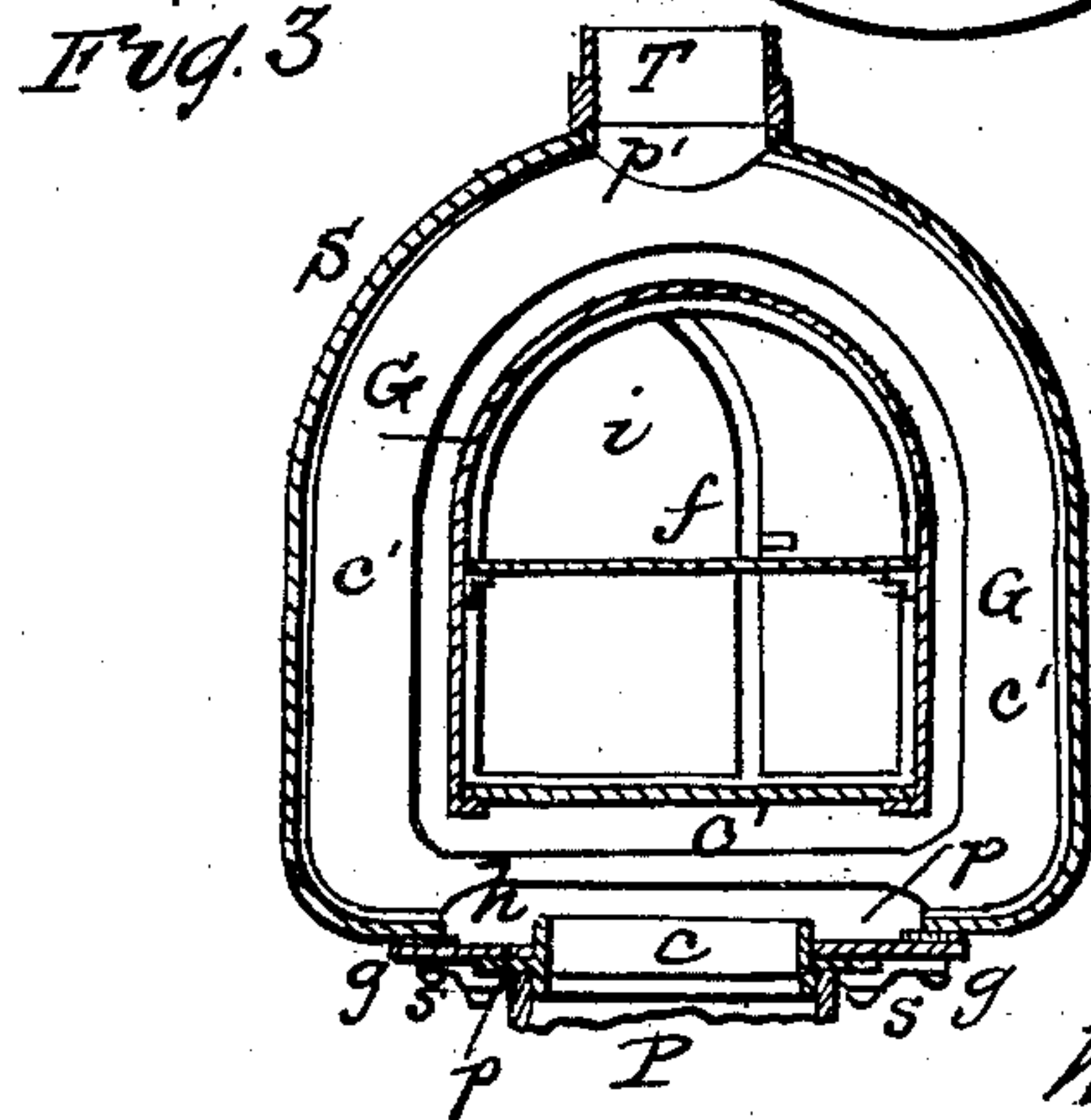
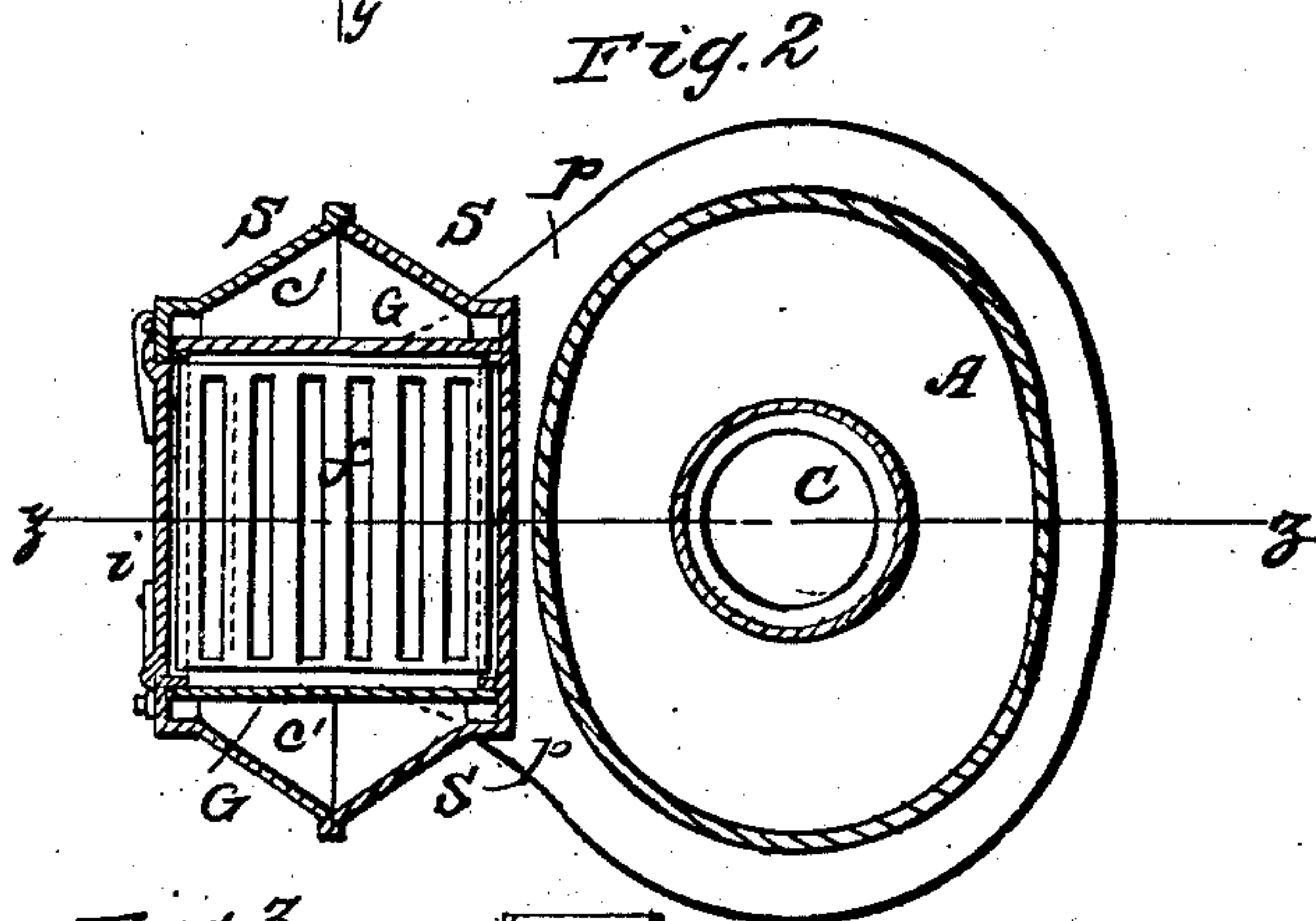
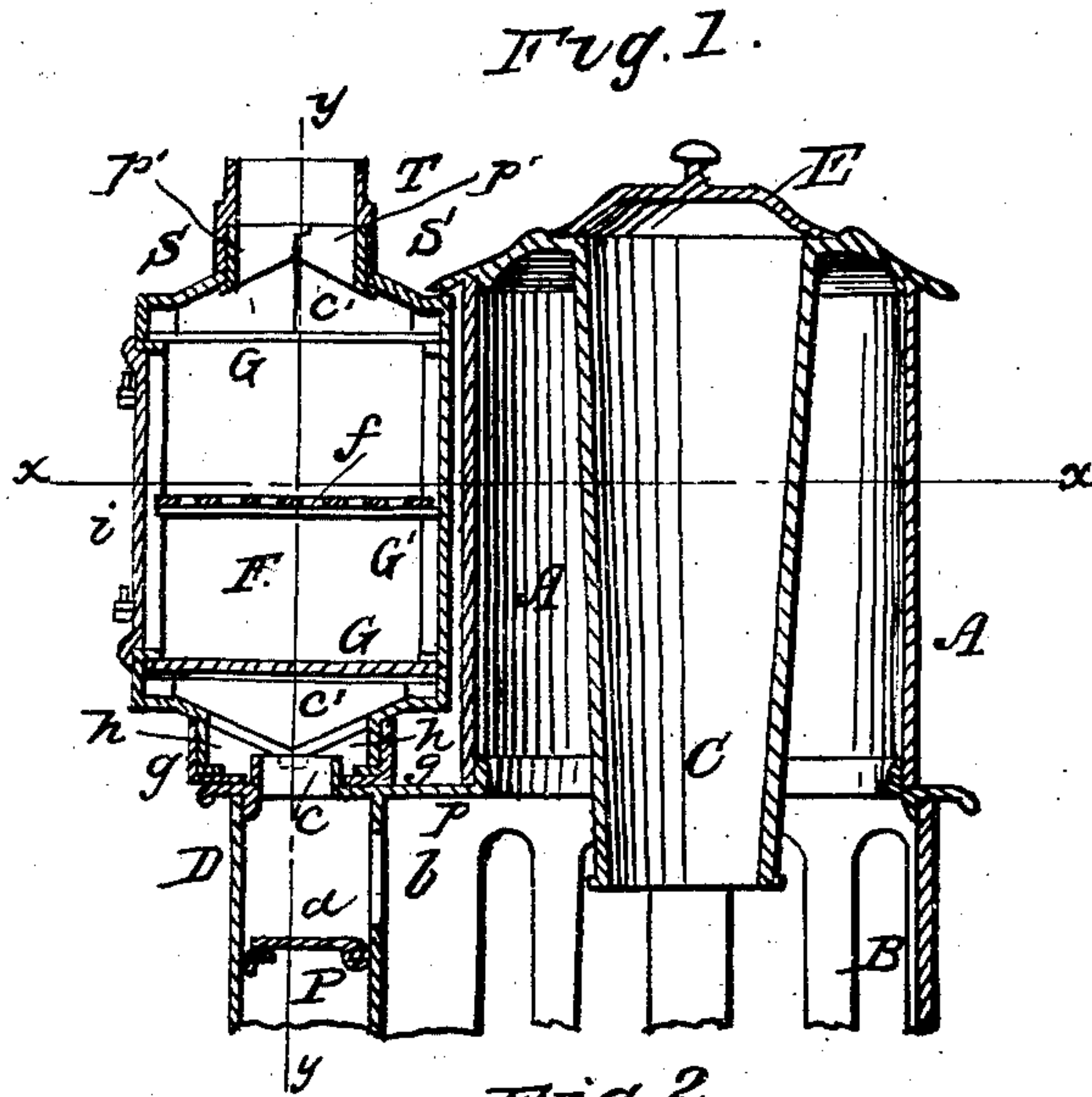


W. HAILES.  
Cooking Stove.

No. 90,357.

Patented May 25, 1869.



Witnesses

*R. Campbell*  
*J. V. Campbell*

Inventor

*W. Hailes*  
*Mason & Co. Attorneys*



# United States Patent Office.

WILLIAM HAILES, OF ALBANY, NEW YORK.

*Letters Patent No. 90,357, dated May 25, 1869.*

## BASE-BURNING STOVE.

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, WILLIAM HAILES, of Albany, in the county of Albany, and State of New York, have invented a new and useful Portable Oven for Base-Burning Parlor-Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a section, taken centrally through a base-burning heating-stove, in the vertical plane indicated by line *z z* in fig. 2, showing, in similar section, the improved oven applied to it.

Figure 2 is a horizontal section, taken through the stove and oven, in the plane indicated by line *x x*, fig. 1.

Figure 3 is a section through the oven and its support, taken in the vertical plane indicated by line *y y* in fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a new and improved construction of oven for cooking and other purposes, and the adaptation of the same to a base-burning or magazine-stove, whereby the oven is portable or detachable from the stove, and, when applied to the stove, it affords a flue entirely surrounding it, which flue forms part of the exit-flue of the stove, and whereby the said oven can be readily adjusted to well-known forms of magazine-heaters; and, when necessary, it can be conveniently taken to pieces, and cleaned, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, I have represented my improvement applied to the upper portion of a well-known form of magazine heating-stove, A being the upper section of this stove, which section surrounds the magazine C, and is supported upon the enlarged illuminating-section B.

Below this section, the base of the stove is constructed in the usual manner.

In rear of the wall A, and formed by a horizontal extension of the illuminating or window-section B, is a flue-section, D, which is separated from B by a vertical wall, through which is a direct-draught opening, *b*, which may be closed by the same damper, *a*, used to close the indirect-draught flue P.

The horizontal plate *p*, which caps the flue P, has a pipe-collar, *c*, formed upon it, which is adapted to receive a flue-pipe, for conducting off the products of combustion when the improved oven is not used, and which is also adapted to enter a corresponding opening formed in a flanged base, *g*, when said flue-pipe is removed, and the oven is used in its place.

The base, *g*, is adapted to receive the elliptical or elongated foot, *h*, of the oven, and to form tight joints, and a substantial base-support.

This base, *g*, also serves as a collar for embracing the contracted foot *h*, and uniting the two vertical sections S S, which partly enclose the oven-wall G, and form a flue, *c'*, surrounding four of its sides.

To the bottom side of the base, *g*, two or more buttons, *s s*, are pivoted, which will catch beneath the edge of the plate *p*, as shown in fig. 3, and secure this base and the oven down in place on said plate.

The oven-chamber F is enclosed, in part, by an arched wall, and horizontal base, G, by a single back-plate, G', lying next the wall A of the stove, and by a door, *i*, which, when open, will afford access to the interior of the oven.

The arched wall G may be made of sheet-metal, and the base-wall G may be of cast-iron, because the heated products rising from flue P impinge directly against this plate, and are here divided equally between the flue-spaces *c' c'*, on opposite sides of the arched wall G, so as to ascend, through these spaces, to the exit-pipe T.

The flue-spaces *c' c'*, leading around the oven to the exit-pipe T, are formed by two vertical halves or sections, S S, which are of cast-iron, and which are suitably constructed with ledges upon their inner sides, for receiving, supporting, and keeping in place the oven-walls G.

The flanged base *g* unites the two sections at their lower ends, by receiving the foot-piece *h*, as above described; and the collar-band T unites the upper ends of said sections, by embracing the semicircular collar-portions, *p*, formed thereon, as shown in figs. 1 and 3.

The vertical meeting edges of the two sections S S should be lapped, rabbeted together, or otherwise united, so as to make a tight joint.

The section S, nearest the wall A of the stove, is constructed with the plate G', for closing that side of the oven-chamber F opposite the door *i*, as shown in figs. 1 and 2.

It will be seen, from the above description, that the oven may be readily removed from or attached to the stove, at pleasure, and, when it is not used, an escape-pipe section can be readily applied in its place.

It will also be seen, that the oven-chamber is formed by the inner walls of flues *c' c'*, which flues form a continuation of the ascending flue P.

It will also be seen, that the flues *c' c'* are, in part, formed by the two vertically-divided halves or sections S S, which are connected together by the flanged base *g* at one end, and the collar-band T at the other end, so that, by removing said parts, the sections S S will separate, and can then be easily cleaned of soot and ashes.

And it will further be seen, that the collar-band T also serves as a means for readily connecting to it the flue or smoke-pipe that leads to the chimney.

I am aware that W. O. Durant and others have patented and manufactured magazine heating-stoves with



oven and boiler-attachments, constituting permanently-attached parts of such stoves; and, therefore, I do not claim broadly as my invention the application to a stove of a permanently-attached oven-boiler or water-reservoir.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The oven-chamber F, with its flue-plates S S, divided as described, and held together by the devices described, and all for the purpose set forth.

2. The arrangement of the collar-base *g*, flue-plates

S S, oven-chamber F G G', and collars *h p'*, substantially in the manner shown and described, and for the purpose set forth.

3. The arrangement of the single flat wall G', plates G G, door *i*, and the plates S S, for the purpose of forming an oven with a single flat wall, and with a flue-space around two of its sides, all as herein described and shown.

Witnesses:

WILLIAM HAILES.

JNO. G. TREADWELL,  
CONRAD VAN ALLEN.