(No Model.) 2 Sheets—Sheet 1.

J. P. NESSLE.

HYDRAULIC CANDLESTICK.

No. 416,418. Patented Dec. 3, 1889.

Fig. 1.

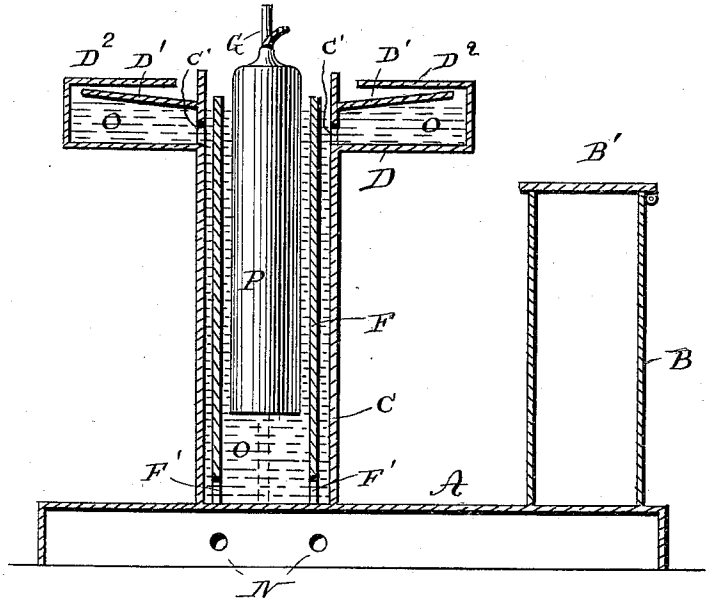


Fig. 4.

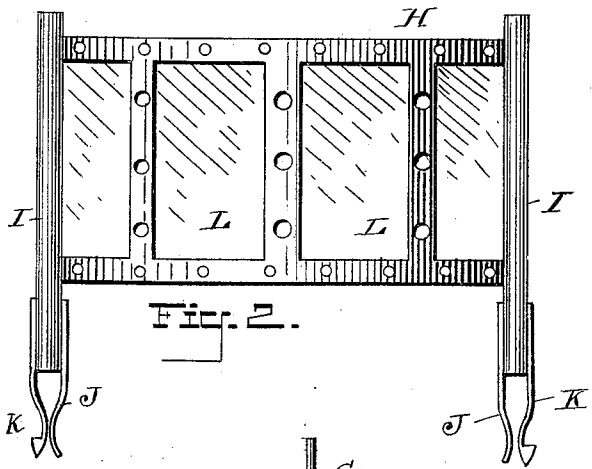


Fig. 2.

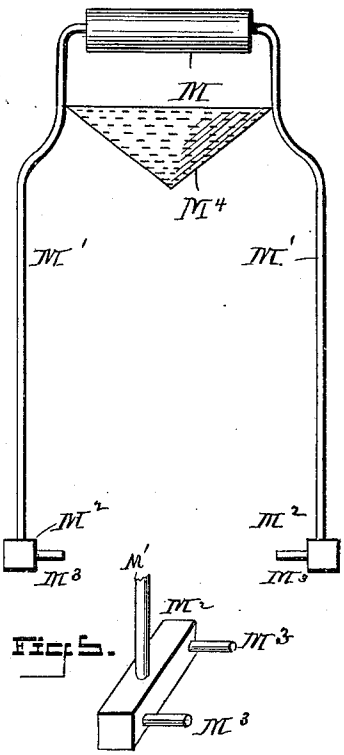


Fig. 5.

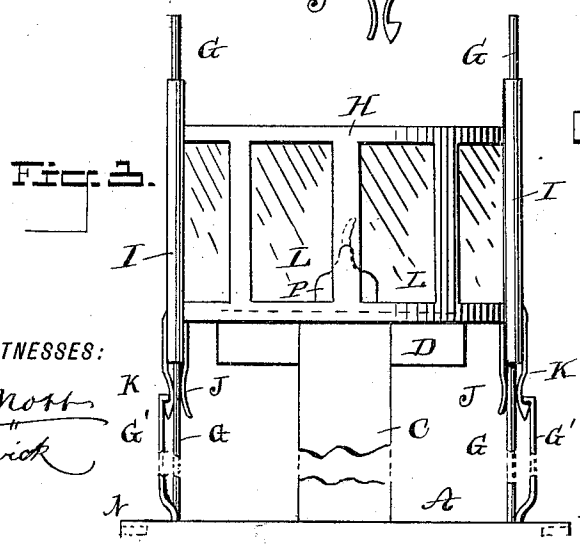


Fig. 3.

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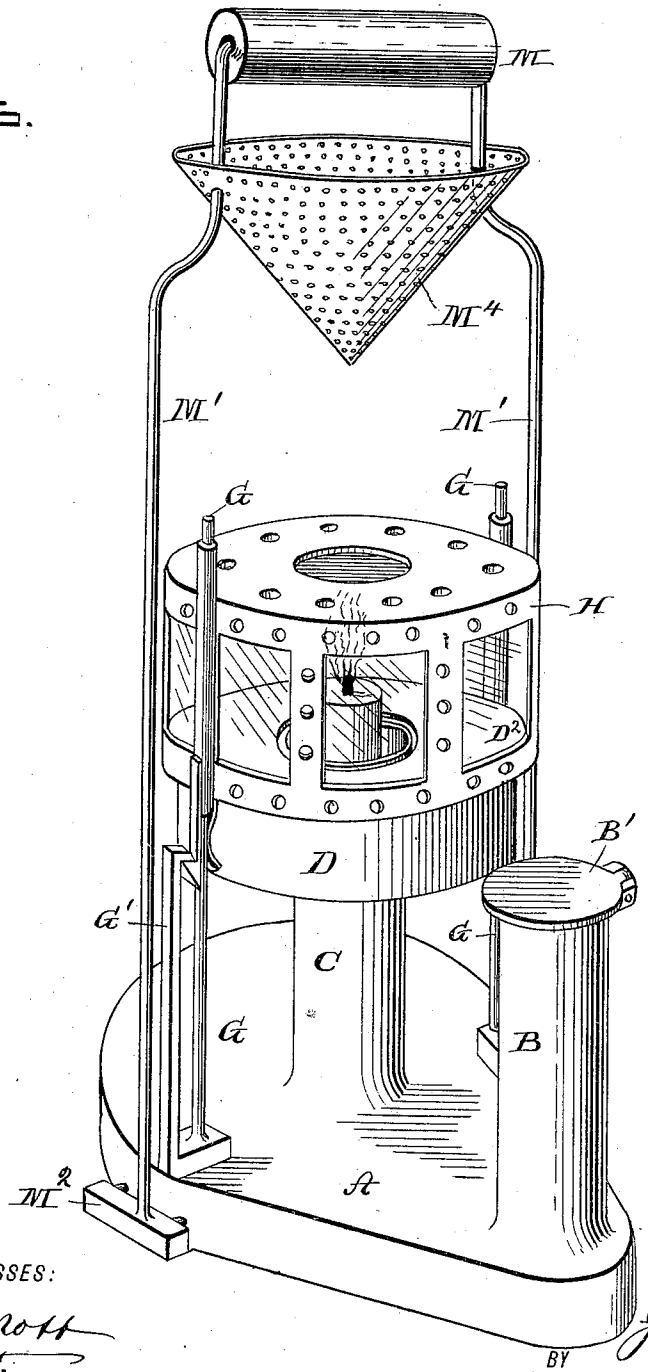
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Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN P. NESSLE, OF NEWARK, NEW JERSEY.

HYDRAULIC CANDLESTICK.

SPECIFICATION forming part of Letters Patent No. 416,418, dated December 3, 1889.

Application filed September 7, 1888. Renewed October 26, 1889. Serial No. 328,214. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. NESSLE, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Hydraulic Candlestick, of which the following is a full, clear, and exact description.

The object of my invention is a candlestick for holding the lighted end of a candle in a certain fixed position with relation to said candlestick, the candle being seated in a tube containing water and rising automatically as its bulk is lessened by consumption.

The invention also consists in the particular construction and arrangement of parts, as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a central longitudinal sectional view of my invention. Fig. 2 is an elevation of the lantern-frame. Fig. 3 is an elevation of the candlestick and lantern-frame, parts being broken away. Fig. 4 is an elevation of a bail. Fig. 5 is a perspective detail of the bail, and Fig. 6 is a perspective view of the improvement when used as a lantern.

The base-plate A of the candlestick is provided with a match-box B, fixed thereto, and B′ is a hinged lid on the upper end of said box. A tube C has its lower end fixed to the upper side of the base-plate A, the upper end of said tube being open. The sides of the tube C near its top are provided with a series of openings C′. A reservoir D is provided with a central opening. The upper end of the tube C is fixed in said opening, so as to permit the tube-openings C′ to communicate with the interior of the reservoir. The upper side of said tube is also provided with an outwardly-extending plate or flange D′, which extends into the reservoir. The upper sides of said reservoir are provided with an inwardly-extending flange D^2. There is a vent-space between these two plates for the reservoir.

F is a tube slightly shorter and of less diameter than the tube C. The lower end of the tube F is fixed to the upper side of the base-plate A within the tube C, so as to leave an annular space between the tubes, and the sides of said tube F near its bottom are provided with a series of openings F′.

Two upwardly-extending rods G G have their lower ends fixed to the base-plate A. These rods lie parallel, and they are placed on opposite sides of the reservoir and out of contact therewith. The lower side of each rod G is provided with a spring-catch G′.

H is an adjustable frame, open at top and bottom and preferably circular in form. Two tubes I I are fixed on opposite sides of the frame H. The lower side of each tube I is provided with a spring J and a spring-catch K, which extend below their respective tube. The frame H is also provided with panes of glass L or other transparent material.

M is a bail for carrying the device when used as a lantern. Each arm M′ of this bail is provided with a block M^2, having inwardly-extending pins M^3 fixed thereto. These pins are adapted to engage the side openings N in the sides of the base-plate A. An inverted conical guard M^4 is secured between the upper sides of the arms M′. This guard is to protect one's hand from the heat of the candle.

The water in the reservoir and tubes is represented by the letter O, and P is a candle within the tube F.

The operation is as follows: The reservoir and tubes are partly filled with water and the candle inserted into the water in the tube F. The water in said tube is displaced when the candle is inserted. Should there be any overflow by such displacement, the excess of water will pass between the plates D′ D^2 and flow outward over the outer edges of the top plate D^2. When the tubes and reservoir are filled with water to the extent shown in Fig. 1 and the candle placed as therein shown, said candle will float with its head or wick end above the surface of the water. As the candle is consumed, it becomes less, of course, in weight and bulk, and therefore rises in the water, the burning end, however, always remaining at the same height. As the candle moves upward, the water flows from the reservoir through the openings C′, thence downward between the tubes, thence through the openings F′ in the inner tube F, and thence up-

ward in said tube, thereby maintaining the water in said tube at a uniform height irrespective of the length of the candle. The match-box B is used as a handle for carrying the candlestick.

When a lantern is desired, the rods G are inserted into the frame-tubes I. The springs J K clamp the said rods, so that the frame may be held at any desired height on the rods. The frame and rods are locked when the spring-catches G′ K are engaged, as shown in Fig. 3.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a candlestick, the combination, with a candle-holding tube, of a reservoir communicating with the said tube, substantially as and for the purpose set forth.

2. A candlestick consisting of two tubes, one within the other, so as to leave a space between them, each tube being closed at its bottom and open at the top, the inner tube being provided with side openings near its bottom, the outer tube being provided with side openings near its top, and a reservoir fixed to the outer tube, the openings in said outer tube communicating with the reservoir aforesaid, substantially as shown and described.

3. A candlestick consisting of two tubes, one within the other, so as to leave a space between them, each tube being closed at its bottom and open at the top, the inner tube being provided with side openings near its bottom, the outer tube being provided with openings near its top, and a reservoir provided with a vent, as specified, the openings in the outer tube aforesaid communicating with the reservoir, substantially as shown and described.

4. In a candlestick, the combination, with a base provided with upwardly-extending rods, of a transparent frame provided with tubes to receive the said rods, and spring-catches for locking the parts together, substantially as described.

5. The combination, with a candlestick, of a base-plate secured thereto, two parallel rods secured to said plate and extending upward therefrom, each rod being provided with a spring-catch, and the frame H, provided with tubes I, the lower end of each of said tubes being provided with a spring-clamp and a catch for engaging the catches aforesaid, substantially as shown and described.

JOHN P. NESSLE.

Witnesses:
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C. SEDGWICK.