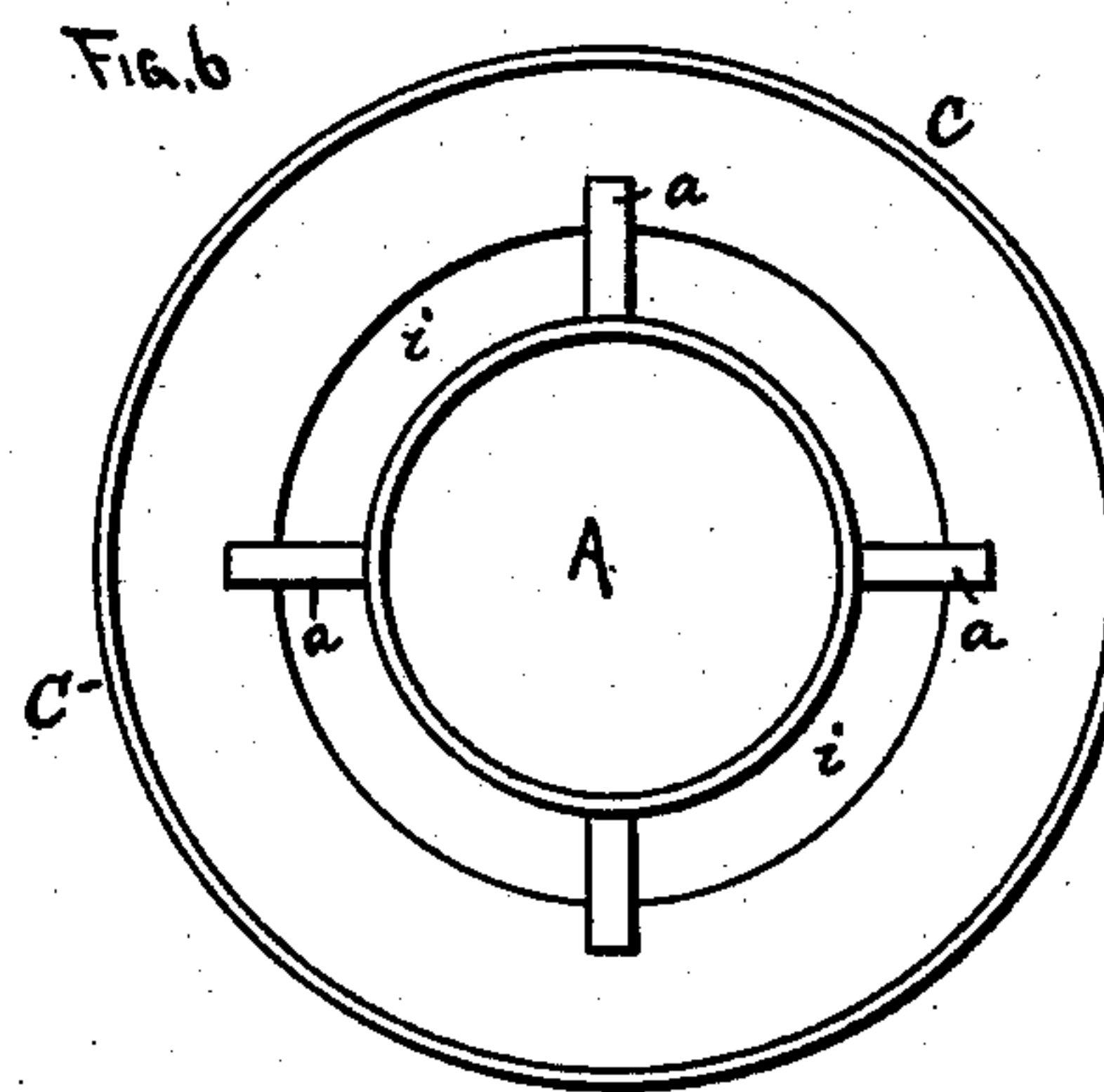
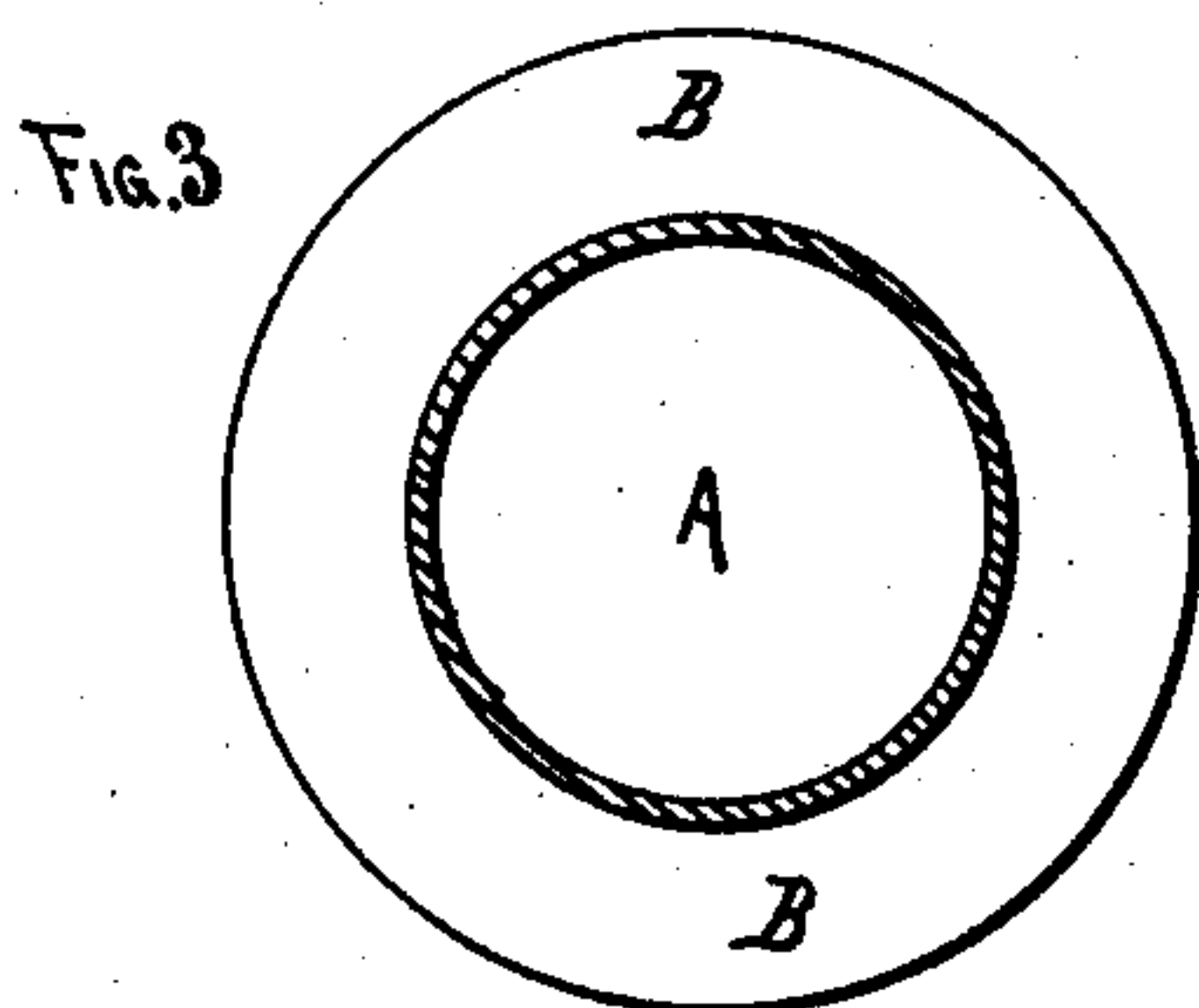
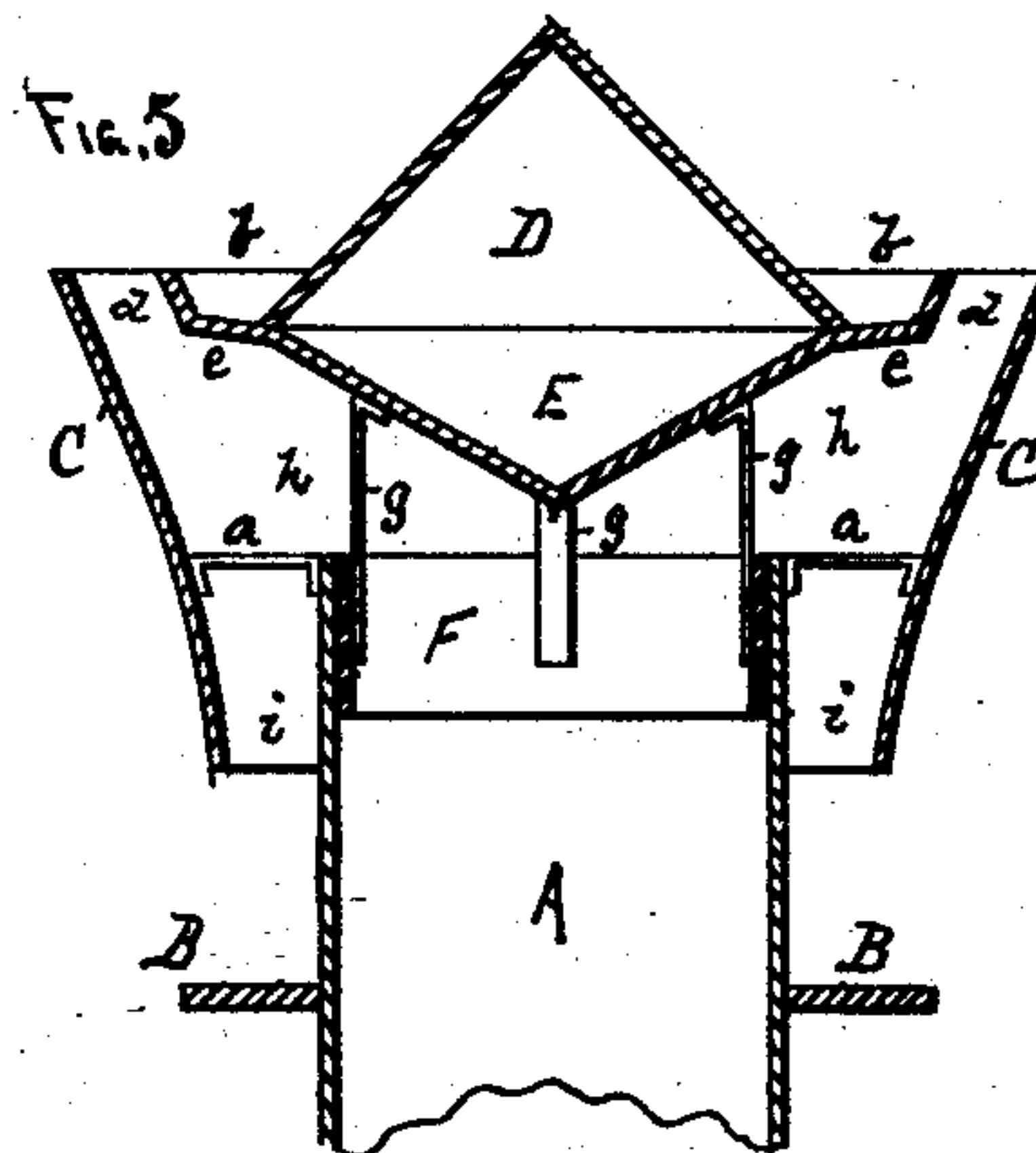
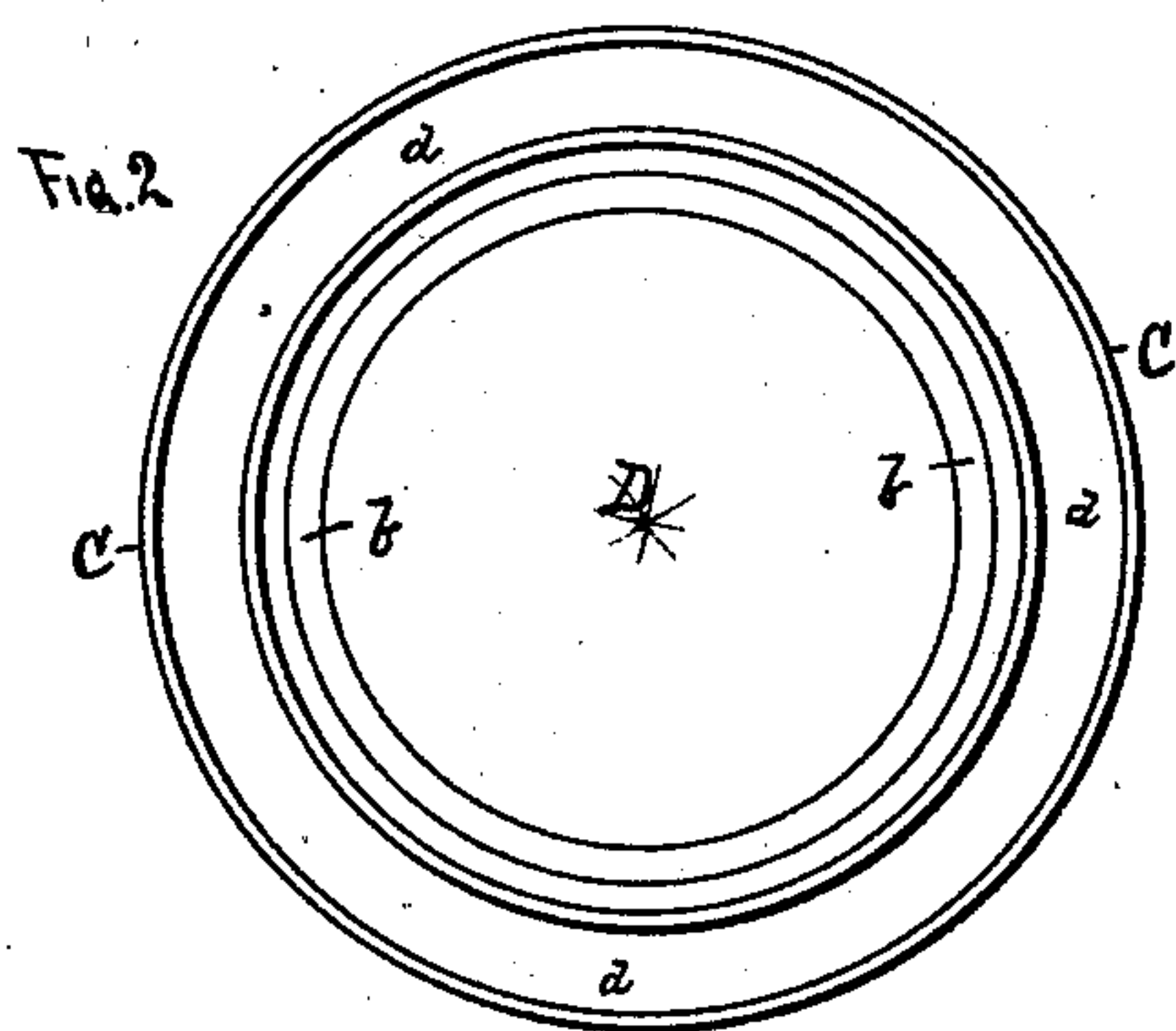
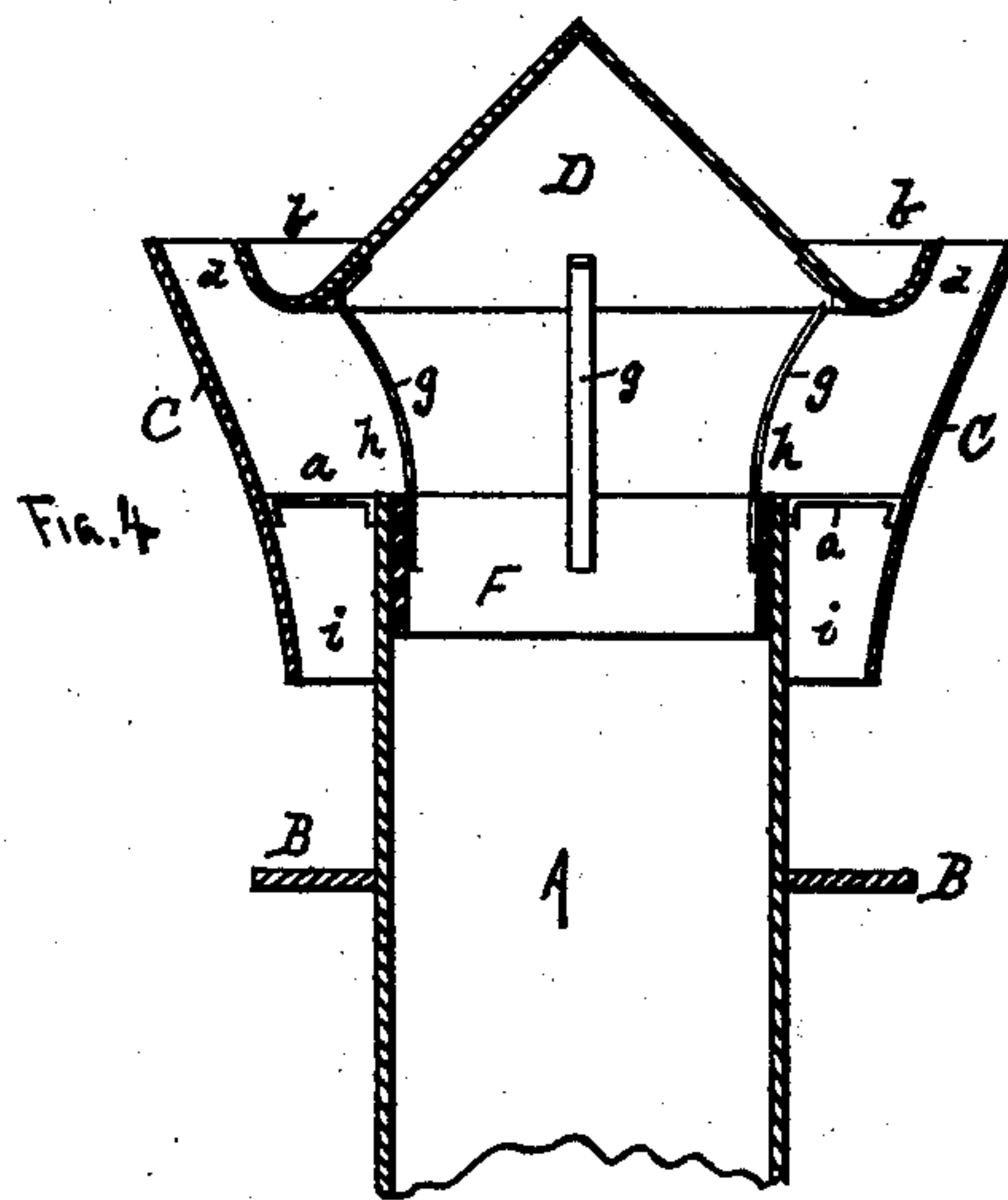
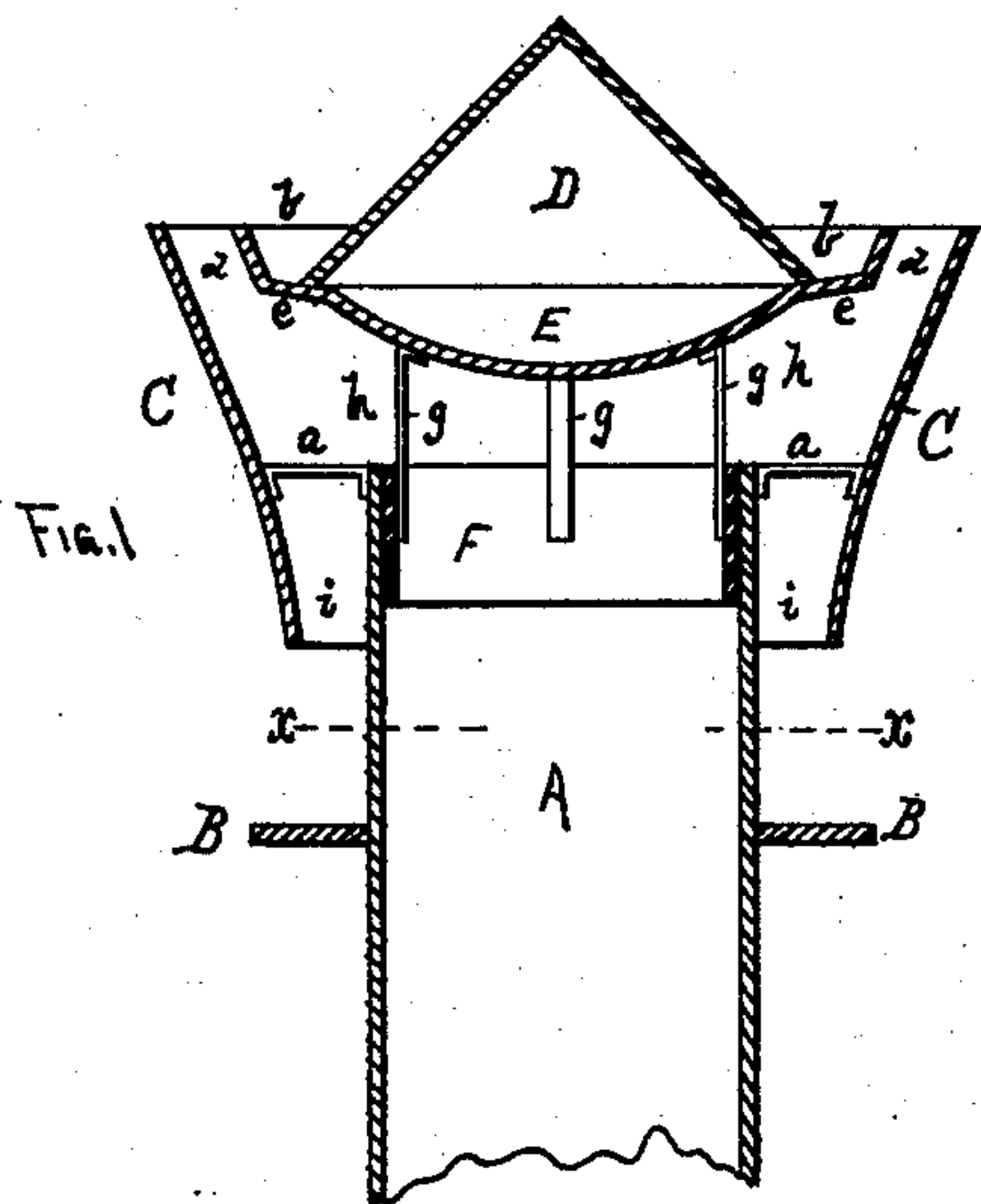


(No Model.)

H. L. DAY.
VENTILATING FLUE CAP.

No. 297,972.

Patented May 6, 1884.



WITNESSES.

Daniel Murphy
Louis Fesser Jr.

Henry Lawrence Day

INVENTOR, BY
Louis Fesser & Co. Attys.

UNITED STATES PATENT OFFICE.

HENRY LAWRENCE DAY, OF MINNEAPOLIS, MINNESOTA.

VENTILATING-FLUE CAP.

SPECIFICATION forming part of Letters Patent No. 297,972, dated May 6, 1884.

Application filed September 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY LAWRENCE DAY, a citizen of the United States, and a resident of Minneapolis, in the county of Hennepin, in the State of Minnesota, have invented certain new and useful Improvements in Ventilating-Flue Caps, of which the following specification is a full, clear, and exact description, reference being also had to the accompanying drawings, in which—

Figure 1 is a sectional elevation, and Fig. 2 is a plan view, of the ventilating-cap. Fig. 3 is a cross-sectional view on the line *xx* of Fig. 1. Figs. 4 and 5 are sectional elevations, showing slight modifications of the form. Fig. 6 is a plan view of the ventilating-cap with the dome removed.

A is the main flue or shaft, around which, a short distance down from the top, is a projecting flat ring, B, and attached to the top of the shaft by bars *a* is an outwardly-flaring jacket or shield, C, leaving a space, *i*, between it and the flue, the lower edge of the shield coming below the top of the flue and the upper edge coming above the top of the flue, as shown.

D is a conical top or dome connected to the flue A by standards *g*, and having an upturned lower edge, *b*, and downwardly-curved bottom E. The top of the upturned edge *b* is level with the upper edge of the shield C, leaving a space, *d*, between them; and the bottom E is some distance above the top of the flue A, leaving a large space, *h*, between them. The outer edge of the bottom E slants upward and outward, as shown at *e*, so as to enable the air, smoke, &c., to escape more freely from the flue, and also to prevent the air-currents from being driven down the flue. By this arrangement the dome D prevents any air-currents being driven down the flue A, while its upturned edge *b* catches all the currents which strike the dome and turns them upward and outward, thus creating by friction an upward current in the narrow throat *d*, which greatly assists in creating a draft in the flue. The same effect is produced by the edge *e* and outwardly-flaring shield C, when the currents are blown upward, the band B serving to prevent the air from

blowing directly up between the shield and flue.

In Fig. 5 the bottom E is shown of a cone shape, reversed from the cone D, but the action is the same.

In Fig. 4 the upturned edge *b* is shown of a rounded form and the bottom E removed, which form may be found advantageous under some circumstances; but I prefer the form shown in Fig. 1, as the bottom E renders the exit of air or smoke from the flue more easy.

The standards *g* are shown connected to a ring, F, which fits down into the top of the flue, so that the dome D and bottom E may be easily removed from the flue, to enable its interior to be reached for cleaning, repairs, &c.

I do not confine myself to a conical shape of the dome D, though I prefer that shape; and although the dome operates with excellent effect with the upturned edge *b*, yet it will work with good effect without it.

Having described my invention and set forth its merits, what I claim is—

1. The combination of the flue A, outwardly-flaring shield C, dome D, and convex bottom E, substantially as and for the purpose herein specified.

2. The combination of the flue A, deflecting-ring B, flaring shield C, dome D, and convex bottom E, substantially as and for the purpose herein specified.

3. The combination of the flue A, shield C, and dome D, having the lower upturned edge, *b*, and convex bottom E, substantially as set forth.

4. The combination of the flue A, shield C, dome D, standards *g*, and ring F, substantially as described.

5. The combination of the flue A, deflecting-ring B, flaring shield C, dome D, having the upturned edge *b*, and the bottom E, substantially as and for the purpose herein specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY LAWRENCE DAY.

Witnesses:

C. N. WOODWARD,
LOUIS FEESER, Sr.