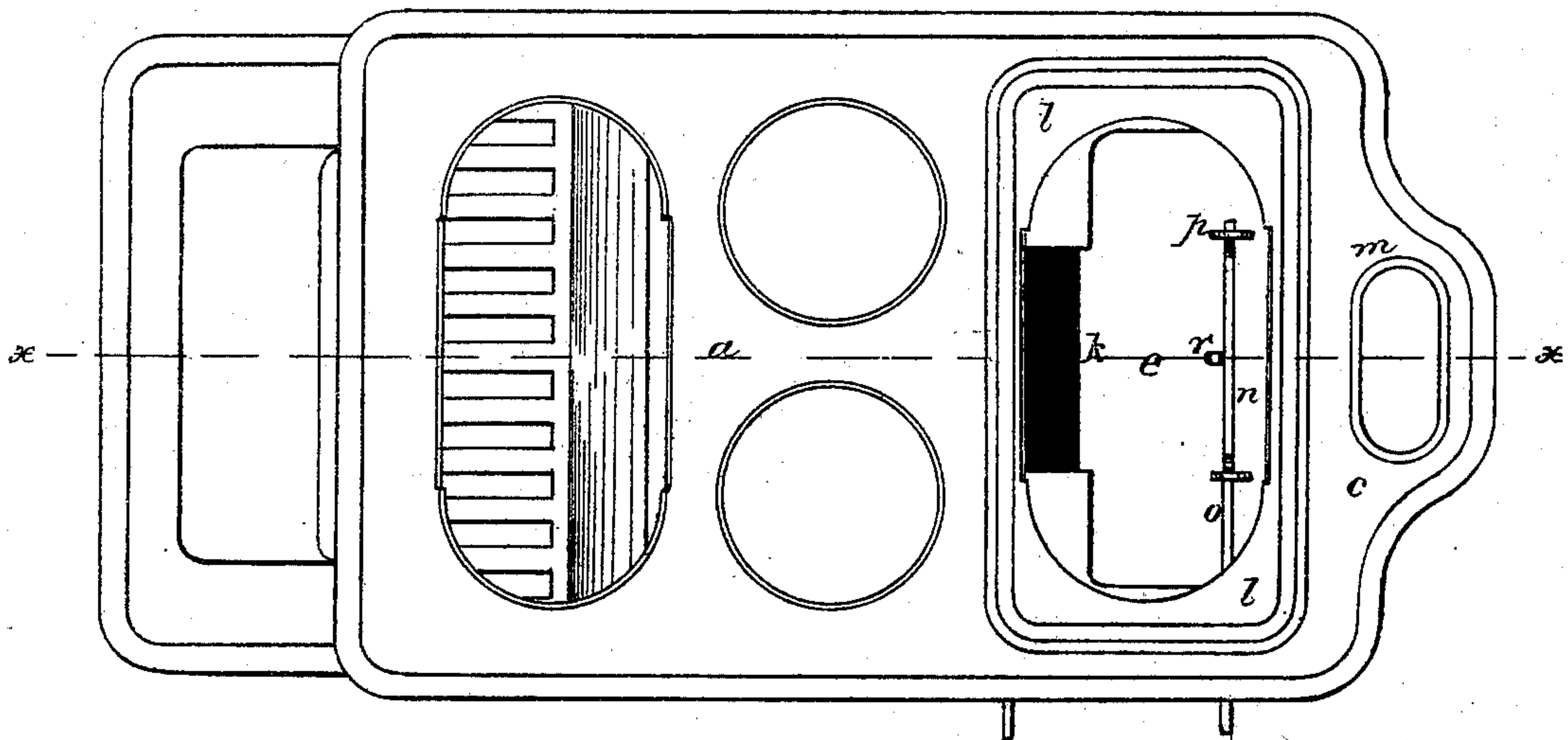


Fig. 2.

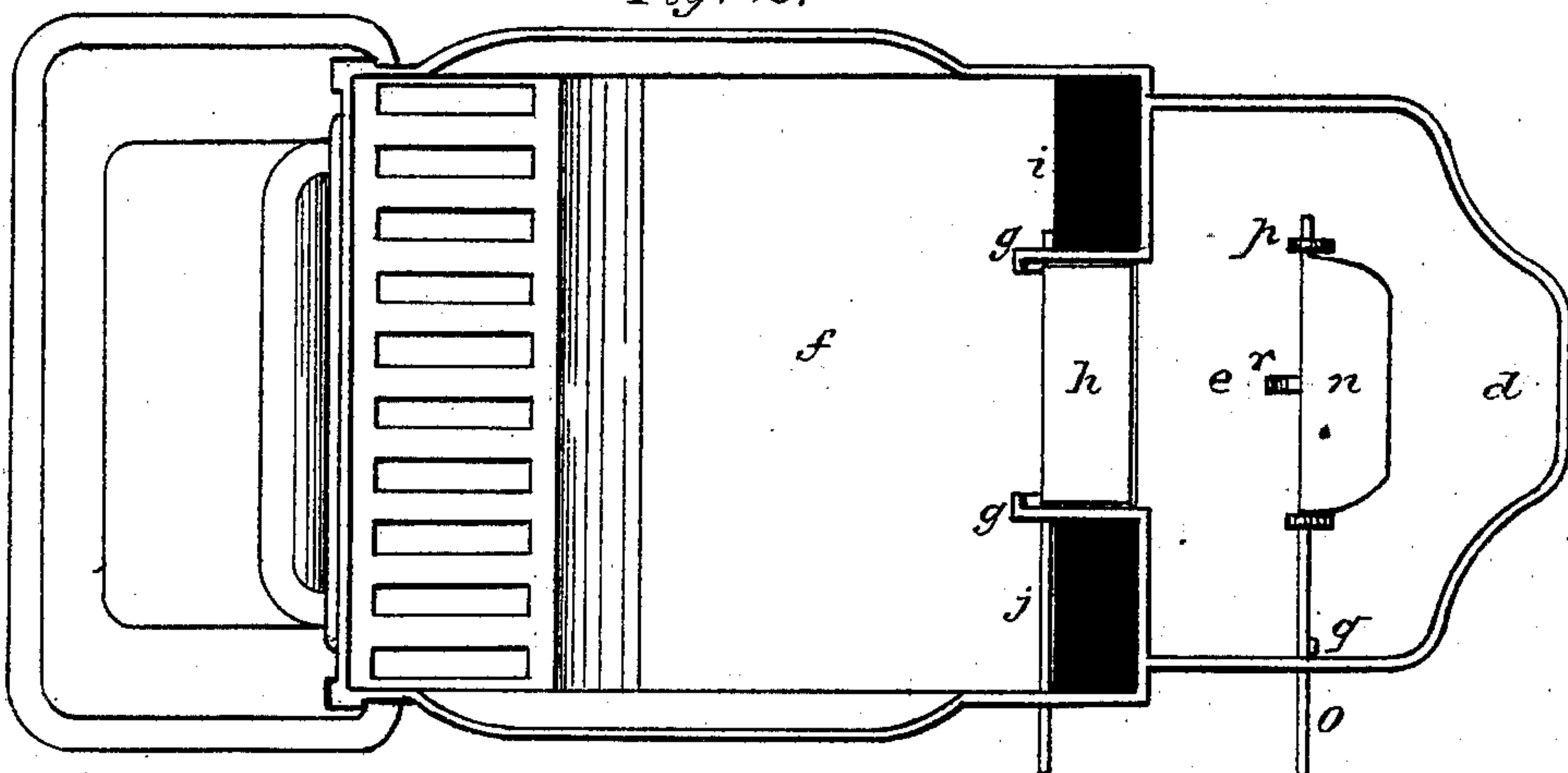
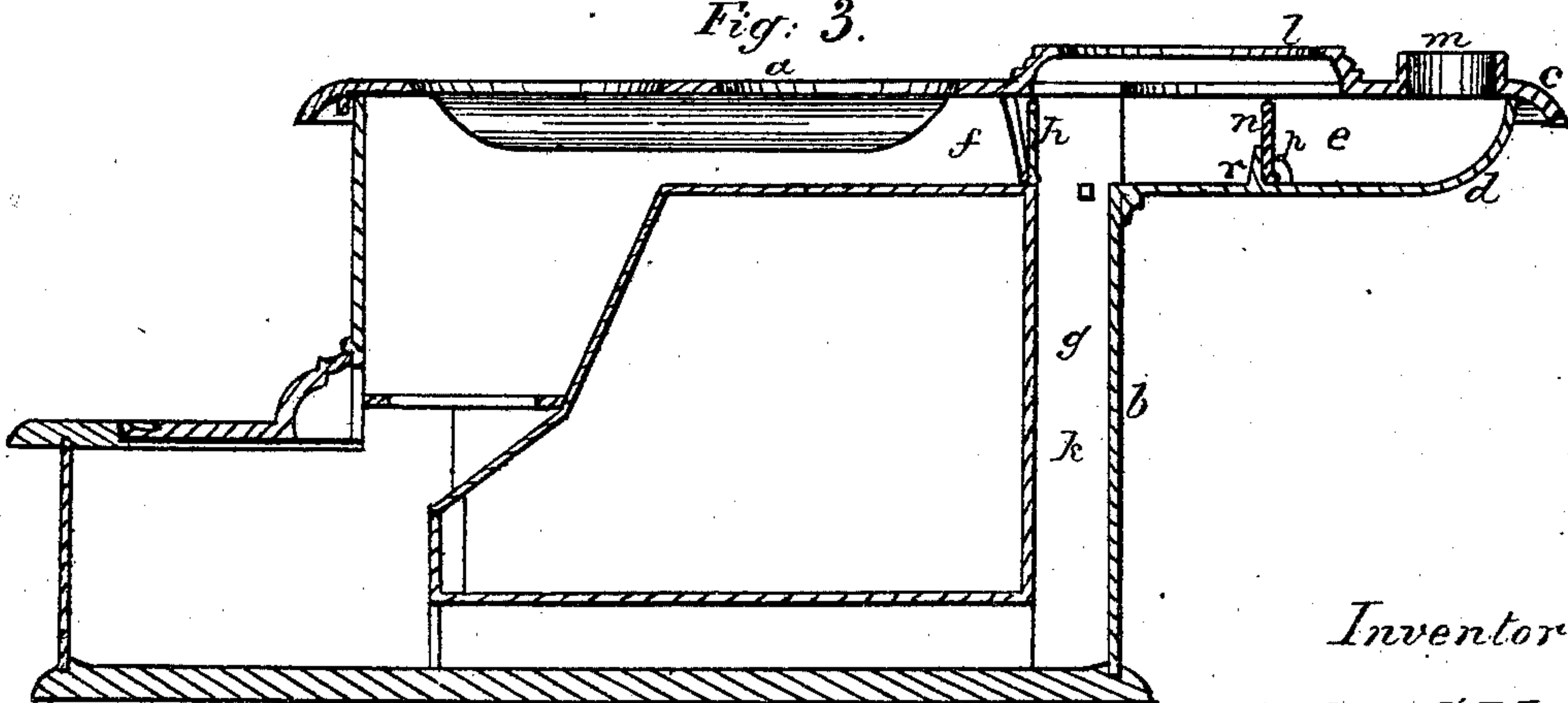


Fig. 3.



Witnesses:

West Wagner  
Wm. J. Bayliss

Inventor:

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his Attorneys

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Fig: 4.

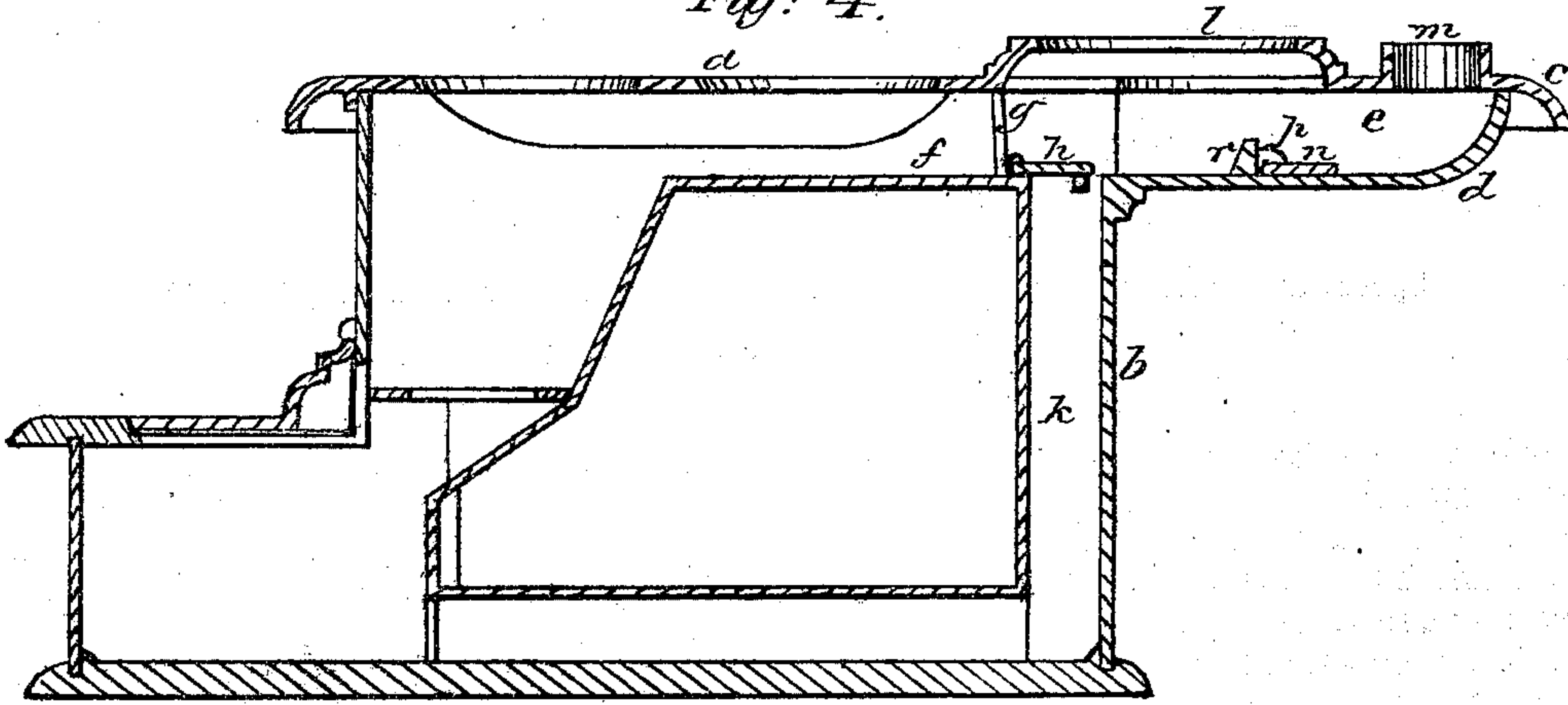


Fig: 5.

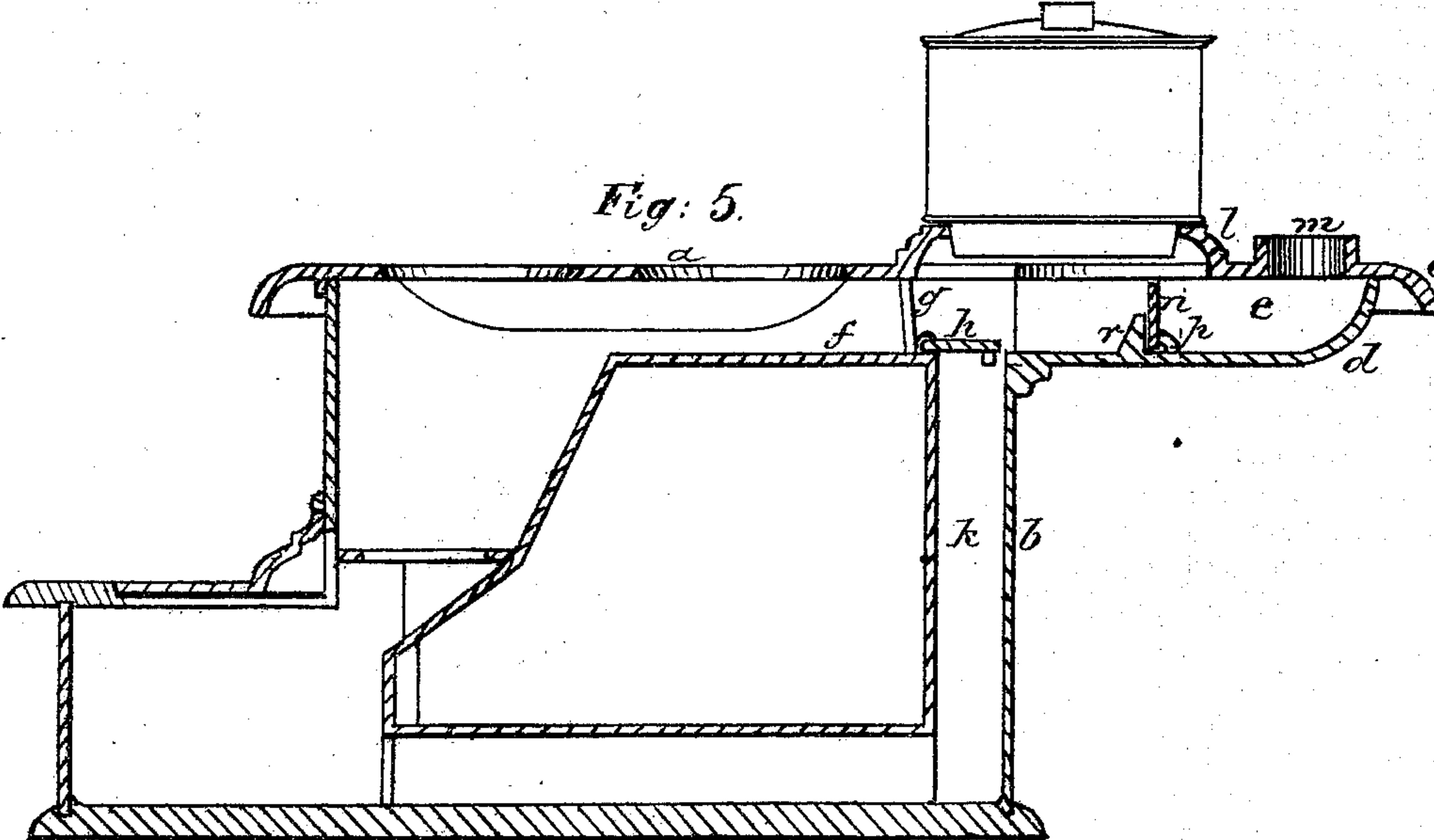
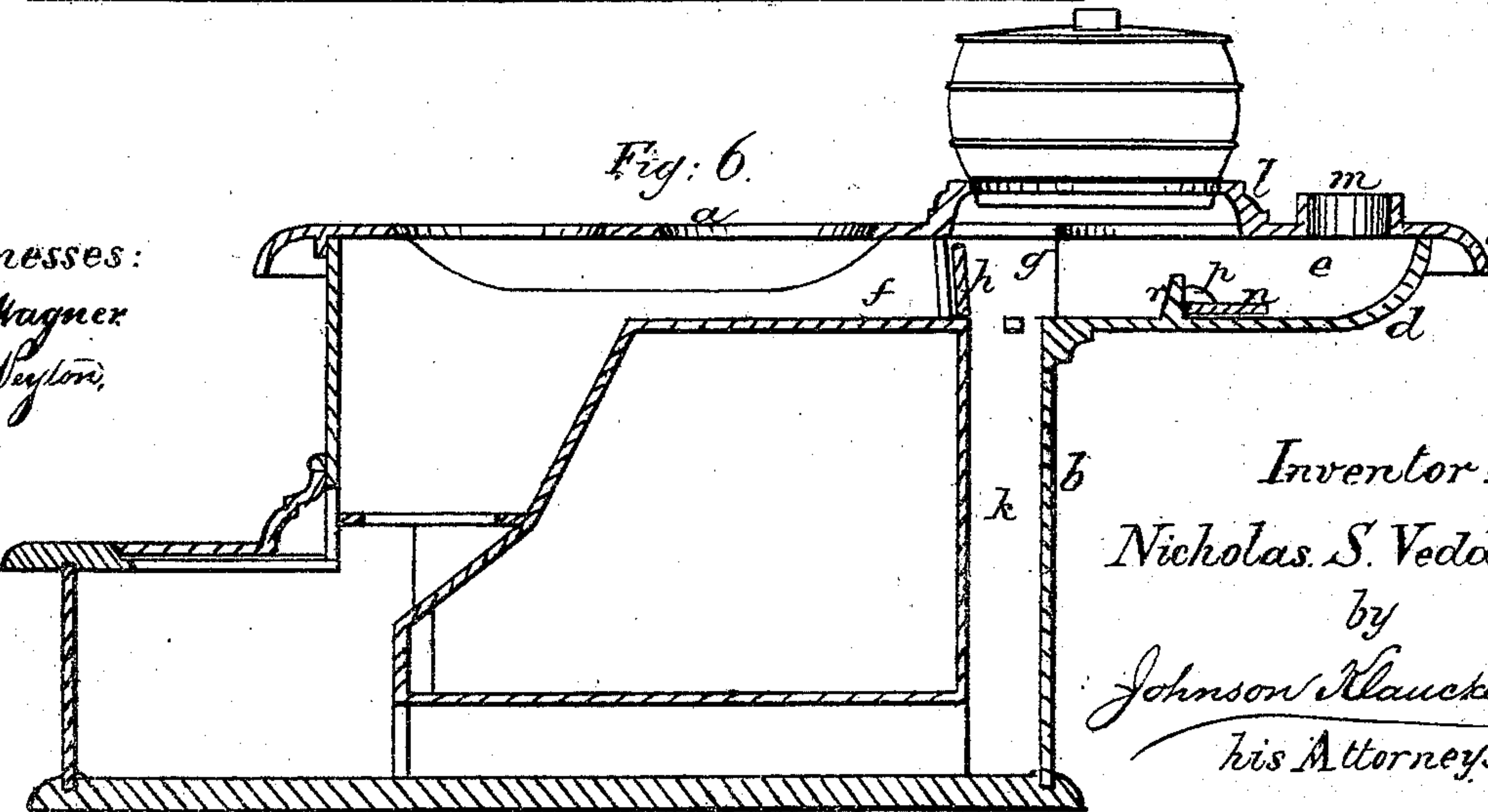


Fig: 6.



Witnesses:

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# UNITED STATES PATENT OFFICE.

NICHOLAS S. VEDDER, OF TROY, NEW YORK.

## IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 122,871, dated January 16, 1872.

*To all whom it may concern:*

Be it known that I, NICHOLAS S. VEDDER, of Troy, in the county of Rensselaer and State of New York, have invented a new and useful Improvement in Cooking-Stoves, of which the following is a specification:

My invention relates to that class of cooking-stoves having a rear extension chamber to allow the stove to be converted from a four-boiler-hole with removable reservoir to a six-boiler-hole stove without a reservoir; and my said improvement consists in providing said extension chamber, when formed by the top plate and a lower rear basin, with an elevated rim independent of the rear exit-flue, to receive and support the reservoir or boiler so that its bottom will not project within the extension chamber, and thus leave the latter perfectly open and unobstructed by said vessel, which is a highly important advantage in the construction of this class of stoves, because the vessel, when so projecting, tends to impede the draught. This advantage could not be obtained by the elevated-box arrangement patented to me August 11, 1868; nor is it possible to obtain such advantage in the patent of Chamberlain and Caven of August 18, 1863, because they have no elevated rim. My improvement also consists in providing the extension chamber with an adjustable damper which can be turned up against a projection on the bottom of the basin, to concentrate the heat upon the bottom of the boiler or reservoir, and turned down upon the basin to open the extension chamber to a direct and uninterrupted draught beneath the boiler or reservoir and thus relieve the latter of undue heat and promote the draught of the stove. This feature of adjustment I have found to be of great advantage in a stove having a rear basin or extension chamber, because, while the intermediate damper may be used to cut off the direct draught from the fire-chamber, yet the means for controlling this draught beneath the boiler or reservoir in the rear extension chamber independent of the intermediate damper is always needed.

In the accompanying drawing, Figure 1 represents a top or plan view of a cook-stove embracing my invention. Fig. 2 represents a similar view, the top plate being removed. Figs.

3 and 4 represent vertical central sections, the main damper and the adjustable extension-chamber damper being shown in different positions. Figs. 5 and 6 represent sectional views in the line *xx* of Fig. 1, the stove being arranged for a reservoir in one, and with the additional boiler-holes for pots, &c., in the other.

The top plate *a* extends beyond the rear plate *b* and forms a cover, *c*, for a basin, *d*, the bottom plate of which extends horizontally from the rear plate and forms the extension chamber *e*, which connects with the direct top flue *f* through an opening in the division-plate *g*, provided with a damper, *h*, to cut off communication with the extension chamber when desired, as shown in Fig. 3. An elevated rim, *l*, having a boiler-hole, is formed upon the top plate over an opening in said plate. This rim *l* does not form the stove-pipe exit *m*, but is distinct from it. This elevated rim *l* holds the pots or reservoir entirely above the direct flue *e* of the extension chamber, and therefore removes a difficulty in the flue which is highly disadvantageous in such a rear extension chamber. In practice I have found that it is absolutely necessary to have the direct flue from the fire-chamber entirely open and unobstructed in building the fire, in order to promote a proper draught, and also to control the degree of heat in the extension chamber beneath the reservoir or pots, and these advantages I have accomplished by using an adjustable damper, *n*, instead of a fixed deflector or obstruction-plate. It is located so that when elevated, as shown in Figs. 1, 3, and 5, it will hold the heat against the bottom of the reservoir or pot, and when open or turned down, as shown in Figs. 2, 4, and 6, the extension flue will be entirely open and unobstructed by such damper. It does not extend entirely across the chamber *e*, so that when turned up the draught will be around its ends, but this partial draught is not sufficient in firing. The stem of the damper *n* is fitted into an eye, *p*, at its inner end, and it is kept in a closed position by resting against a stop, *r*, on the bottom of the chamber *e*. Its rod *o* passes through the side of the stove, by which said damper *n* is opened and closed. The elevated rim *l* is provided with suitable openings for the reception of the boiler-hole plate, so that the said opening may be used either for

a hot-water reservoir or wash-boiler, or other vessel.

Having described my invention, I claim—

1. The elevated reservoir or pot-rim *l*, constructed independent of the exit-flue pipe *m* and arranged above the extension chamber *e*, as and for the purposes herein set forth.

2. The adjustable damper *n* in the extension

chamber *e*, in connection with the stop *r*, for the purpose of regulating the heat beneath the reservoir or pots and removing the obstruction to the draught of the stove, as described.

NICHOLAS S. VEDDER.

Witnesses:

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C. H. ASH.

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