

P. PRETTYMAN.

Lamp Burner.

No. 93,744.

Patented Aug. 17, 1869.

Fig. 1.

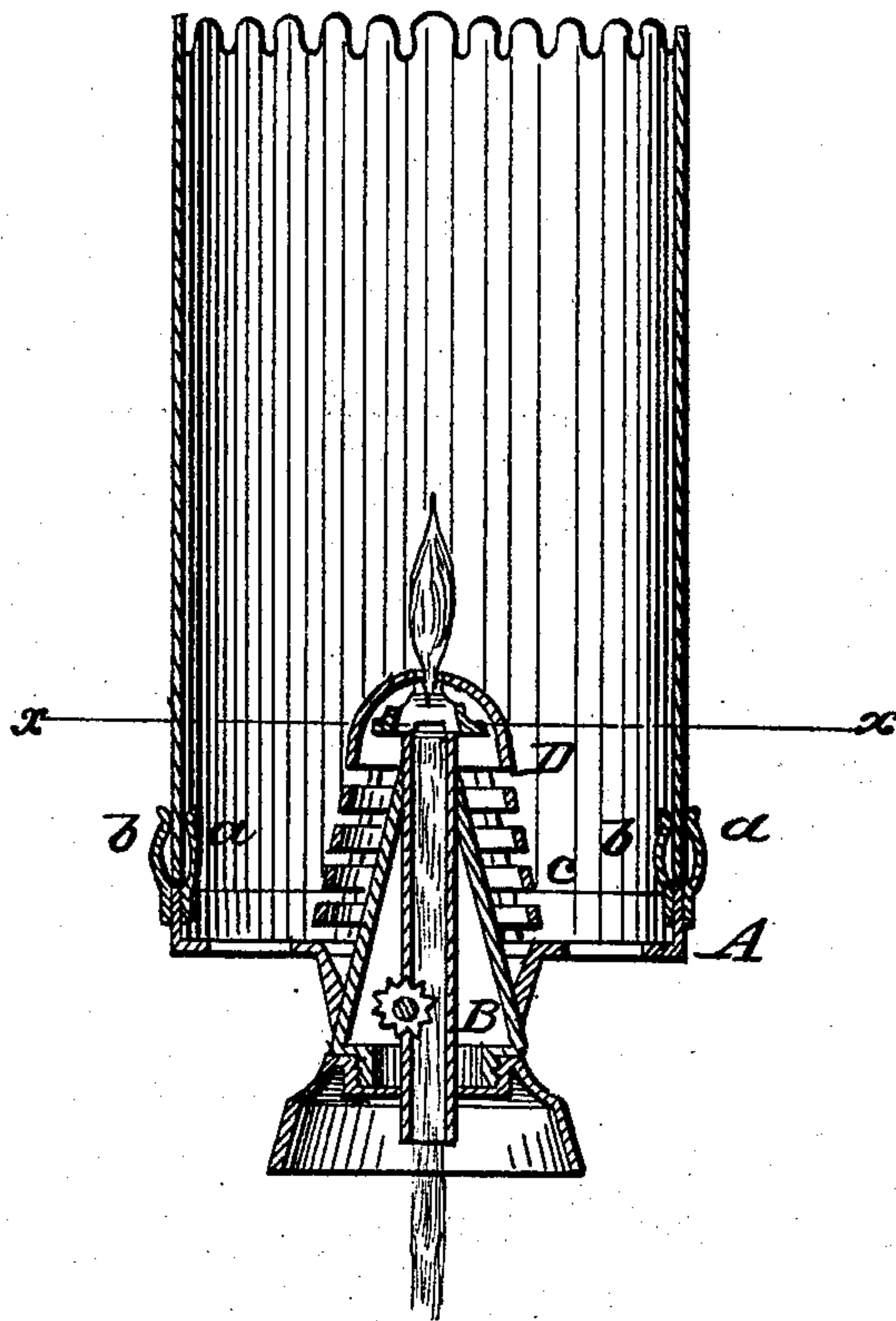
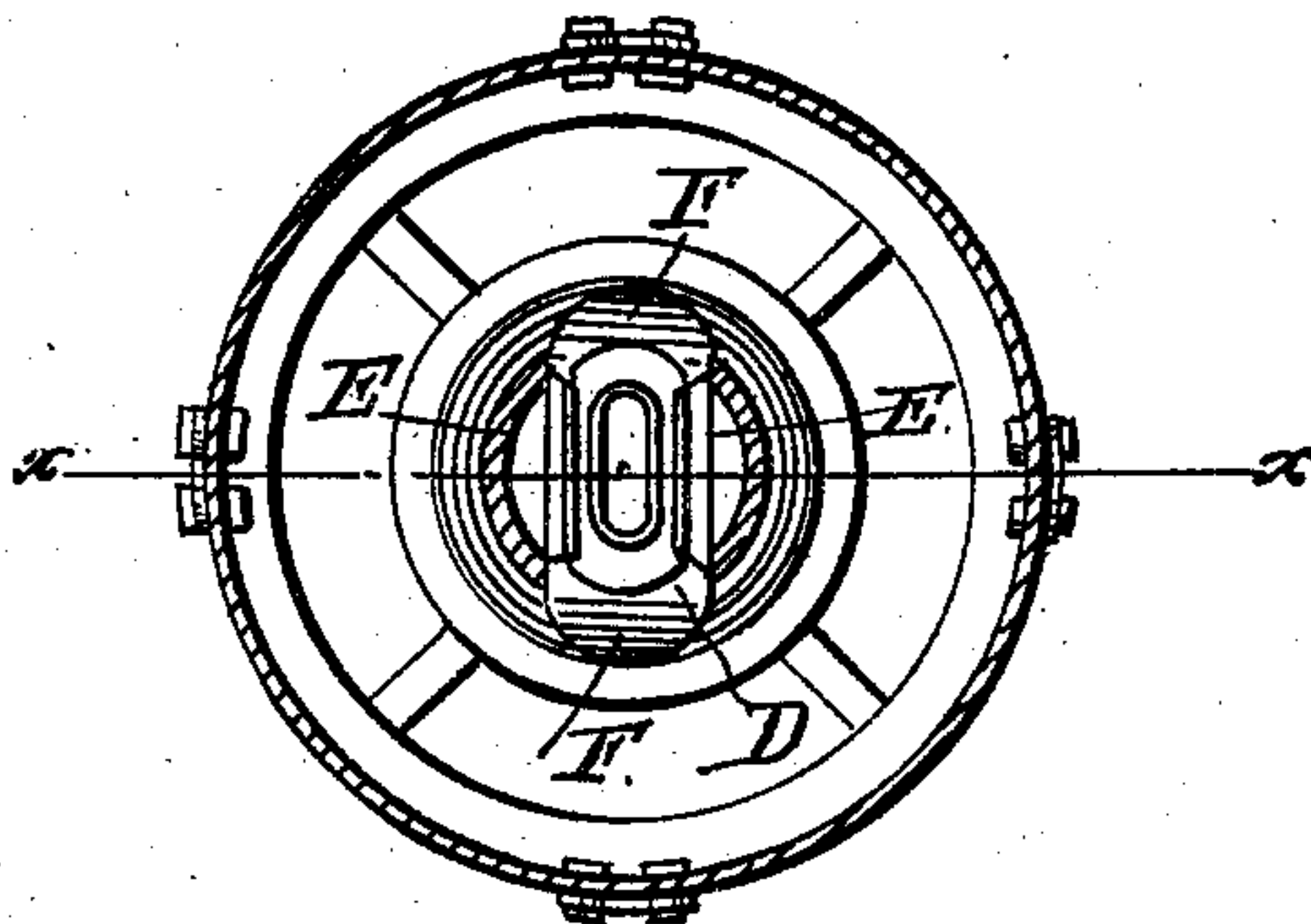


Fig. 2.



WITNESSES

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PERRY PRETTYMAN, OF PARADISE SPRING FARM, OREGON.

Letters Patent No. 93,744, dated August 17, 1869.

IMPROVEMENT IN LAMP-BURNERS.

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, PERRY PRETTYMAN, of Paradise Spring Farm, in the county of Multnomah, and State of Oregon, have invented a new and improved Lamp; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in lamps, whereby it is designed to provide means for preventing the wick-tube from heating, and the communication of heat to the oil-chamber, and for facilitating the process of combustion.

In the accompanying drawings—

Figure 1 represents a sectional elevation of a lamp provided with my improvements, the line *xx* of fig. 2 showing the plane of the section; and

Figure 2 represents a horizontal section on the plane *yy* of fig. 1.

Similar letters of reference indicate corresponding parts.

In order to secure the glass chimneys to the lamp-tops, or burners, I provide the metallic support A for the chimney, with the vertical curved springs *a b*, the one set, *a*, on the outside of the vertical portion of the support A, and the other set, *b*, on the inside of the same, arranged at suitable intervals around the same, between which the shell of the lower end of the chimney is inserted, whereby the application and removal of the said chimneys are greatly facilitated, and it may be held with security, which latter depends on the strength of the springs, and they may be made of any desired strength; and in order to protect the wick-tube from becoming unduly heated, I encase it in a conical tube, B, slightly flattened at the top, and having an opening through which the wick-tube passes, the said conical tube having a much greater radiating-surface, and being arranged to take the heat thrown downward from the flame from the wick-tube, will spread it and expose it to the air admitted through the perforated funnel C, will itself become cooled, in a

great measure, by giving the heat off to the air, and thereby prevent the heating of the wick-tube and the communication of the heat to the oil-chamber below. And for facilitating the process of combustion, I provide a device for giving direction to the air as it comes into contact with the flame, and thereby so shaping the said flame as to receive the greatest amount of oxygen from the air and to produce a brilliant flame.

The said device consists of a sheet-metal plate, D, having an elliptical opening through it centrally, and arranged horizontally above the wick-tube, with the said opening coincident with the axis of the wick-tube, and its longest diameter in the same direction as the longest diameter of the said wick-tube, and partly within the perforated funnel C.

The said plate D is provided with two wings, E, or air-deflectors, rising upward in an angular direction toward the sides of the flame, causing the air coming in contact with the base of the flame to contract it as much as possible in the direction of its shortest diameter, while the wings, or air-deflectors E, projecting upward from the ends in the opposite direction, or outwardly from the flame, and beyond the shell of the funnel C, are calculated, by preventing the air rising outside of the said funnel, from contracting the flame in its longest diameter, whereby the surface of the flame as it emerges from the said funnel will be very much greater, causing a more perfect expansion of the flame, whereby the illumination of the carbon particles is rendered more perfect.

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

The arrangement, with relation to the wick-tube, of the conical imperforate tube B, perforated funnel C, and air-deflector D, provided with the wings E F, as herein set forth and shown, for the purpose specified.

The above specification of my invention signed by me, this 13th day of October, 1868.

PERRY PRETTYMAN.

Witnesses:

I. L. ATKINSON,
L. M. PARRISH.