

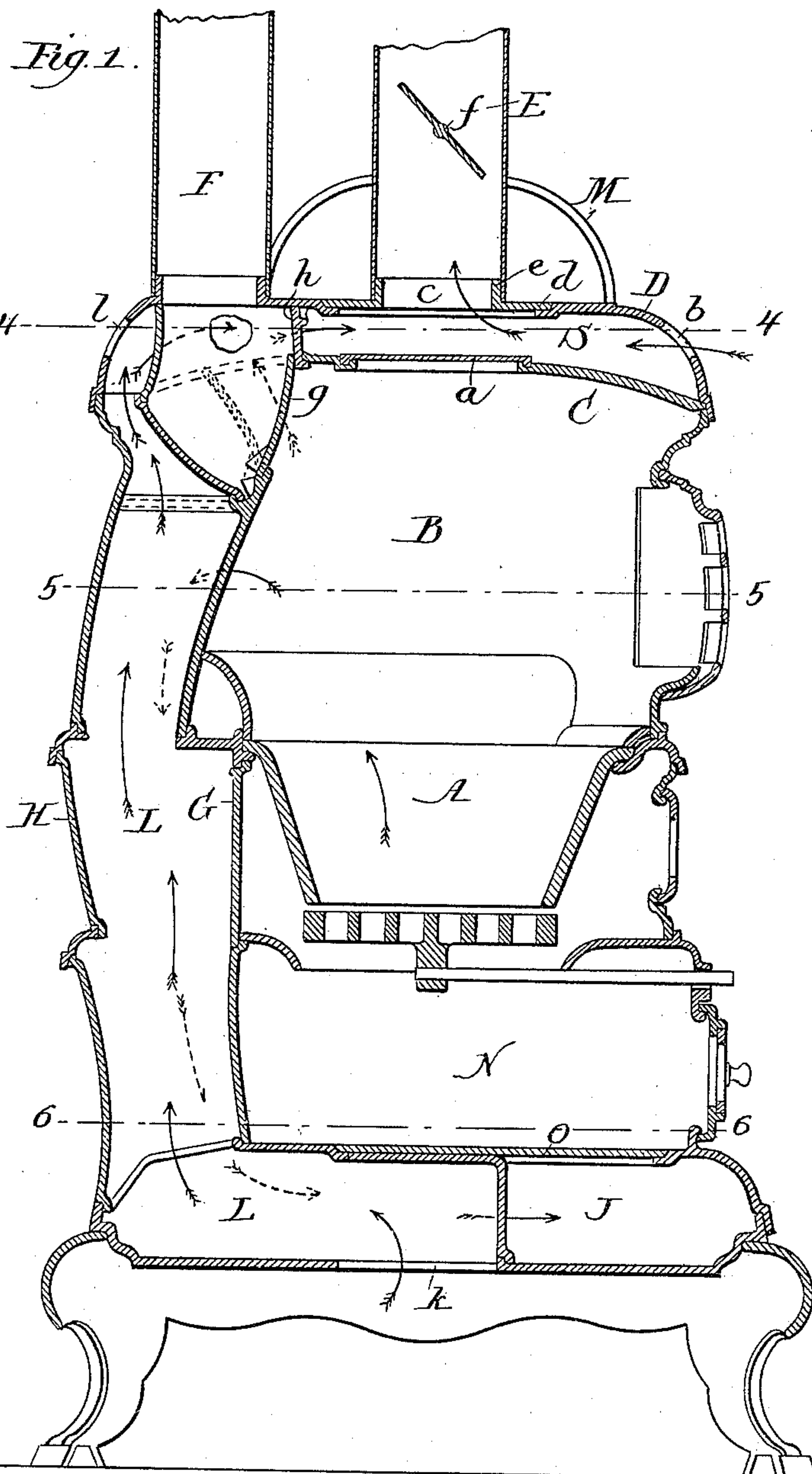
(No Model.)

4 Sheets—Sheet 1.

J. L. COLLINS & H. C. BURGIE.  
HEATING STOVE.

No. 409,452.

Patented Aug. 20, 1889.



Witnesses:

Albert H. Adams.  
Harry T. Jones.

Inventors:

James L. Collins  
Henry C. Burgie

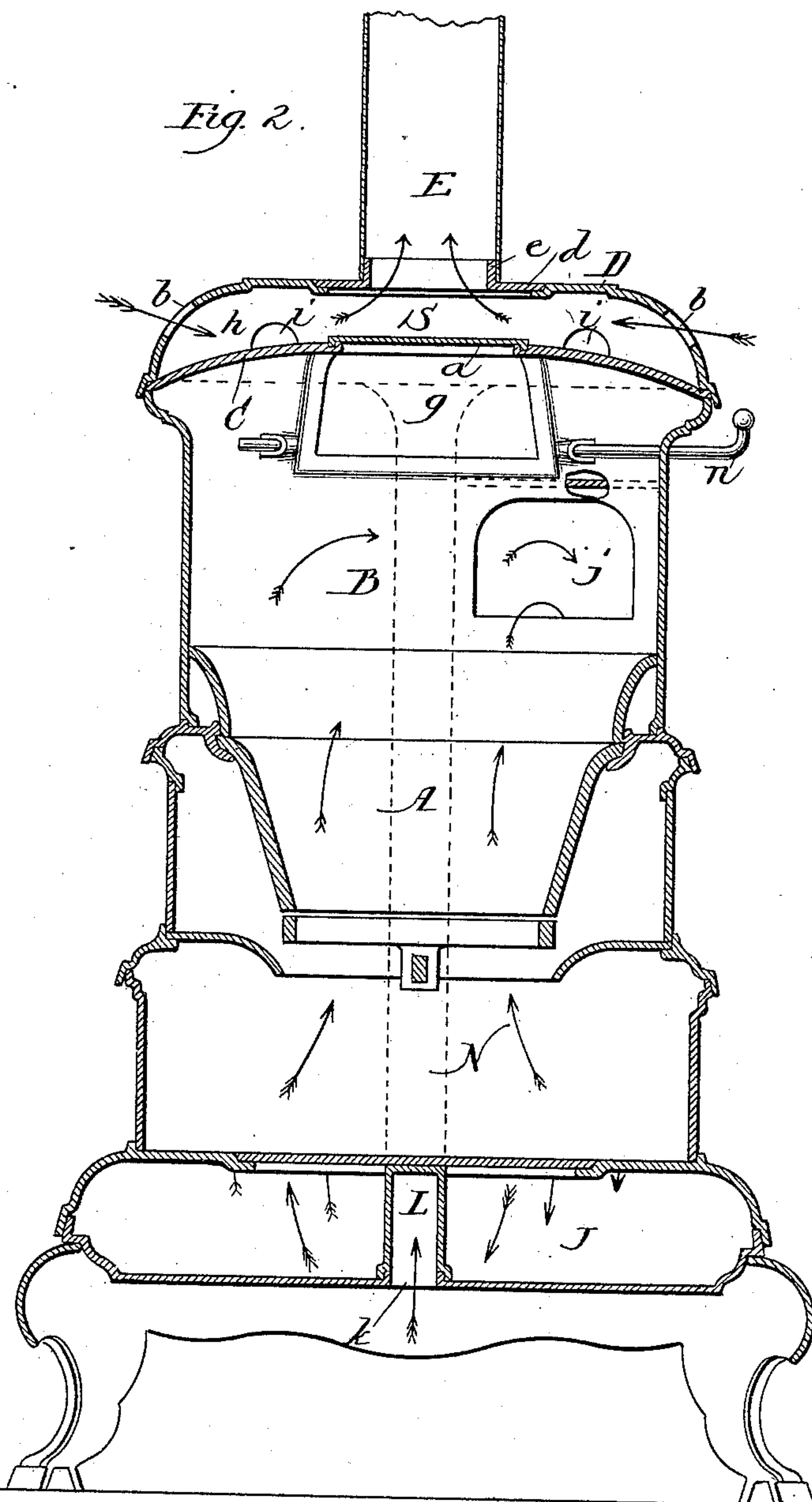
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(No Model.)

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Fig. 3.

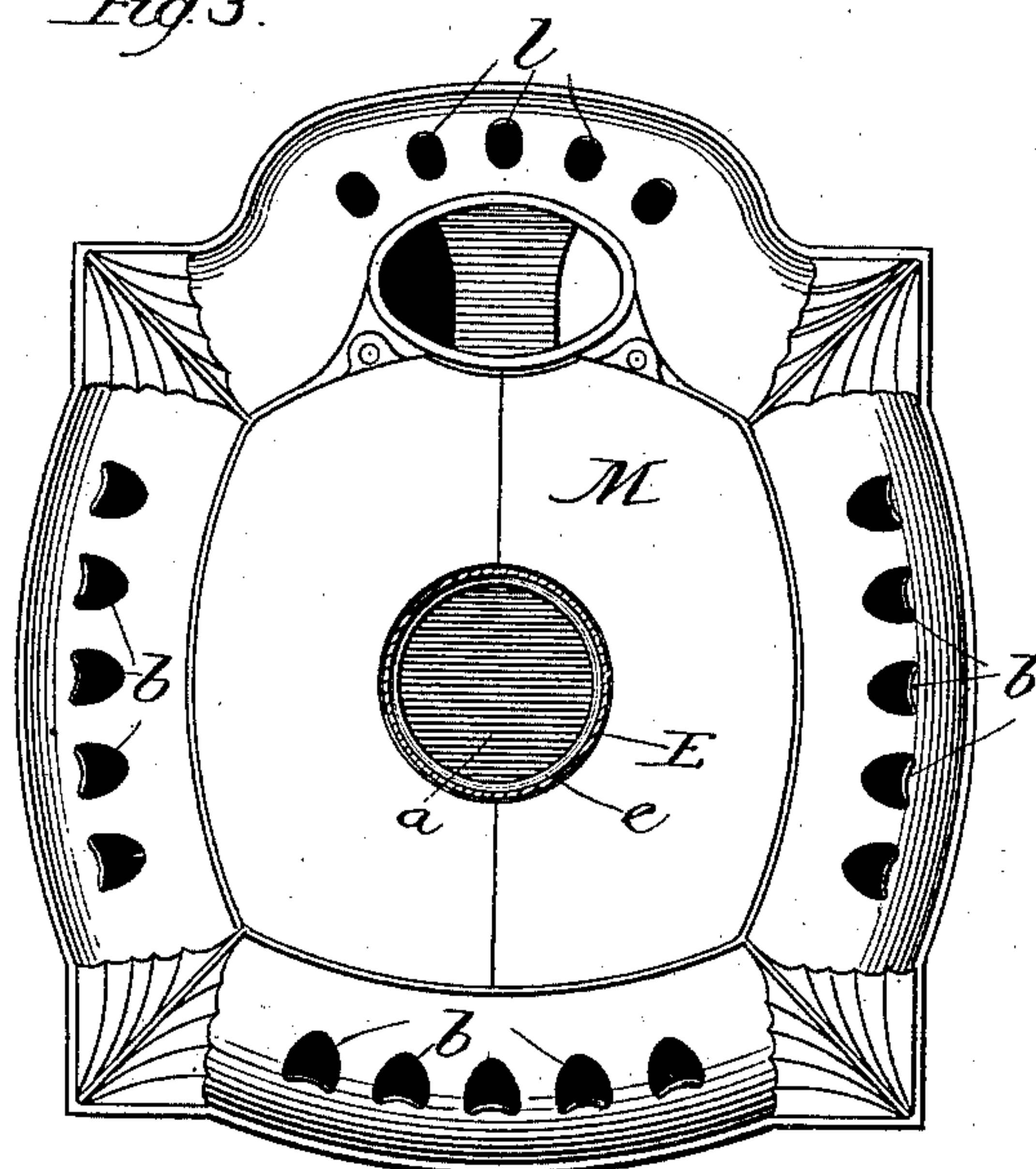
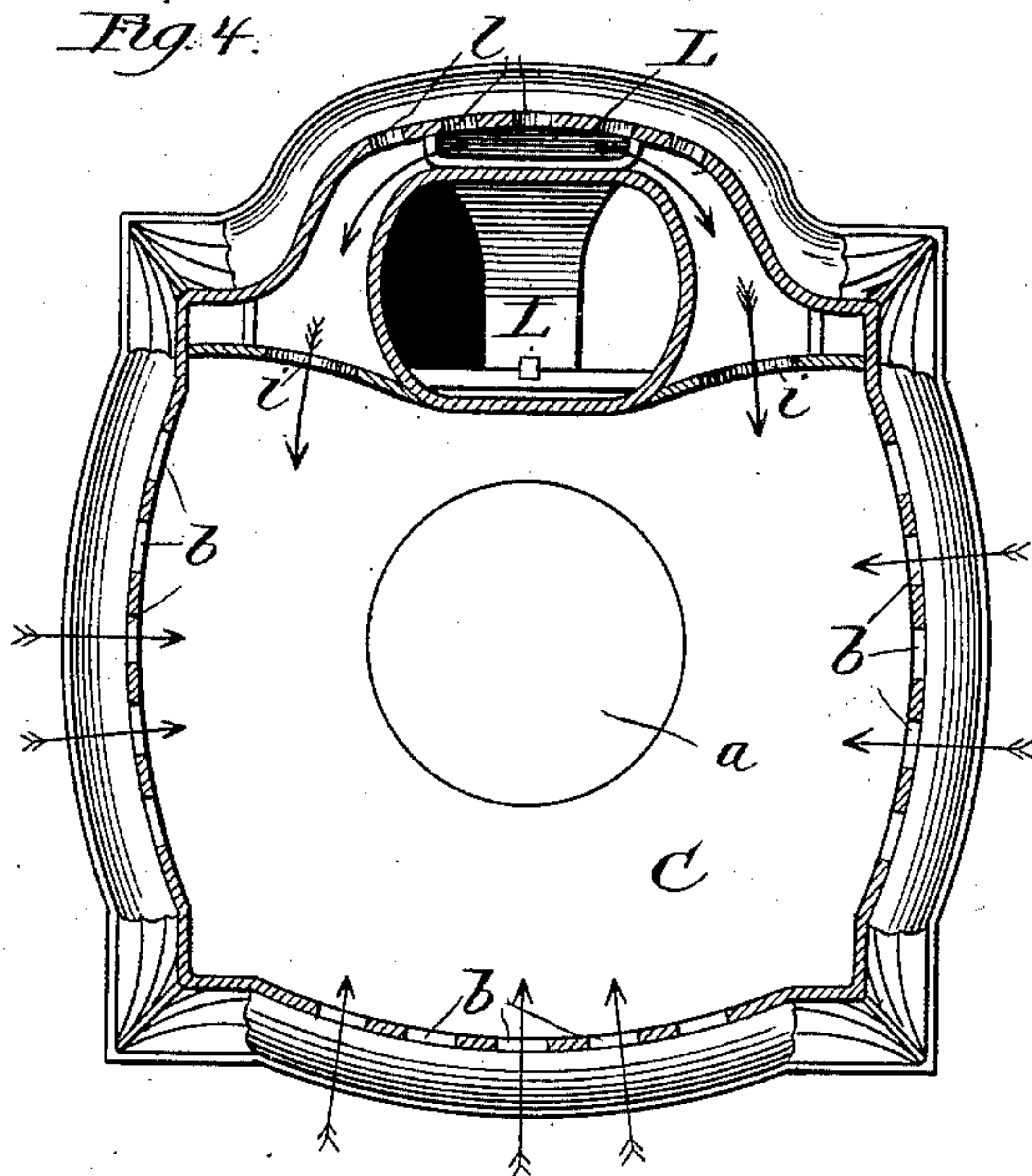


Fig. 4.



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(No Model.)

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Fig. 5.

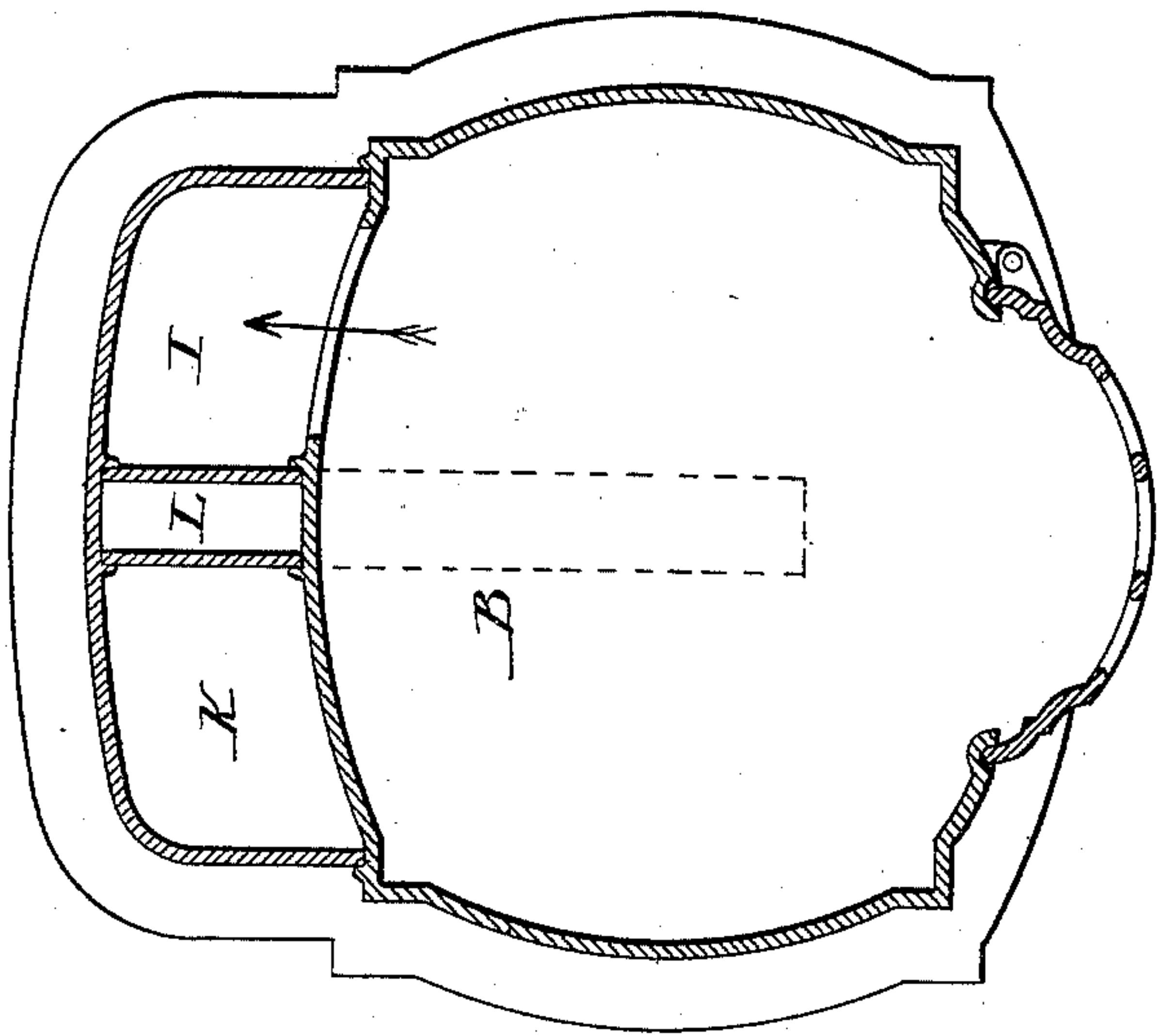
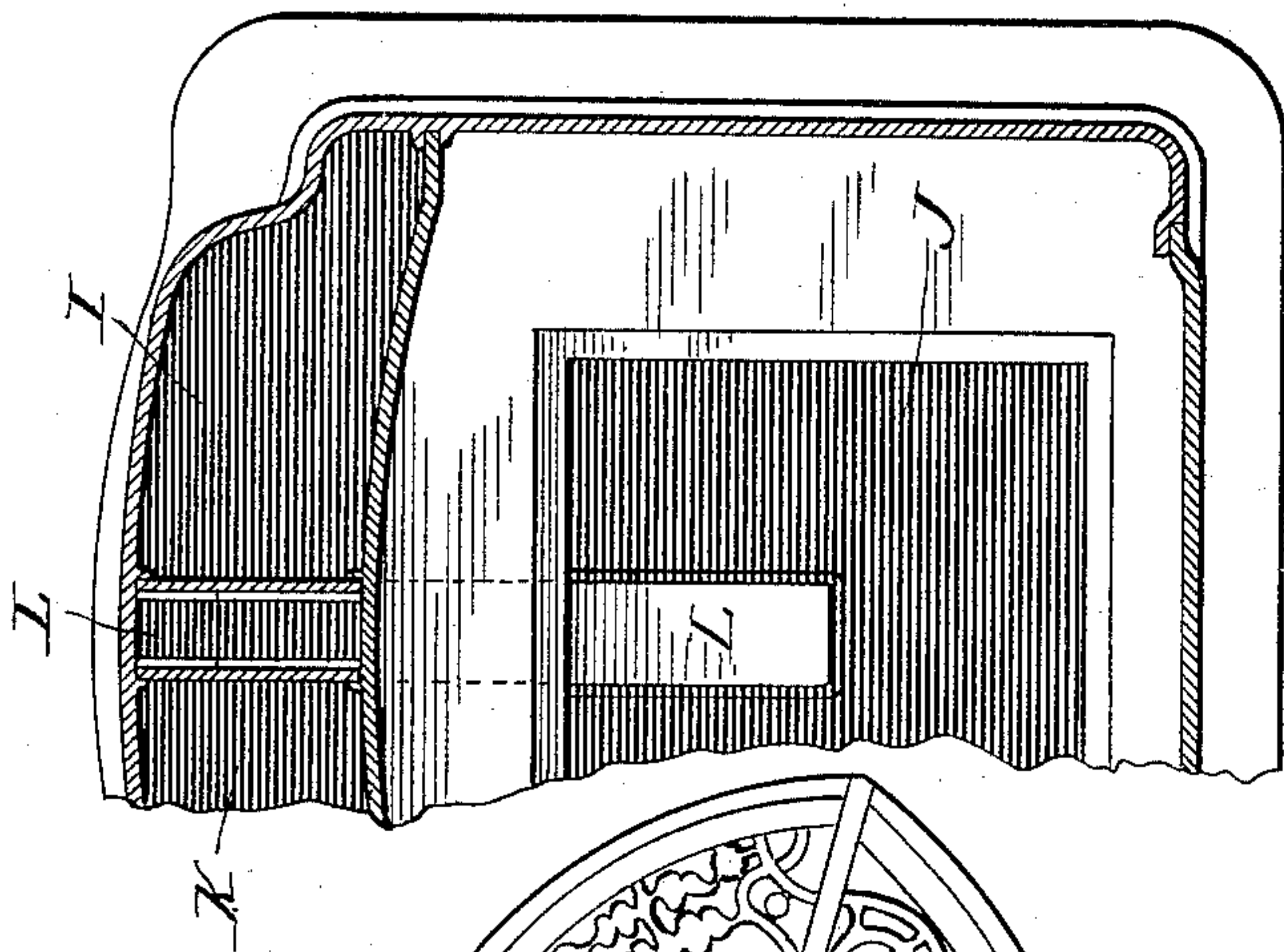


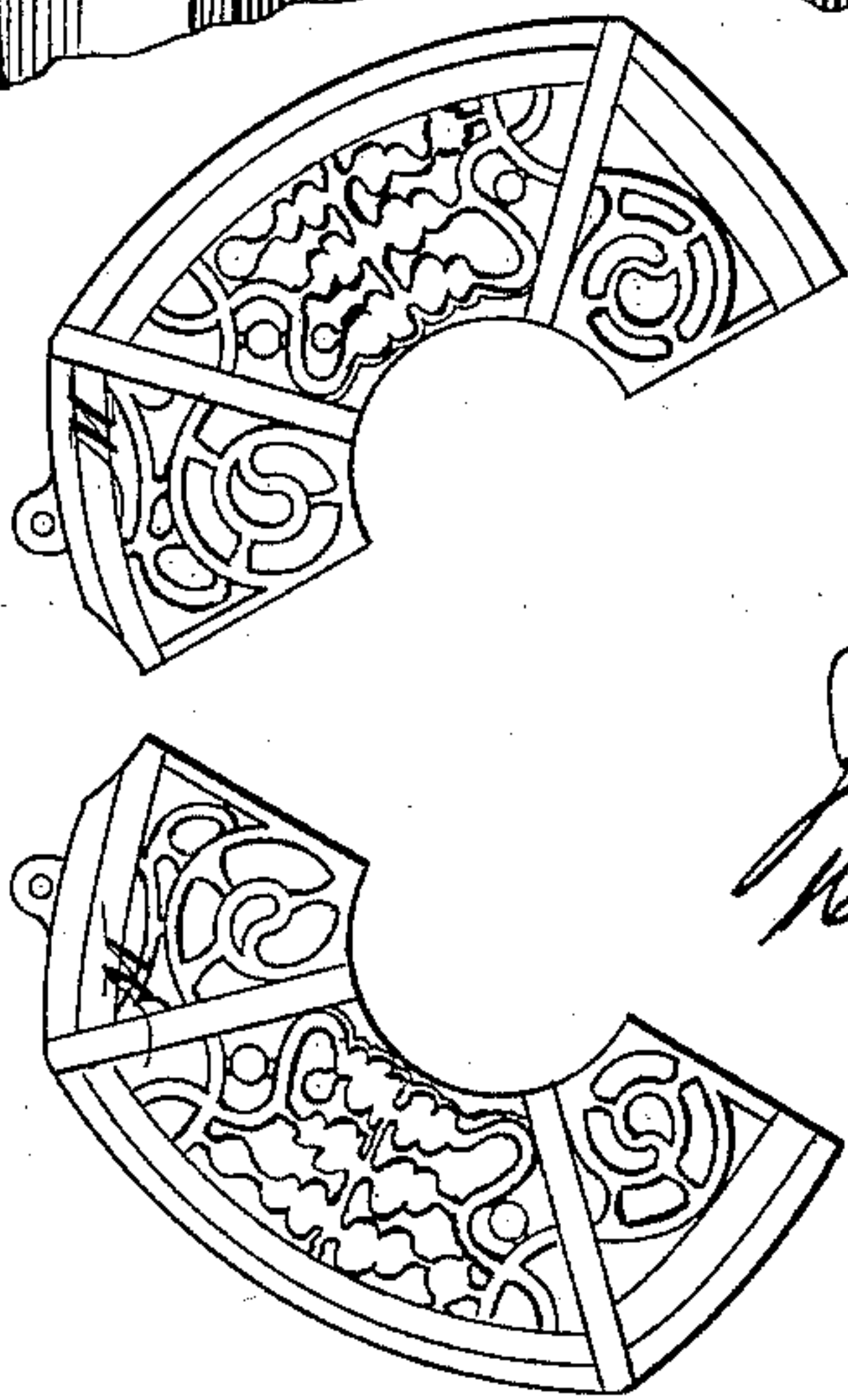
Fig. 6.



Witnesses:

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Fig. 7.



Inventors:

James L. Collins  
Henry C. Burgie

# UNITED STATES PATENT OFFICE.

JAMES L. COLLINS AND HENRY C. BURGIE, OF CHICAGO, ILLINOIS.

## HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 409,452, dated August 20, 1889.

Application filed May 7, 1889. Serial No. 309,856. (No model.)

*To all whom it may concern:*

Be it known that we, JAMES L. COLLINS and HENRY C. BURGIE, residing at Chicago, in the county of Cook and State of Illinois, and citizens of the United States, have invented a new and useful Improvement in Heating-Stoves, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a central vertical section from front to rear. Fig. 2 is a central vertical section from side to side. Fig. 3 is a plan of the upper plate of the stove. Fig. 4 is a horizontal section at line 4 of Fig. 1. Fig. 5 is a horizontal section at line 5 of Fig. 1. Fig. 6 is a horizontal section at line 6 of Fig. 1. Fig. 7 is a detail of the hinged ornamental dome.

The objects of our invention are to increase the heating capacity of a stove and to provide a passage for conducting a portion of the heated air to the room above that in which the stove is located, which we accomplish as illustrated in the drawings and hereinafter described. That which we claim as new will be pointed out in the claim.

In the drawings, A is the fire-pot.

B is a combustion and hot-air chamber above the fire-pot.

C is a plate which is located a little below the upper plate of the stove. In this plate there is a hole closed by a cover *a*.

D is the top plate of the stove, in which there are a number of air-passages *b*. This plate is provided with a large hole *c* over the hole in the plate C.

*d* is a plate or ring of metal, which is provided with a collar *e*, adapted to receive a pipe E, in which there is a damper *f*.

There is a hot-air space S between the two plates C D.

*g* is a damper which, when open, allows a direct draft from the fire-chamber to the smoke-pipe F. The back part of the stove has double walls G H.

*h* is a partition between the two plates C D, which partition is provided with openings *i*.

*j* is an opening in the inner rear wall which communicates with a smoke-flue I, which passes down on one side of the stove to a

chamber J in the base, from which a smoke-flue K passes up on the opposite side of the stove, through which flue K the smoke passes to the smoke-pipe F. In the base of the stove, and between these two flues I K, there is a cold-air flue L, into which cold air is admitted through an opening *k* in the bottom of the stove, which cold air becomes warmed in its upward passage through the flue L, and can escape into the room through openings *l* in the top of the stove; or such air, or a portion of it, can pass through the holes *i* in the partition *h* and into the space between the two plates C D.

In Fig. 4 we have indicated by arrows the course of the air from the upper end of the flue L through the openings *i* to the space between the plates C D.

M is an ornamental dome, which is divided into two parts, each of which is connected with the stove by a hinge *m*, so that they can be opened to permit the pipe E to be placed in position, and then can be closed against such pipe. When the pipe E is not wanted, a cover is to be provided to close the opening *c* in the plate D.

N is the ash-pit.

Doors are to be provided, as usual, to give access to the fuel-chamber and ash-pit. The damper *g* can be operated by the rod *n*.

*o* is a removable plate, which covers an opening through which access can be had to the chamber J.

The pipe E is designed to convey hot air to a room above that in which the stove is located. When this pipe is used, the air in the space between the two plates C D will become highly heated, and, the damper *f* being open, there will be a strong current of warm air through the pipe E to the room above, air being supplied to the space S through the holes *b* in the top of the stove and also from the air-flue L through the openings in the partition *h*. When the pipe E is not used, or when the damper *f* therein is closed, there will be a rapid circulation of hot air through the chamber or space S, air being drawn into such space through some of the openings *b* and escaping into the room through others;



