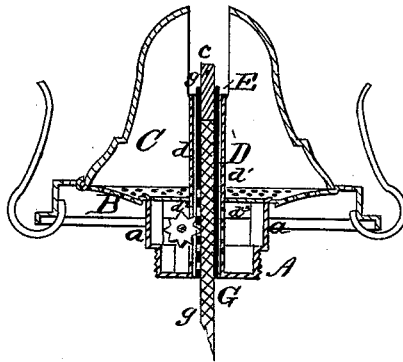


J. T. SHUSTER.  
Lamp-Burner.

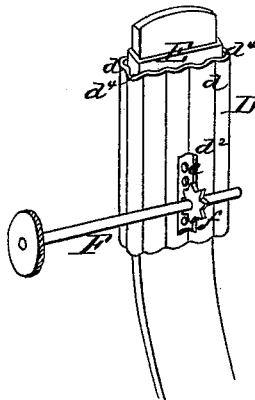
No. 214,960.

Patented April 29, 1879.

*Fig. 1*



*Fig. 2.*



Witnesses  
W. Connolly.  
H. Connolly

By

Inventor  
John T. Shuster  
Connolly Bros  
Attorneys

# UNITED STATES PATENT OFFICE.

JOHN T. SHUSTER, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. **214,960**, dated April 29, 1879; application filed February 18, 1879.

*To all whom it may concern:*

Be it known that I, JOHN T. SHUSTER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Lamp-Burners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a vertical central section, and Fig. 2 is a perspective view, of wick-tube.

My invention has relation to a lamp-burner intended for use in connection with a non-combustible wick; and my improvements consist in the peculiar construction and combination of parts hereinafter fully described, having reference principally to the provision of an adjustable wick-tube, which may be moved vertically for the regulation of the flame within a stationary tube, the latter being corrugated to afford gas-ventages for the oil-reservoir, and having openings for the supply of air to support combustion.

Referring to the accompanying drawings, A designates the screw-neck of a burner, and *a* arms sustaining a perforated plate, B, on which rests a dome, C, these parts being constructed in the usual or any suitable manner.

D is a tube passing through the neck A and plate B, and made fast thereto, its upper extremity being slightly below the opening *c* in the dome C, as shown. Said tube has corrugated sides *d* *d*<sup>1</sup>, one of which is slotted at *d*<sup>2</sup>, the other side having openings or perforations *d*<sup>3</sup>, opposite to said slot, the purposes of which will be hereinafter fully detailed.

E represents the wick-tube fitted within the stationary tube D, and having a rack, *e*, formed on one of its sides, for engagement with a pinion, *f*, on a shaft, F. The pinion *f* passes through the slot *d*<sup>2</sup> in the tube D, and when the shaft F is turned the tube E will be moved up or down, as required, within said tube D, for the purpose of regulating the flame. G shows the wick, composed of two parts—viz., a lower section, *g*, of felt or common wicking, and a non-combustible tip, *g*<sup>1</sup>, of asbestos or other equivalent material. These two parts are joined or held in end contact in the tube E. Said tube thus forms a joint for the

two sections of the wick. It also subserves the further purpose of forming a rack for the engagement of the pinion *f*, which is necessary where a rigid tip is employed on a wick, in which case the wick cannot be moved by the engagement of the pinion direct with the cotton or flexible portion, as in common wicks.

A still further advantage is this. The wick being closely confined within the tube E, the grooves *d*<sup>1</sup> in the tube D are left open, and form ventages for the gas generated in the oil-reservoir or lamp-bowl, said gas ascending therethrough and burning freely at the point of combustion, being supplied with ample oxygen through the openings *d*<sup>2</sup> *d*<sup>3</sup>.

I am aware that there is no novelty in providing a lamp-burner with a corrugated wick-tube through which the wick is directly fed, nor in providing a burner with a sliding or adjustable tube. I therefore do not claim either of these forms as my invention; but I base my claim on the assumption that the sliding wick-tube and the corrugated stationary tube have not before been combined as required for the effective use of a non-combustible wick.

What I claim as my invention is—

1. The stationary corrugated tube D in a lamp-burner, in combination with an internal sliding wick-tube, E, substantially as shown and described.

2. In a lamp-burner, the combination, with a stationary tube, D, slotted at *d*<sup>2</sup>, of an internal sliding wick-tube, E, having a rack, *e*, and a pinion, *f*, on a shaft, F, substantially as shown and described.

3. The combination, with an internal wick-tube, E, of an external corrugated tube, D, having air-supply openings *d*<sup>2</sup> *d*<sup>3</sup>, substantially as shown and described.

4. The combination, with a stationary corrugated tube, D, in a lamp-burner, of an internal sliding tube, E, and a wick, G, in two sections, *g* *g*<sup>1</sup>—viz., a lower part, of common wicking, and a non-combustible tip, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of February, 1879.

JOHN T. SHUSTER.

Witnesses:

WM. H. SHUSTER,  
CHAS. F. VAN HORN.