

(No Model.)

O. B. KEELEY, Dec'd.

2 Sheets—Sheet 1.

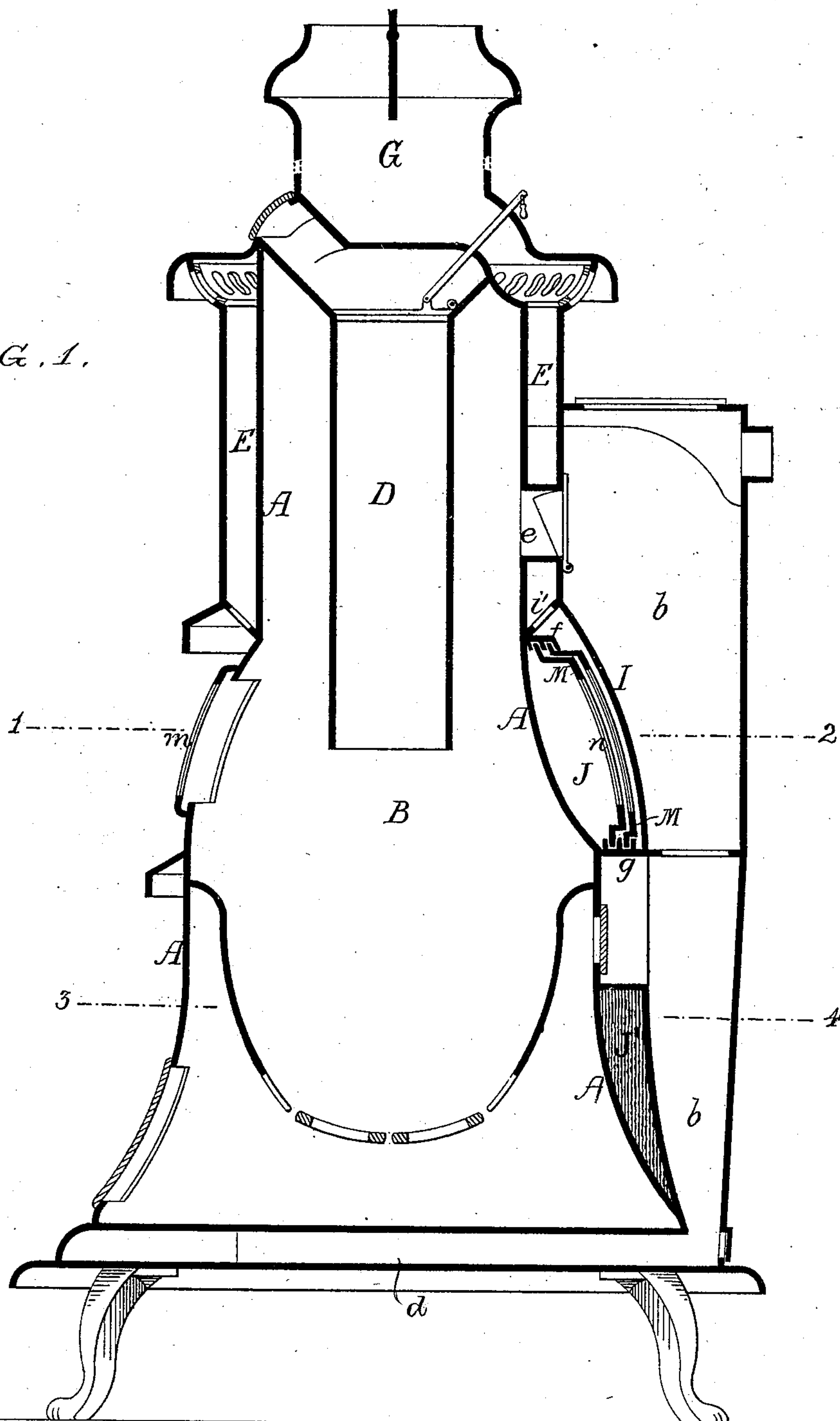
J. and M. E. KEELEY, Administrators.

HEATING STOVE.

No. 254,660.

Patented Mar. 7, 1882.

FIG. 1.



Witnesses:

Harry Drury
James T. Tobin

Inventor:

Oliver B. Keeley
by his Attorneys
Howson and Jones

(No Model.)

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2 Sheets—Sheet 2.

J. and M. E. KEELEY, Administrators.

HEATING STOVE.

No. 254,660.

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FIG. 2.

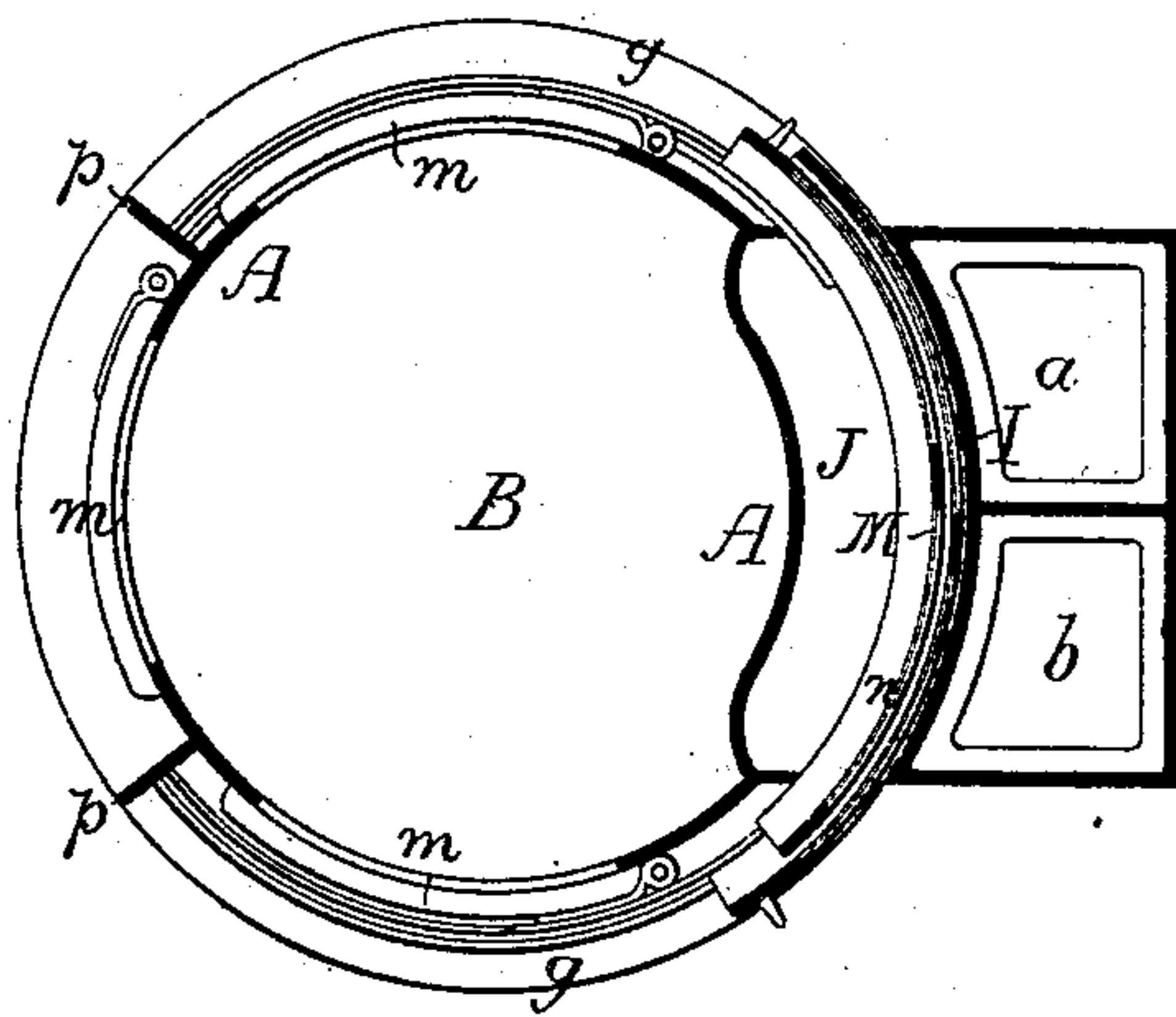


FIG. 3.

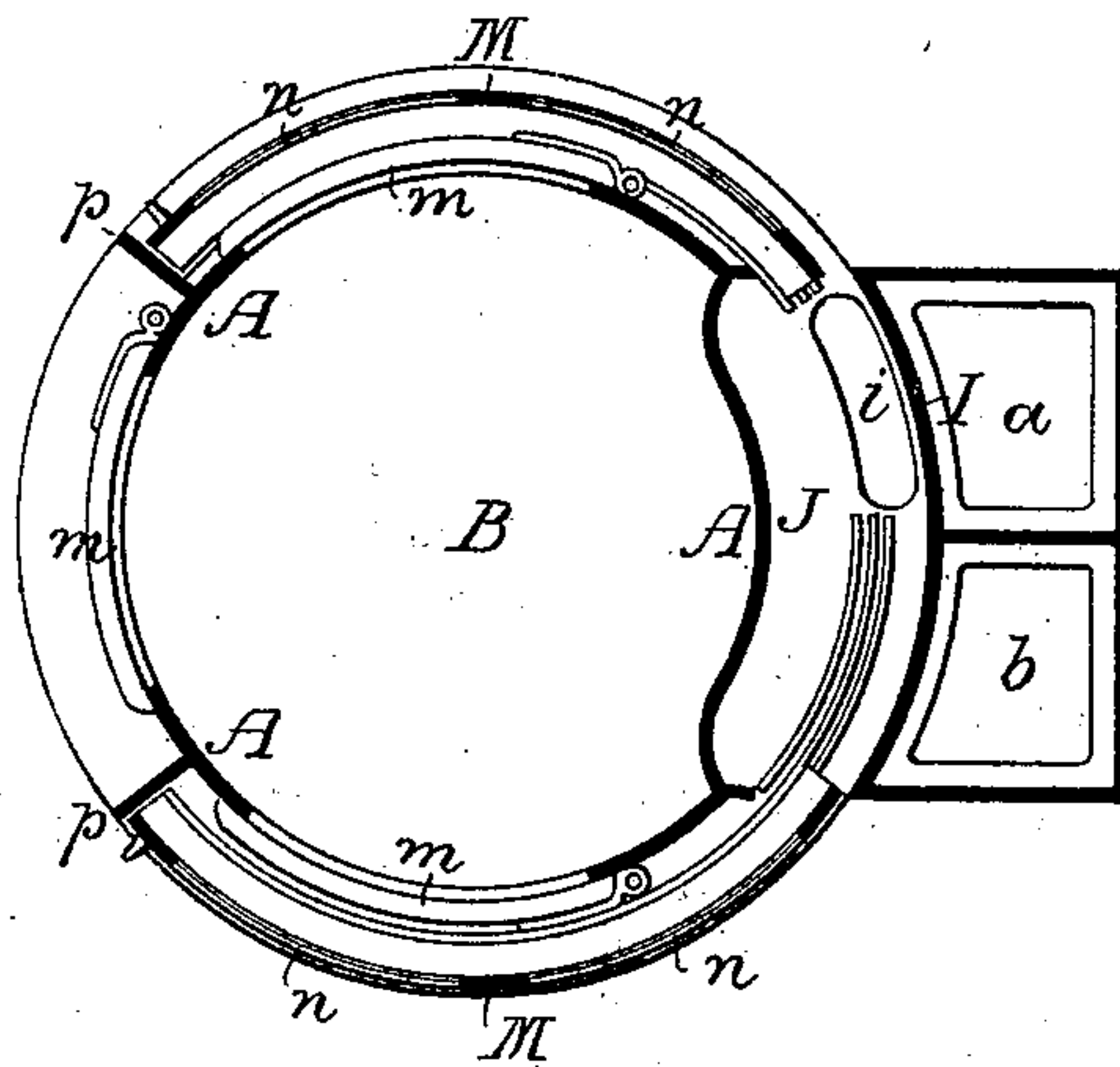


FIG. 5.

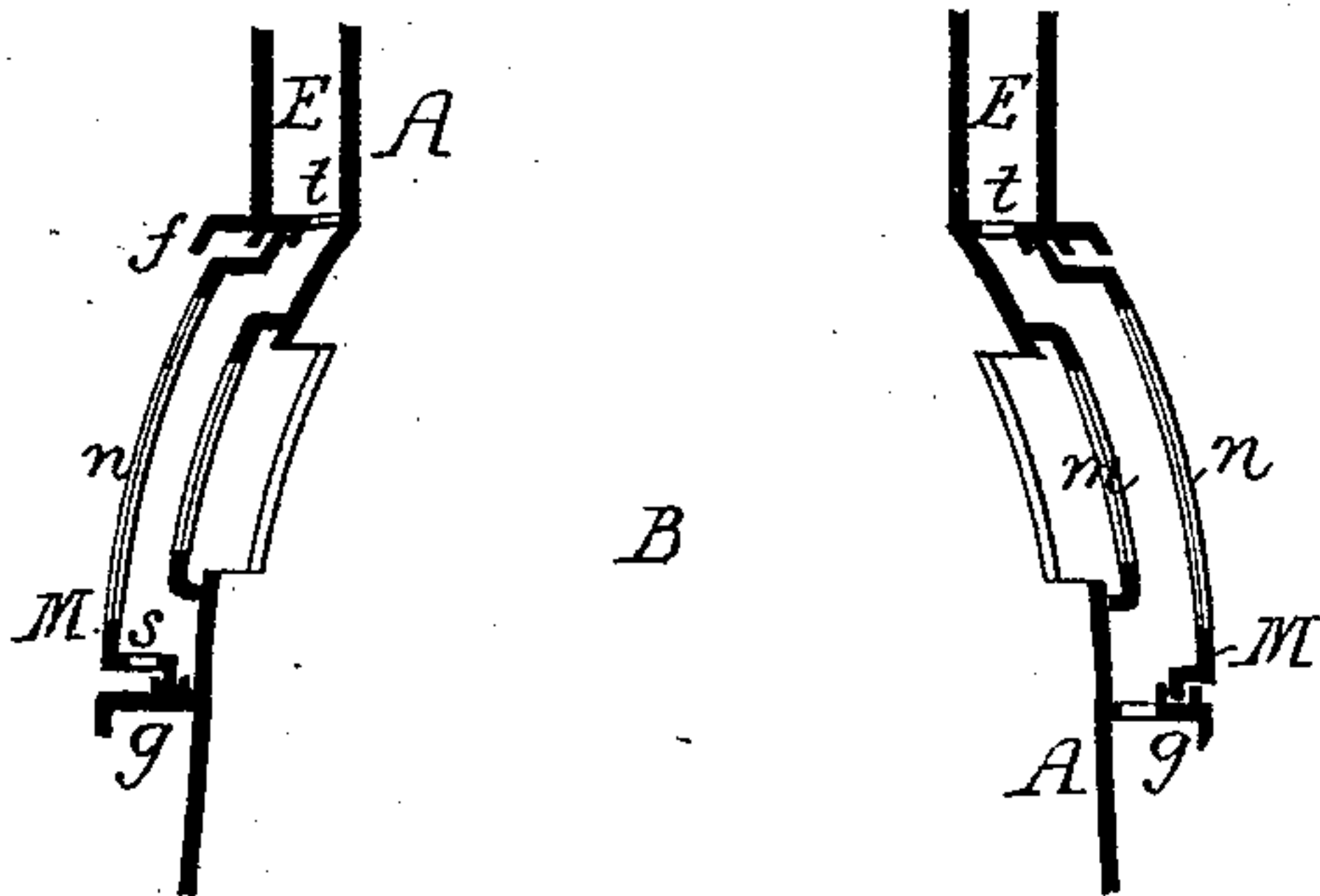
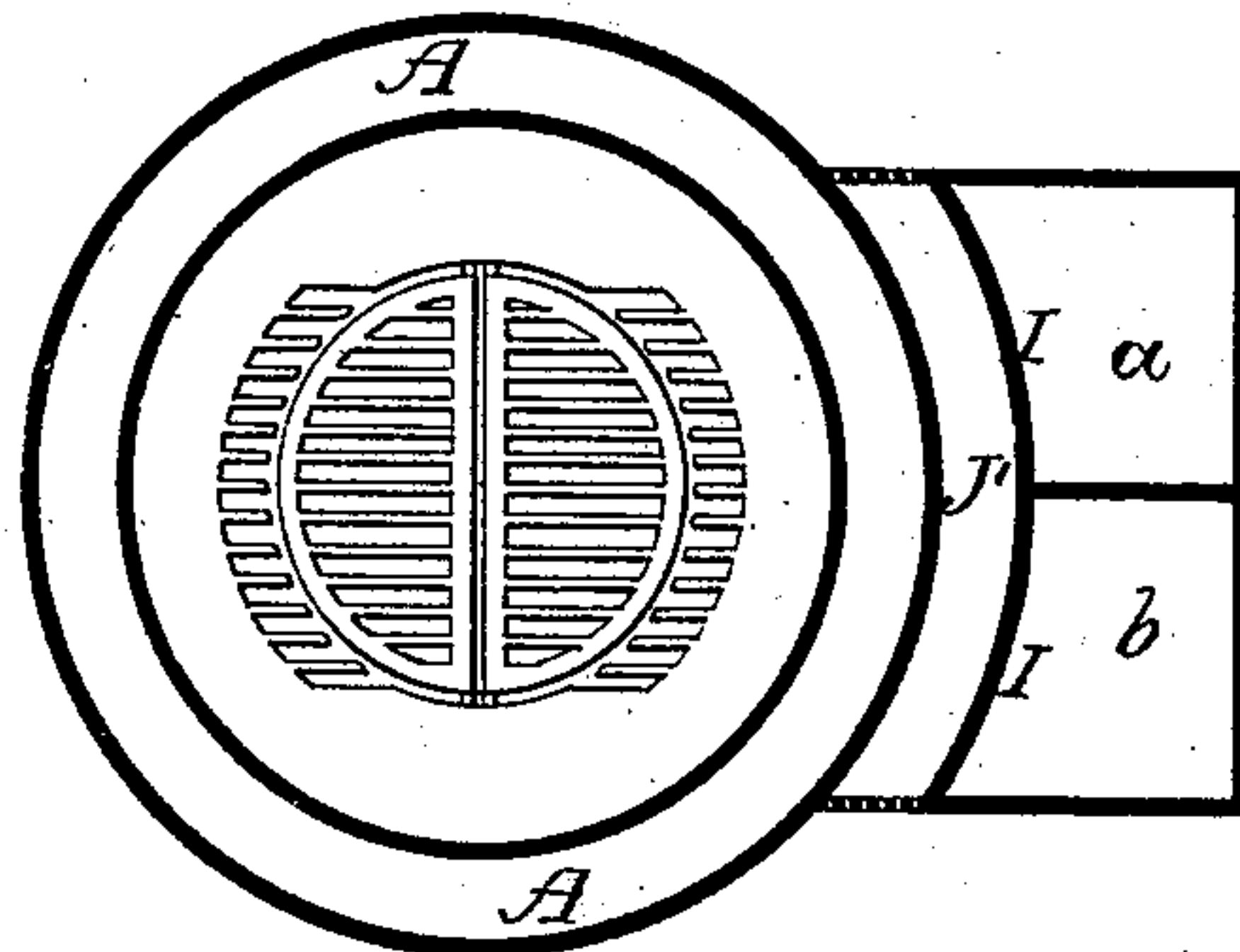


FIG. 4.



Witnesses:

James F. Tobin
Harry Drury

Inventor:

Oliver B. Keeley
by his attorneys
Howell and Sons

UNITED STATES PATENT OFFICE.

OLIVER B. KEELEY, OF SPRING CITY, PENNSYLVANIA, (JOSEPH KEELEY AND MARY E. KEELEY ADMINISTRATORS OF SAID OLIVER B. KEELEY, DECEASED.)

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 254,660, dated March 7, 1882.

Application filed November 28, 1881. (No model.)

To all whom it may concern:

Be it known that I, OLIVER B. KEELEY, a citizen of the United States, residing in Spring City, Chester county, Pennsylvania, have invented certain Improvements in Heating-Stoves, of which the following is a specification.

The main object of my invention is to increase the air-heating capacity of that class of stoves known as "parlor-heaters," a further object being to accomplish this result without interference with the illuminating qualities of the stove.

In the accompanying drawings, Figure 1, Sheet 1, is a longitudinal vertical section of a heating-stove with my improvements; Figs. 2 and 3, Sheet 2, sectional plan views of the same on the line 1 2, but with the movable parts in different positions; Fig. 4, a sectional plan on the line 3 4, Fig. 1; and Fig. 5, a transverse vertical section of part of Fig. 1, showing modifications of part of the invention. The views on Sheet 2 are on a smaller scale than Fig. 1.

A is the casing of the stove; B, the combustion-chamber; D, the magazine; and E, an air-heating chamber formed by an annular casing surrounding the upper portion of the casing of the combustion-chamber B, this air-heating chamber communicating above with a drum, G, from which the hot air is conducted by suitable pipes to a room or rooms above that in which the stove is situated.

At the back of the stove are two flues, *a b*, communicating with each other at the bottom through a partitioned chamber, *d*, at the base of the stove, the upper end of the flue *a* communicating with the combustion-chamber B, while the upper end of the flue *b* communicates with the pipe leading to the chimney, so that when the stove is in operation the products of combustion descend the flue *a*, traverse the chamber *d*, and ascend the flue *b* prior to their escape. There is the usual dampered opening, *e*, whereby direct draft from the combustion-chamber to the chimney is afforded in starting the fire.

Between the casing A of the combustion-chamber and ash-pit of the stove and the casing I of the flues *a b* intervenes a chamber, made in two parts, J J', the upper part, J, of

the chamber being contained between flanges *f* and *g* on the casing A, and being open at both sides, while the lower portion, J', of the chamber—that is, the portion below the flange *g* and between the casings A and I—is partially closed at the sides by ornamental work of such a character as will not interfere with the free entrance of air to said portion J' of the chamber, communication between the two portions of the chamber being afforded by an opening, *i*, in the flange *g*, and communication between the portion J of the chamber and the hot-air chamber E being permitted by an opening, *i'*.

In the flanges *f* and *g* are formed guides for two segmental shields, M, which can slide freely in their guides and can be brought forward, as shown in Fig. 2, so as to partially inclose the casing of the combustion-chamber of the stove, this portion of the casing being provided with the usual illuminating doors or windows, *m*. When thus brought forward the front ends of the shields abut against radial ribs *p* on the stove-casing, and the direct radiation of heat from the inclosed portion of the stove-casing into the room in which the stove is situated is prevented, the chambers formed between the casing of the stove and the shields M serving to heat air admitted thereto through openings *s* in the bottoms of the shields, the air, when heated, being discharged into the chamber J, and finding its way thence through the opening *i'* and upward into the hot-air chamber E. Instead of taking this course, however, the air may ascend directly into the chamber E through openings *t* in the flange *f*, as shown in Fig. 4, and, if desired, the shields M may be closed at the bottom, openings for the admission of air in this case being made in the flange *g*, as shown.

When it is desired to expose the casing of the combustion-chamber for the purpose of radiating heat directly into the room, the shields M are moved back until they occupy positions in the chamber J, as shown in Fig. 3.

Shields to partially inclose the casing of the combustion-chamber have been heretofore used, and are shown in T. J. Coulston's Patent, No. 104,274, dated June 14, 1870; but said shields have been made in the form of continuous segments of sheet or cast iron, and when

drawn forward such shields obstruct the view of the fire through the illuminating-windows *m* of the stove-casing, and thus impart a cheerless appearance to the stove.

5 The shields *M* in my improved stove have glass or mica covered illuminating doors or windows *n*, so that the view of the fire is not obstructed when said shields are drawn forward. The formation of the glass or mica covered openings in the shields is also of advantage in reducing the area of the metal portion of the shield, the mica radiating heat into the room more readily than the iron, so that the temperature of the latter, when the shields are
10 drawn forward, is not reduced to such an extent as when imperforate shields are employed.

The mica-windows also reduce the weight of the shields, and thus permit them to be moved with less effort than the usual shields.

20 I claim as my invention—

1. The combination of the casing *A*, hot-air chamber *E*, flue-casing *I*, and the heating-

chamber made in two parts, *J J'*, separated by the flange *g*, as set forth.

2. The combination of the hot-air chamber 25 *E*, the combustion-chamber *B*, the flue-casing *I*, the air-heating chamber *J* between the flue-casing and the casing of the combustion-chamber, and the shields *M*, adapted to form with the stove-casing air-heating chambers communicating with the chamber *J*, as set forth. 30

3. The combination of the stove-casing having illuminating doors or windows *m*, with the sliding shields *M*, having mica-covered openings *n* formed therein, as and for the purpose 35 specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OLIVER B. KEELEY.

Witnesses:

HARRY DRURY,
HARRY SMITH.