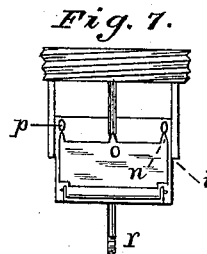
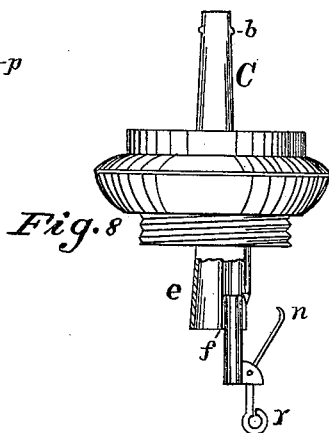
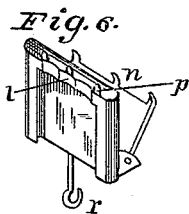
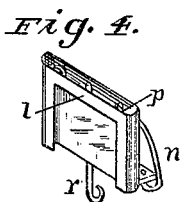
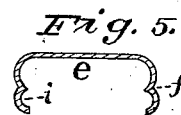
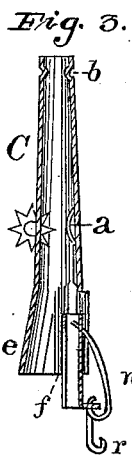
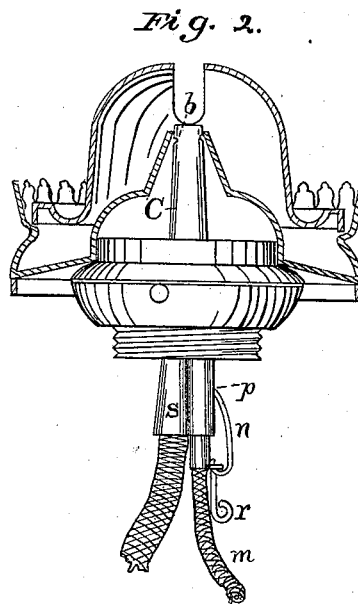
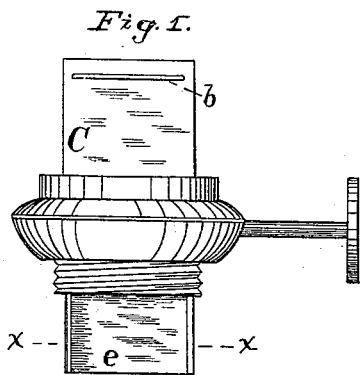


S. S. MANN.  
Lamp-Burner.

No. 212,562.

Patented Feb. 25, 1879.



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

Inventor:  
Stephen S. Mann  
By his Atty  
Char. B. Mann

# UNITED STATES PATENT OFFICE.

STEPHEN S. MANN, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. **212,562**, dated February 25, 1879; application filed January 18, 1879.

*To all whom it may concern:*

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

The object of the invention is, more particularly, to provide a burner which shall be well adapted for burning the grade of mineral oil known as "300° fire-test."

It is well understood that this heavy oil will not ascend a single ordinary flat wick with sufficient rapidity to maintain a flame that will yield a satisfactory light. A supplemental wick is therefore provided, which is adapted for attachment and removal, at the under side of the burner, as hereinafter set forth.

Figure 1 is a side view of the lower part of burner. Fig. 2 is a transverse view of same, and also of the cone and chimney-holder in section. Fig. 3 is a vertical section of a wick-tube. Fig. 4 is a view of the supplemental wick-holder. Fig. 5 is a cross-section through *x x*, Fig. 1. Figs. 6, 7, and 8 are views of the detachable wick-holder, showing a modification of the points which retain the wick.

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

The letter C represents the wick-tube, which tapers from the lower toward the upper end, this arrangement permitting the wick to be readily inserted, and avoiding any compression of it at the point where the supplemental wick is attached. The broad sides of the tube are provided, near the upper end, with a transverse crease or groove, *b*, which may be depressed from the outer side inwardly, so as to bear against the wick, or from the inner side outwardly, either way serving the purpose, which is to evenly spread the oil in the wick, so that its flow shall be equal from edge to edge as it reaches the burning-point.

The nearest approach to the transverse groove that I am aware of is to be found in United States patent issued to me January 28, 1879, where three depressions are shown formed in the wick-tube near its upper end. These, however, are not connected together to form a depression from edge to edge of the tube.

The action of the spur-wheels on the wick is insured by the inward depressions *a*, formed

in the tube directly opposite each wheel, which serve as supports against which the wick bears.

To provide for the attachment of the supplemental wick, the tube is extended below the burner, as shown at *s*. In the broadest direction this extension has one side, *e*, closed, and the other side open. The edges of the open side are turned slightly toward each other, and, in connection with the vertical crease *f*, form a groove, *i*, which is adapted as a slide for the wick-holder.

The supplemental wick-holder consists of a flattened tube having one of its broad sides cut away, so as to leave but a narrow strip at the upper part, as seen at *l*, Fig. 4. When the wick is in the holder this cut-away side is next to the main wick, and the two wicks are thus permitted to come into close contact. The wick *m* is retained in the holder by the spring-pins *n*, which are rigidly secured at one end to a flange on the lower part of holder. The pointed ends enter slots *p* in the broad side of the holder and press into the wick. A small wire ring, *r*, is attached and projects below the holder, serving as a convenient handle.

It will be seen the holder is adapted to slide into the grooves provided below the burner.

The extension part *s* below the burner partly incloses the main wick, the side *e* being the part which serves to keep the main wick in a fixed position relative to the vertical grooves, and insures the contact of the two wicks. It is not essential that this extension be a continuation of the wick-tube, as shown in the present example; but, instead, the extension side *e*, or its equivalent construction, and the grooves, may be separate pieces, attached in any suitable manner below the burner.

Figs. 6, 7, and 8 illustrate a supplemental wick-holder, whereof the points *n*, which retain the wick, are formed on the edge of a plate which is hinged at its opposite edge to the flange on the lower part of holder. By swinging this hinged plate the points enter the slots *p* and press into the wick.

Having described my invention, I claim and desire to secure by Letters Patent—

1. In a lamp-burner, a flat wick-tube provided on its broad sides near the upper end with the transverse crease or groove *b*.

2. In a lamp-burner, the combination of a

wick-tube tapering from the lower toward the upper end, and provided on its broad sides with a transverse crease or groove, as set forth.

3. A lamp-burner provided on its lower side with vertical grooves adapted as a slide for the insertion of the holder of a supplemental wick, whereby the latter may be brought in contact with the main wick and readily removed therefrom, as set forth.

4. The supplemental wick-holder, for attaching a wick to the lower side of the burner, consisting of a flattened tube having one of its broad sides partly cut away, and the other provided with slots *p*, through which pass the points, as set forth.

5. The combination, in a lamp-burner, of the

extension part below the burner, having one side open, the edges of which are provided with vertical grooves, and a supplemental wick-holder adapted to slide in the grooves, as set forth.

6. The combination, in a lamp-burner, of a flat wick-tube, vertical grooves on the lower side of the burner, adapted as a slide for the holder of a supplemental wick, and an extension adapted to keep the main wick in a position which insures the contact of the two wicks, substantially as set forth.

S. S. MANN.

Witnesses:

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