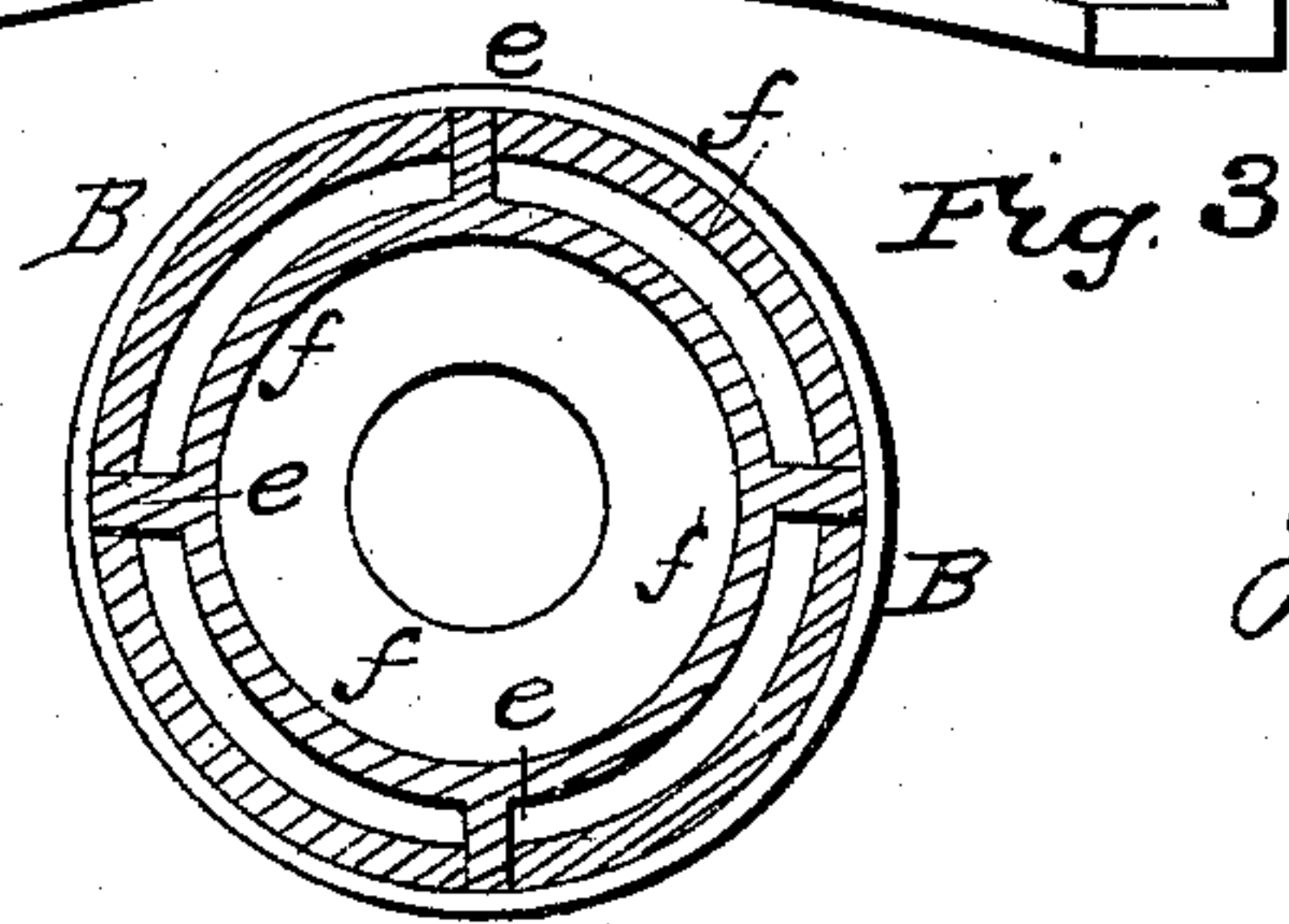
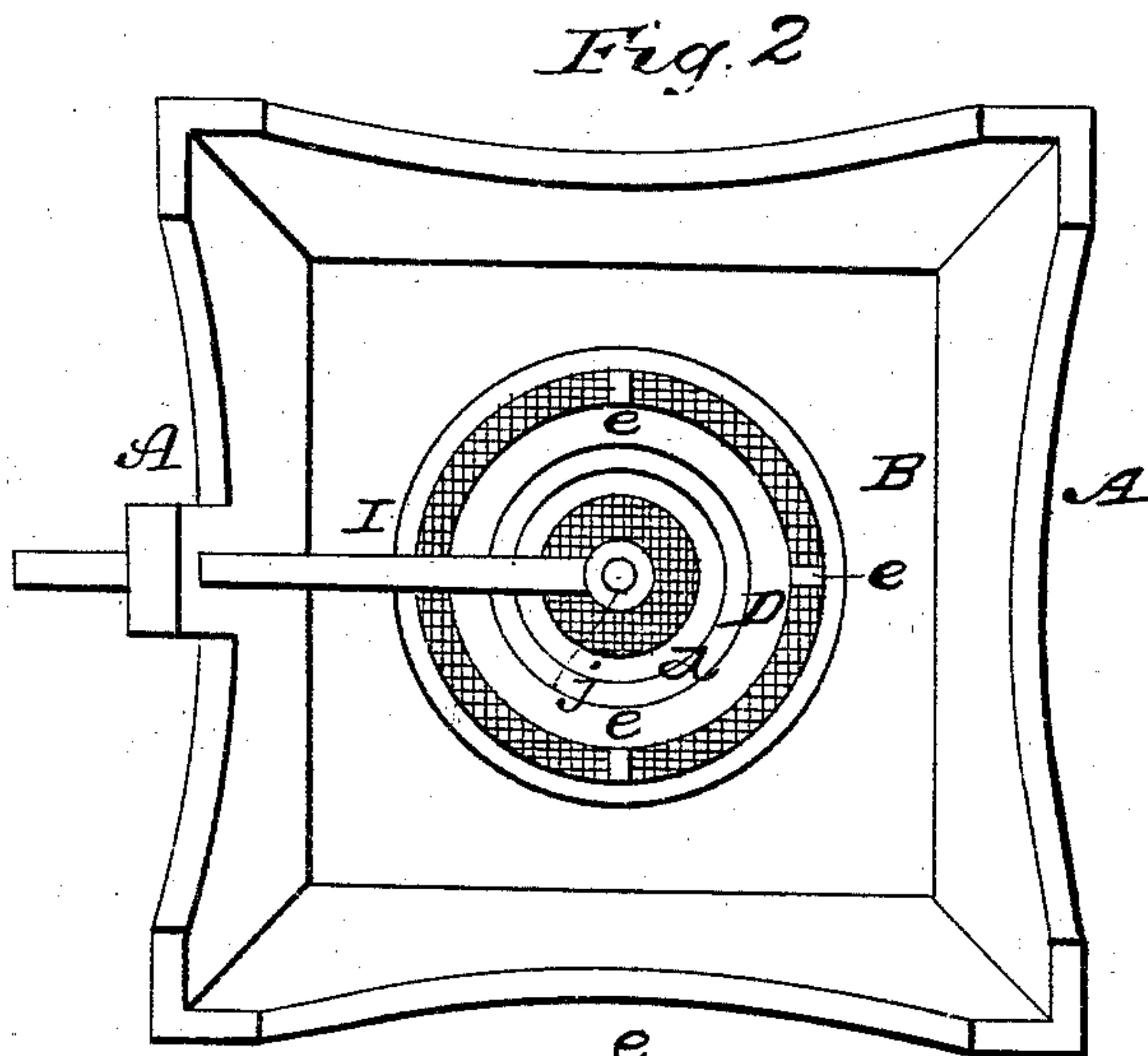
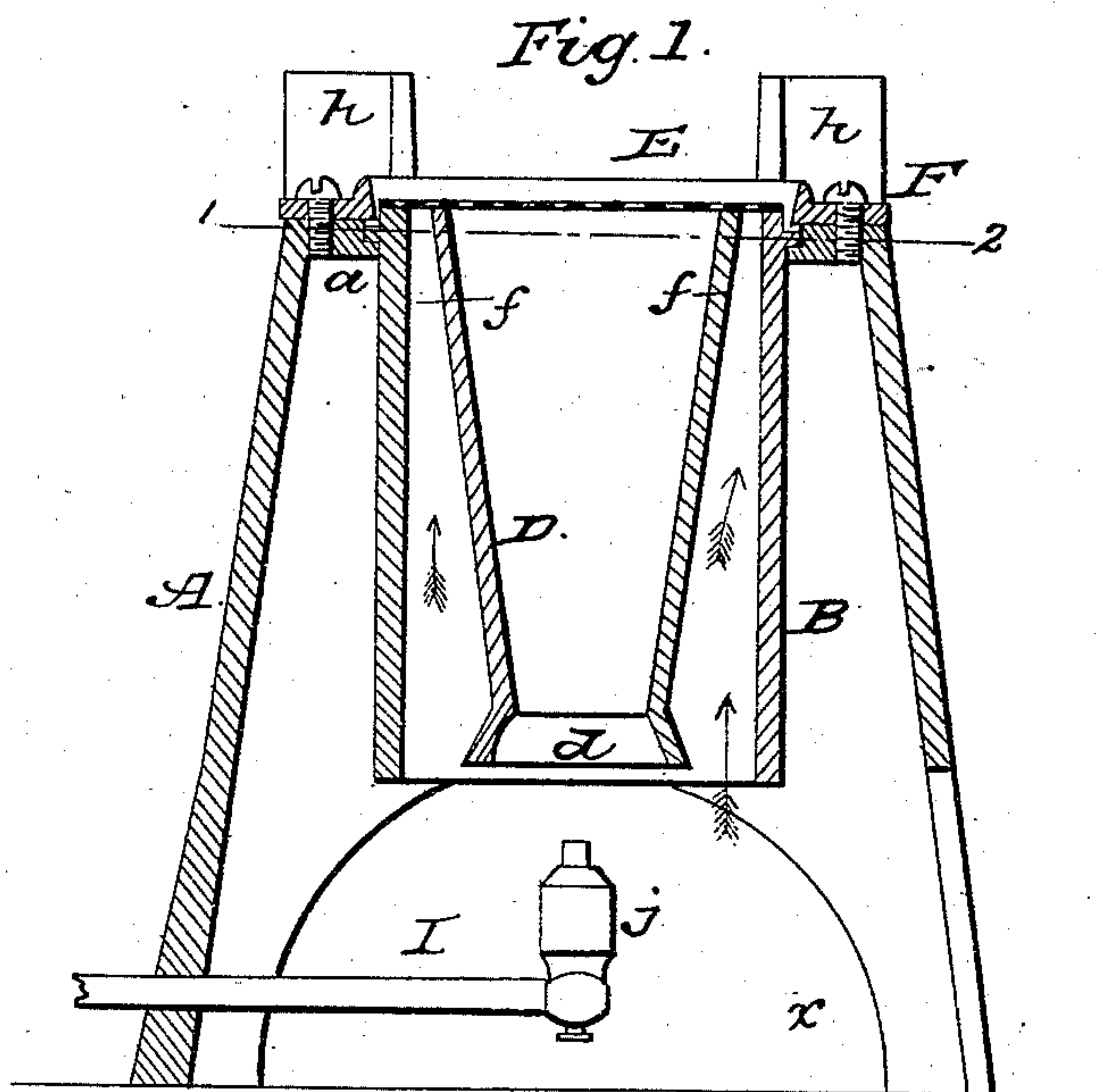


J. Q. BIRKEY.

Gas Stove.

No. 70,395.

Patented Nov. 5, 1867.



Witnesses
Wm. Albert Steel
Howbootham,

Inventor
J. Q. Birkey
By his attorney
W. Howson

United States Patent Office.

JOHN Q. BIRKEY, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 70,395, dated November 5, 1867.

IMPROVEMENT IN GAS-STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN Q. BIRKEY, of Philadelphia, Pennsylvania, have invented an Improvement in Gas-Stoves; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of an improvement, fully described hereafter, in the gas-stove for which Letters Patent were granted to me on October 31, 1865, my present improvement being such as to concentrate the flame above the wire gauze, and to increase the heat of the flame.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a vertical section of my improved gas-stove.

Figure 2, an inverted plan view, and

Figure 3, a sectional plan on the line 1-2, fig. 1.

A is a metal casing, the form of which may be varied without departing from the main features of my invention. In the present instance it is square, viewed transversely, and has a slight taper from the base upwards, the upper end terminating in the horizontal portion *a*, in which is an opening for receiving the tube B, a rib on the latter fitting into a recess formed in the edge of the said opening. Within this tube is a hollow inverted cone, D, terminating at the lower end in a flaring mouth, *d*, which, however, is not essential to the proper carrying out of my invention. The upper end of this hollow inverted cone is furnished with any suitable number of projections, *e*, which fit in recesses in the upper edge of the tube B, the projections and recesses being such that the cone is maintained at a short distance from the tube, an annular space, *f*, intervening between the two. On the top of the cone and tube rests a disk, of wire gauze, or a perforated metal plate, E, which is confined at the edges by a plate, F, secured to the top of the casing A, the said plate also serving to confine the tube B to its place, and having projections, *h*, for receiving a culinary utensil. The inner edge of the plate adjacent to the upper end of the tube B is inclined outward, as shown in fig. 1, for a purpose described hereafter. Through the casing A passes a pipe, I, for conveying ordinary illuminating gas to a tip, *j*, which is situated below but centrally with the hollow inverted cone D. In the sides of the casing are openings, *x*, of any desired form for admitting a plentiful supply of air.

The above-described gas-stove is very similar to that for which Letters Patent were granted to me on October 31, 1865, with the exception of the tube B, which is the main feature of my present improvement. I have found that by arranging this tube in the manner described in respect to the hollow cone, extending the wire gauze E across both, and permitting a plentiful supply of air to pass in the direction of the arrow through the space between the tube and cone and through the gauze, the flame above the latter is more concentrated and the heat of the flame more intense than when the tube is absent. I have found that the within-described arrangement of the plate F, with its inclined inner edge, in respect to the perforated plate E, tends to spread the flame.

I claim as my invention, and desire to secure by Letters Patent—

1. The tube B, arranged in respect to the hollow cone D and wire gauze or perforated disk E, substantially as and for the purpose set forth.

2. The plate F, with its inclined inner edge arranged in respect to the perforated plate or wire-gauze disk E, substantially as and for the purpose described.

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

JOHN Q. BIRKEY.

Witnesses:

CHARLES E. FOSTER,

W. J. R. DELANY.