

(No Model.)

T. H. CONWAY.
HEATING STOVE.

No. 606,048.

Patented June 21, 1898.

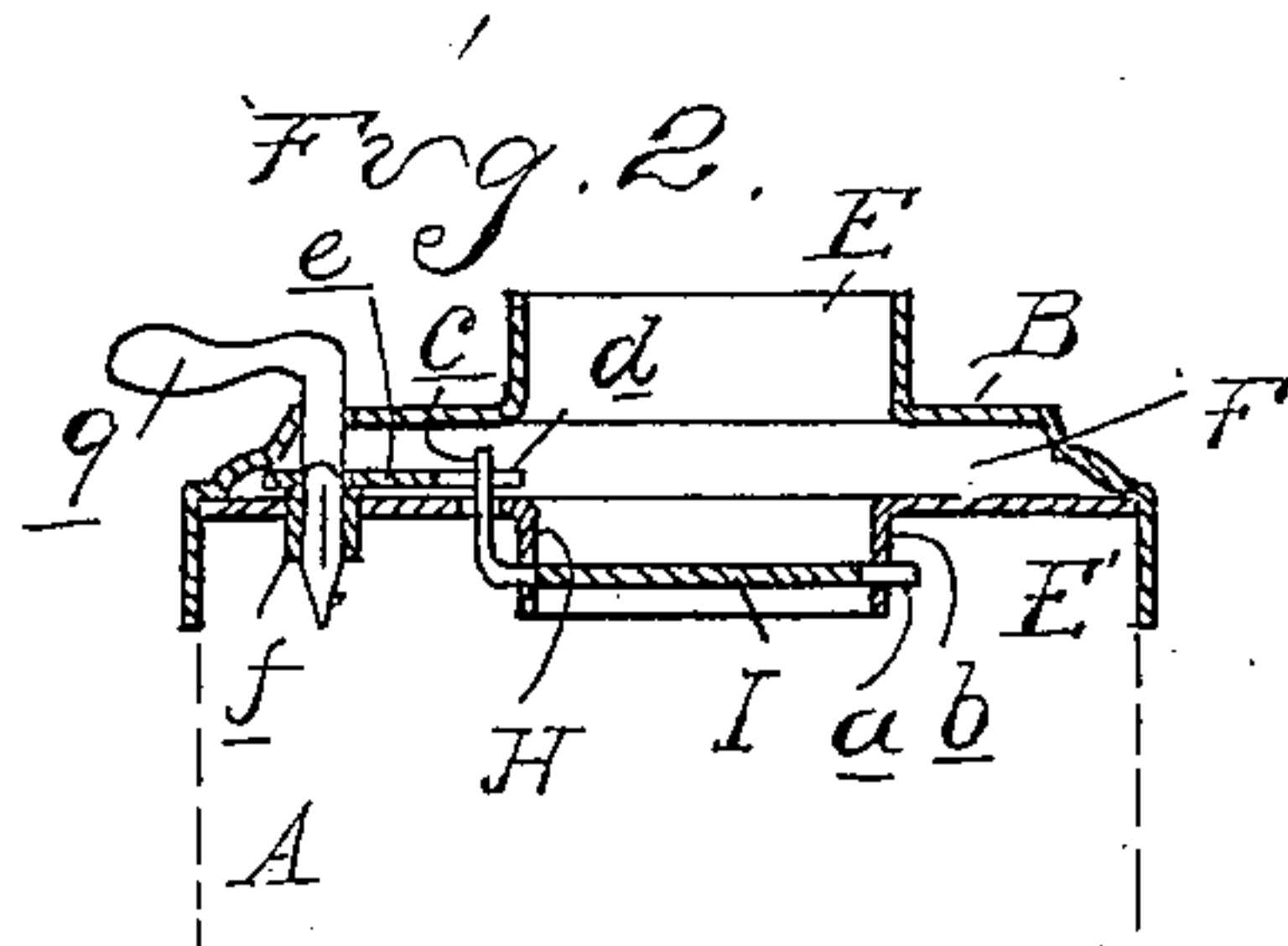
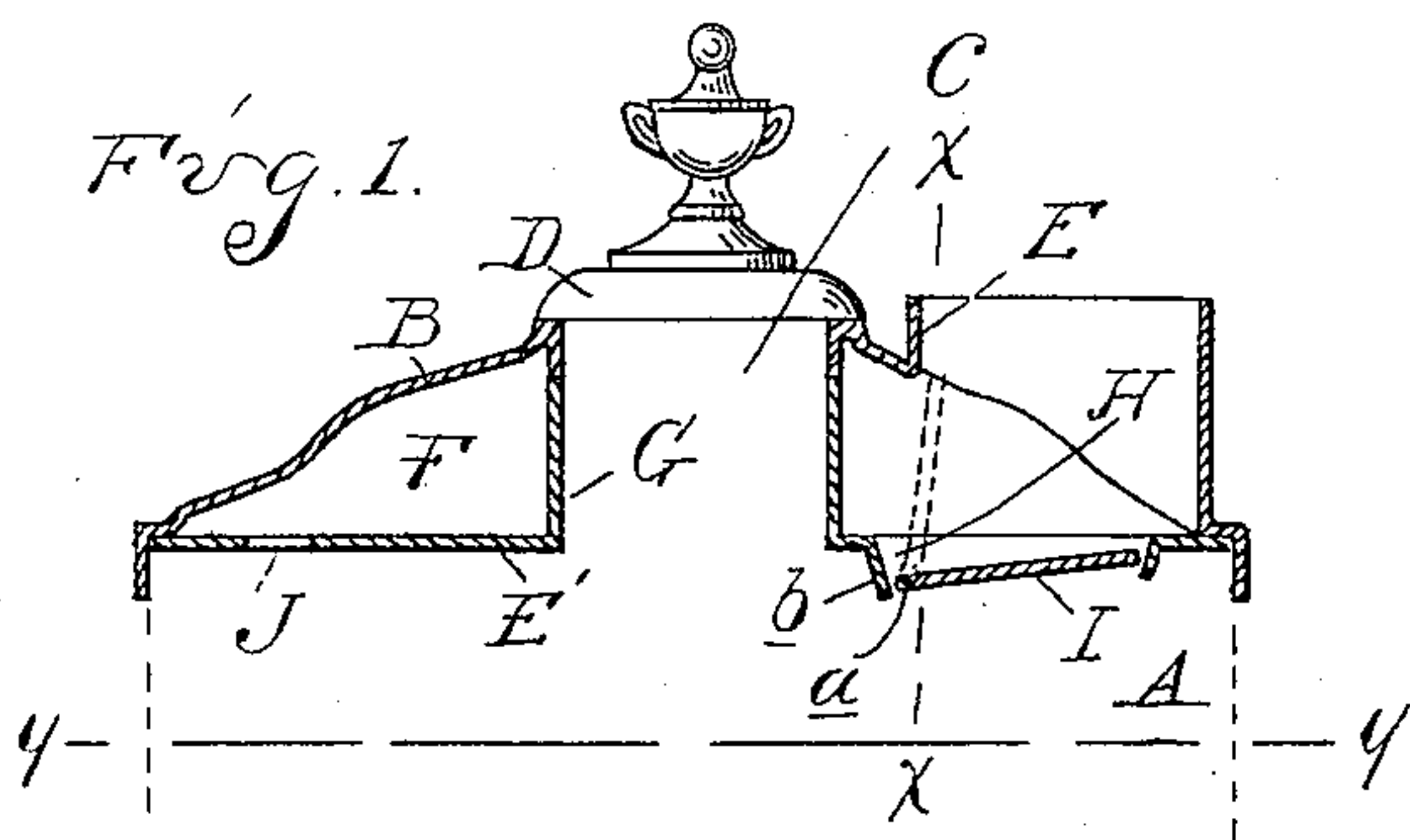


Fig. 3.

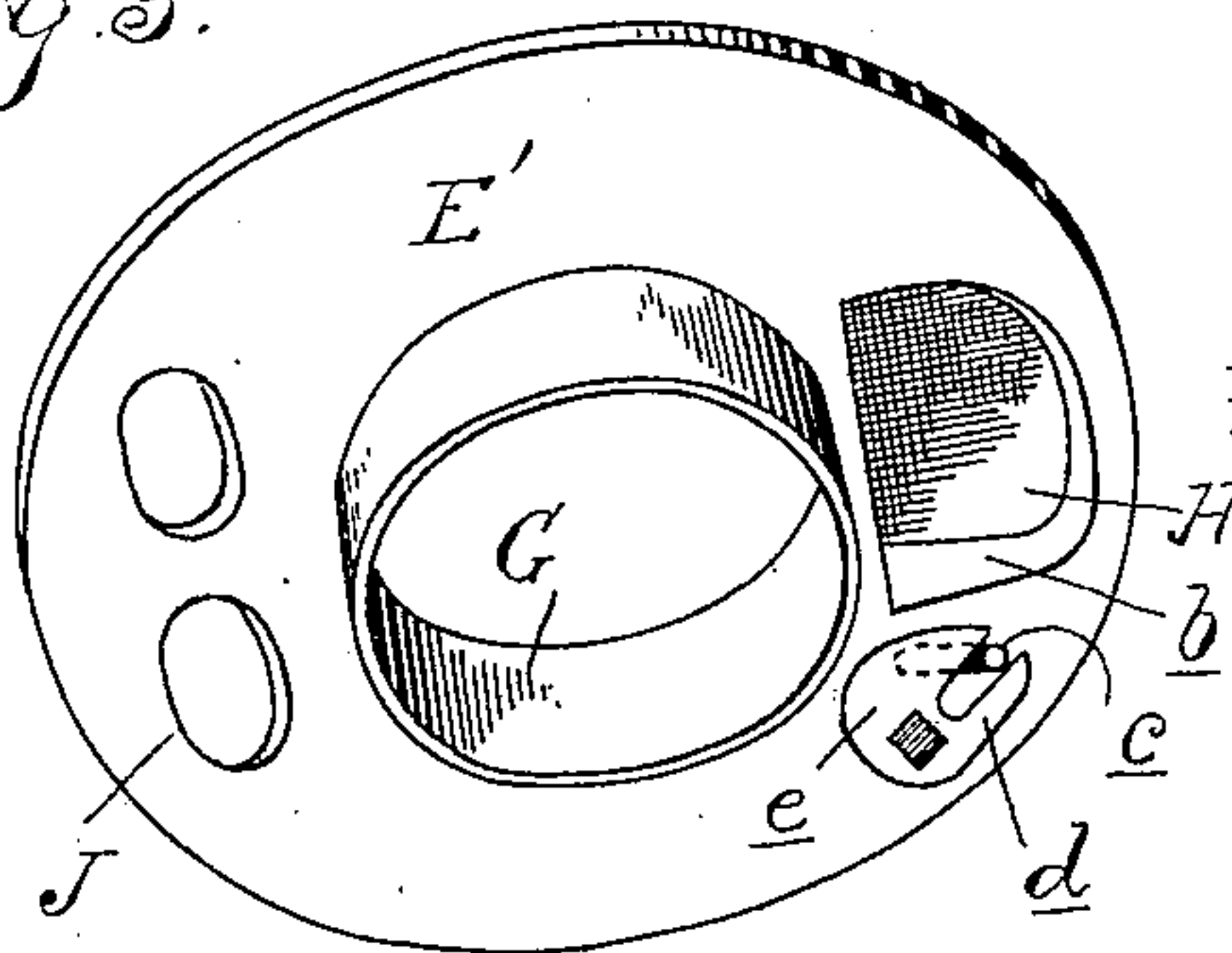


Fig. 5.

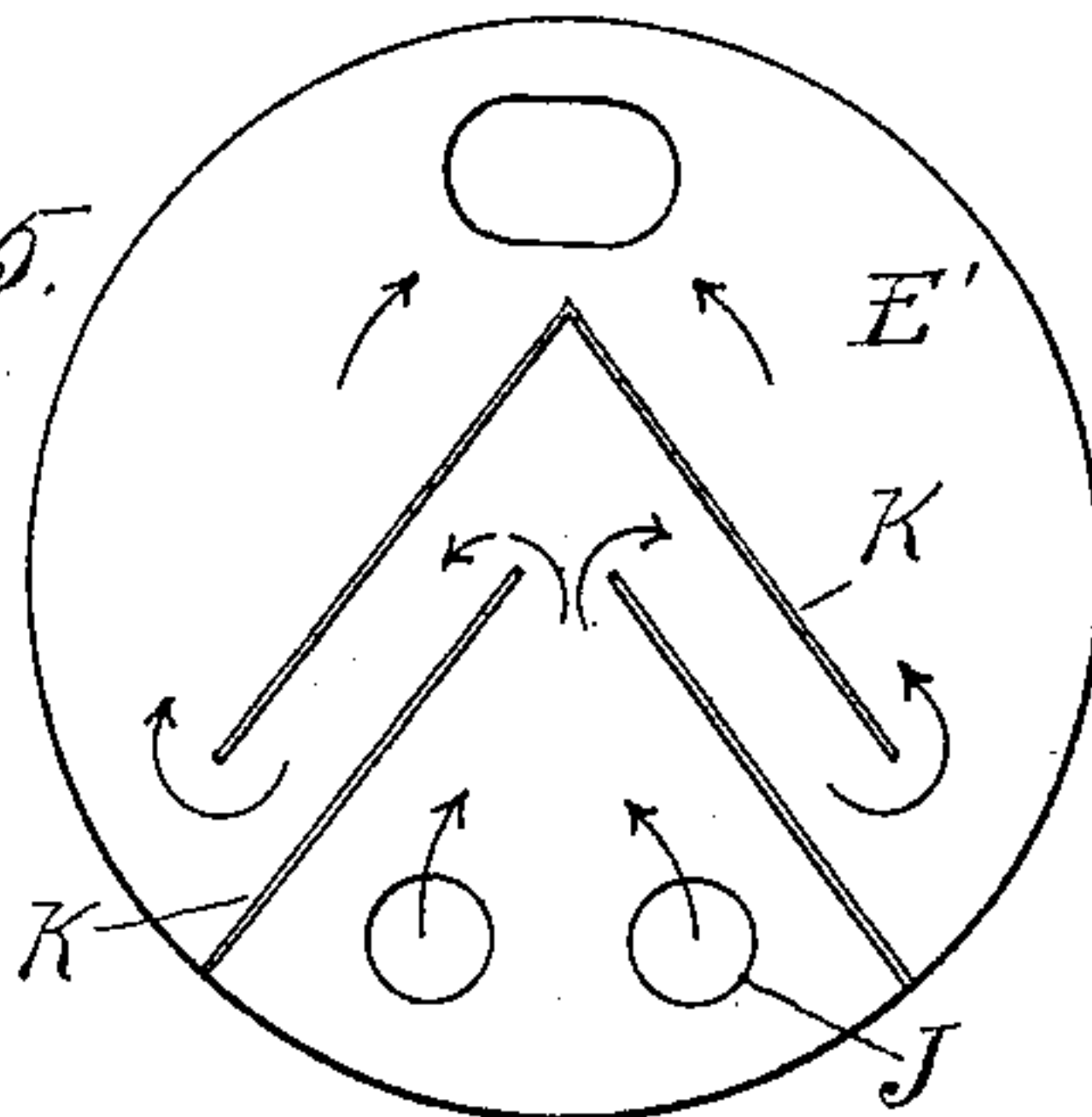


Fig. 6.

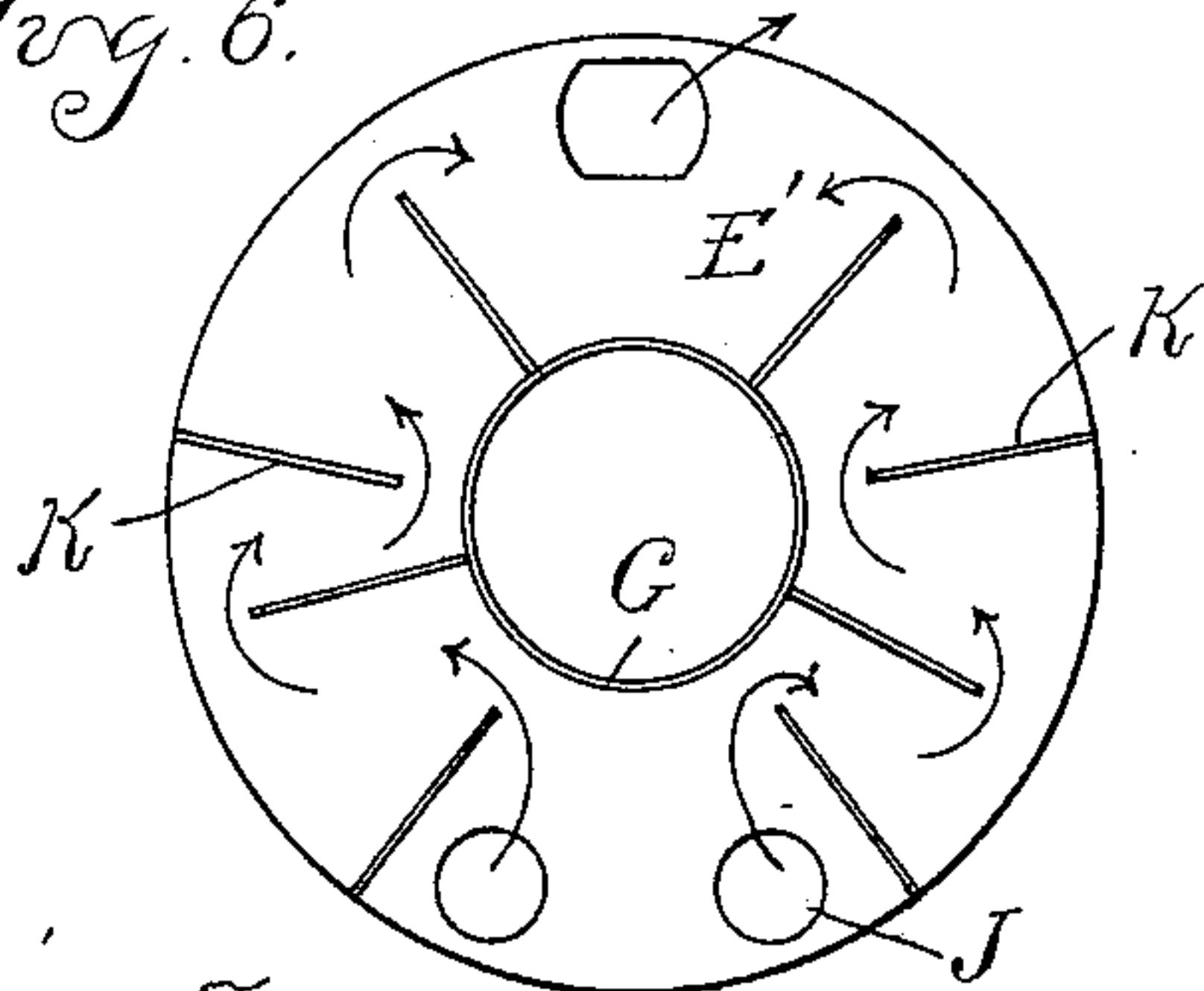


Fig. 4.

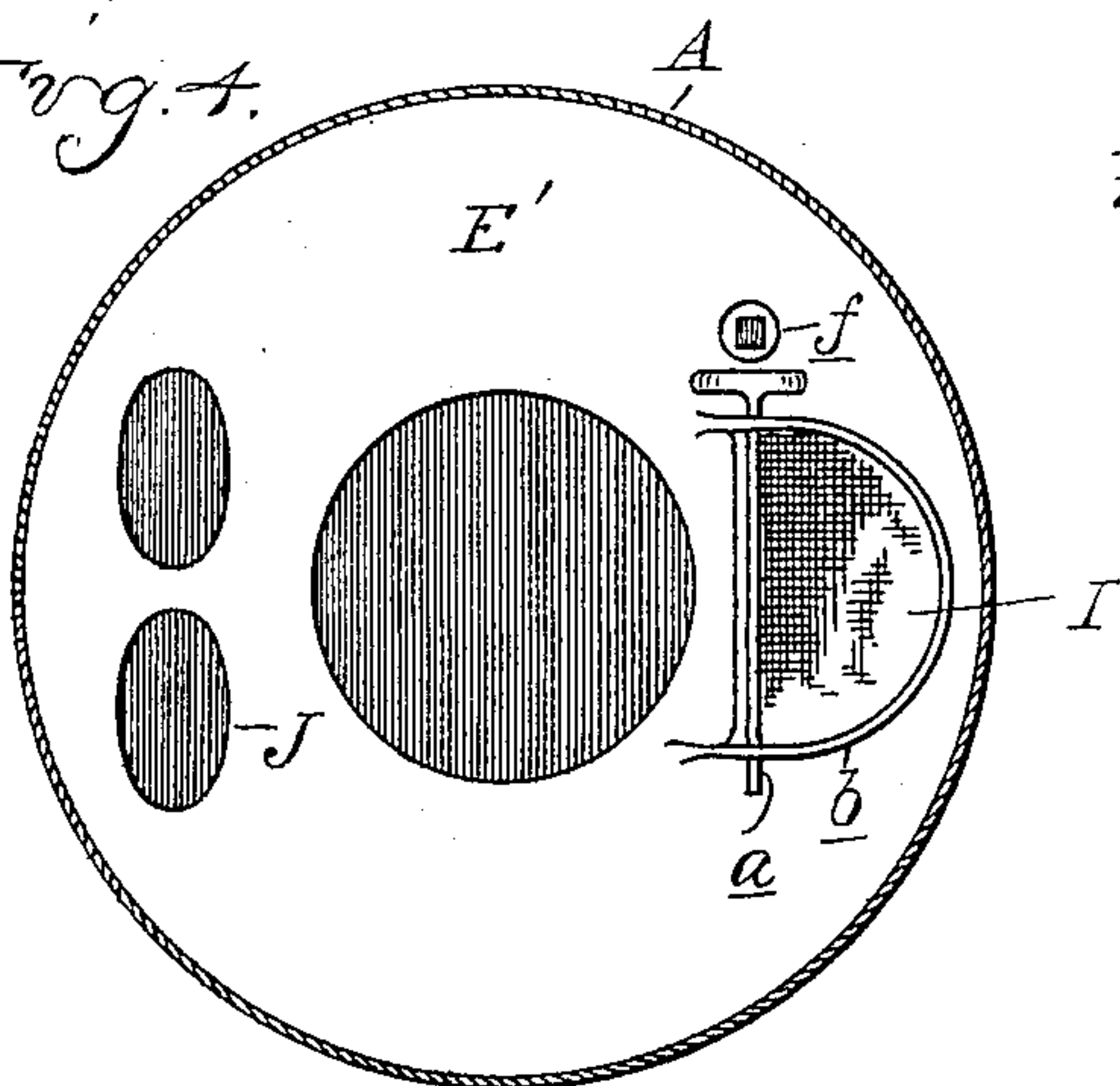
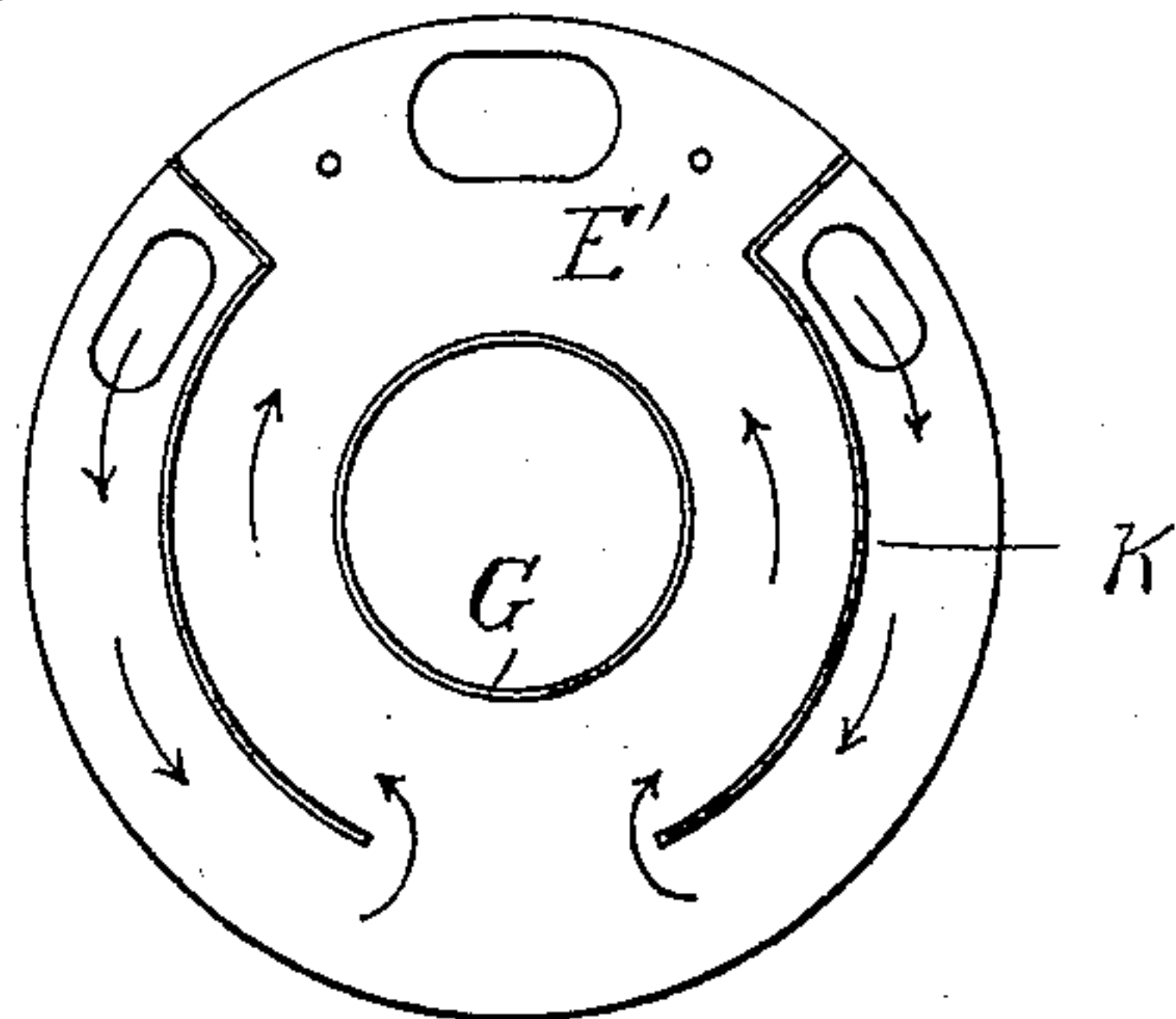


Fig. 7.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS H. CONWAY, OF DETROIT, MICHIGAN.

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 606,048, dated June 21, 1898.

Application filed October 11, 1897. Serial No. 654,907. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. CONWAY, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Heating-Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention is in the nature of an attachment for heating-stoves of the well-known type in which the stove forms merely a combustion-chamber, the top being provided with a stovepipe connection and usually also with
15 a boiler-hole; and the invention consists in the peculiar construction, arrangement, and operation of a baffle-plate adapted to fit into the stove below the top plate and form in connection therewith an indirect smoke-flue in the
20 top of the stove, whereby the heating quality of the stove is improved at a slight cost, all as more fully hereinafter described, and shown in the drawings, in which—

Figure 1 is a vertical central section of a
25 stove-top provided with my improvement. Fig. 2 is a vertical cross-section on line *x x*, Fig. 1. Fig. 3 is a detached perspective view of the baffle-plate. Fig. 4 is a horizontal section on line *y y*, Fig. 1, looking at the under
30 side of the baffle-plate. Figs. 5, 6, and 7 are plan views of modified forms of the baffle-plate.

A is the body of the stove which forms the combustion-chamber.

35 B is the top plate.

C is a boiler-hole in the top plate, D is the cover therefor, and E is the connection for the stovepipe, the parts representing the usual arrangement found in ordinary heat-
40 ing-stoves.

My invention consists in introducing below the top plate a baffle-plate *E'* and thereby forming beneath the top plate an indirect smoke-flue *F*, where the stove is provided
45 with the boiler-hole, as is the case in the stove shown in the drawings. I provide the baffle-plate with a circular standing flange *G*, which extends up to and joins to the boiler-hole. This plate is provided with several
50 apertures, whereby the combustion-chamber communicates into the smoke-flues above. One of these apertures, *H*, is placed in direct-

draft relation with the stovepipe and is controlled by a damper *I*, while the other apertures, *J*, are placed in indirect-draft relation
55 with the stovepipe connection. To this end the openings may be placed near the front side of the stove, as in Fig. 3, or circuitous passages may be formed on top of the baffle-plate by means of flanges or partitions *K* variously arranged, as shown in Figs. 5, 6, and
60 7, with which the openings communicate in the well-known manner to produce an indirect draft to the stovepipe. A preferable arrangement for operating the damper is shown
65 in the drawings, wherein *a* is the shaft, to which the damper is secured in bearings formed in the depending flange *b* of the baffle-plate. One end of this shaft is formed
70 with an upwardly-projecting crank *c*, which engages into a slot *d* of a small plate *e*, pivoted on top of the baffle-plate by means of socket-pin *f*, which has a squared aperture for the reception of the squared end of the
75 loose crank-handle *g*, which projects upwardly through a hole in top of the stove. By making this crank-handle shorter or longer the construction is applicable to any stove to which the invention may be applied.

In practice it will be seen that by closing
80 the damper *I* an indirect draft is provided, which greatly enhances the heating qualities of the stove, while by opening the damper *I* a direct draft is provided into the stovepipe. At the same time if the top is provided with
85 the boiler-hole the convenience of the same is not interfered with. However, if it is not deemed necessary to provide the baffle-plate with a central opening communicating with the boiler-hole the arrangement shown in Fig.
90 5, wherein the indirect draft is concentrated in the center below the boiler-hole, may be sufficient.

What I claim as my invention is—

1. The combination with a heating-stove
95 wherein the body forms the combustion-chamber and which is provided with a top and a stovepipe connection at or near the top, of a plate conformable to the horizontal section of the body and located therein below
100 the stove-top and stovepipe connection and dividing the stove into a lower combustion-chamber and upper smoke-flue communicating directly with each other by means of two

apertures in said plate, one of said apertures being in direct-draft relation with the stove-pipe connection, a partition in said smoke-flue arranged to cause an indirect passage 5 therein to the stovepipe connection from the other aperture, and a damper for the direct-draft aperture.

2. The combination with a heating-stove wherein the body forms the combustion- 10 chamber and which is provided with a top having a boiler-hole centrally therein and a stovepipe connection, of a plate conformable to the horizontal section of the stove-body and located therein below the stove-top and 15 dividing the stove into a lower combustion-chamber and an upper smoke-flue communicating with each other directly by means of two apertures in said plate, a circular flange or partition surrounding a central 20 opening in said plate and extending to the stove-top and registering with the boiler-hole therein and forming an annular passage in the smoke-flue, one of said apertures in the plate being in direct-draft relation with the 25 stovepipe connection, and the other of said apertures being in indirect-draft relation with said stovepipe connection, and a damper for the direct-draft aperture.

3. The combination with a heating-stove having a top provided with a central boiler- 30 hole, and a stovepipe connection, of a baffle-plate E' located within said stove below the top thereof and dividing the stove into an upper smoke-flue and a lower combustion- 35 chamber, an upwardly-extending circular partition above said plate forming an annular passage, said baffle-plate having an aperture J on one side of said partition and an aperture H on the other side of said partition be- 40 low the stovepipe connection, and a damper for the aperture H.

4. The combination with a stove of a baffle-plate therein having an aperture, a damper 45 for said aperture, a crank c secured to said damper, a plate pivotally secured to said baffle-plate and provided with a slot in which said crank loosely engages, and an operating- 50 handle for said slotted plate detachably engaging the same and extending without the stove, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS H. CONWAY.

Witnesses:

M. B. O'DOHERTY,
OTTO F. BARTHEL.