

C. L. WOOSTER,  
 CANDLE WICK SUPPORT,  
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1,320,109.

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Fig. 1

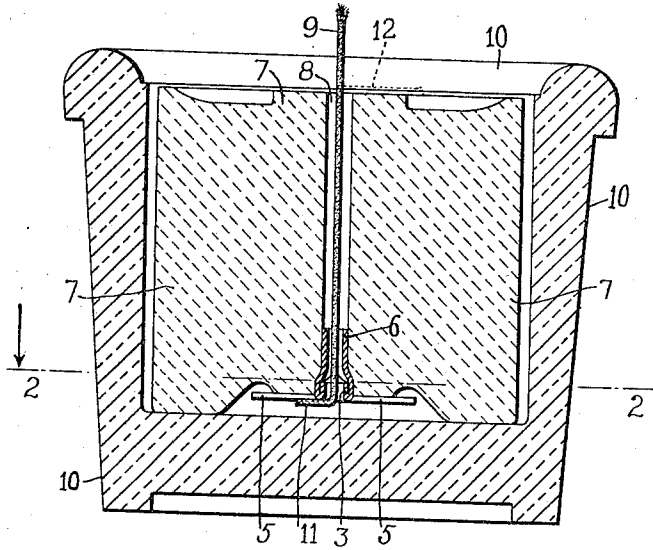


Fig. 2

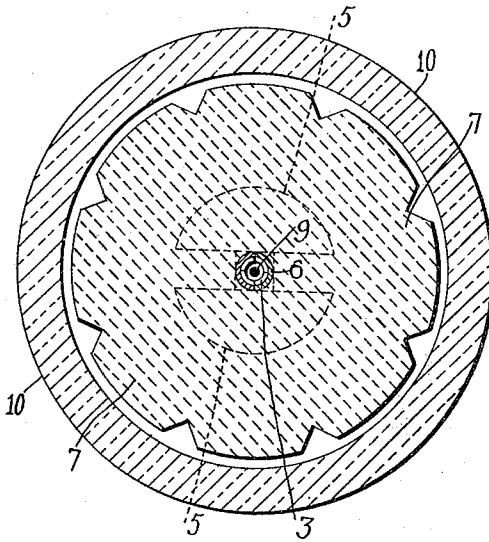


Fig. 3

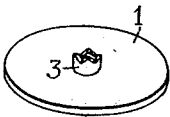
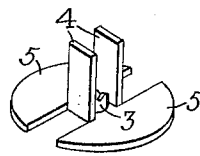


Fig. 5



Fig. 4



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# UNITED STATES PATENT OFFICE.

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## CANDLE-WICK SUPPORT.

1,320,109.

Specification of Letters Patent.

Patented Oct. 28, 1919.

Application filed February 18, 1919. Serial No. 277,790.

*To all whom it may concern:*

Be it known that I, CLARENCE L. WOOSTER, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented a certain new and useful Improvement in Candle-Wick Supports, of which the following is a full, clear, and exact description, reference being made to the accompanying drawings, forming part of this specification.

This invention relates to improvements in wick-supporting devices which are applied to the wicks of candles such as are called "fairy lamps" and "night lights," the main function of these devices being properly to support the wicks when the candles are nearly consumed. The object of the invention is to remedy faults which impair the utility of these devices and which are due both to their construction and to their mode of operation. The invention consists of a wick-keeper, which is defined in the claims and which is composed of a base and tubular post relatively arranged as specified therein, the keeper being preferably made in the form shown and as hereinafter described.

On the accompanying sheet of drawings, like reference-numerals indicating like parts in different views:

Figure 1 is a vertical section of a candle and a cup containing it, the candle including a wick-keeper which embodies the invention and a vertical section of which is shown in this view;

Fig. 2, a cross section of the candle and cup, the sectional plane being indicated by the line 2, 2, Fig. 1;

Fig. 3, a view of a perforated disk from which a wick-keeper is to be made;

Fig. 4, a view of a partly formed wick-keeper; and

Fig. 5, a view of the wick-keeper of which sectional views are shown in Figs. 1 and 2.

In candles of the variety above referred to a wick-support is needed to prevent the wicks from falling sidewise when the candles are nearly consumed. Then the wax in the cups in which they are burned, and which are commonly of glass, is soft or melted so that it will not hold the wicks in their proper positions. If a burning wick falls a part of the candle is wasted, and unless the flame is instantly extinguished it is liable to reach the side of the cup and break it.

Although wick-holders which only act on the wick near its lower end have been used and some have been patented, I am not aware that any of them comprises a tubular post through which the wick of the candle loosely passes, or that any of them loosely supports a wick so that it will not fall when more or less of the candle has not been consumed. A wick-holder consisting of a perforated flat or slightly cupped plate does not prevent the wick from falling, or bending sharply close to the bottom of the cup, and a wick-holder having a pair of flat tongues projecting from a base and pinching the wick at their upper ends prevents the melted wax from being freely drawn in the wick above the tongues, and cannot loosely support the wick so as to keep it from falling to one side or the other and from between the flat tongues. Besides, these tongues must be bent by hand, or hand-operated or foot-operated tools, into firm contact with the wick, and then must be forced into the candle-body by pressure great enough to drive them into the solid wax, and therefore they are quite apt to be tilted or deformed so that they will bend the wick rather than hold it upright.

The wick-keeper shown herein is made by a rotary machine which in successive operations converts flat blanks, such as thin tin disks, into finished devices like that represented in Fig. 5 of the drawings. Each blank is centrally pierced by a pointed tool so that the perforated blank 1 (Fig. 3) has the bur 3, forming a little hub on its upper face and stiffening its central portion. The tongues 4 (Fig. 4) are cut and bent up from the body of the blank by another tool, the hub 3 extending between and close to the tongues. By another operation, performed with a hollow tool having a flaring mouth and including a pin which extends between the tongues 4, these tongues are forced together and curved laterally from their upper ends nearly to the hub 3. The finished device (Fig. 5) comprises the base 5 and tubular post 6, the prolonged axis of the tubular post passing through the hub 3 and the base and being perpendicular when the device stands on a level surface. The hub 3 reinforces the tongues 4 when the last operation is performed, and it stiffens the tubular post 6. The internal diameter of the hub is the same as that of the tubular part of the post.

The candle-body 7 has in it a small central hole 8 which extends through it from end to end. The wick 9 is smaller in diameter than the hole 8 and may be readily pushed through the hole. The candle fits loosely in the cup 10, the depth of the cup being about equal to the length of the candle. Cups, candle-bodies and wicks such as these were well known in "night lights" prior to the invention of the wick-keeper which is described and claimed herein.

The tubular post of this wick-keeper fits tightly in the hole 8 in the candle-body 7. The interior diameter of the tube 6 and hole 8 is greater than the thickness of the wick, and this may be pushed through the hub and tube either before or after the keeper is applied to the candle-body. No operation which changes the shape of any part of the keeper, or the relation of any of its parts to another part, is performed after the keeper leaves the machine by which it is made, so that the form which the machine gives to it is that which it has after it and the wick are put into use together. The keeper is applied to the candle-body, in which the post is so tightly held that it will not fall out, by pushing the tubular post 6 into the hole 8 by hand until the base 5 makes contact with the body, as indicated in Fig. 1. The wick, which is somewhat stiffened with wax, and which extends through the keeper and candle-body, as shown by Fig. 1, when the candle is ready for use, may be bent over near its ends so that it will be prevented by the parts 11 and 12 (the latter

indicated by dotted lines in Fig. 1) from falling out of the candle-body when the candle is not in the cup.

As the candle burns the space around the wick in the hole 8 and keeper, and that between the candle and cup, fill with melted wax, and after the candle-body gets to be shorter than the post of the keeper the wick is held upright by the keeper, yet plenty of melted wax will be drawn up in the wick and tube 6 to support a good flame until all or approximately all of the wax in the cup is consumed.

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

1. A wick-keeper, for use in a candle comprising a wick that is inserted in the candle-body after it is formed, by passing the wick through a small central hole extending from end to end of the body, said keeper being composed of a centrally perforated base, and a short tubular post which is made to fit snugly in the hole in the candle-body and loosely to surround the wick near its lower ends only and which is composed of sections projecting from the base of the keeper, the prolonged axis of said tubular post passing through the perforation in the base, and being upright when the keeper stands on a level surface.

2. A wick-keeper such as is defined in claim 1, the base of the keeper having on it a short hollow hub which extends between and close to the sections of the tubular post.

CLARENCE L. WOOSTER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."