D. SEAWRIGHT.

Lamp.

No. 198,500. Patented Dec. 25, 1877.

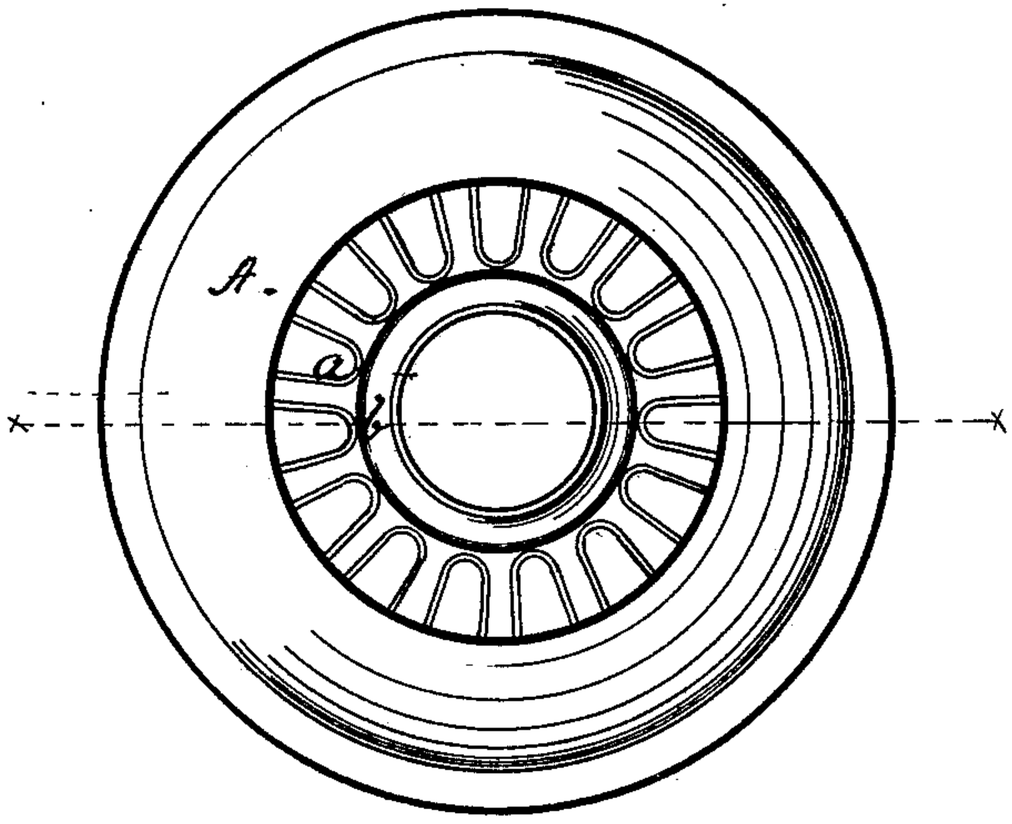

Fig. 1.

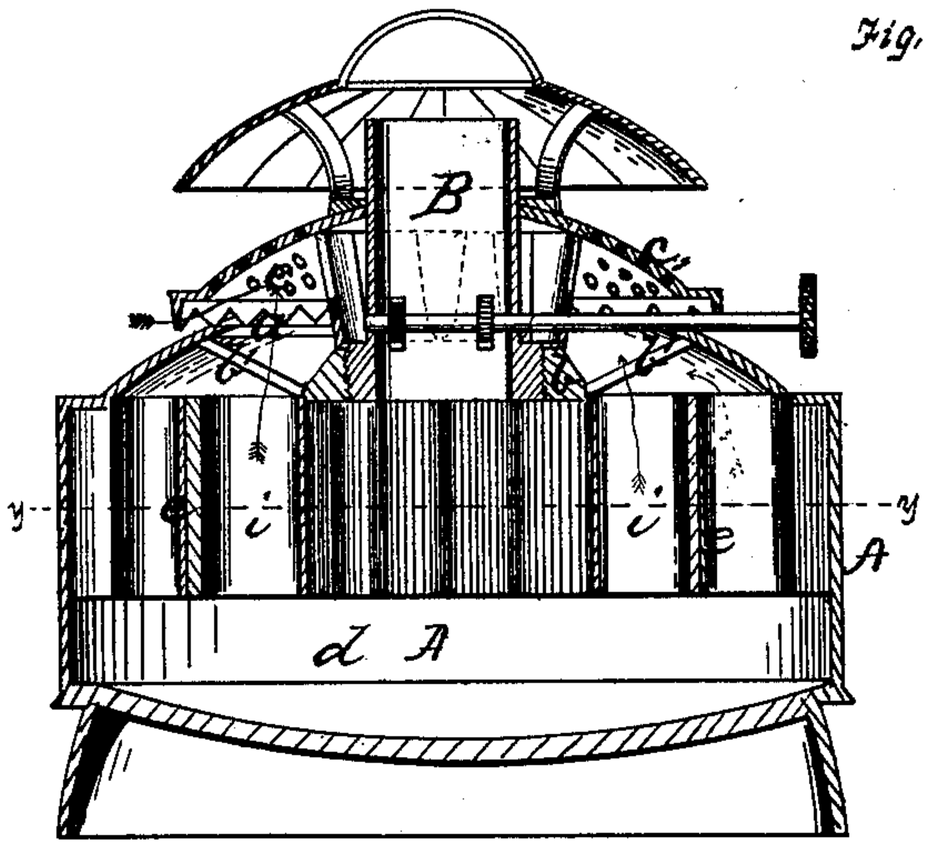

Fig. 3.

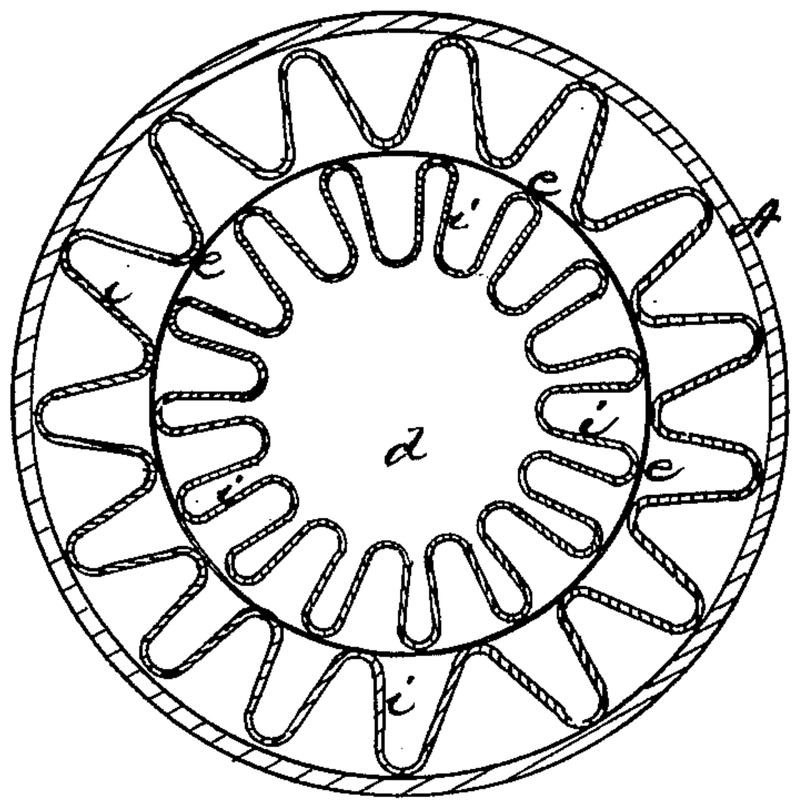

Fig. 2.

WITNESSES.

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UNITED STATES PATENT OFFICE.

DAVID SEAWRIGHT, OF NEW BRIGHTON, PENNSYLVANIA.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **198,500,** dated December 25, 1877; application filed October 6, 1877.

To all whom it may concern:

Be it known that I, DAVID SEAWRIGHT, of New Brighton, in the county of Beaver and State of Pennsylvania, have invented a new and useful Improvement in Non-Explosive Gas-Consuming Lamps; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of a lamp embodying my invention, the burner having been removed. Fig. 2 is a vertical section of the lamp, the burner being attached. Fig. 3 is a horizontal section of the lamp in the line *y y*, Fig. 2.

Like letters refer to like parts wherever they occur.

My invention relates to the construction of lamps, especially such as are adapted to burn petroleum and similar oils.

I will now proceed to describe my invention, so that others skilled in the art to which it appertains may apply the same.

In the drawings, A indicates an oil reservoir or font, having an annular opening, *a*, in its top, centrally of which is the collar *b*, for securing the usual or any approved form of burner B. The diameter of the opening *a* is preferably somewhat less than the perforated diaphragm, flange, or chimney-gallery *c* of the burner, so that, while large enough to permit free escape of any gas formed, it will still be so related to the burner that the gas will enter the draft or air supply, be carried to the flame, and consumed.

A series of curved slots in the top of the reservoir, and arranged around the collar *b*, would produce the same result in many respects; but I prefer to make a clear opening and suspend the collar *b* therein by arms *b'*, so that the gallery *c* can be lowered to the top of the lamp, thus insuring a draft over the opening *a*, and at the same time conceal the openings and give a finished appearance to the lamp.

The interior of the reservoir, except near the bottom, where a chamber, *d*, is left to accommodate the wick, is divided up into a series of small cells or chambers by partitions *e* and cross-partitions *i*, which serve to break up the body of oil in the lamp and divide it, so that it cannot slop over or spill out under the ordinary motion incident to carrying or moving the lamp.

The preferred manner of making these partitions, which should occupy the entire diameter of the reservoir, is to solder or rivet the ends of a series of strips to form circles, and secure within the same other strips, corrugated or folded, as shown in the drawings.

The oil-reservoir thus constructed can be filled through the collar, as usual, or through the opening *a* on one side of the collar.

The burner and wick being in place and the lamp lighted, the draft or air supply to the flame will be across the opening *a*, keeping the oil cool within the reservoir, and drawing off any gas which may form, conducting it to the flame.

The lamp will be found to give a superior light, and all the oil in the reservoir will be consumed without waste.

I am aware that a reservoir for lamps has been divided into several chambers by vertical transverse partitions, and do not claim the same; but,

Having thus described my invention, and the advantages thereof, what I claim, and desire to secure by Letters Patent, is—

1. The lamp having the gas-escape arranged with relation to the burner, as specified, so as to deliver the gas thereto, and provided with diaphragms, which divide the body or reservoir into a series of small cells, substantially as and for the purpose described.

2. The open-top lamp having the vertical diaphragms *e i* and wick-chamber *d*, substantially as and for the purpose set forth.

In testimony whereof I, the said DAVID SEAWRIGHT, have hereunto set my hand.

DAVID SEAWRIGHT.

Witnesses:

F. W. RITTER, Jr.,

J. K. SMITH.