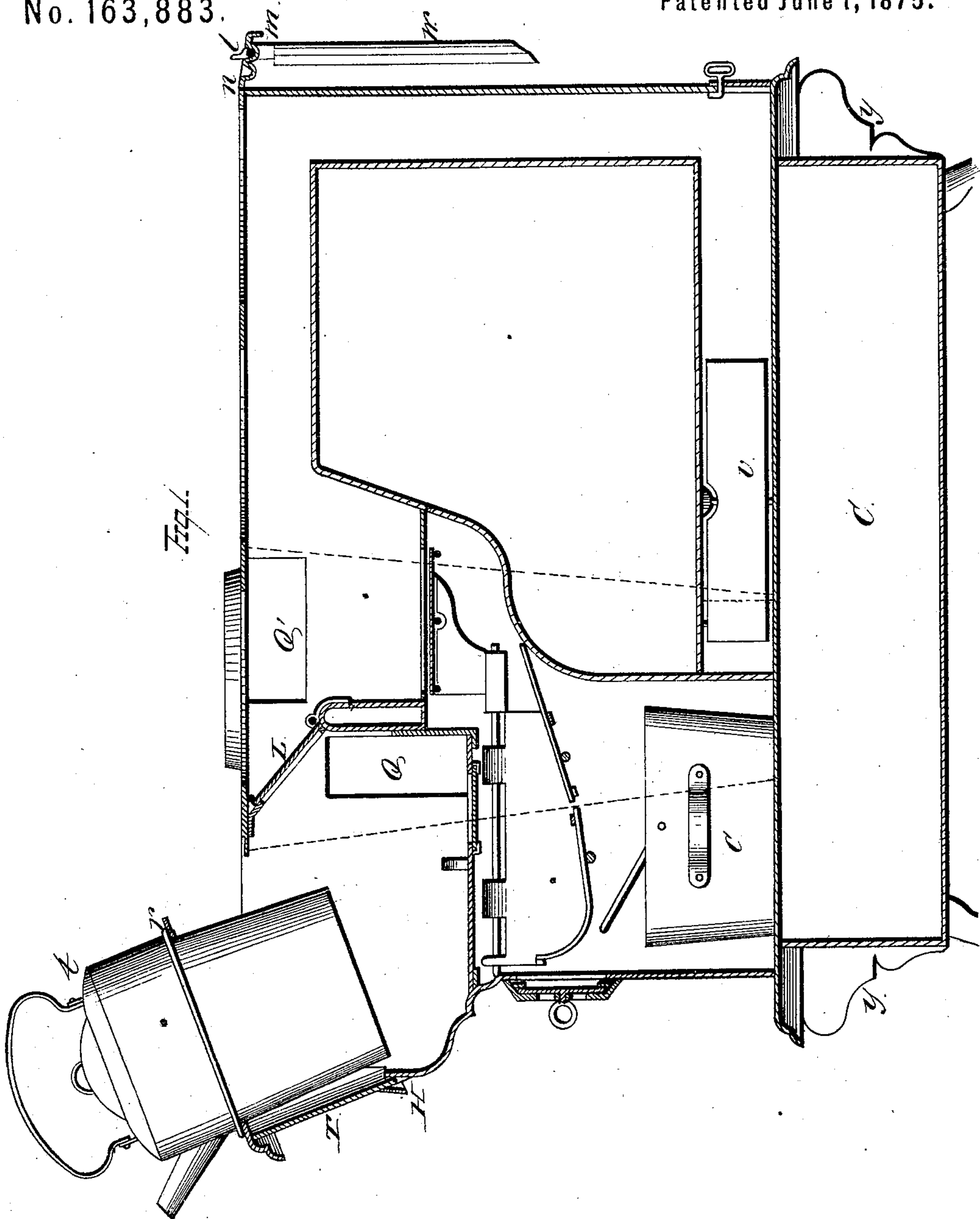


D. E. PARIS.
Reservoir Cooking-Stove.

No. 163,883.

Patented June 1, 1875.



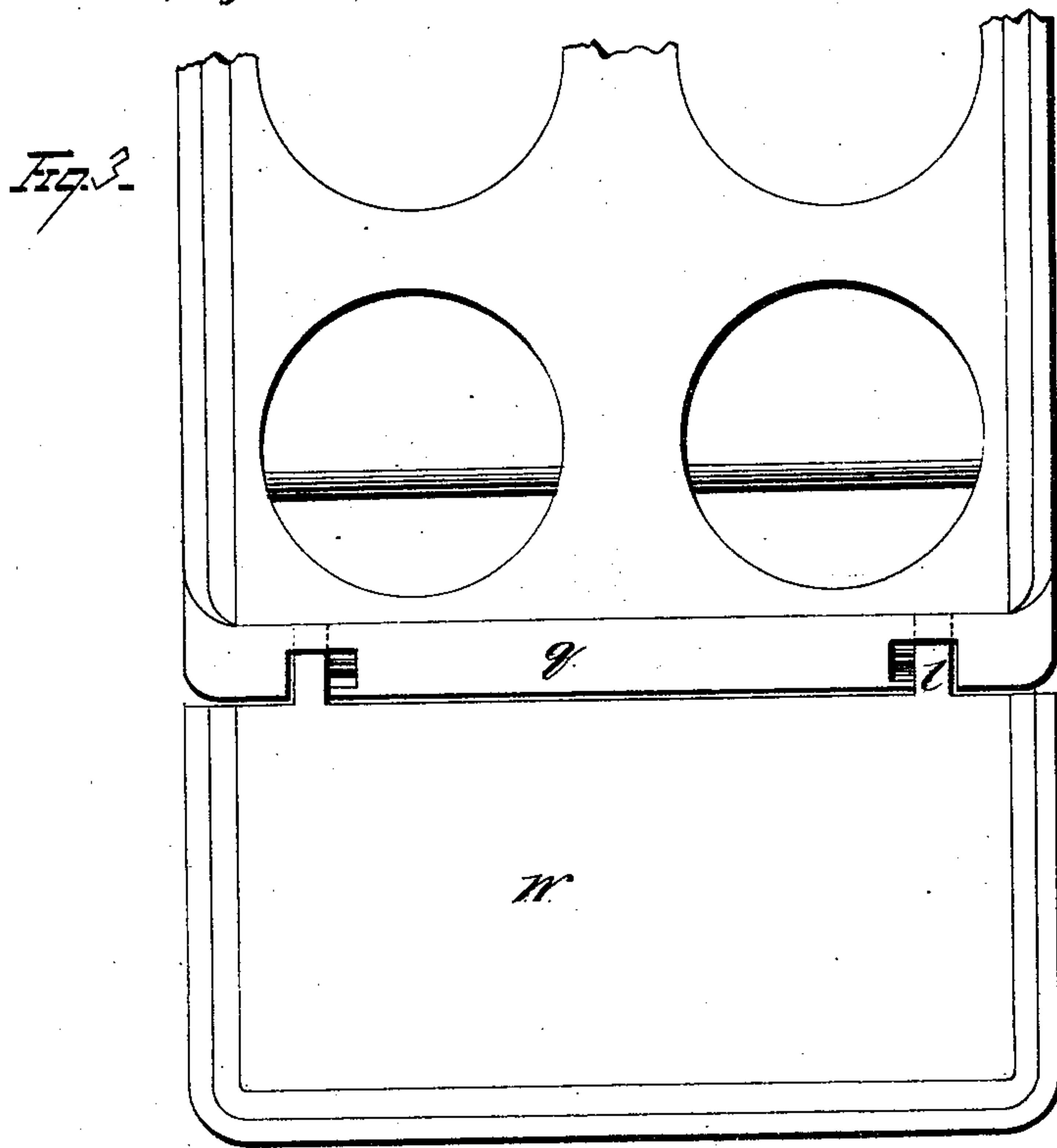
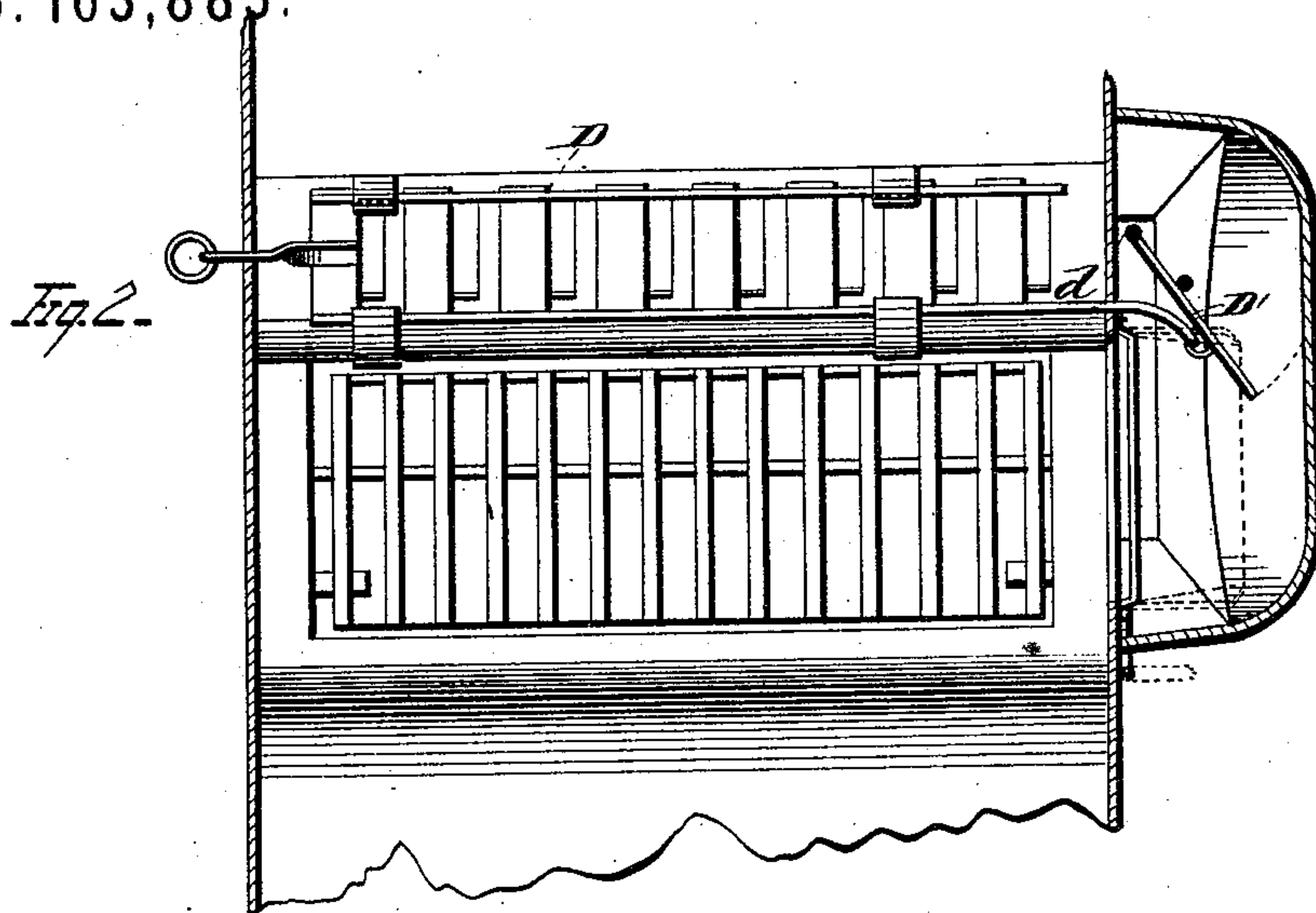
WITNESSES
W. D. Newman,
Thomas Caldwell

INVENTOR
David E. Paris,

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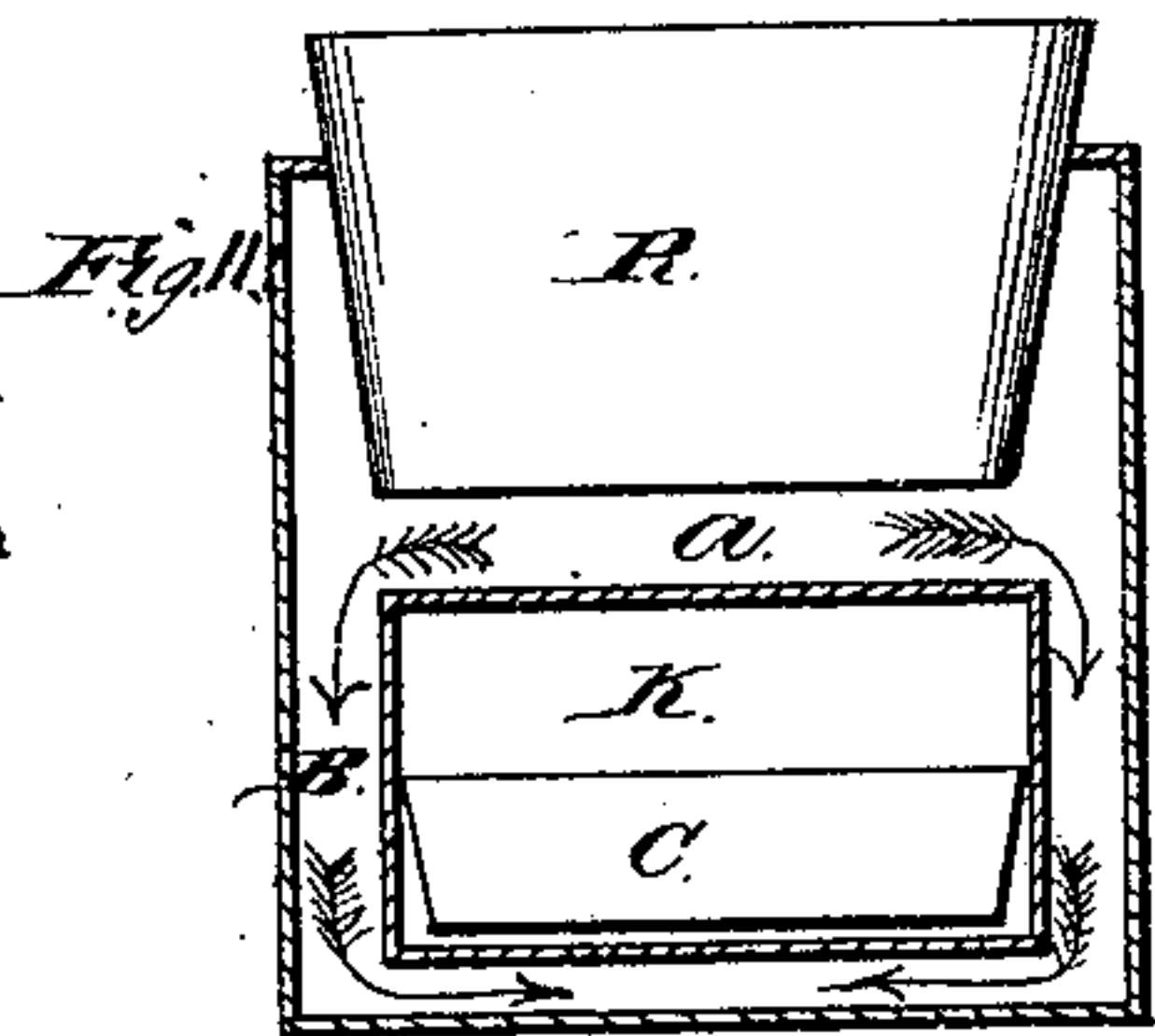
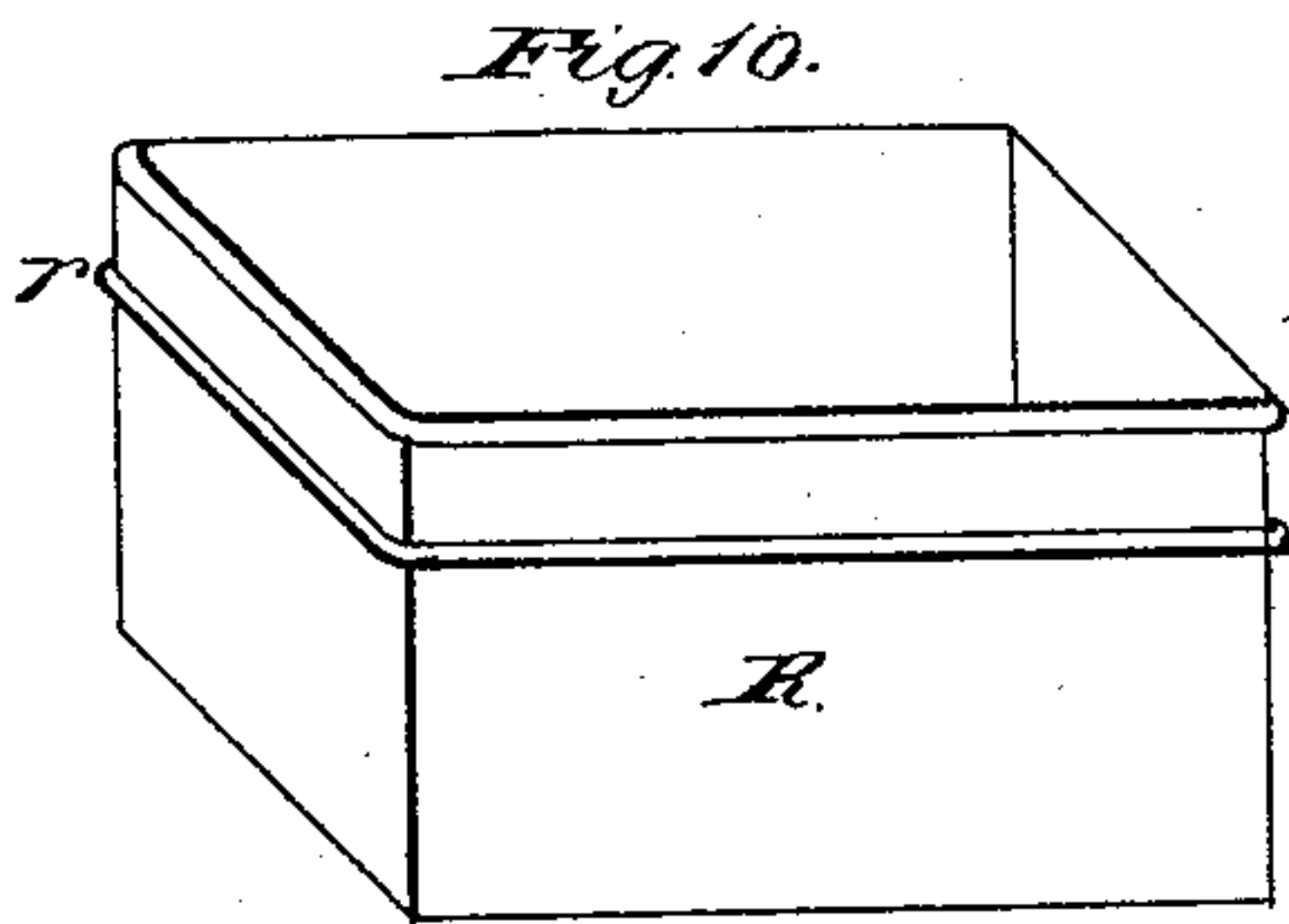
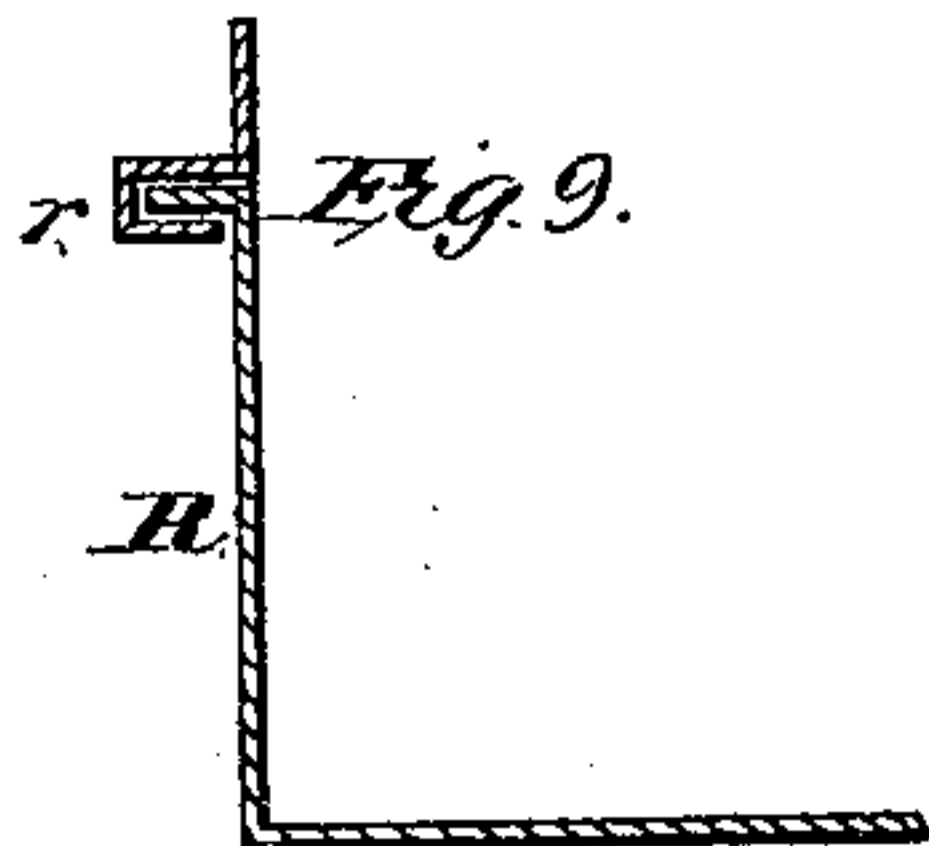
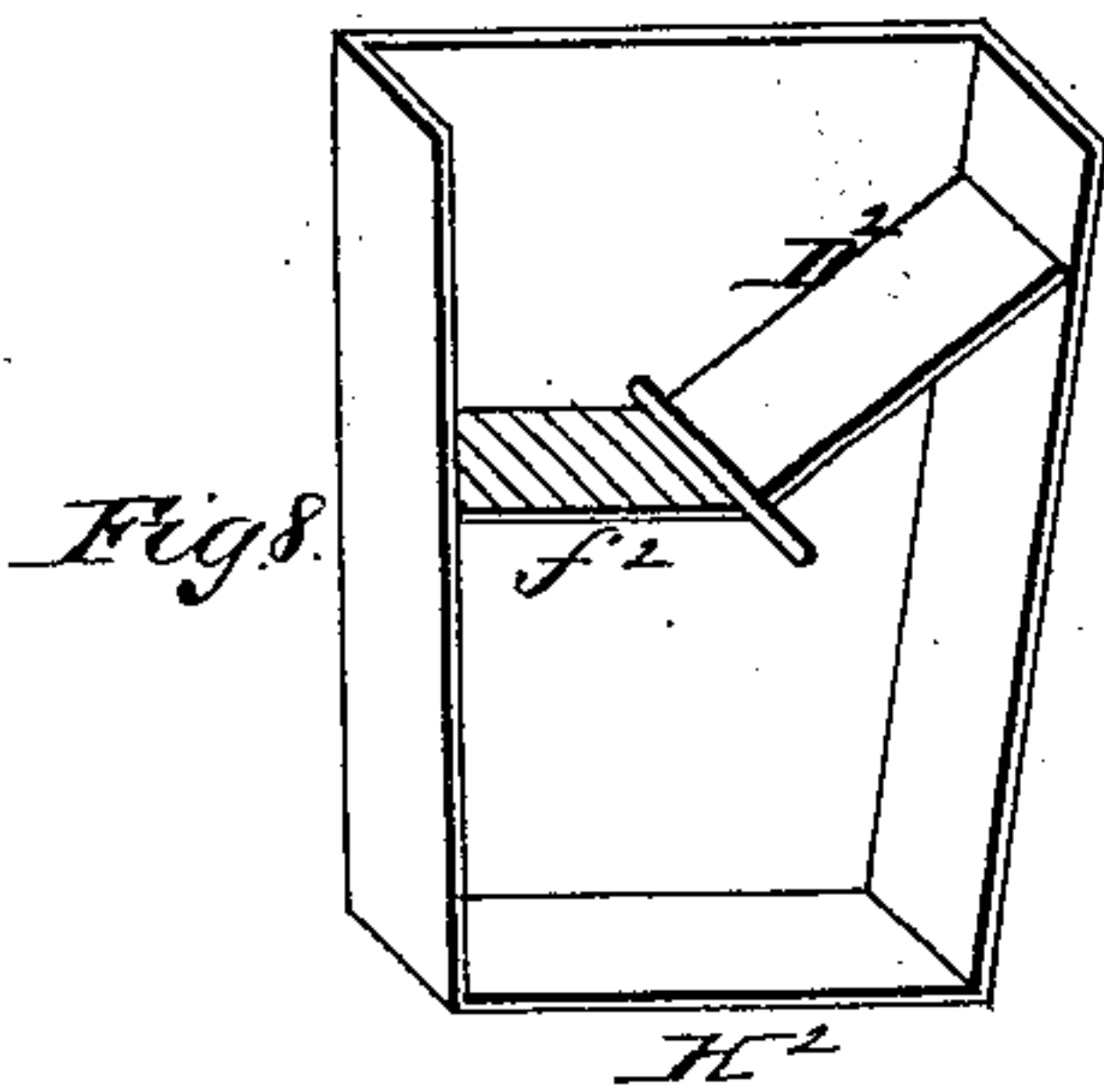
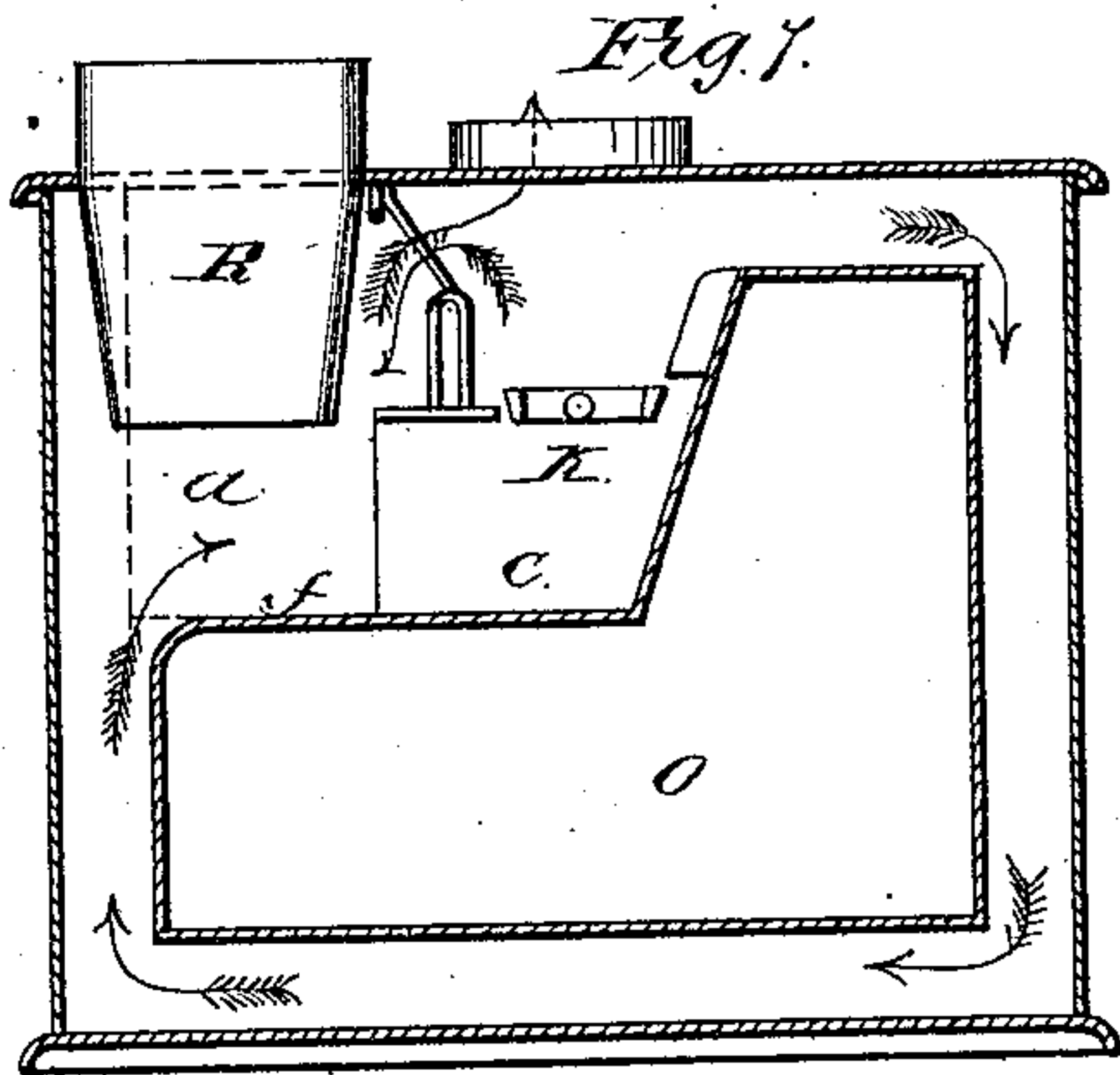
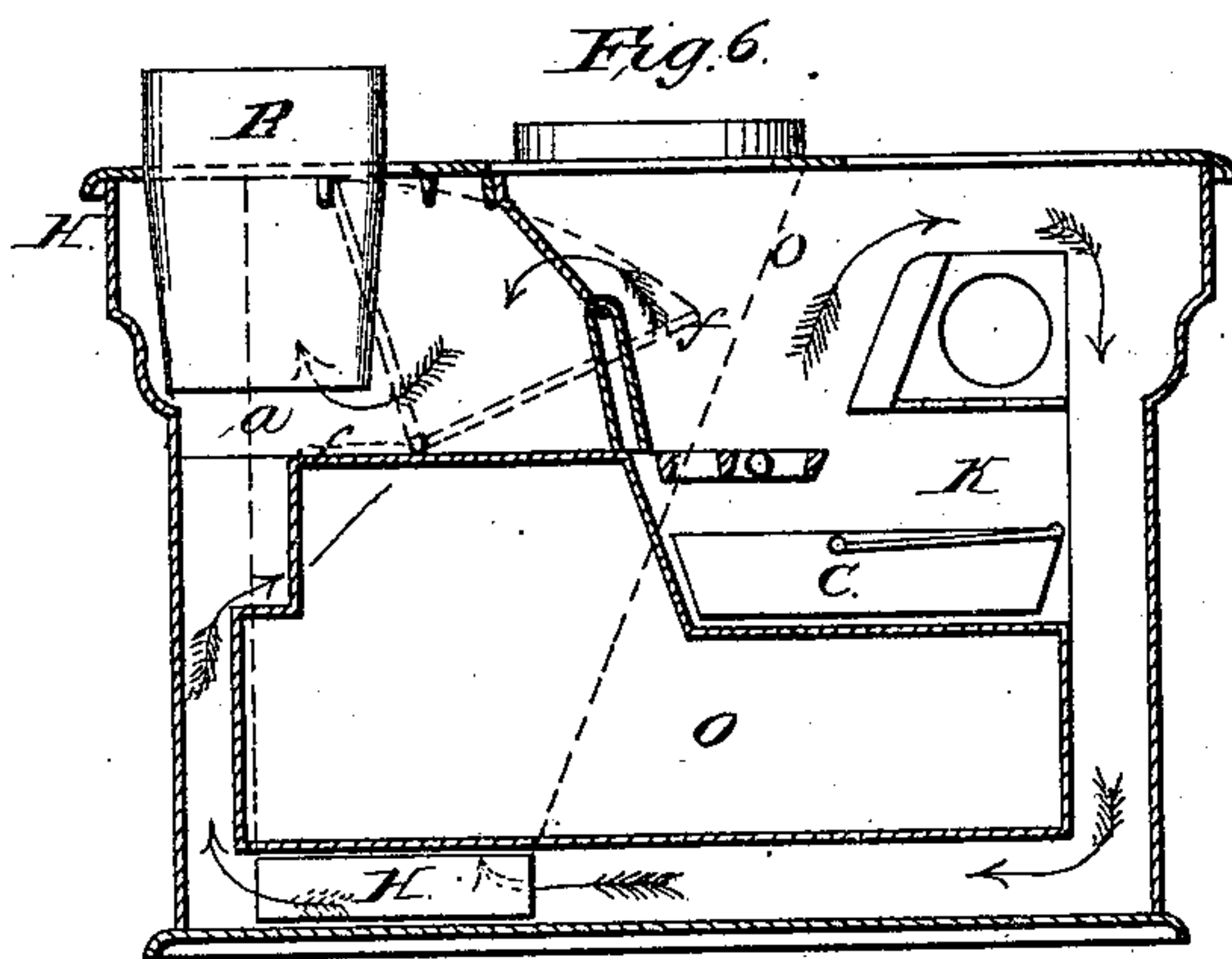
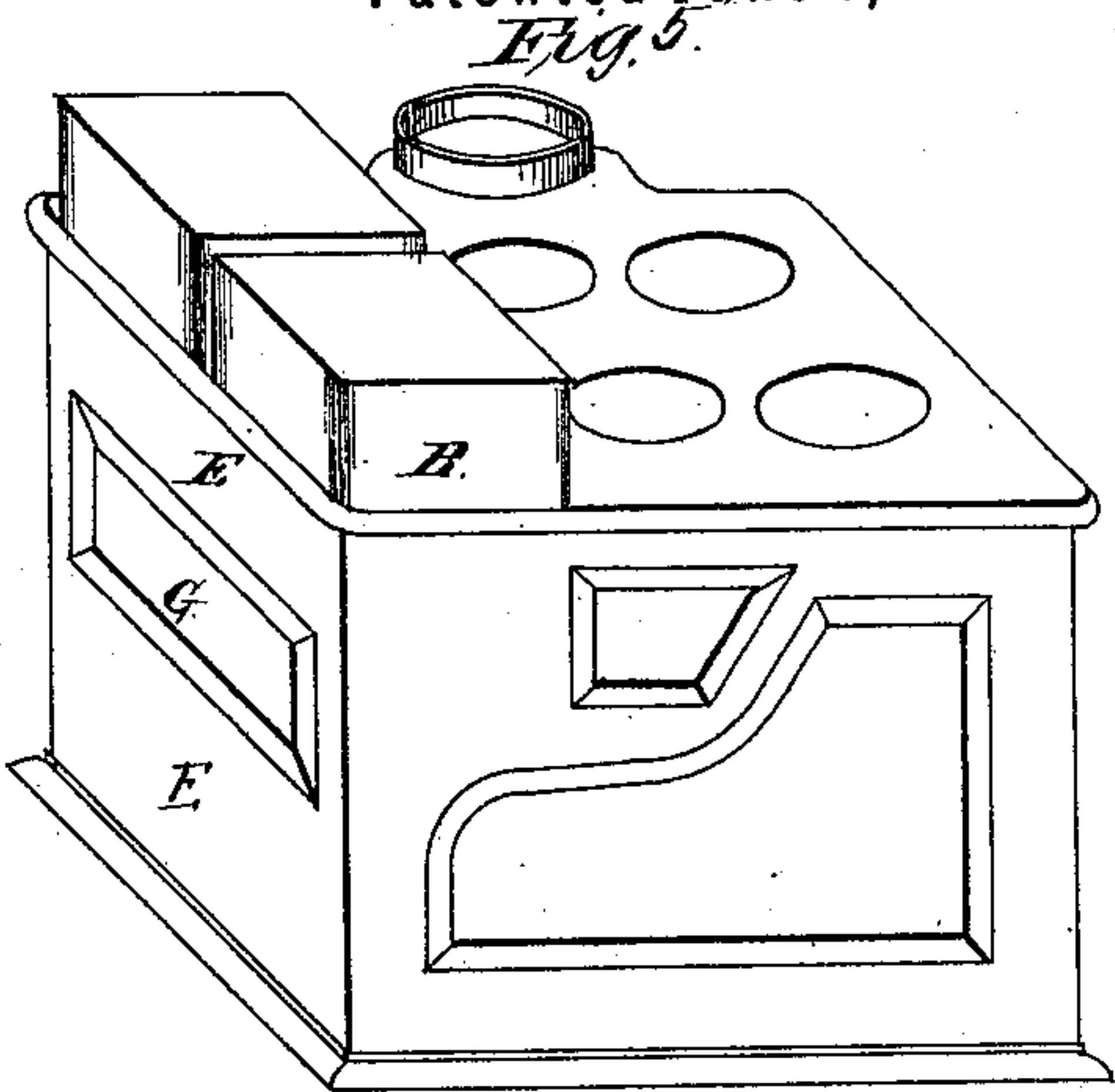
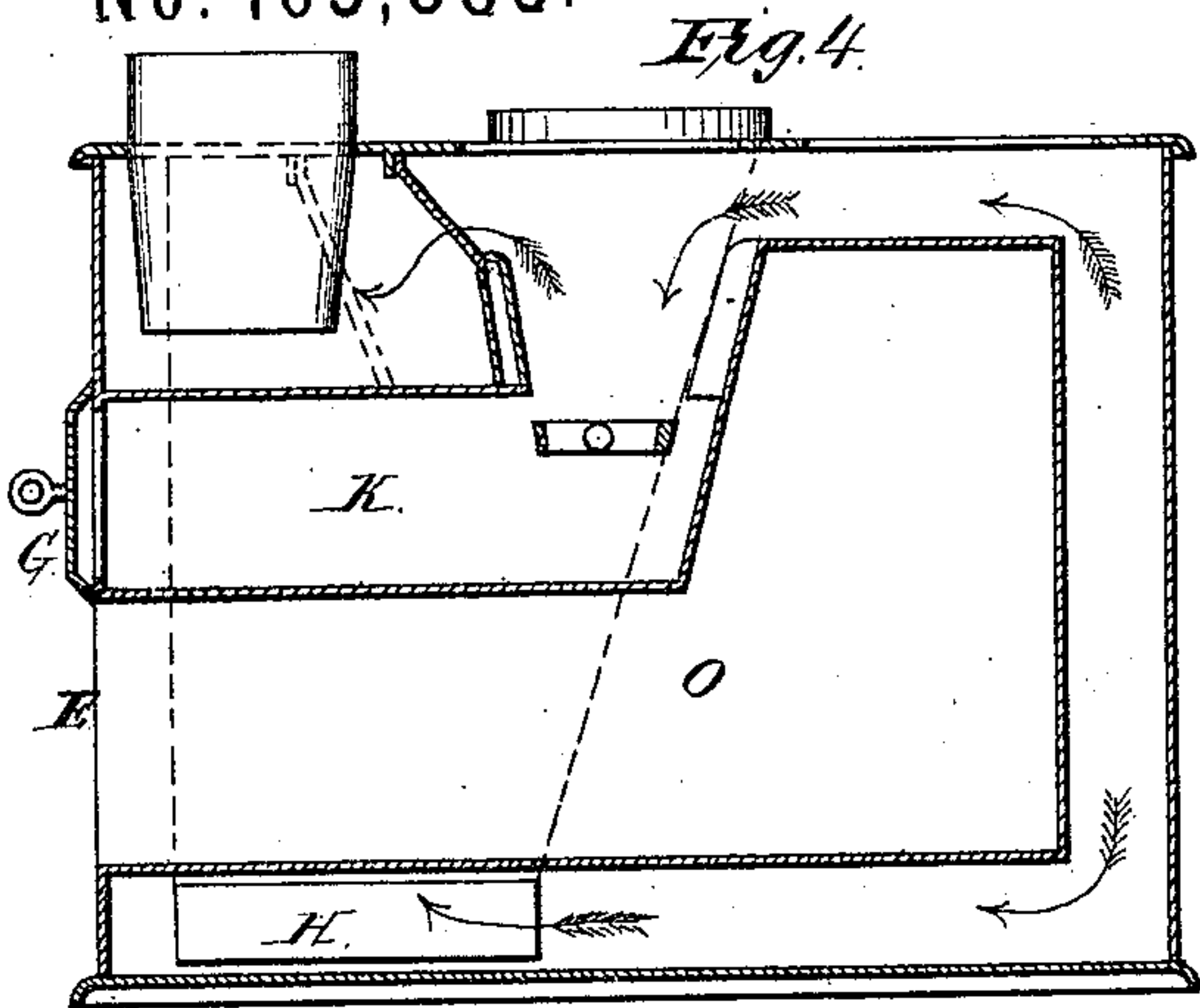
WITNESSES
W. S. Newman.
Thomas Caldwell

INVENTOR
Daniel E. Paris

D. E. PARIS.
Reservoir Cooking-Stove.

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Witnesses:
Thomas Caldwell
Joseph B. Co.

Inventor:
Dane E. Paris.

UNITED STATES PATENT OFFICE.

DANIEL E. PARIS, OF TROY, NEW YORK.

IMPROVEMENT IN RESERVOIR COOKING-STOVES.

Specification forming part of Letters Patent No. **163,883**, dated June 1, 1875; application filed October 15, 1874.

To all whom it may concern:

Be it known that I, DANIEL E. PARIS, of Troy, in the county of Rensselaer and State of New York, have invented certain Improvements in Stoves, of which the following is a specification:

My present invention relates to that class of devices known as reservoir cooking-stoves; and its object is, first, to locate the fire-box between the oven-flue and the reservoir-chamber, providing at the same time suitable draft-openings, whereby the whole heat from the said fire-box may be concentrated upon the reservoir or upon the oven at pleasure; second, to construct the reservoir with a top similar to the ordinary tea-kettle, for the purpose of preventing overflow of water when tipping; third, to make the reservoir in two parts, the junction of which shall form a strengthening-band, and also a firm support for the reservoir upon its casing; to accomplish all of which my invention consists in certain peculiarities of construction and arrangement of parts, first to be fully described, and then pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a sectional elevation of a stove or range, showing my improvements in connection with tipping or tea-kettle reservoirs; Fig. 2, a plan view of damper attachments and connections which may be employed to regulate draft, &c.; Fig. 3, a plan view, showing cabinet-shelf attached and extended; Fig. 4, a section of modified form of stove or range, wherein the oven extends to one of the vertical stove-plates and underneath the ash-pit K; and Fig. 5, a perspective view of same. Figs. 6, 7, 9, and 10 are sections of further modifications, showing different flue and oven arrangements, all comprehended by my invention. Fig. 8 is a perspective view, showing arrangement of damper in exit-flue. Fig. 11 is a section of reservoir, showing method of making the joint between the two parts; and Fig. 12, a perspective view thereof. Fig. 13 is a sectional elevation through the length of the reservoir, showing relative arrangement which may be made between reservoir and ash-pan with indirect flue at the side.

R is the reservoir; O, the oven; and P, the fire-pot, in all the figures. The reservoir-com-

partments or casing is located upon one side, and near to the fire-pot. In the construction shown in Fig. 1, L is an opening leading from the fire-pot directly into the reservoir-casing. This opening may be grated, and provided with a suitable damper to govern inflow of heat. Q is the escape-passage leading from reservoir-chamber to the exit-flue, and Q' a similar passage leading directly from the fire-pot.

To heat the reservoir rapidly, the damper-covering Q' being closed, those governing Q and L are opened, when the products of combustion will pass directly through the casing without passing under the oven. A single damper at either Q or L is, of course, all that will be necessary, and the opening Q' may be entirely omitted; but in Fig. 2 I have shown two connected dampers, whereby both openings may be governed simultaneously, D being the damper which closes L, Fig. 1, and D' that closing passage Q, Fig. 1, connected to D by rod *d*.

By closing the direct and reservoir draft the products of combustion are compelled to flow around the oven, starting upon their course in a direction directly opposite to that taken in the direct movement. This construction enables me to concentrate the whole of the heat upon either the oven or the reservoir, or to divide the same between the two by suitably manipulating the dampers, and it will be observed that this, the principal feature of my invention, is attained in the several modifications shown, being independent of any peculiar construction of oven or fire-box, or of the number of flues into which the flue-space of the stove is divided. At V, Fig. 1, is shown a pivoted or hinged strip located within the flue beneath the oven, by means of which the products of combustion may be more uniformly directed through the flue, and which will also serve to scrape or clear the same from soot, &c. D², in Fig. 8, is a damper hinged to the plate *f*², within the exit-flue. When turned down to position shown, (and correspondingly by dotted lines, Fig. 6,) the draft will be through the reservoir-casing, and when closed the reservoir will be moderately heated by the products, which expand into the chamber.

In applying a tipping reservoir, as in Fig. 1, I find it preferable to form a rim around the top, as at *t*, thus giving it the appearance of an ordinary tea-kettle, and preventing spilling and slopping of water when tipping.

Two or more of these kettle-reservoirs may be hung upon the plate *T*, or hinged, as at *H* in Fig. 1.

To provide a suitable support for the reservoir, I form the same in two parts, and unite the two in a joint, as clearly shown at *v* in Fig. 11. This joint forms the projecting flange which rests upon the casing, and at the same time gives lateral strength and stiffness to the reservoir, and, what is more important, enables me to construct the reservoir of two kinds of sheet metal, the upper part (which is exposed to view) of planished copper and the lower part of yellow metal, or cheap sheet-copper, thus making a very inexpensive vessel, strong, and durable. Double reservoirs, as in Fig. 5, or single, as in Fig. 13, may be employed.

I am aware that the tipping reservoir is not new in this case, having secured patents upon it myself. I hereby reserve the right to apply for a separate patent covering the details shown in Fig. 6 of the drawings.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a cooking stove or range, having its exit-flue opening on its rear side, or longitudinally opposite the fire-box, a reservoir-chamber located on one end of the stove, horizontally and laterally opposite the fire-box, in combination with an ash-pit below said chamber.

2. In a cooking range or stove having its exit flue-opening on its rear side, a reservoir-chamber and ash-pit, located the one above the other on one end of the stove, and a baking-oven and flue-space on the other end, in combination with a fire-box intervening, constructed as described, so that the smoke and heat may pass around the oven or through the reservoir-casing, at the will of the operator.

3. A smoke-flue leading to the exit-pipe located on the back side, and in rear of the back plate of an oblong or square shaped cooking-range, in combination with a reservoir casing or chamber, located at right angles thereto on one end of the range, and connected therewith by an aperture made through the end or rear wall of said casing, to allow the smoke to pass through it on its way to the exit-pipe.

4. In an oblong or square shaped cooking-range, having its exit-flue opening on its rear side, connected with a reservoir casing or chamber located on one end at right angles therewith, the combination of the fire-box and reservoir casing or chamber, separated by a plate or wall, provided with a protecting damper, that may either prevent or allow the direct action of the heat upon the reservoir.

In testimony that I claim the foregoing I have herewith set my hand in the presence of two witnesses.

DANIEL E. PARIS.

Witnesses:

W. J. KELLY,
CHAS. H. DAUCHY.