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W. G. MACIVY.

CANDLE HOLDER.

(Application filed Sept. 11, 1900.)

(No Model.)

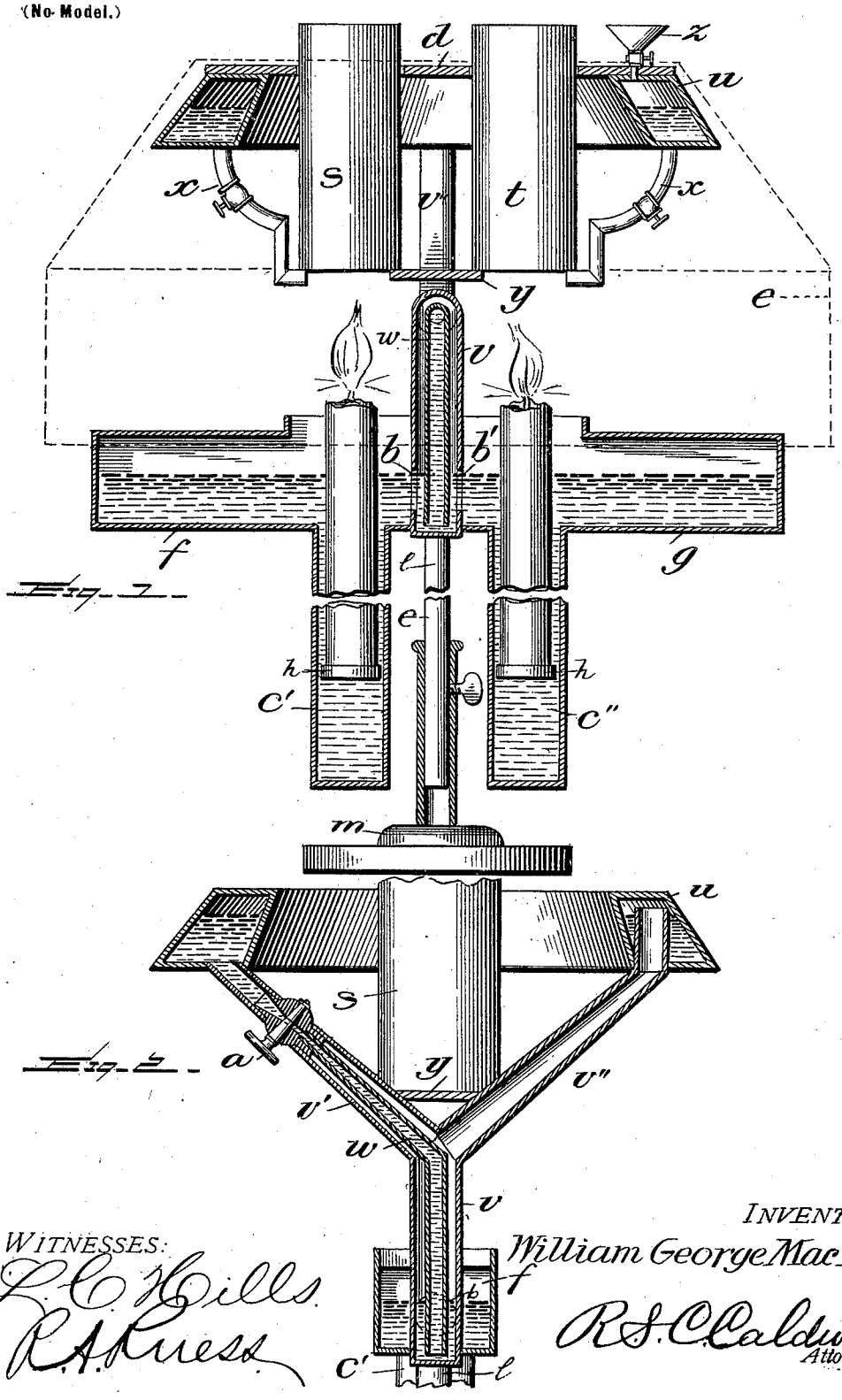


Fig. 1.

Fig. 2.

WITNESSES:

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WILLIAM GEORGE MACIVY, OF LONDON, ENGLAND.

CANDLE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 663,833, dated December 11, 1900.

Application filed September 11, 1900. Serial No. 29,636. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GEORGE MACIVY, manufacturer, of 1 Knox street, London, England, have invented certain new and useful Improvements in or Connected with Candle-Holders, of which the following is a specification, and for which I have applied for patent in Great Britain, No. 20,380, dated October 11, 1899.

This invention relates to candlesticks, candle-lamps, candelabra, and chandeliers intended for the use of candles, candle-brackets, and any other candle-holders used for lighting purposes, and has for its object a device for keeping the candle flame or flames of such apparatus practically at a constant level and intensifying the light therefrom.

The reference-letters inserted hereinafter refer to drawings appended hereto, in which the same reference-letters are used in different views of the same or similar parts.

Figures 1 and 2 show central vertical sections of a table-lamp. These sections are taken at right angles to each other, but in Fig. 2 the foot of the lamp is omitted.

Each lighting apparatus according to this invention consists, mainly, of a socket or sockets placed in a vertical position and of a reservoir or one or more reservoirs. The said sockets are referred to as "sconces" hereinafter. A suitable candle is to be placed into each sconce, so as to emerge therefrom by about half an inch. Some suitable liquid—for instance, water—is to be poured into each sconce, so as to fill up any remaining space therein. This liquid, referred to as a "candle-bath" hereinafter, keeps the candle floating and causes it to rise automatically as it burns off. The reservoirs are for storing liquid intended to be in due course automatically supplied to the sconces in order to counteract the sinking of the level of the candle-baths, which is a consequence of the candles rising, as aforesaid.

A reservoir may be placed either at a level higher than that of the candle-tops, as exemplified by the reservoir marked u in Fig. 1, or at a lower level, but not lower than a horizontal line about flush with the sconce tops, as exemplified by the pair of reservoirs marked f and g, respectively, in Fig. 1. The shape of a reservoir varies with its position, the object in view being to have the reservoir intercepting as little candle-light as possible and preventing the reservoir from being bulky and too conspicuous. Each reservoir is to be provided with such ventilating-tubes and conduits as are required by the use for which the reservoir is intended.

The candle in each sconce is to be stuck upon a suitable float h, intended to raise the last bit of the burning candle in due course out of its candle-bath and to place it above the sconce-top at about the level the candle-flame would occupy if the candle were only half consumed.

The figures refer to an apparatus with two sconces; but any number of sconces may be fitted to the apparatus.

c' and c'' are each a sconce. The top of each sconce is wider than its main body in order to prevent the top of the candle from becoming stuck in the event of guttering.

u is a hermetically-sealed reservoir in the shape of a ring, supported by the arms v' and v'', which rise from the upright v. The upright v consists, as also the arms v' and v'', of tubes of which the central hollows put the inside of the reservoir u in communication with the inside of the sconces c' and c'', partly for purposes of ventilation and partly for conveying liquid from the reservoir u into the sconces, as will be exemplified hereinafter.

The term "hermetically sealed" as employed above and throughout the specification refers to the normal condition of the reservoir u when its only air-vent v'' is closed by the tube v being submerged in the liquid contents of the sconces.

The arm v' is provided with a stop-cock a, to which is fitted the small tube w, which runs within both the arm v' and the upright v down near the bottom of the latter, where the open end of the tube w is intended to supply automatically in due course liquid from the reservoir u to the sconces by way of two apertures b and b'.

In addition to the arm v' and tube w for securing a supply of liquid from the reservoir u to the sconces a tubulure (marked x in Fig. 1) provided with a stop-cock may be fitted to the reservoir u over each or any sconce, so that this tubulure may drop liquid into the sconce below.

In any case of liquid made to drop ostensibly down into any sconce the drops reach the candle-bath between the side wall of the sconce and the candle under the same circumstances as the tube *w* would have supplied liquid to the same sconce in the position which the tube *w* occupies in Fig. 1.

In the cases of ostensible dropping of liquid the object in view is the display of an intermittent fountain combined with a lamp. In the same cases the liquid in the reservoir *u* may usefully be perfumed.

Any tubulure, like that marked *x*, may be used at the same time for supporting the chimney close to it.

Across the apertures *b* and *b'* air penetrates under certain circumstances referred to hereinafter and rises through upright *v* and arm *v''* into the region of the reservoir *u*, above the liquid contained in the latter.

f and *g* are tube-shaped reservoirs in direct inside communication with the sconces and are intended to lower the sinking rate of the candle-baths.

The apparatus works as follows: The stop-cock *a* in the arm *v'* and in the tubulures *x* being closed, the reservoir *u* is to be filled with liquid by way of the funnel *z*, whereupon the stop-cock fitted to this funnel is to be closed likewise. A suitable candle is then placed into each sconce, and any remaining space within the sconces, as, also the space within the reservoirs *f* and *g*, is to be filled up with liquid, so as to submerge the apertures *b* and *b'*. Thereupon the stop-cock *a*, fitted to the arm *v'* or to the tubulures *v* like that marked *x*, as the case may be, may be opened, and the apparatus is ready to be lighted and to work. While the candles are burning the level of each candle-bath sinks as the candle therein is consumed, whereby the apertures *b* and *b'* get clear of the liquid, which so far has submerged them. Consequent thereupon air penetrates across the apertures *b* and *b'*, rises into the reservoir *u* in order to take the place of some liquid which, owing to this supply of air, flows from the reservoir *u* either through the central hollow of tube *w* or through a tubulure or tubulures like that marked *x*, as the case may be, and drops into the sconces until the apertures *b* and *b'* are again submerged. The last-mentioned event stops any further flow of liquid on the principle of an intermittent fountain. While the candles go on burning the cycle of automatic events just stated repeats itself indefinitely.

The ring-shaped reservoir *u* is provided with a fixed top disk *d*, provided with two suitable holes, into which the chimneys *s* and *t* are placed. These chimneys rest on the small platform *y*, fitted between the arms *v'* and *v''*.

A fringed lamp-shade (indicated in Fig. 1 by dotted lines and marked *e*) rests upon the reservoir *u* and conceals the latter from sight. The concentration of several candles under one lamp-shade intensifies the candle-light. Either the reservoir *u* or the pair of reservoirs *f* and *g* may be dispensed with if a less accurate action than that which results from the combination of all of them is preferred—for instance, in order to lessen the cost of construction.

The extensible base (marked *l* and *m*) may be of any usual construction.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a candlestick, the combination with a candle-holding tube or sconce, of a hermetically-sealed reservoir communicating with said tube or sconce and means for admitting air to the reservoir to permit a flow of its contents to the tube or sconce at intervals, substantially as described.

2. In a candlestick, the combination with a candle-holding tube or sconce, of a hermetically-sealed reservoir communicating with and adapted to supply said tube or sconce with a liquid and means dependent upon the height of liquid contained within tube or sconce for admitting air to the reservoir, substantially as described.

3. In a candlestick, the combination with a candle-holding tube or sconce, containing a liquid, a hermetically-sealed reservoir for supplying the tubes or sconces with liquid, a connecting-tube extending from the reservoir above the level of its liquid contents to the tube or sconce and provided with an opening at the normal level of the liquid in the tube or sconce, substantially as described.

4. In a candlestick, the combination of a candle-holding sconce containing liquid, a hermetically-sealed reservoir for supplying liquid to said sconce, an upright tube having its ends submerged in the contents of the sconce with an opening at the normal level of said contents of the sconce, a tubular arm leading from the upright tube to the reservoir above its liquid contents, and a second tubular arm leading from the reservoir to the upright tube with its lower end extending within said upright tube to beneath the level of the liquid contents of the sconce, substantially as described.

5. In a candlestick the combination with a pair of candle-holding sconces, an open reservoir in free communication therewith, an upright tube mounted in the reservoir and having an opening on a level with the liquid contents of the reservoir and sconce, a pair of diverging tubular arms projecting from the upright tube, one of which being in communication with said upright tube and the other projecting through said upright tube to beneath the level of the liquid contents of the reservoir, and an annular hermetically-sealed reservoir mounted on the diverging arms and communicating therewith, substantially as described.

6. In a candlestick the combination with

a pair of candle-holding sconces, an open reservoir in free communication therewith containing with said sconces a liquid, an upright tube mounted in the reservoir and having an opening on the level with the liquid contents of the reservoir and sconces, a pair of diverging arms projecting from the upright tube, one of which being in communication with said upright tube and the other provided with a valve and projecting through said upright tube to beneath the level of the liquid contents of the reservoir, an annular hermetically-sealed reservoir mounted on the diverging arms and communicating with the first-described arm above the liquid-level of said reservoir and with the second described arm below said liquid-level, a valved tubulure leading from the bottom of the hermetically-sealed reservoir and adapted to discharge the contents of said reservoir into the other reservoir, a platform extending between the pair of diverging arms, and a pair of chimneys mounted on said platform and located over the sconces, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WILLIAM GEORGE MACIVY.

Witnesses:

BENJ. THOS. KING,

RICHARD STEWART.