

H. W. ADAMS.

Lamp.

No. 25,310.

Patented Sept. 6, 1859.

Fig. 1

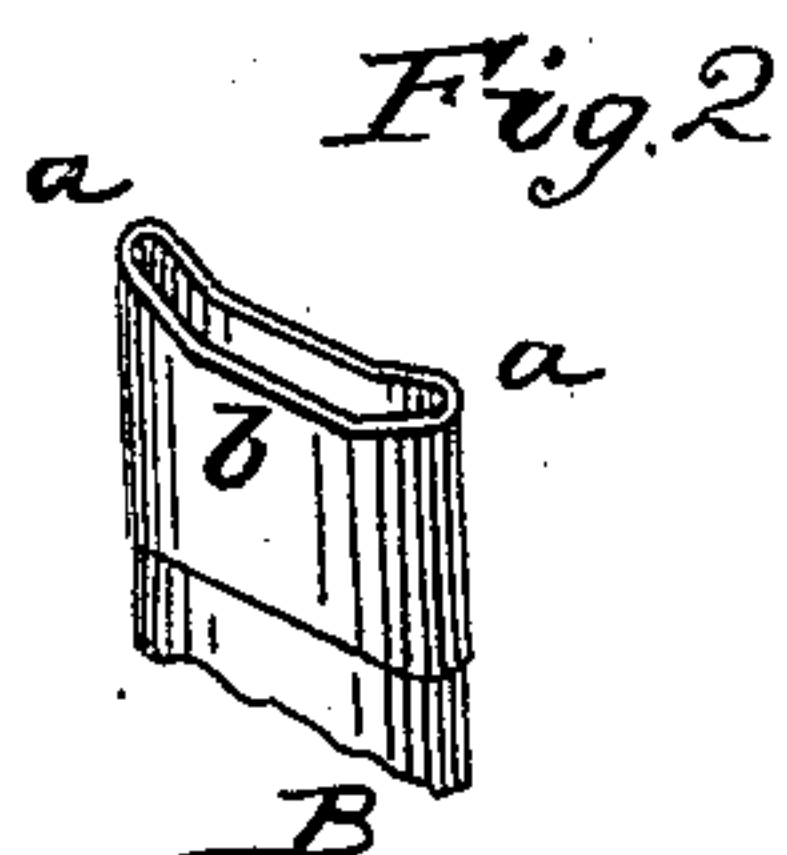
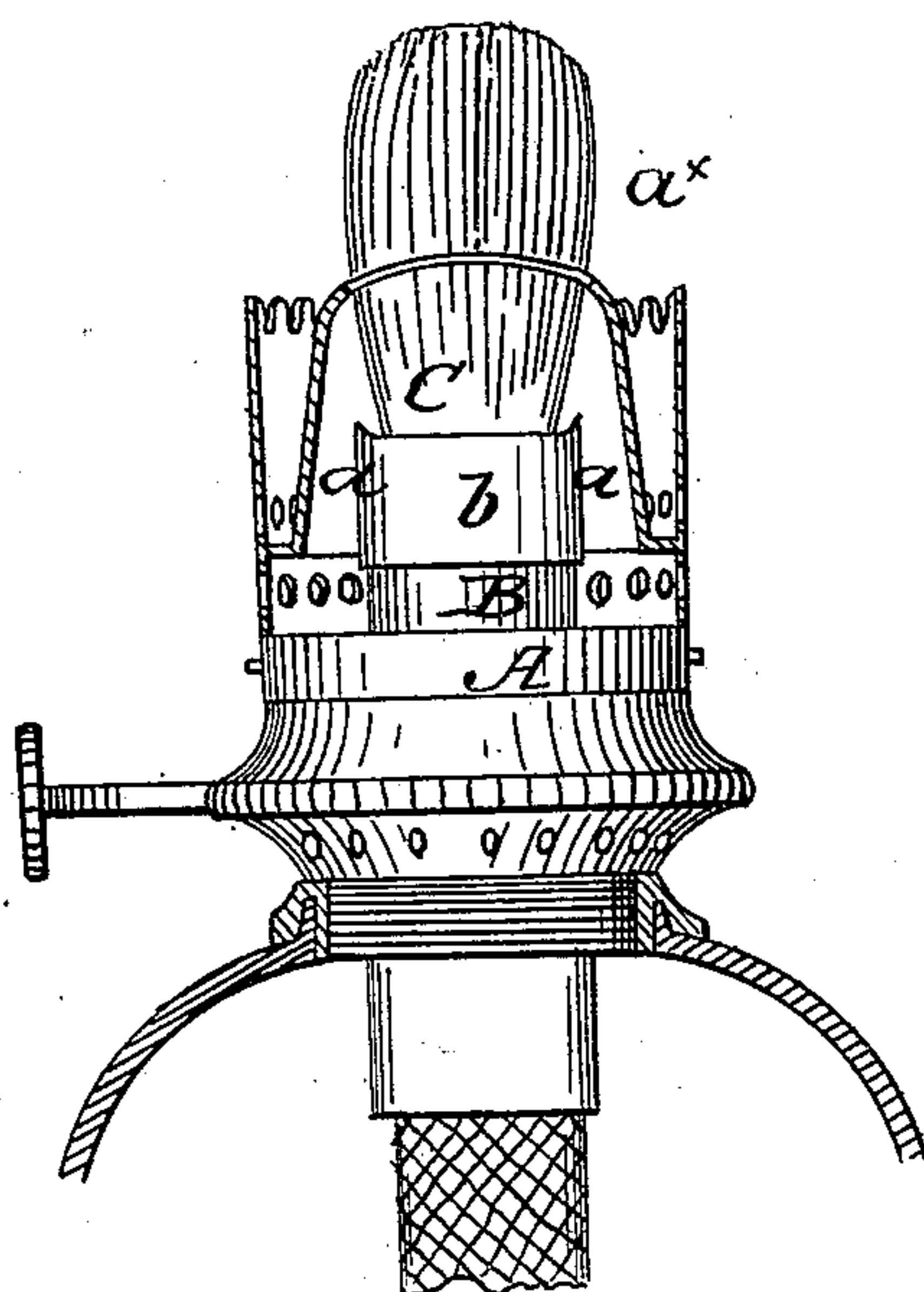
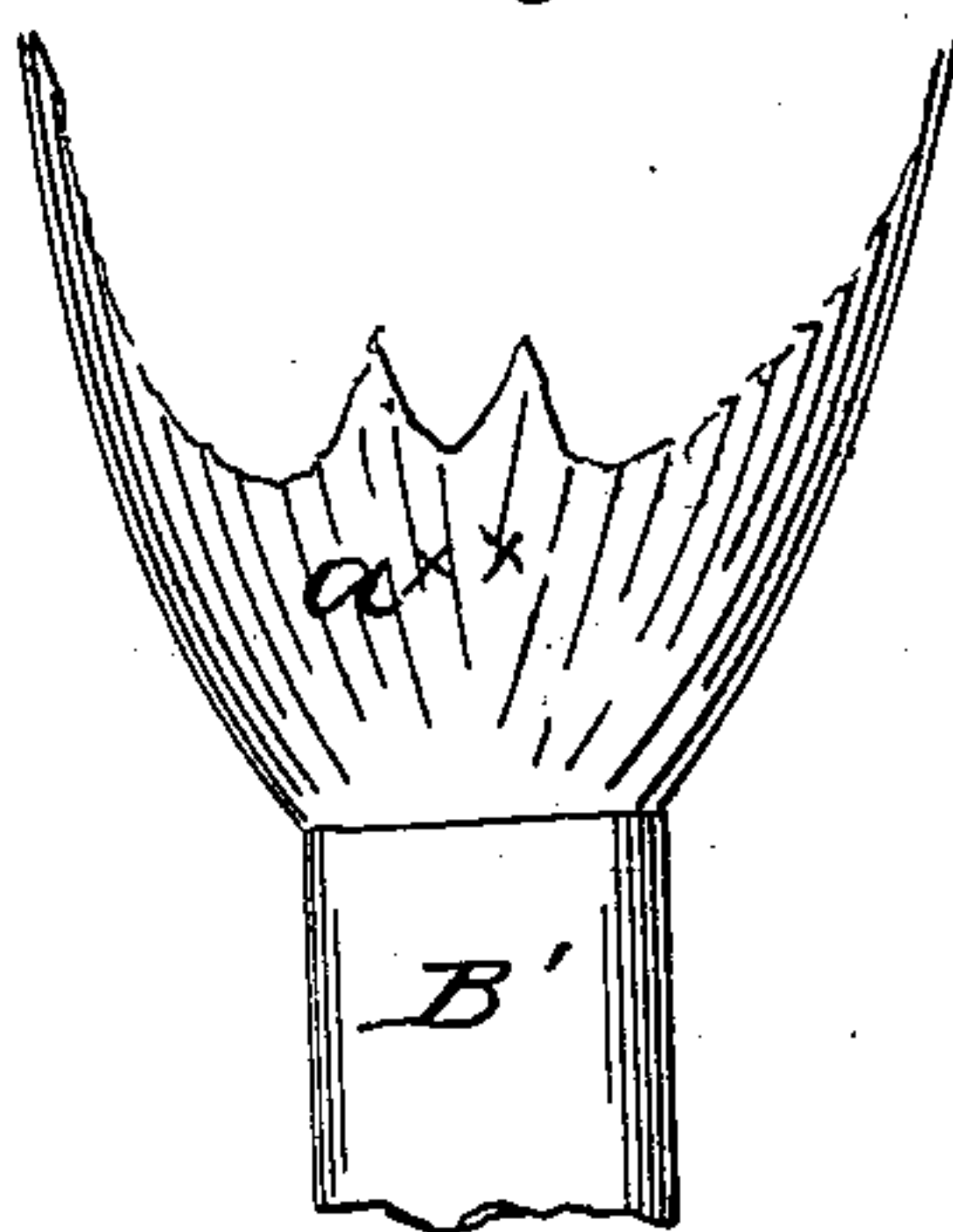


Fig. 3



Witnesses
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HENRY W. ADAMS, OF BROOKLYN, NEW YORK.

LAMP.

Specification of Letters Patent No. 25,310, dated September 6, 1859.

To all whom it may concern:

Be it known that I, HENRY W. ADAMS, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Lamps, (No. 2;) and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side sectional view of a lamp top with my improvement applied to it. Fig. 2, is a detached perspective view of my improvement. Fig. 3, is a detached side view of a wick tube of ordinary construction.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement in the wick tubes of lamp tops or burners designed for burning coal oil and other hydrocarbons of a similar nature.

The object of the invention is to obviate the smoking of the lamp hitherto caused by an uneven trimming of the wick and the tendency or aptitude of the ends of the wick at each side of its top surface to expand or project out more prominently than the central portion during combustion.

The invention consists in having the ends of the top of the wick tube project upward higher than the central part so that when the central part of the top of the wick is raised sufficiently above the top of the wick tube to burn, the ends of the top of the wick will be inclosed by the projecting ends of the tube and the combustion confined to the central part, thereby obviating the difficulty alluded to.

To enable those skilled in the art to fully understand and construct my invention I will proceed.

A, Fig. 1, represents a lamp top or burner such as is generally known as the "Vienna burner" and at present commonly used for burning coal oil. The several parts of this burner with the exception of the wick tube B, are of ordinary construction, well known and therefore do not require a minute description.

The upper end of the wick tube B, is expanded or enlarged in any proper way so as to

form a chamber of larger capacity than the other portion of the tube and therefore permit an annular space to encompass the upper part of the wick. This enlarged or expanded orifice of the wick tube I shall not further describe nor allude to as it performs a function separate and apart from this within described invention and forms the subject matter of a distinct application. The wick tube is of flat form designed for the usual flat wick.

The upper end of the wick tube B, is not horizontal as usual, its ends *a, a*, are elevated somewhat higher than the central portion *b*, as shown clearly in Figs. 1 and 2. The ends *a, a*, of the tube B, extend upward sufficiently to cover the ends of the wick C, when the central portion is sufficiently elevated above the central portion of the wick tube to burn, see Fig. 1. The ends *a, a*, therefore prevent the extreme ends of the wick from burning, the central part being the part from which the flame issues, see Fig. 1.

By this invention the flame *a** has a rounded top, the sides gradually diminishing in height at the top owing to the ends *a, a*, of the wick tube, the inner sides of which ends are inclined so as not to form an abrupt cut off.

In the ordinary wick tube B', see Fig. 3, the top is perfectly horizontal, and the ends of the upper part of the wick is liable to project out and upward above its center part. This is apt to be produced by trimming the wick, and even when trimmed so as to be perfectly horizontal, the heat of the flame *a**, in connection with the rarefied and gasified oil have a tendency to expand or force out the ends of the wick, so that when lighted one or both corners of the flame will project up higher than the other portion and smoke, see Fig. 3, in which one corner of the flame projects upward so as to smoke. There is no remedy for this difficulty but to retrim the wick, and this in coal oil lamps is attended with considerable trouble. By my invention the difficulty is entirely obviated for the corners of the wick are not burnt or ignited and the height of the flame may be regulated as desired by simply raising and lowering the wick.



Having thus described my invention what I claim as new and desire to secure by Letters Patent, is.

5 Constructing the upper end of the wick tube B, with elevated ends *a, a*, so as to inclose the ends of the wick C, and prevent said ends from burning too high when the central part is sufficiently elevated above the

central part *b*, of the wick tube to be allowed to burn, substantially as and for the purpose herein set forth. 10

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