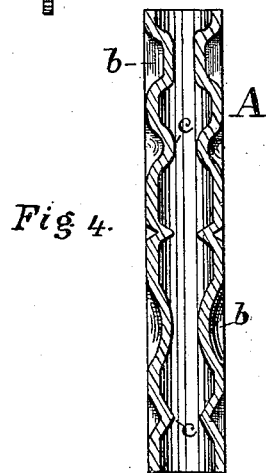
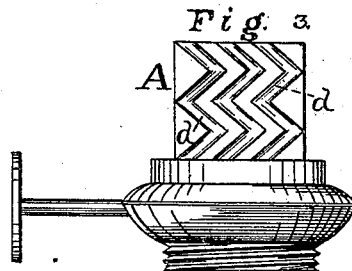
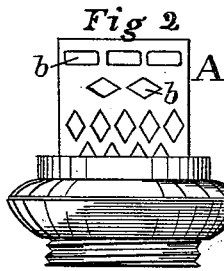
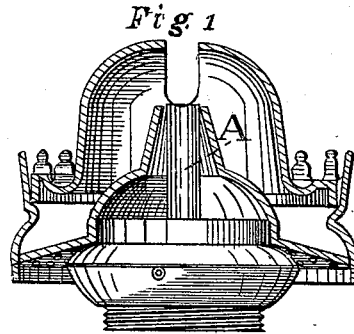


S. S. MANN.  
Lamp-Burner.

No. 211,761.

Patented Jan. 28, 1879.



Witnesses:  
J. Morton Gale,  
A. C. Eader

Inventor:  
S. S. Mann  
By his Atty  
Chas B. Mann

# UNITED STATES PATENT OFFICE.

STEPHEN S. MANN, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. **211,761**, dated January 28, 1879; application filed December 12, 1878.

*To all whom it may concern:*

Be it known that I, STEPHEN S. MANN, of the city and county of Baltimore, and State of Maryland, have invented a new and useful Improvement in Lamp-Burners, of which the following is a specification:

In the accompanying drawings, Figure 1 is a view of a burner, in which the cone and chimney-holder are in section. Fig. 2 is a side view of wick-tube and lower part of burner. Fig. 3 is a side view of same parts, showing a modification in the tube—viz., continuous zigzag depressions. Fig. 4 is a transverse vertical section of a wick-tube on a large scale.

The subject-matter claimed hereinafter will now be specifically designated.

The wick-tube A in width is of the usual size, but in the transverse direction is larger than the ordinary tubes, to permit the use of an extra-thick wick. The broad sides of the tube are provided with indentations *b*, which may be of any desired form or size; or different forms and sizes may be used in the same tube. These indentations form small projections *c* on the inner sides of the tube, and are placed or arranged in such manner as to avoid leaving between the projections continuous vertical channels or passages when the wick is in position.

By reason of the indented projections *c* being arranged otherwise than in direct vertical lines, the oil is diffused in the wick as it ascends, and the objection which pertains to vertical corrugations—that the oil ascends in straight channels—is obviated.

Another objection to corrugations, if oils of the lighter grade are used, consists in the straight passages along the sides of the wick, down through which flame may pass, causing an explosion of the vapor formed by such oil.

By the method of placing or arranging the indentations the passages or spaces left between the wick and tube are so tortuous as practically to prevent the passage of the flame.

It will be seen these indentations afford the requisite support for the wick without compressing, and thereby the utmost capacity of the wick is made available for the ascension of oil.

The modification shown in Fig. 3 consists of continuous depressions in the wick-tube, arranged in a zigzag course, and so as to avoid leaving at any point the straight vertical channels hereinbefore referred to.

I do not claim the formation in a wick-tube of vertical corrugations, nor the particular arrangement of corrugations in such manner as to leave the mouth or upper end of the tube plain, permitting the same to fit at the burning-point closely to the wick; nor indentations placed one directly above the other, forming a series of unconnected vertical depressions.

Having described my invention, I claim—

1. A lamp-burner having a wick-tube provided with indentations projecting inward, and which are so placed or arranged relatively to each other as to avoid leaving straight continuous vertical channels when the wick is in position, as set forth.

2. A lamp-burner having a wick-tube provided on its inner sides with projections, arranged substantially in the manner described, to avoid leaving straight continuous vertical channels or passages between the wick and the sides of the tube, as set forth.

S. S. MANN.

Witnesses:

JOHN C. GMEINER,  
J. P. WHITE.