J. C. SHOPLAND.

WICK-ATTACHMENTS FOR LAMPS.

No. 185,703. Patented Dec. 26, 1876.

Fig: 1.

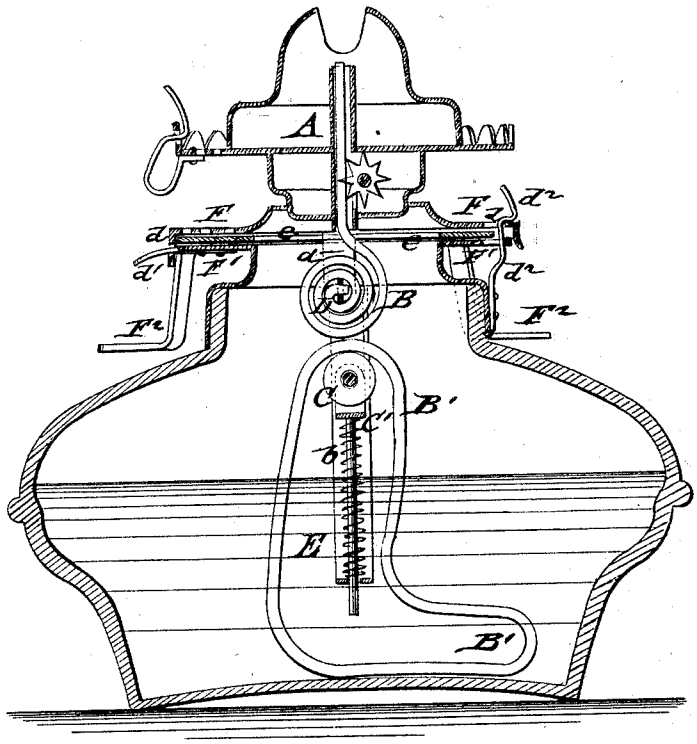


Fig: 2.

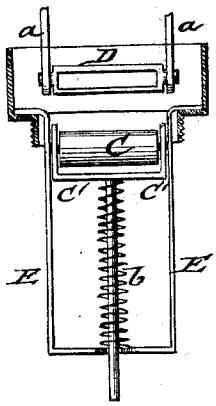
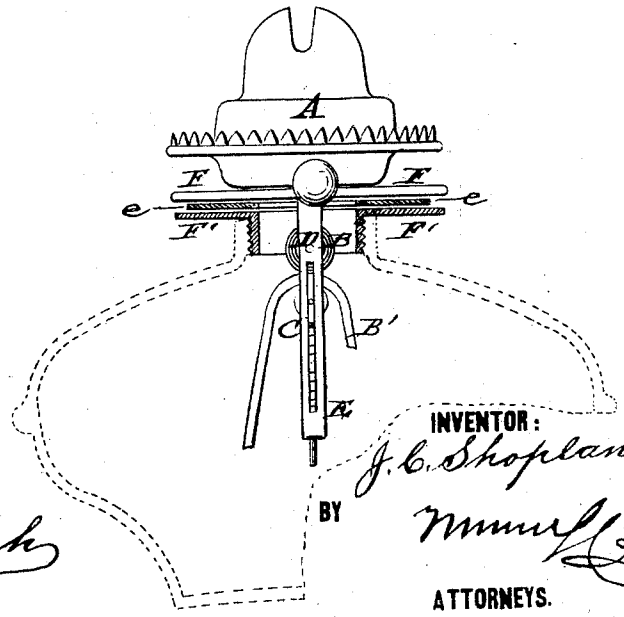


Fig: 3.



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JOHN C. SHOPLAND, OF NORTHPORT, NEW YORK, ASSIGNOR TO HIMSELF AND WILLIAM MORGAN, OF NEW YORK CITY.

IMPROVEMENT IN WICK ATTACHMENTS FOR LAMPS.

Specification forming part of Letters Patent No. **185,703**, dated December 26, 1876; application filed November 4, 1876.

To all whom it may concern:

Be it known that I, JOHN C. SHOPLAND, of Northport, in the county of Suffolk and State of New York, have invented a new and Improved Wick Attachment for Lamp-Burner, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical central section of my improved wick attachment to lamp-burners; Fig. 2, a detail side view of the spring-roller of the lower endless-wick section; and Fig. 3, a sectional side view of the wick attachment applied entirely to burner.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide kerosene-lamps with an improved wick attachment, by which the lamps may be filled at any time without extinguishing the light, by detaching the burner, and supporting the same during the refilling of the lamps, employing the light of the flame during the filling by the sufficient supply of oil contained in the wick.

The invention consists of a wick attachment, consisting of two separate wicks, the upper sliding up to the wick-tube of the burner, and being wound upon a slotted revolving frame below the wick-tube, and forming continuous contact with the lower endless wick within the lamp by a guided and spring-acted roller pressing thereon.

The burner has a base-plate with downwardly-extending posts, for supporting the burner and upper wick-section during filling, and is tightly secured to a collar and intermediate non-conducting layer of the lamp-bowl.

In the drawing, A represents a kerosene-lamp burner of the usual construction, which is provided, in place of the common wick, with an improved compound wick, consisting of an upper sliding wick, B, that is renewed from time to time, and a lower endless wick, B′, that turns on a spring-acted roller, C, within the lamp-bowl. The upper wick-section is inserted at the lower end into a slotted wick-holder, D, that binds on the wick and revolves in supports *a* at the under side of the burner, so as to admit the convenient winding up of the wick on the holder D. The coiled wick-section B is brought in contact with the endless wick-section B′ by the roller C, that turns in a frame, C′, sliding in a slotted guide-frame, E, and, being acted upon by a spiral spring, *b*, is placed around a central stem of frame C′, between frame and lower part of guide-frame E, the stem being guided in a perforation of the latter. The roller guide-frame E may be either attached to the inside of the neck of the lamp-bowl or to the lower part of the burner, as desired. A solid ring-plate, F, of the burner, is attached by recesses *d* to a lug, d^1, at one side, and a spring-catch, d^2, at the opposite side, of the lamp-burner, and seated on a corresponding collar-plate, F, of the lamp, and a ring-shaped layer, *e*, of felt or other suitable non-conductor of heat, interposed between the ring-plate F and collar-plate F^1. The lamp below the non-conducting layer is thereby kept in perfectly cool state, without being heated by the burner above the same. The plate F is also provided with downward, extending arms or posts F^2, on which the burner may be supported when detached from the lamp, in case the spring-roller and endless wick are attached to the bowl. The oil in the coiled upper wick-section is then sufficient to keep the flame burning during the time required for filling up the lamp.

When the spring-roller and endless wick are attached to the burner, the same has to be held in one hand or to be placed in a hollow support, so as to serve to furnish the light for refilling the lamp without the necessity of an extra light.

When the burner is replaced on the bowl, the coiled wick forms intimate contact with the endless wick by means of the spring-roller, which presses the endless wick continually on the upper wick during the adjustment and decrease of size of the same, and supplies the oil thereto by capillary attraction, until every particle of oil in the bowl is consumed.

Only the upper wick has to be replaced when burned out, by being rewound on the slotted holder, and passed up through the wick-tube to be raised or lowered by the spur-wheels in the usual manner.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. A wick attachment for lamp-burners, consisting of an upper wick, coiled below the wick-tube, and a lower endless wick of the bowl, forming contact therewith, substantially in the manner and for the purpose set forth.

2. The combination of the upper wick with a slotted revolving wick-holder below the wick tube, for winding up the wick thereon, substantially as described.

3. An upper wick coiled around a slotted holder, and a lower endless wick, in combination with a guided and spring-pressed roller, for the purpose of producing a continuous contact of the wick-sections, as specified.

JOHN C. SHOPLAND.

Witnesses:
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