

(No Model.)

A. F. BAUMER.
NIGHT LIGHT.

No. 574,376.

Patented Jan. 5, 1897.

Fig. 1.

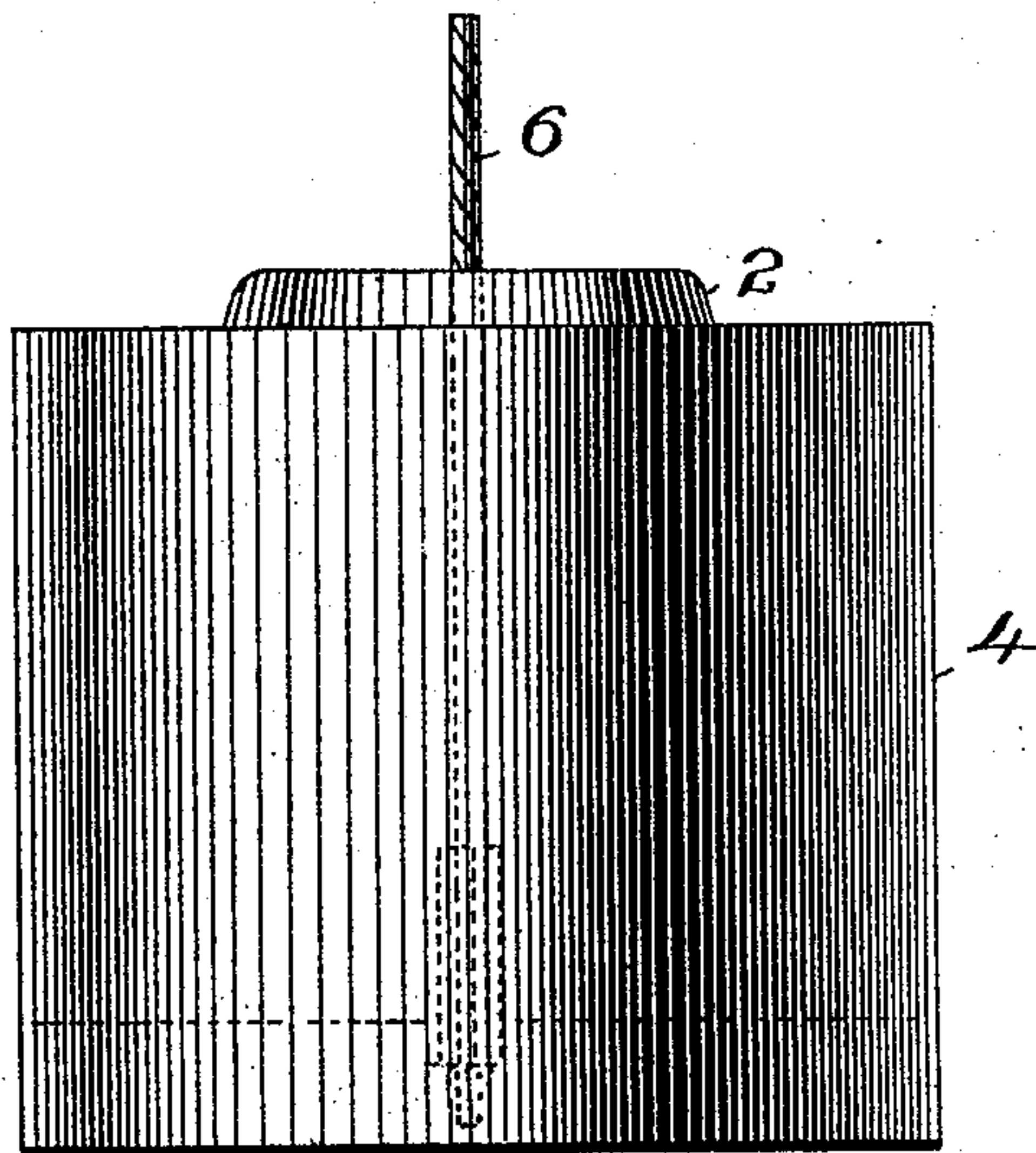


Fig. 2.

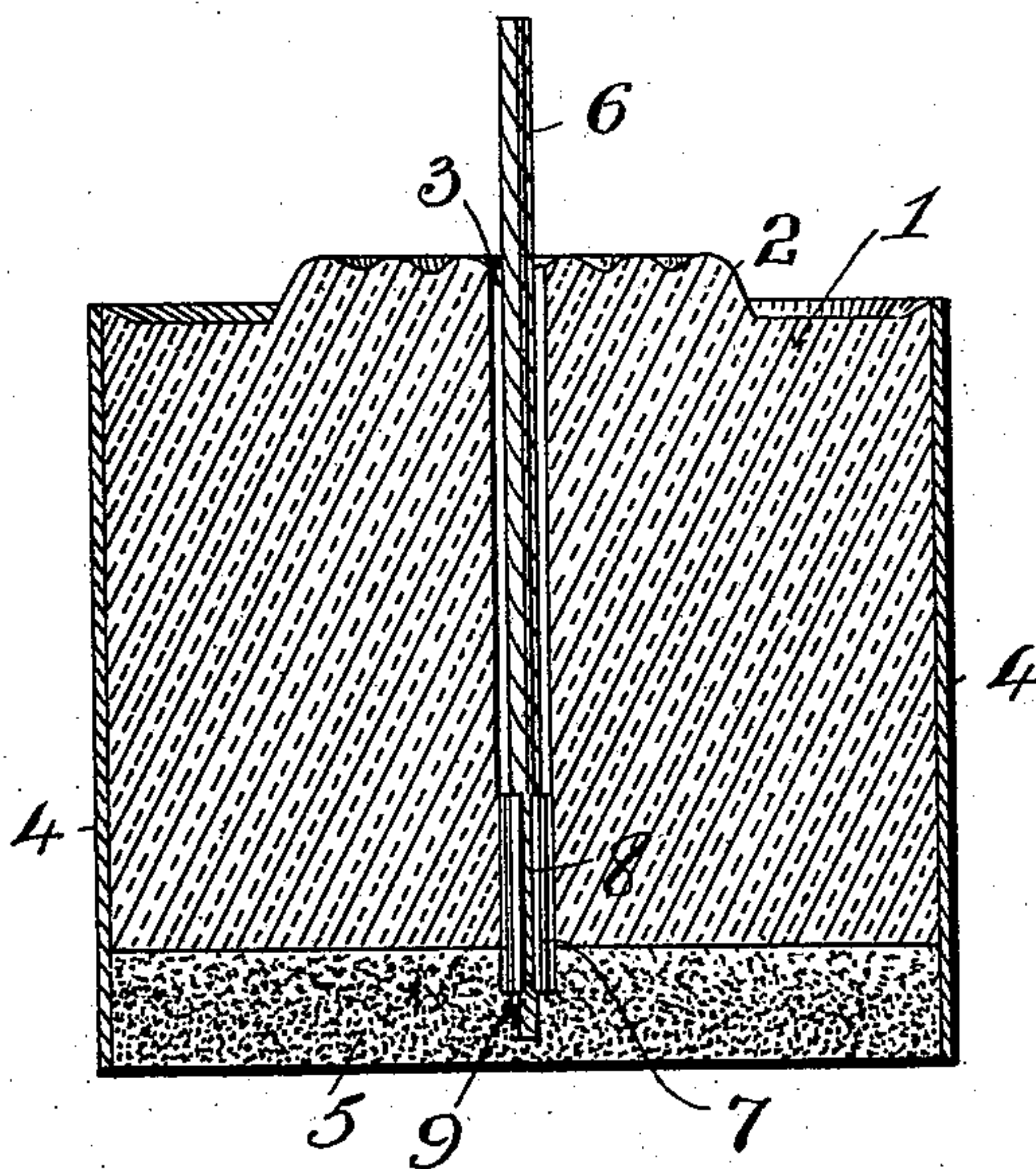
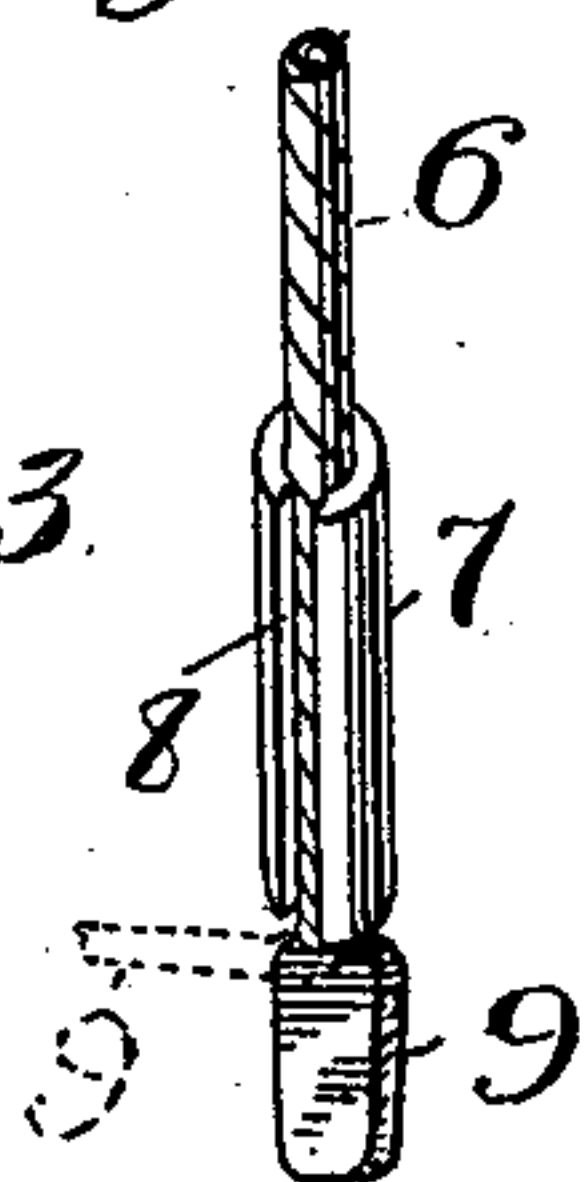


Fig. 3.



WITNESSES:

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ANTON F. BAUMER, OF SYRACUSE, NEW YORK.

NIGHT-LIGHT.

SPECIFICATION forming part of Letters Patent No. 574,376, dated January 5, 1897.

Application filed April 4, 1896. Serial No. 586,272. (No model.)

To all whom it may concern:

Be it known that I, ANTON F. BAUMER, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have made certain new and useful Improvements in Night-Lights, of which the following is a specification.

My invention has reference to that class of lights wherein a short body of wax, paraffin, or other illuminant is employed, the special uses of such devices being for night illumination.

The object of my invention is to provide a light economical of manufacture and wherein entire consumption of the illuminant can be had, and which will not burn the paper or other casing in which it is common to envelop the wax.

My invention consists in the construction and combination of parts hereinafter described, and further pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a front elevation, Fig. 2 a sectional elevation, and Fig. 3 a perspective view enlarged, of the tubular upholder and the lower end of the wick.

In the drawings similar numerals of reference indicate corresponding parts throughout the several views.

At 1 is indicated a body of wax, preferably cylindrical in form and preferably of greater diameter than height, of any suitable illuminant, such as wax, paraffin, or candle composition, provided centrally with an elevation 2 to provide initially for feeding the wick, which body 1 has a hole 3 formed centrally therein opening out of the top and bottom of the wax body.

At 4 is a paper casing or envelop secured about the wax body, but of a height greater than that of the wax body, so as to form a recess at the bottom for the reception of plaster-of-paris or other moldable and non-combustible material 5, which fills up the recess and forms a seat for the wax body.

At 6 is a wick or taper, preferably of the waxed kind, which is inherently "stable" (so called) by reason of its ability to support itself to a certain extent, as distinguished from a plain fabric wick which has no inherent stability or very little. This wick passes through the aperture 3 in the wax body, pref-

erably loosely, as shown, and extends out from the top and bottom of the same, the lower end or portion of the wick passing snugly through a tube 7, which is preferably split, as at 8, formed by bending a piece of metal of the required height to form the partially-closed tube, the edges of the metal not meeting, thereby forming the split.

The lower end of the tube is seated or embedded in and gripped by the adhesion of the plaster-of-paris to its lower end, the lower end of the wick being flattened out, as shown at 9, which flattened end is embedded in and gripped by the plaster below the tube. The plaster forms a non-combustible and moldable bottom for the casing formed by the paper 4, and being non-absorbent supports the wax either in the solid or liquid condition.

The tube 7, which forms an upholder for the wick independent of the wax and also independent of the plaster-of-paris in which the foot of the wick is embedded, prevents the flame of the wick from descending below a certain definite height above the plaster, so as to prevent overheating of the plaster and an untimely liquefying of the wax or disintegration of the paper cover. It also supports or upholds the wick independently of the wax or the plaster-of-paris, so as to prevent the wick falling over against the paper and igniting it should the wax become inopportunely liquefied. The slit in the tube allows of capillary action or suction of the liquefied wax into the wick along the tube's entire length and down to the plaster, and it also allows free passage of the liquefied wax within the tube, thereby preventing the latter from becoming unduly heated and transmitting its heat to the plaster, which would in turn untimely liquefy the wax.

In cases where a support for the wick has been employed in connection with solid illuminants the relation of the support (if a tube) to the body of illuminant did not allow of a complete liquefying of the top of the body of illuminant, and the flame would melt a section of the body about the top of the tube and then cease, the flame then going out. By my construction the entire top of the wax body will at once liquefy and this stratum of liquid wax be carried down to and below the top of the tube, liquefying the wax to the

plaster bottom. This results from the fact that the tube lies so much below the top of the wax, the wick acting in the usual way until the top of the tube is reached, at which point the flame will be maintained, and the heat of the flame being brought close to the wax lying below it, together with the heat transmitted through the tube, will liquefy the wax below the tube and down to the plaster, the split in the tube allowing the wick to take up the wax, while preventing the flame from descending and burning up the wick before the wax is consumed.

My construction resides in providing a combination from which all of the above results will flow. Further, it provides an arrangement whereby the parts can be easily assembled, thereby saving time and labor in this regard and enabling better and cheaper packing and shipping of the lights in bulk.

One of the most valuable features of the present invention is the facility and economy of assembling the parts in the manufacture of the light. This depends upon the fact that the aperture, wick, and tube are of such relative diameters that the wick can be passed into the tube without being squeezed or being so loose as to fall out, and then the tube can be passed into the aperture and will remain therein in like manner. Then the wax can be placed in the paper casing and the plaster poured in. This simplifies the operation of manufacturing the light and saves considerable money as well as time and less expert hands are needed for the manufacture.

The hole through the wax body is preferably made larger than the wick to permit the wick to be passed through said hole after the wax body has been formed, and after the wax body has been thus formed the paper casing is secured about it, leaving the overlapping portion at the bottom. A number of the wax-bodies (incased) are laid upon racks, and the wicks, which have been previously cut to the desired length and their ends flattened out, as shown, are passed through the tube with the flattened end projecting from the bottom and the wick and tube inserted in the aperture in the wax body, the wick and tube projecting from the wax the proper distance, (or the flattened end of the wick may be bent over, as shown in dotted lines, Fig. 3,) and the liquid plaster poured into the recess or receptacle formed by the overlapping edge of the paper and about the tube and wick end, the wick and tube being held in place during the formation of the plaster base by friction with their adjacent parts—viz., the tube in the wax and the wick in the tube.

By comparing the foregoing method of manufacture and assemblage to that which has preceded my invention the utility of the combination embodied in my invention will be apparent, especially the ease and rapidity of inserting the wick and securing it in place.

I am aware that I am not the first to employ a split tube and a plaster bottom in lights of

this class nor to embed the wick in the plaster, and therefore do not claim the use of the same broadly.

I claim—

1. In an article of the class described, the combination of a body of illuminant, an incombustible base therefor, a tube supported by said base and extending into the lower portion only of said body, said tube being apertured laterally to communicate with said illuminant, and a wick within said tube and extending therefrom into and through the upper portion of said body, said tube being adapted to prevent the flame descending below its top, substantially as described.

2. In an article of the class described, the combination of a body of an illuminant, an incombustible base therefor, a slit tube supported by said base and extending into the lower portion only of the said body, and a wick in said tube, extending therefrom into and through the upper portion of the said body, said tube being adapted to prevent the flame descending below its top, substantially as described.

3. In an article of the class described, the combination of a body of an illuminant, an incombustible base therefor, an envelop inclosing said body and base, a slit tube supported by said base and extending into the lower portion only of said body, a wick within said tube and extending therefrom into and through the upper portion of said tube, said tube being adapted to prevent the flame descending below its top, substantially as described.

4. In an article of the class described, the combination with a paper casing 4, the plaster bottom 5, the wax body 1 having a central aperture, the slit tube vertically disposed and secured by the plaster in said aperture, and extending into the lower portion only of said body, and an inherently stable wick 6 supported in the body 1 by said tube, the tube being adapted to prevent the flame descending below its top, substantially as described.

5. The combination of the wax body 1, plaster bottom 5, paper casing 4, of the slit tube extending into the lower portion only of said body extending above the plaster within an aperture in the wax and held in place by the said plaster, the aperture in the wax being continuously wider than said tube, and a stable wick of less diameter than said aperture upheld therein by said tube, the tube being adapted to prevent the flame descending below its top, substantially as described.

6. The combination, in an article of the class described, of the wax body 1, plaster base 5, paper casing 4, the wax having the aperture 3, the vertically split tube 7 secured at its base to said plaster and extending upwardly in the lower portion only of the aperture, and a wick supported in the said wax by said tube, the tube being adapted to prevent the flame descending below its top, substantially as described.

7. The combination, in an article of the class described, of the wax body 1, the plaster base 5, the paper casing 4, the wax having an aperture, the split tube 7 secured at its base to the plaster and extending upwardly in the lower portion only of said aperture, and a wick extending through said tube and wax and projecting out from said tube and into the plaster of the base, the tube being adapted to prevent the flame descending below its top, substantially as described.

8. The combination with the base 5, of the wick 6 having the flattened end 9 embedded in the base, the split tube 7 secured at its base in the plaster, the wax body 1 having the aperture 3 into the lower portion only of which said tube extends, the wick passing through said tube and through said aperture, and the paper casing 4 surrounding the base 5 and body 1, the tube being adapted to prevent the flame descending below its top, substantially as described.

9. The combination, in an article of the class described, with a suitable wax body and base for the same, of an upwardly-disposed

wick having a flattened end embedded in the base, and a split tube extending into the lower portion only of said body, through which tube the wick extends for upholding the latter, the tube being adapted to prevent the flame descending below its top, substantially as described.

10. A night-light comprising the following elements, a paper casing, a body of illuminant located therein, having a longitudinal aperture, a slit tube of a diameter permitting said tube to be passed readily into said aperture and be held in the same by friction, and a stable wick of a diameter permitting it to be passed into said tube and be held therein by friction with its sides, and a molded incombustible base, substantially as described.

Signed at the city of Syracuse, county of Onondaga, State of New York, this 26th day of March, 1896.

ANTON F. BAUMER.

Witnesses:

CHAS. J. MARKERT,
THOMAS J. KREUZER.