

R. E. BRUCKNER.
 INVERTED INCANDESCENT MANTLE LAMP.
 APPLICATION FILED MAY 28, 1910.

982,790.

Patented Jan. 31, 1911.

Fig. 1.

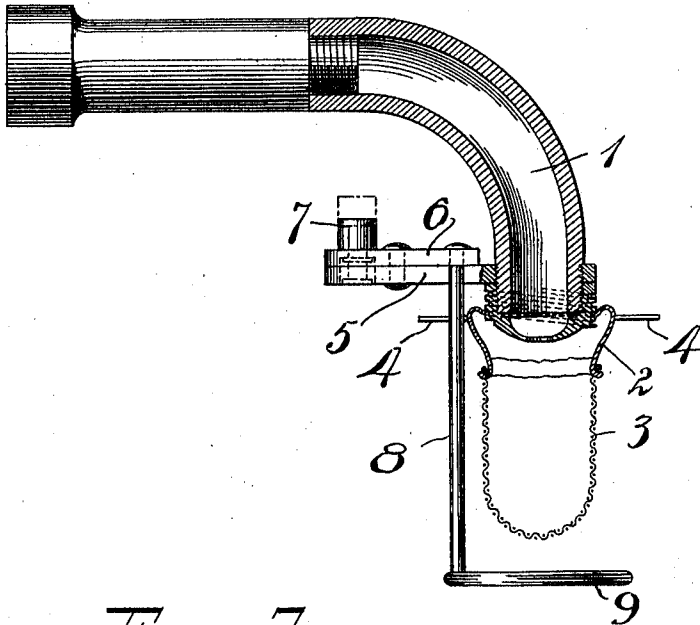


Fig. 2.

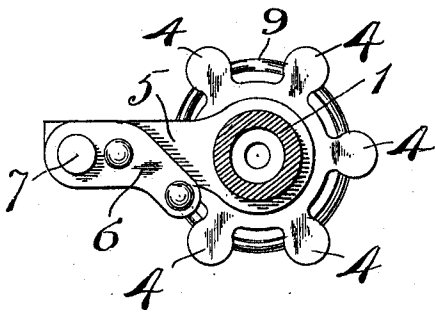
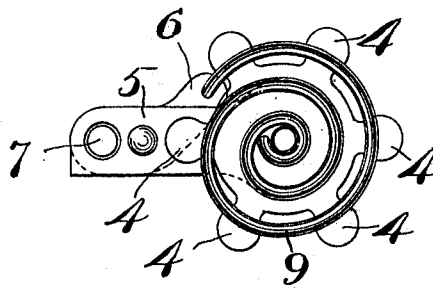


Fig. 3.



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INVERTED-INCANDESCENT-MANTLE LAMP.

982,790.

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To all whom it may concern:

Be it known that I, RUDOLPH E. BRUCKNER, a citizen of the United States, residing at Mount Vernon, county of Westchester, State of New York, have invented certain new and useful Improvements in Inverted-Incandescent-Mantle Lamps, of which the following is a full, clear, and exact description.

My invention relates to an improvement in inverted incandescent mantle lamps, the device being of particular utility in connection with overhead car lamps, such as employed for car lighting. In such lamps the mantle is ignited ordinarily with a match or taper applied from below. It frequently happens that through carelessness mantles are broken by being struck in the act of lighting.

The purpose of this invention is to provide a suitable device whereby the danger of breakage is substantially lessened, the construction being such that although normally the guard is in such a position that the mantle can not be readily applied, such guard may be quickly shifted to a position wherein the broken mantle may be removed and a new one may be applied with entire safety and ease. I am aware that it is customary to provide a protecting device for mantles, but heretofore such protecting devices have been made as part of the mantle carrier so as to form a unitary structure, thus requiring a new guard with each mantle.

My invention aims at providing a guard of such construction that the same one may be employed for a number of mantles, in fact, indefinitely until broken or destroyed. In certain types of mantles the carrier therefor, which is formed as a unitary part thereof, is applied to the burner itself by means of a thread, continuous or interrupted, as desired. In such cases there is danger of the mantle becoming accidentally detached by being rotated back by vibration to its free position. In this connection my improved guard device may be employed to perform a second function of locking the mantle carrier in place.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of an inverted mantle burner with my invention applied thereto. Fig. 2 is a top plan view, partly in section. Fig. 3 is a lower plan view.

1 is the burner tube, through which a mix-

ture of gas and air in the proper proportions is supplied.

2 represents the mantle carrier which is arranged to be secured, preferably by a rotary movement, to the lower end of the tube 1.

3 represents the mantle formed as a unit with a carrier 2.

4—4 are radiating wings on the mantle carrier 2 to facilitate the handling of the same and utilized in this instance as one of the means to secure the mantle in place.

5 is a frame carried by the tube 1 near its lower end and above the mantle carrier 2, said frame supporting a pivotally mounted swinging lever 6, said lever being preferably arranged to swing in a horizontal plane. These parts 5 and 6 may be drawn together friction-tight to prevent accidental displacement, or may be held in any other desired manner against such displacement.

7 represents a finger piece whereby the lever 6 may be swung. Depending from a point near one end of the lever 6 is a small wire rod 8, the lower end of which is bent into a horizontal plane and curved or spirally wound, as best seen in Fig. 3, to form an under guard 9. The diameter of the under guard 9 is preferably somewhat greater than the diameter of the mantle 3, so that a match or taper, brought into proximity with the side of the mantle, will be prevented from coming in contact with the same to the injury thereof; so likewise the spiral curls may be sufficiently close to check the match or taper if raised from below, and thus prevent injury to the lower end of the mantle. When the guard stands in the position indicated in Fig. 1, the rod 8 will stand between the radial arms or wings 4, thus preventing such a degree of rotation of the carrier 2 as will disengage the mantle from the supporting tube 1. When, however, it becomes necessary to replace the mantle, the lever 6 is swung from the position shown in Fig. 1 to a position wherein the guard 9 is turned away from the lower end of the burner. This act not only frees the wings 4—4 to permit the old mantle carrier to be removed, but furnishes sufficient room to permit the quick and easy application of a new mantle without danger of breakage. As soon as the new mantle is in place, the lever 6 may be restored to the position shown in Fig. 1.

One simple and convenient means for

positively locking the lever 6 in its normal position is illustrated in the drawings, in which it will be seen that the finger piece 7 may be raised to the position indicated in dotted lines, whereupon its lower end becomes freed from the frame 5, thus permitting the lever to be freely swung. This merely constitutes a preferred form of positive locking device for the guard carrying lever.

What I claim is:

1. In an inverted incandescent mantle lamp, a tubular mantle support, a mantle and a carrier therefor, said carrier being arranged to be secured to said support, and a mantle guard device carried by said tubular support and movable into and away from a position directly under said mantle, a carrier for said guard and a pivotal mounting for said carrier, eccentric to said tubular support and independent of said mantle carrier.

2. In an inverted incandescent mantle lamp, a tubular mantle support, a mantle and a carrier therefor, said carrier being arranged to be secured to said support, a mantle guard device carried by said tubular support and movable into and away from a position directly under said mantle, and a horizontally swinging lever carrying said guard, said lever being mounted in a plane above said mantle.

3. In an inverted incandescent mantle lamp, a tubular mantle support, a mantle and a carrier therefor, said carrier being arranged to be secured to said support, a mantle guard device carried by said tubular sup-

port and movable into and away from a position directly under said mantle, a horizontally swinging lever carrying said guard, said lever being mounted in a plane above said mantle, and means for preventing the accidental displacement of said lever when said guard is in its operative position.

4. In an inverted incandescent mantle lamp, a tubular mantle support, a mantle and a carrier therefor, said carrier being arranged to be secured to said support, a mantle guard device carried by said tubular support and movable into and away from a position directly under said mantle, a horizontally swinging lever carrying said guard, said lever being mounted in a plane above said mantle, and means for preventing the accidental displacement of said lever when said guard is in its operative position, said means including a positive locking device.

5. In an inverted incandescent mantle lamp, a tubular mantle support, a mantle and a carrier therefor, said carrier being arranged to be secured to said support, and a mantle guard device carried by said tubular support and movable into and away from a position directly under said mantle, said guard comprising a downwardly extending wire, the lower end of said wire being convolutely curled and arranged at an angle to the depending portion of the wire adjacent the side of the mantle.

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