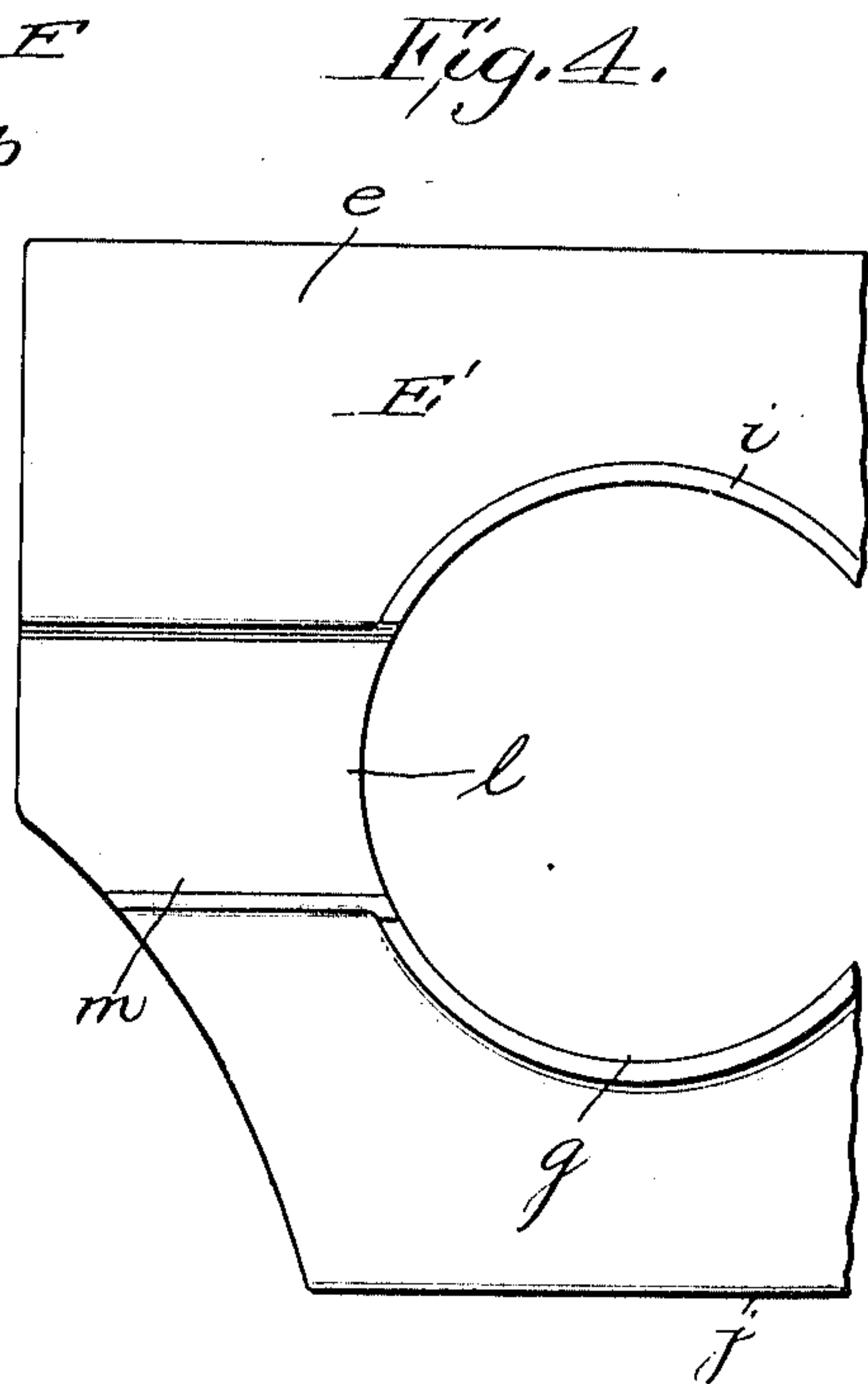
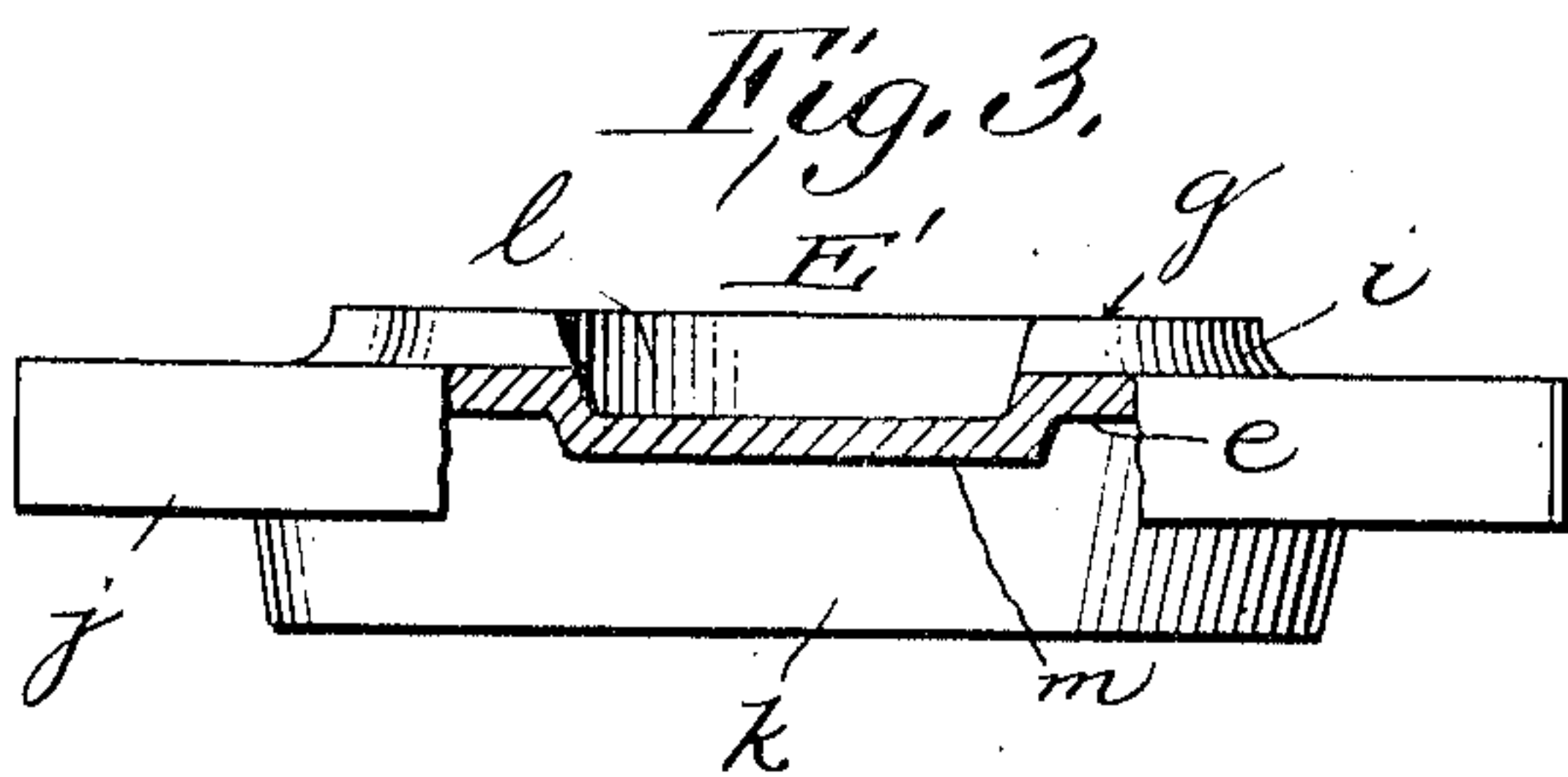
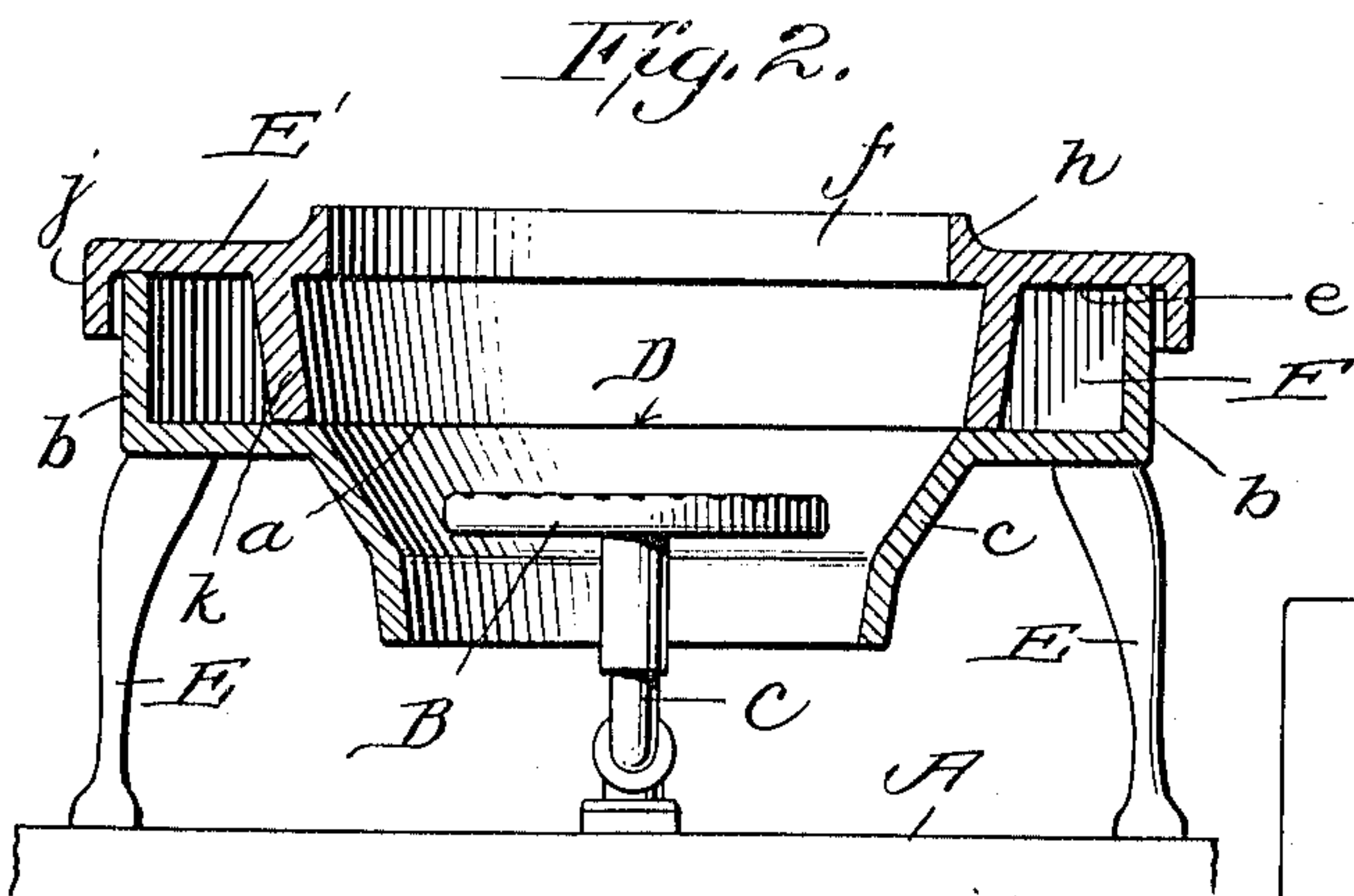
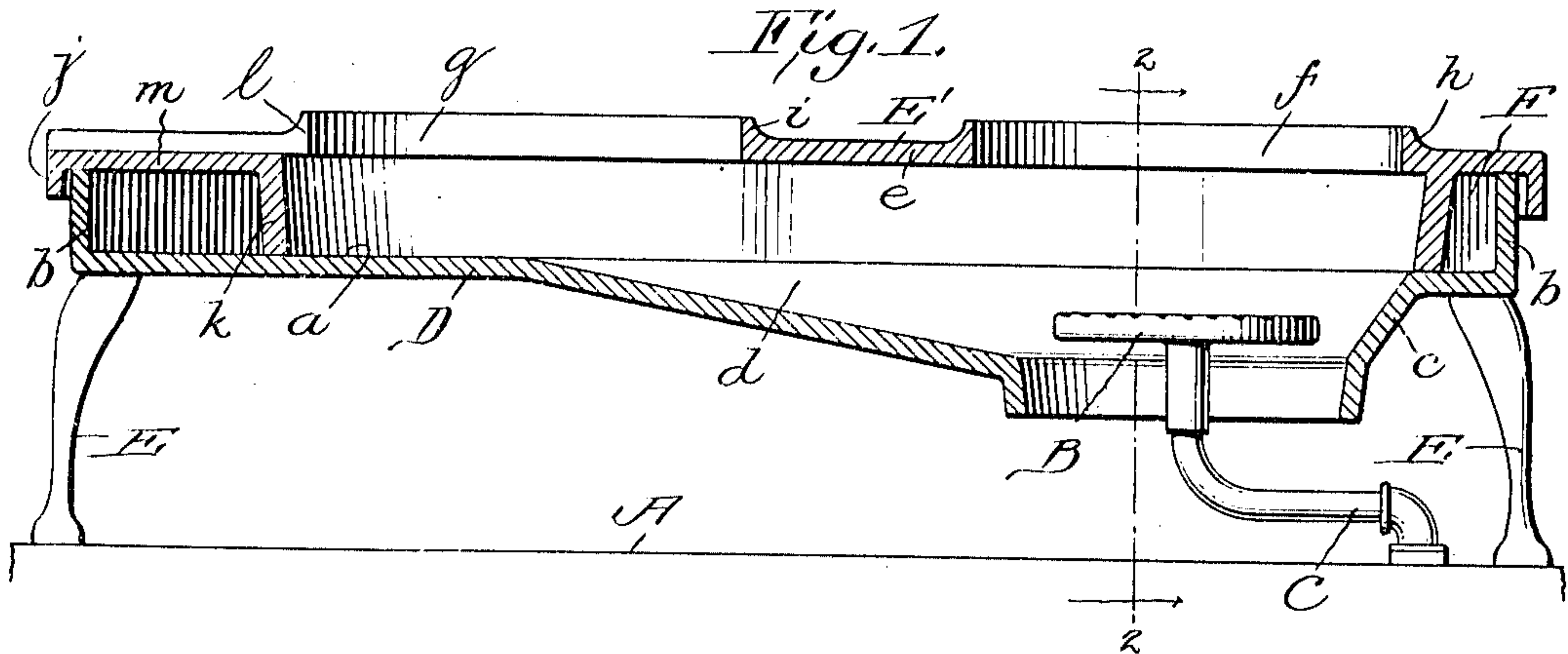


W. E. FROST.
HEATING DEVICE.
APPLICATION FILED OCT. 30, 1909.

954,428.

Patented Apr. 12, 1910.



Witnesses

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WALTER E. FROST, OF AUBURN, MAINE, ASSIGNOR OF THREE-FOURTHS TO EMMETT G. LEARN, OF AUBURN, MAINE, AND ONE-FOURTH TO JEREMIAH M. SCANNELL, OF LEWISTON, MAINE.

HEATING DEVICE.

954,428.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed October 30, 1909. Serial No. 525,470.

To all whom it may concern:

Be it known that I, WALTER E. FROST, citizen of the United States, residing at Auburn, in the county of Androscoggin and State of Maine, have invented new and useful Improvements in Heating Devices, of which the following is a specification.

My invention relates to heating devices designed for use over a gas or other fuel burner and constructed with a view to utilizing a single burner to heat more than one utensil and the contents thereof; and it contemplates the provision of such a device embodying a simple and efficient construction, comprising members adapted to be separated and readily and thoroughly cleaned, and also comprising means for assuring the passage of an adequate quantity of heat and products of combustion from the burner to the utensil-support comparatively remote from the burner.

With the foregoing in view, the invention will be fully understood from the following description and claims when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is a vertical section taken through the longitudinal center of my novel device, and showing the burner in elevation. Fig. 2 is a transverse section taken in the plane indicated by the line 2—2 of Fig. 1, with the burner in elevation. Fig. 3 is a detail elevation of the end of the cover member remote from the burner with a portion broken away. Fig. 4 is a detail plan view of the end portion of the device that is remote from the burner.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A is a base.

B is a burner carried by the base and adapted to be supplied through a pipe C with gas or other fuel, and D is the body section of my novel heating device, which is adapted to be supported by legs E or otherwise above the base. The said body member D is preferably formed of metal and comprises a bottom wall *a*, a vertical wall *b* rising from the edges of the bottom wall, a flange *c* depending from the bottom wall, at a point adjacent one end of the member, and adapted to surround the burner B, and a longitudinal channel-portion *d* depending

from the bottom wall and extending from the inner side of the flange *c* toward the opposite end of the member and having its bottom inclined upward toward said end, as shown in Fig. 1.

E' is the cover member of the device, which is also preferably formed of metal suitable to the purpose, the said cover member comprises a top wall *e* in which are separated openings *f* and *g*, surrounded by upstanding flanges *h* and *i*; the said top wall being designed to rest on the vertical wall *b* of the body member D, a marginal flange *j* depending from the top wall *e* and adapted to surround the body wall *b* with a view to preventing grease reaching the interior of the body member, and a flange *k* depending from the top wall *e* and inclosing the two openings *f* and *g* therein, and adapted, when the top wall *e* rests on the side wall *b* of body member D, to bear snugly on the bottom wall *a* of said body member. It will also be observed by comparison of Figs. 1, 3 and 4 that the cover member E' is provided in its top wall *e* and flange *i*, at a point remote from the burner B, with an opening *l* for the escape of products of combustion, and is also provided on its top wall with a depending grooved portion *m* which extends longitudinally between the opening *g* and the adjacent end of the cover member and is open at its upper side. The inner end of the grooved portion *m* communicates with the space inclosed by the flange *k* of the cover member E', and hence it will be manifest that when the opening *l* is closed by a utensil that surrounds the flange *i*, the grooved portion *m* will form an adequate escape for the heat and products of combustion and in that way maintain the draft necessary to assure the passage of heat and products of combustion from the burner B to and past the bottom of the utensil on the flange *i*.

In the practical use of my novel heating device, utensils are placed above the openings *f* and *g*, whereupon the utensil above the former opening will be directly heated by the burner, while heat and products of combustion from the burner will be deflected to and past the utensil above the opening *g* and will pass out of the device through the opening *l* and grooved portion *m*.

Incidental to the operation of the device, it will be observed that the heat and products of combustion will be confined within

the flange *k* of the cover member *E'* while
en route between the burner *B* and the es-
cape opening *l* and grooved portion *m*, and
that the dead-air space *F*, formed between
5 the flange *k* of the cover member *E'* and the
side wall *b* of the body member *D*, will pre-
vent the radiation of heat from the device.

It will be gathered from the foregoing
that when the device is to be cleaned, the
10 cover member *E'* as a whole may be lifted
from the body member *D* with a view of
facilitating such operation.

The construction herein illustrated and
described constitutes the best practical em-
15 bodiment of my invention that I have de-
vised, but it is obvious that in the future
practice of the invention such changes or
modifications may be made as do not involve
departure from the scope of my invention as
20 defined in the claims appended.

Having described my invention, what I
claim and desire to secure by Letters-Pat-
ent, is:

1. In a heating device, the combination
25 with a suitably supported body member com-
prising a bottom wall having a depending
flange adapted to receive a burner and also
having a longitudinal channel portion com-
municating at one end with the space with-
30 in said flange and having its bottom in-
clined upward from said space, and a side
wall extending upward from said bottom
wall; of a separable cover member compris-
ing a top wall resting on the side wall of
35 the body member and having spaced open-
ings and a depending marginal flange sur-
rounding the side wall of the body member
and also having a depending flange inclosing
the said spaced openings; the said flange
40 bearing on the bottom wall of the body
member and inclosing the space within the

depending flange and the longitudinal chan-
nel portion of said bottom wall, and forming
in conjunction with the side wall of the body
member an air space, substantially as and 45
for the purpose set forth.

2. In a heating device, the combination
with a suitably supported body member
comprising a bottom wall having a depend-
ing flange adapted to receive a burner and 50
also having a longitudinal channel portion
communicating at one end with the space
within said flange and having its bottom
inclined upward from said space, and a
side wall extending upward from said bot- 55
tom wall; of a separable cover member com-
prising a top wall resting on the side wall
of the body member and having spaced open-
ings, one of which is arranged above the
space within the depending flange of the 60
body member, and also having a longitudi-
nal depending grooved portion extending
outwardly from the other opening and a
depending marginal flange surrounding the
side wall of the body member and further 65
having a depending flange inclosing the said
spaced openings; said flange bearing on the
bottom wall of the body member and in-
closing the space within the depending
flange and the longitudinal channel portion 70
thereof and forming, in conjunction with
the side wall of said body member an air
space, substantially as and for the purpose
set forth.

In testimony whereof I have hereunto set 75
my hand in presence of two subscribing wit-
nesses.

WALTER E. FROST.

Witnesses:

WM. H. PUTNAM,
W. L. LOTHROP.