F. A. TABER.

Candlestick.

No. 89,811. Patented May 4, 1869.

Fig. 3.

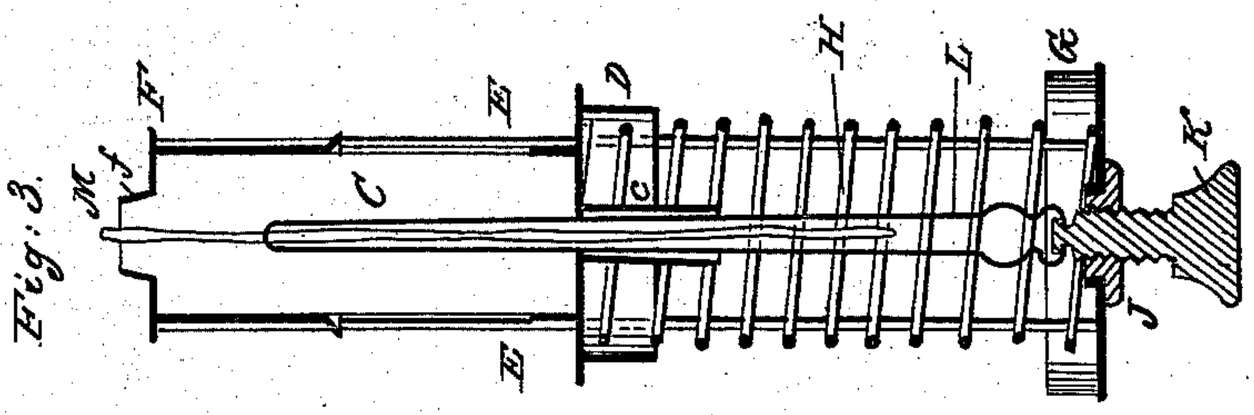



Fig. 2.

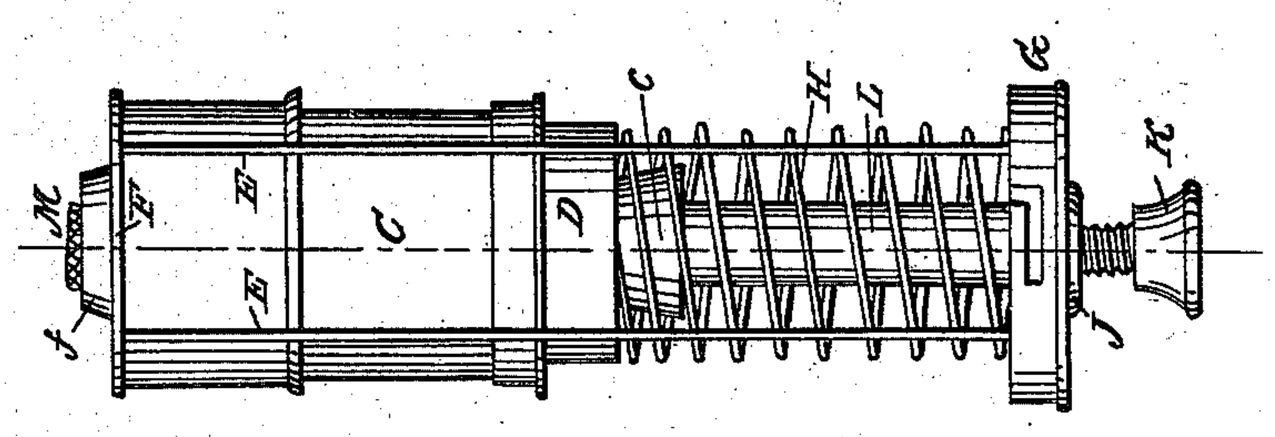
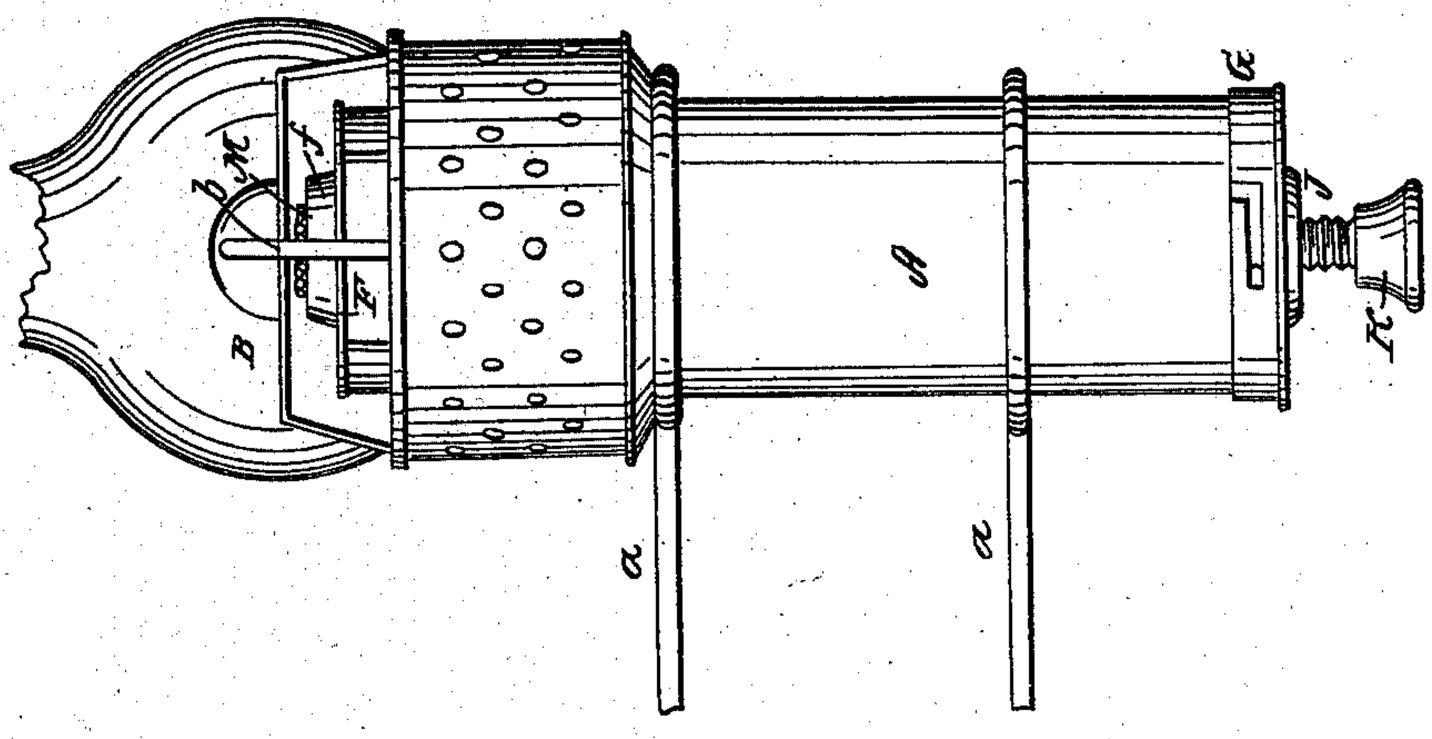



Fig. 1.

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# United States Patent Office.

FREEMAN A. TABER, OF BALTIMORE, MARYLAND.

*Letters Patent No.* 89,811, *dated May* 4, 1869.

## IMPROVEMENT IN CANDLESTICKS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, FREEMAN A. TABER, of city and county of Baltimore, in the State of Maryland, have invented a new and useful Improvement in Illuminators; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains, to fully understand and use the same, reference being had to the accompanying drawings, making part of the specification, in which—

Figure 1 is a side elevation.

Figure 2 is a similar view thereof, the outer casing having been removed.

Figure 3 is a central vertical section in the line *x x*, fig. 2.

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

My invention consists in the application to a lamp-casing, of a candle, having a separated wick, which is readily raised and lowered.

It is intended to be a substitute for the dangerous hydrocarbon-fluids, now so much in use, whereby many advantages are gained, among which may be cited, the non-liability to explosion, and communication of fire to surrounding objects, cleanliness and cheapness, and readiness of transportation.

In the drawings—

A represents a cylindrical casing, of suitable form and construction, and adapted to be supported upon the brackets *a*, or upon a base, or feet, as in ordinary lamps.

Its upper end is provided with a cone, B, which should be somewhat elevated above the top of the casing; and spring-fingers *b* may be secured thereto, to retain an ordinary chimney in place.

C represents a candle, which is formed of a block of paraffine, tallow, sperm, or other suitable material, but without a wick embedded therein, as ordinarily.

A slot, or opening is made vertically through the centre of the candle, and of size sufficiently large to receive a movable wick, and its operating-tube.

This candle is to be placed upon a slide, or cap, D, which is retained and guided between guide-rods, E, whose length should correspond to that of the cylindrical casing to which the candle is to be applied.

To the upper part of the rods E, is secured a burner, F, and to their lower ends a cap, G, as shown in figs. 2 and 3.

It will be seen that the slide D is between the burner F and the lower cap G, and has a vertical motion between the two. When the candle is placed in slide D, it is evident that it may be advanced toward the burner F, so that its upper end will enter said burner, and it is necessary that said candle do so, in order to be in position for burning, or illumination.

A coiled, or other proper spring, H, is placed within the guide-rods E, and has its lower end resting on the bottom cap G, and its upper end bearing against the slide D, whereby the candle is always forced upward, within the burner F.

J is a screw-plug, applied to the bottom cap G, and forming a bearing for a screw, K, which is provided with a milled head.

This screw has a vertical motion, and is swivelled to the lower end of the wick-tube L, which is constructed in any of the well-known forms, but, by preference, of a flat strip of metal, bent at the middle, so that its two ends come in contact, and said middle part forms the connection for the swivel-screw K.

The wick-tube is placed within the spring H, passed through the slide D, and is to be introduced into the candle to near its upper end.

The wick N is inserted in the opening in the candle and the wick-tube.

Owing to the construction of the tube, the two ends spring open, when drawn downward below slide D, and allow of the ready application of the wick. Or the latter may be placed within the tube previous to introduction within the opening in the candle.

A guide, *c*, may be placed on the lower face of slide, to assist in the insertion of the wick-tube, as also to steady its motion.

The various parts of the candle, its holder and connecting-parts, as thus complete, are now in condition to be applied to the casing A, which is adapted to receive them.

A bayonet-joint is formed in the bottom of the casing and the lower cap, in order to properly support the candle and its parts in position, or a screw-thread, or other fastening may be employed for the same purpose. Instead of these, the candle and its parts may be suspended from the top of the casing.

Fig. 1 shows the lamp completed for lighting. The wick is lighted and adjusted to the proper flame, by means of the swivel-screw.

The candle melts at the points of combustion, and keeps the wick supplied with inflammable matter.

While this matter is being consumed, the spring H presses the candle or block upward, so that the top of the cap, or burner F is continually filled, and the proper level of the melted matter is maintained.

The cap, or burner is formed with a flange, *f*, around the slot through which the wick protrudes, whereby there is no overflowing of the melted candle.

The necessary air for the flame is admitted through openings in the casing A, or in any other suitable manner. The wick must be trimmed and regulated as in other lamps.

My invention is equally applicable to lamps for the household, steam, and street-cars, and all places where illumination is desired, or necessary.

The candles are easily made, and admit of convenience in transportation. They can be packed in boxes, or packages, similar to the ordinary candles. They emit no such unpleasant smell as coal-oil, and other fluids, and are not liable to explosion.

In cases of accidents or collisions in steam-cars, the light may be extinguished by the concussion, or the broken pieces and fragments of the cars smothering it. But sometimes the lamp breaks, and the oil runs, or spreads. Its volatile nature causes fire from the wick or stove to be communicated to it, whereby the pas-

sengers, who are caught in the wreck, are exposed to the horrors of burning, especially so, after partly escaping serious bruises, or are merely caught in the wreck, but are uninjured.

The numerous accidents, due to the filling, upsetting, and explosion of coal-oil lamps, breaking of the reservoirs, and like causes, are sufficient reasons why volatile fluids should be displaced by comparatively less dangerous substitutes.

Cleanliness, cheapness, and utility enter into the elements of my invention.

I disclaim a tubular candle, having an unattached wick, and I do not claim, broadly, placing the candle on a slide which is forced up by a spring to the burner, as I am aware that these features are not new, in themselves considered; but,

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The spring wick-holder L, for the wickless candle, when operated by the swivel-screw K, working through nut J, applied to part G, substantially as shown, and for the purpose set forth.

2. The candle-holder, constructed, as described, of the support D, with guide *c*, cap E *f*, bottom piece G, connecting-wires E, spring H, spring wick-tube L, screw K, and nut J, all as herein set forth, and fitted within the casing A, as specified.

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