Oct. 31, 1933. J. O. CADIEUX 1,932,509

GAS LAMP

Filed March 1, 1930

Fig. 1.

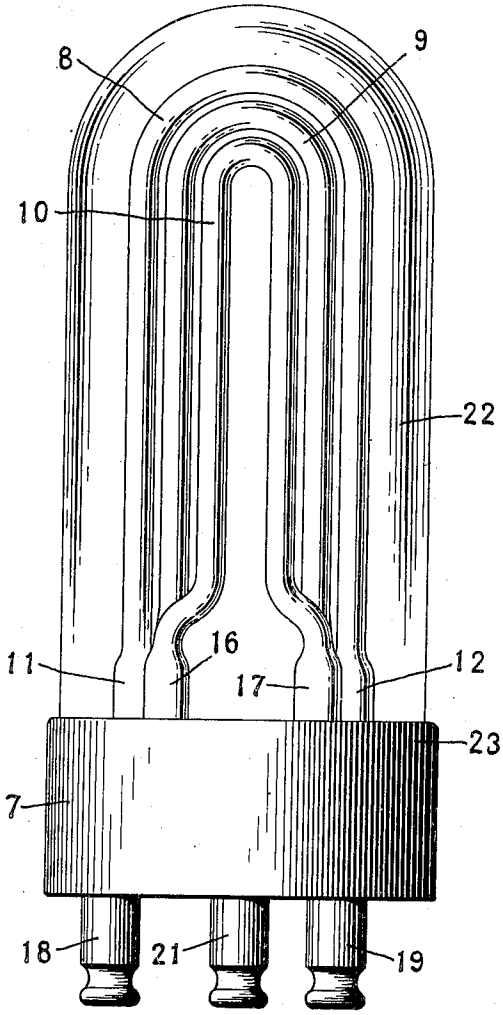


Fig. 2.

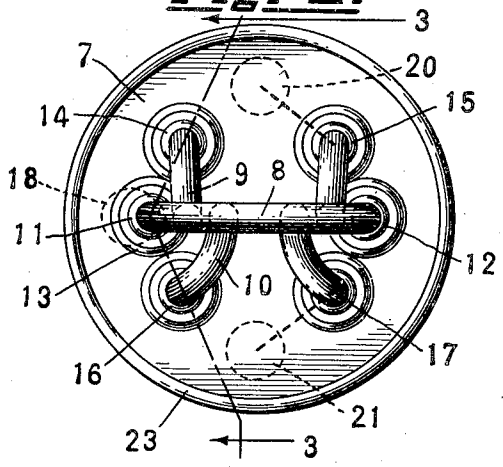


Fig. 3.

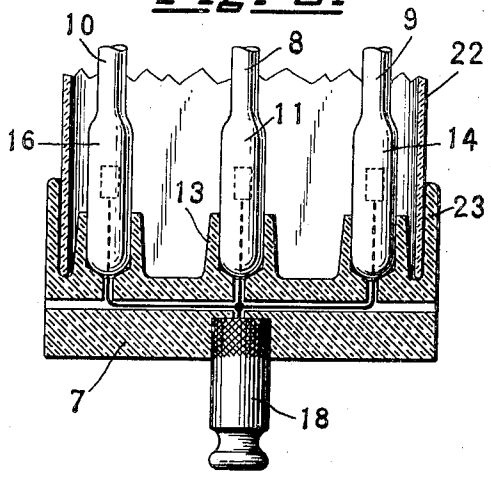
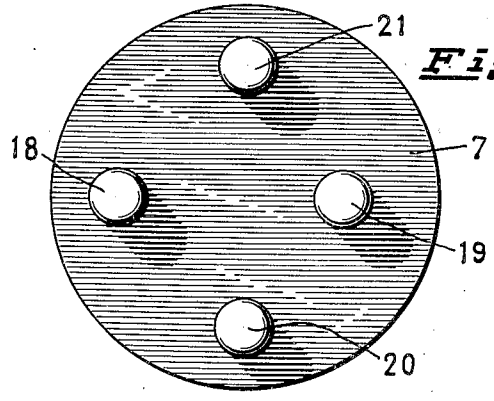


Fig. 4.



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GAS LAMP

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10 Claims. (Cl. 176—122)

My invention relates particularly to lamps utilizing gases such as neon.

One object is to provide a simple durable construction which can be readily manufactured, transported and used.

Another object is to provide a gas lamp which can be readily made and assembled in accordance with standard specifications.

Another object is to provide a construction by means of which a plurality of different colors may be displayed, as for instance in signaling.

In the preferred form I employ a base preferably of molded insulation and having a number of independent sockets for receiving the ends of the gas tubes. Two or more tubes are provided capable of emitting light of suitable colors. Terminal prongs are embedded in the base and connected to the respective tubes.

Fig. 1 is a front view of a lamp embodying my invention and also employing an outer globe.

Fig. 2 is a plan view of the construction of Fig. 1 but with the globe omitted.

Fig. 3 is a fragmentary sectional view of the plane of the line 3—3 of Fig. 2.

Fig. 4 is an end view showing the prongs.

The base 7 is preferably of insulating material and supports the various parts including the gas holding members 8, 9 and 10 of suitable color and material, having suitable electrodes, and containing suitable gases. Each of these members in the form shown is an inverted U shaped tube and is provided with ends such as 11 and 12, which are adapted to be supported in the base in suitable manner. Preferably each end of each member is supported in a socket 13 as shown in Figs. 2 and 3, being held in place by the conducting wires or by cement or in any other suitable manner.

The intermediate tube 9 may have its ends 14 and 15 offset so as to bring the central portion closer to member 8.

In a similar manner the inner tube has its ends 16 and 17 offset, thus spacing the terminals of the various tubes at convenient distances around the base.

In the form shown the terminal prong 18, which has one end embedded in the base, is electrically common to the ends 11, 14 and 16 of the three tubes, for convenience in making connections with a socket, relays, etc. (not shown).

In the form shown the outer tube 8 has its outer end 12 connected to the terminal prong 19. The intermediate tube 9 has the electrode on its end 15 connected to the terminal prong 20 and the inner tube 10 has the electrode in its end 17 connected to the terminal prong 21. It will be seen that with this construction to change from one tube to another, simply requires the change of the switch, relay or the like from connection with the prong 19 to prong 20 or prong 21, since the prong 18 is common to all three tubes.

I preferably enclose all three tubes in a globe 22 which may be sealed within a flange 23 of the base, thus strengthening and protecting the parts and preventing injury.

It should be understood that a number of colors may be produced by suitably selecting the gases contained within the respective tubes, as for instance, red, amber and green.

In some cases it may be desirable to employ glass of different colors for the different tubes. In fact it is possible to obtain many advantages of my invention by using different colored tubes and a single gas within the globe 22, which gas may have access to the inner tubes through suitable apertures. In such case the current activates only such part of the gas as is within the tube whose electrodes are connected in the circuit and the balance of the gas within the outer globe serves as an auxiliary reservoir for prolonging the life of the lamp.

Such lamps, particularly with gases such as neon, are especially valuable for traffic and other signal lights because of the highly penetrating power of the light in fog. Such lamps are also of long life and require but little current and are hence economical.

I claim:

1. A gas lamp comprising an insulating base and a number of parallel luminescent gas tubes supported therein for emitting light of various colors and having some of the ends offset from the planes of the main central portion of the tubes.

2. A gas lamp comprising a number of gas holding tubes of inverted U-shape, one arranged inside the loop of another and with some of the ends of the tubes offset and a common base holding the ends in place.

3. A gas lamp comprising a number of luminescent gas tubes for emitting light of different colors, a number of tubes having one terminal of each electrically connected to a terminal of the other and some of the terminals being offset from the planes of the respective tubes.

4. A gas lamp having an insulating base, and a number of tubes filled with gas and capable of emitting light of various colors, said tubes having their ends secured in said base, the ends of some

of the tubes being offset from the planes of the tubes.

5. A gas lamp having an insulating base, a number of tubes filled with gas and capable of emitting light of various colors, said tubes having their ends secured in said base and terminal prongs projecting from said base, one prong being electrically connected to a number of said tubes and the other prongs being connected to the other ends of the respective tubes.

6. A gas lamp comprising a number of gas holding tubes of U-shape, one arranged inside of the outline of another, and an insulating base for supporting said tubes.

7. A gas lamp comprising a number of gas holding tubes of inverted U-shape capable of emitting light of different colors, one arranged within the loop of another, each of said tubes having an electric terminal at each of its ends and a common base for supporting said terminals, a plurality of said tubes having one terminal of each electrically connected to a terminal of another of said tubes.

8. A glow lamp comprising a base having terminal prongs, a number of gas filled tubes having their ends supported in said base and with electrodes in their ends connected to the prongs, and a gas filled globe secured to the base and enclosing all of the tubes and constituting a common auxiliary gas supply for all of said tubes.

9. A glow lamp comprising a number of gas filled tubes with their main central portions of inverted U-shape and arranged in a common plane, the ends of said tubes being offset on opposite sides of the central portions of the tubes, and a common base securing the ends of the tubes in place.

10. A glow lamp comprising gas filled tubes having their central portions of inverted U-shape and arranged in a common plane, the ends of one of the tubes being offset from said plane, and a common base for supporting the ends of the tubes.

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