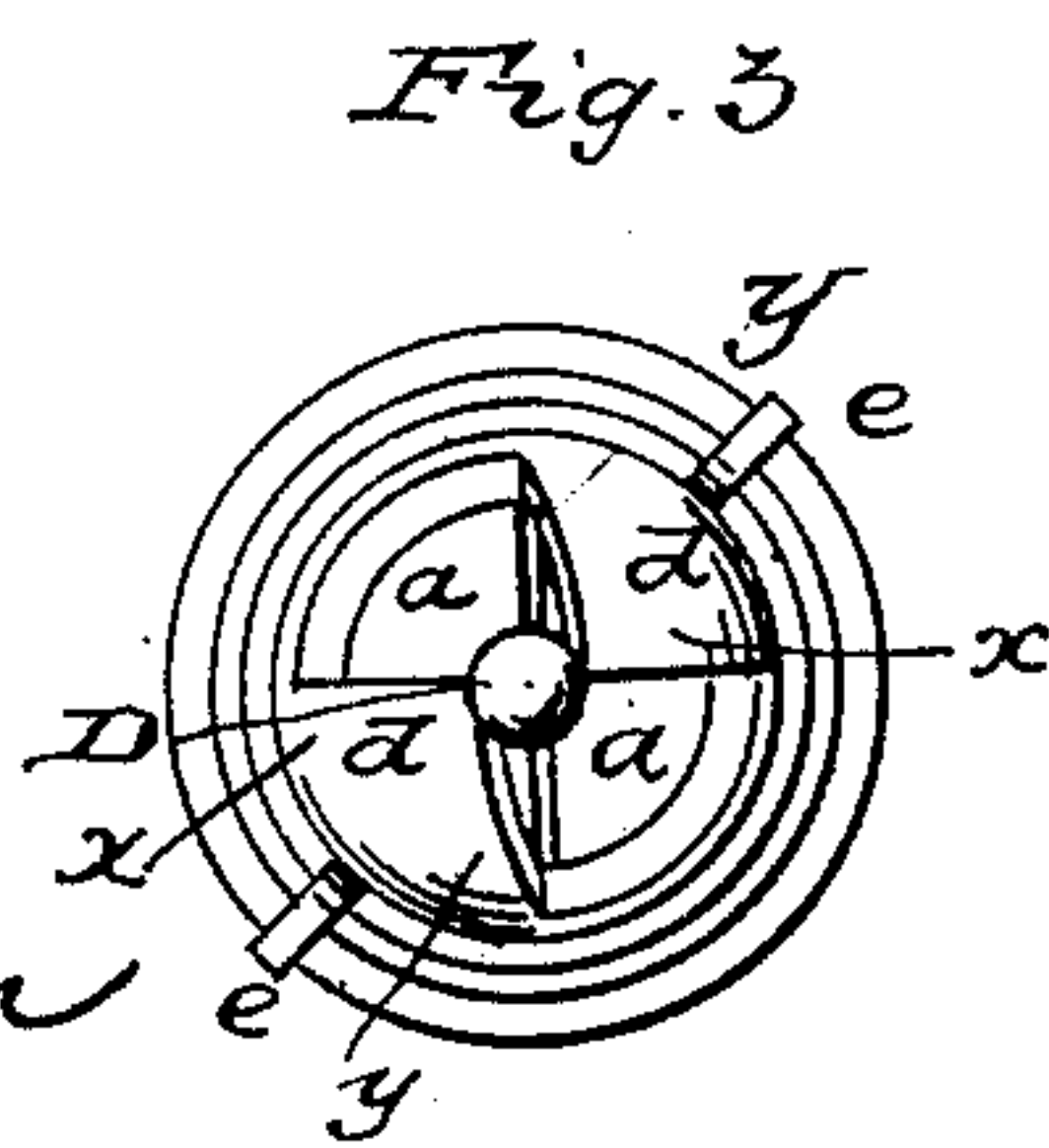
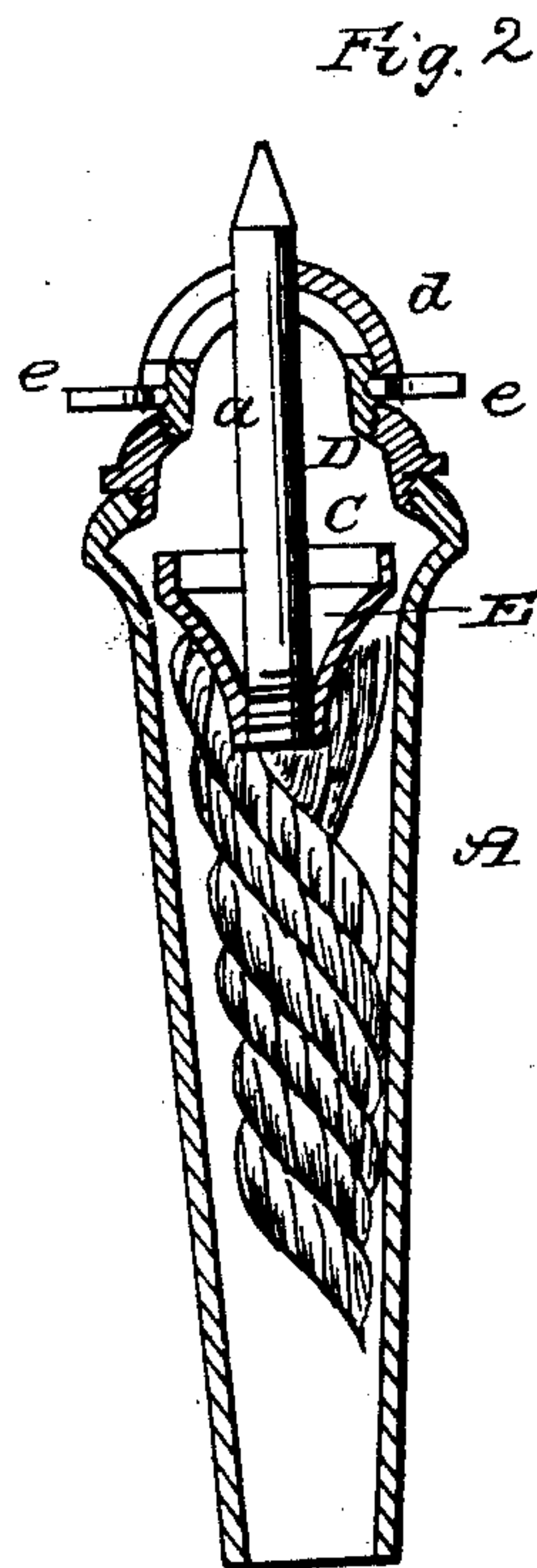
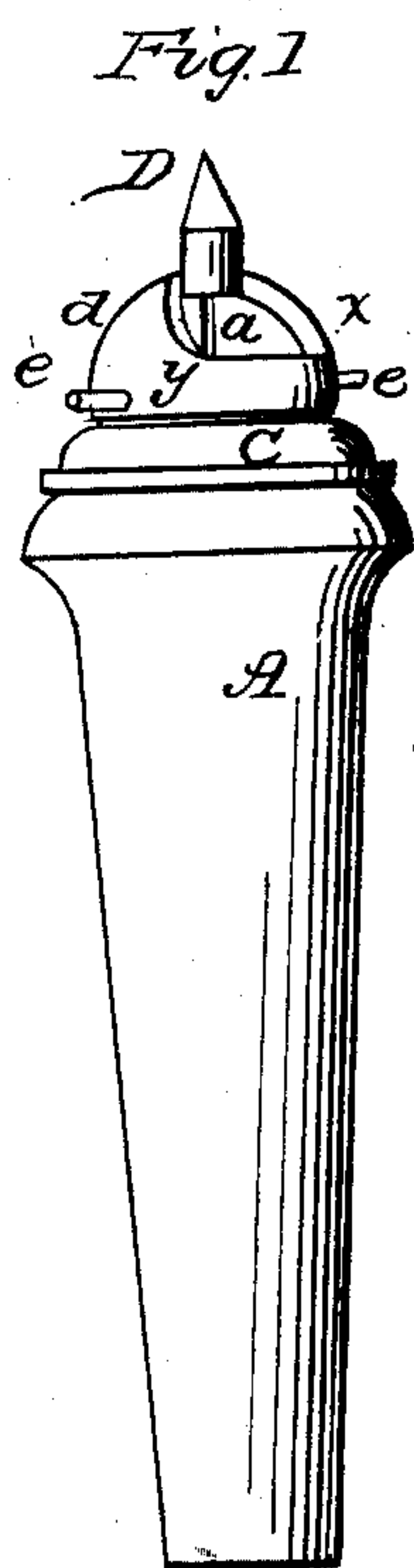


E. TRITTIN.
Vapor Burner.

No. 28,333.

Patented May 15, 1860.



Witnesses
Henry Noxon
Horace Lee

Inventor
E. Trittin

193 ✓
1882
52

UNITED STATES PATENT OFFICE.

EMIL TRITTIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND J. A. CUMMINGS, OF SAME PLACE.

BURNER FOR VAPOR-LAMPS.

Specification of Letters Patent No. 28,333, dated May 15, 1860.

To all whom it may concern:

Be it known that I, EMIL TRITTIN, of the city of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Burners for Fluid-Lamps; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention, which relates to the burners of gas generating fluid lamps, consists of a tube with a gas chamber having a slotted top in combination with a conducting stem with an attachment at the bottom for resting on the wick, and a pointed top projecting above the gas-chamber, the whole being arranged substantially in the manner described hereafter, so as to dispense with the usual unsightly button commonly used as a conductor in this class of lamps and so as to add regularity and steadiness to the flame.

My invention also consists of a novel device fully described hereafter, for increasing or diminishing the extent of the flame at pleasure.

In order to enable others to make and use my invention I will now proceed to describe its construction and operation.

On reference to the accompanying drawing which forms a part of this specification, Figure 1, is an exterior view of my improved burner for fluid lamps. Fig. 2 a vertical section of the same, and Fig. 3 a plan of the burner.

Similar letters refer to similar parts throughout the several views.

(A) represents the wick tube communicating with the reservoir of a fluid lamp, and (B) the wick. The tube is enlarged at the upper end so as to form the gas chamber (C) which has a hemispherical top (*a*) having a narrow slit communicating with the said gas chamber. On this hemispherical top (*a*) fits a hemispherical cap (*d*) which is retained in its proper position in close contact with the said top (*a*), by set screws (*e e*) the points of which enter an annular groove in the top, so that the cap may be turned round to any position and still retain its hold of the burner.

It will be observed on reference to the plan view Fig. 3, that the cap (*d*) has two openings are opposite to the other so as to leave two portions of the hemispherical top *a* exposed. The side (*x*) of each opening is straight and the side (*y*) inclined so that the cap may be adjusted to cover more or less of the slit in the top (*a*) of the chamber.

(D) is the conductor consisting of a plain stem situated centrally with and passing through the top (*a*) of the gas chamber and its cap (*d*), above which the pointed end of the stem projects. The lower end of the stem is furnished with a cup shaped attachment (E) which rests on the top of the wick (B), as seen in Fig. 2.

The gas generated within the chamber (C) passes through the slit in the top (*a*) of the said chamber, where it is ignited and produces a clear, wide spreading flame the heat of which is imparted to the stem (D) and its cup shaped attachment (E). As the latter is in immediate contact with the wick, it serves to convert the fluid absorbed by the wick into the required illuminating gas.

In ordinary gas generating fluid lamps, heat is communicated to the wick through the medium of an enlarged disk or button, which being in immediate contact with the flame interferes with and detracts from its illuminating qualities. The simple pointed stem of my improved burner serves to transmit all the necessary heat to the wick from the flame without injuring the illuminating power of the latter, the point itself serving to add steadiness and regularity to the flame. It will be readily seen that the adjustable cap (*d*) with its openings and inclined sides (*y*) serves to regulate the extent of the flame by covering more or less of the slit in the top (*a*) of the chamber (C).

It will be understood that a supplementary tube with a wick for heating the chamber C in the first instance, is as necessary an adjunct to my improved burner as to those of ordinary gas generating fluid lamps.

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

1. The tube (A) with its chamber (C) and slotted top (*a*) in combination with the stem (D) and the attachment (E) or its

equivalent the whole being arranged substantially as and for the purpose herein set forth.

2. The cap (*d*) with its openings, having
5 inclined sides (*y*) in combination with the
slotted top (*a*) of the burner, the whole
being arranged and operating substantially
as specified.

In testimony whereof, I have signed my
name to this specification, in the presence of 10
two subscribing witnesses.

EMIL TRITTIN.

Witnesses:

HENRY HOWSON,
CHARLES D. FREEMAN.