(No Model.)

E. F. GENNERT.

INCANDESCENT LAMP.

No. 413,442. Patented Oct. 22, 1889.

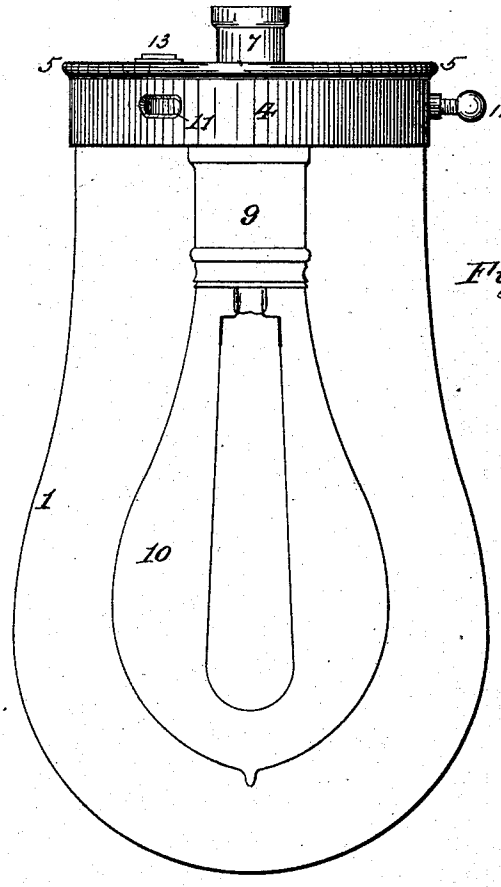


Fig. 1.

Fig. 2.

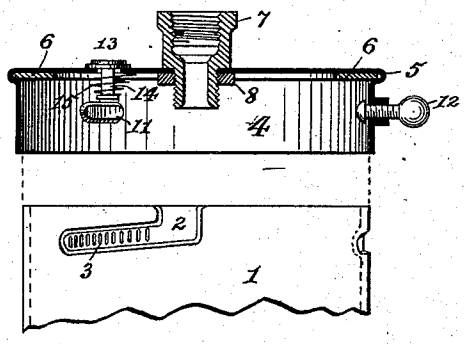
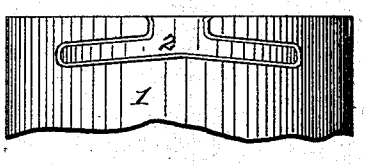


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EMIL F. GENNERT, OF NEW YORK, N. Y., ASSIGNOR TO THE E. P. GLEASON MANUFACTURING COMPANY, OF SAME PLACE.

INCANDESCENT LAMP.

SPECIFICATION forming part of Letters Patent No. 413,442, dated October 22, 1889.

Application filed May 29, 1889. Serial No. 312,586. (No model.)

To all whom it may concern:

Be it known that I, EMIL F. GENNERT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Incandescent-Electric-Lamp Globes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the construction of globes or lanterns for incandescent electric lamps for the purpose of affording the latter a vapor-tight inclosure, so as to preserve the lamp and its parts from the possibility of a short circuit being produced by the deposition of vapor of any kind thereon.

A further object of the invention is to construct such a lantern in a simple and cheap manner.

The invention consists in the construction and combination of parts, substantially as hereinafter fully described and claimed.

In the drawings which form part of this specification, Figure 1 is an elevation of my improved vapor-tight globe with the lamp fitted in place. Fig. 2 is a transverse section of the cap or cover and an elevation of the upper portion of the globe; and Fig. 3 is an elevation of the upper portion of the globe, showing a modified lock for the cover.

The globe 1 is usually made of glass or porcelain, and is preferably blown in a mold, so as to insure a sufficient uniformity in size. Its general shape is approximately a cylinder with rounded end; but this may be changed to suit the fancy of the designer. At its upper end the globe 1 is formed with several bayonet-slots 2, whose inner face is formed with a number of indentations 3. The cover is formed, preferably, out of a single piece of sheet-brass spun so as to have the cylindrical portion 4 with the flange 5 forming on its inside a recess of larger diameter than that of the cylindrical part 4, so as to form a retaining-seat for the rubber gasket or washer 6, whose outer diameter is larger than that of the cylindrical portion 4 of the cover. At the center a hole is punched for the reception of the brass nipple 7, which extends through the cover, and is secured inside by a nut 8, the nipple extending beyond the nut so as to form a point of attachment for the lamp-socket 9, which in turn carries the lamp 10. After the nipple 7 has been placed in position I prefer to run some solder between it and the cover 6, so as to hermetically seal the junction.

The cap 4 is formed with several indentations 11, corresponding in position with the mouths of the bayonet-slots 2.

Instead of forming the full number of the indentations 11, I prefer to substitute for one of them the screw-clamp 12, which exactly corresponds in position.

The lamp having been placed in position on the lower end of nipple 7, which is to be attached to a suitable fixture as its support, the outer globe 1 is placed in position by inserting its upper end into the cap and giving it a partial turn therein. The insertion of the globe 1 into the cap causes the indentations 11 and the clamp-screw 12 to pass down the respective bayonet-slots 2, and then a partial rotation, by reason of the slots being inclined, forces the upper edge of the globe 1 tightly against the face of the rubber gasket 6 and pressing it in turn against the cover 4, thereby effectually sealing the joint between the globe and its cover, and at the same time affording the globe a cushion to prevent its being broken by the pressure. When sufficiently tightened in place, the globe 1 is prevented from working loose by tightening the screw 12, whose inner end then engages with the indentations 3 in the slots 2, so that a positive lock is thus effected, which no amount of jarring or vibration will relax.

Instead of the one-way slots 2 shown in Fig. 2 on the globe, they may be made two-way slots, (shown in Fig. 3,) so that a turn either to the right or left will accomplish the locking.

To provide for the relief due to the pressure of the heating effect on the internal atmosphere of the globe 1, I make an opening in the cover 4 and over the opening place a leather-faced valve 13, on whose stem 14, I arrange a spring 15 of the desired strength. With this construction, as soon as the pressure inside the globe 1 becomes too great, the valve 13 will automatically open and allow some of the air to escape, thereby preventing such rise in

the internal pressure as would endanger the globe under ordinary circumstances and eventually cause its rupture.

The described arrangement of the rubber gasket is important. The outer globe has to be removed frequently for cleaning, and as these globes are generally suspended downwardly in the usual construction, the gasket falls out on removing the globe, and is liable to be lost and the air-tight character of the fixture thus destroyed. By my arrangement, however, the gasket is of larger diameter than the cylindrical portion or mouth of the cover, and is sprung into place in the recess 5, and hence the globe may be lowered away from the cover without any possibility of the gasket falling from its place.

I claim as my invention—

1. The combination, with an incandescent lamp, of the globe 1, having inclined bayonet-grooves 2, a metallic cap having the cylindrical portion 4, indentations 11, and the internal recess 5, with the packing ring or gasket 6, both said recess and ring or gasket being of larger diameter than said cylindrical portion of the cover, substantially as described.

2. The combination of the metal cover or cap 4, having internal recess 5, indentations 11, and clamping-screw 12, nipple 7, nut 8, and incandescent lamp 10, with the outer inclosing-globe having the bayonet-slots 2, substantially as described.

3. The combination of the metal cover or cap 4, having indentations 11 and clamping-screw 12, and carrying the incandescent lamp 10, with the outer inclosing-globe having the indented or corrugated bayonet-slots 2, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EMIL F. GENNERT.

Witnesses:

F. W. BELMONT,

H. I. MOODY.