May 22, 1928.

1,670,523

J. W. RUCKER

INSECTPROOF SCREEN FOR GASOLINE LAMPS

Filed Aug. 1, 1927

Fig. 1.

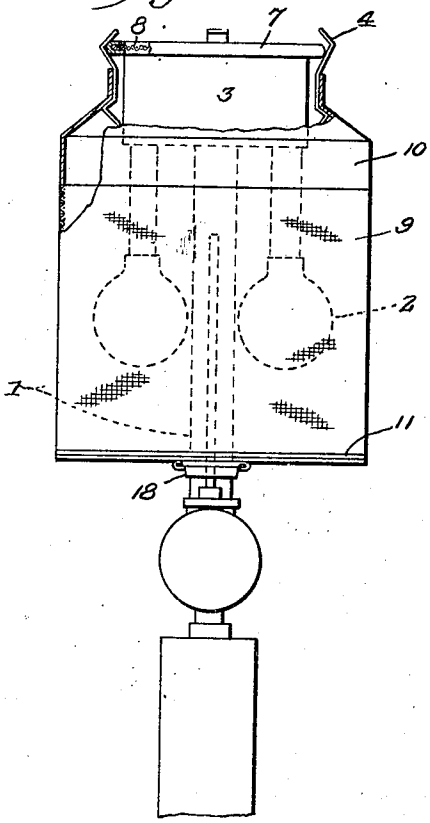


Fig. 2.

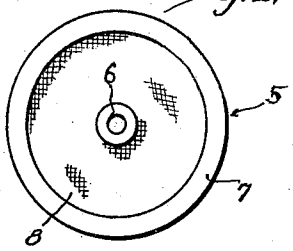


Fig. 3.

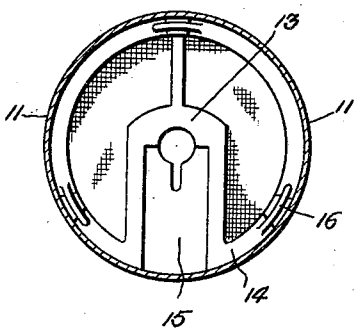


Fig. 4.

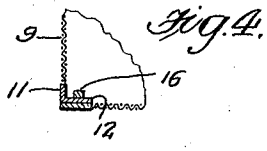
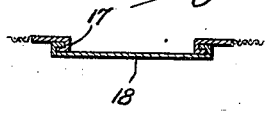


Fig. 5.



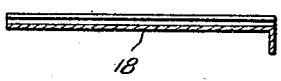


Fig. 6.

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Patented May 22, 1928. 1,670,523

UNITED STATES PATENT OFFICE.

JOHN WILLIAM RUCKER, OF COOLIDGE, KANSAS.

INSECTPROOF SCREEN FOR GASOLINE LAMPS.

Application filed August 1, 1927. Serial No. 209,826.

My present invention has to do with the protection of gasoline lamps, particularly the mantle thereof from insects, and has for its object to provide an efficient screen for the purpose indicated, and one adapted to be applied without disconnecting the lamp, and this expeditiously and without liability of the mantles being broken incident to the application or removal of the screen.

My invention also seeks to provide the provision of a screen which does not interfere with any element of the lamp in any degree and which permits the lamp being lighted and controlled without diminishing in any degree the efficiency of the screen in barring insects from the mantles.

Other objects and practical advantages of the invention will be fully understood from the following description and claims when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:—

Figure 1 is a view partly in elevation and partly in section illustrating the screen constituting the preferred embodiment of my invention as the same appears when properly applied to a gasoline lamp.

Figure 2 is a plan view of the top member of my improvement.

Figure 3 is a horizontal section taken through the screen or wire mesh cylinder of my improvement looking downwardly.

Figure 4 is a fragmentary vertical section illustrating the manner in which the bottom of the screen is connected with the annulus at the lower end of the cylinder of reticulated material.

Figure 5 is a fragmentary vertical section illustrative of the manner in which the door at the bottom of the screen is removably secured in working position.

Figure 6 is a detail longitudinal vertical section of the said door.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

I show in Figure 1 a conventional or well known type of gasoline lamp having a stem 1, mantles 2, a head portion 3 and springs 4 adjacent to the said head portion 3, the said springs 4 being designated to support a globe, not shown.

The said lamp is not of my invention, but is merely shown to facilitate an understanding of the application of my improved insect-proof screen.

My novel screen is applied at the top of the lamp and is moved downwardly to proper working position relative to the lamp. Among other elements my improvement includes a top member 5 made up of a central apertured portion 6, an annulus 7 and a portion 8 of wire screen or reticulated material interposed between the central portion 6 and the annulus 7. The said member 5 is designed to fit in the top portion of the lamp with a view to preventing insects from gaining access to the lamp at the top.

My improvement also comprises a cylinder 9 of wire screen or reticulated material permanently connected at its upper end to a dome portion 10, preferably of sheet metal and preferably shaped as shown. In this connection it will be understood that the dome portion 10 shaped as illustrated is calculated to fit snugly on the springs 4.

At its lower end the cylindrical screen or body 9 is provided with a metallic annulus 11, Figures 1 and 3, the said annulus 11 being permanently connected to the lower end of the wire screen cylinder by any approved means and being provided with inwardly extending spaced lugs 12, Figures 3 and 4.

The bottom member of my novel screen is made up of a frame 13 having annular portion 14 and also having an opening 15, the side walls of which latter are designed to rest at opposite sides of the stem 1 of the lamp. Struck up from the annular portion 14 of the frame 13 are resilient tongues 16 which are adapted when slightly deflected from the plane of the annular portion 14 to be moved into engagement with the lugs 12, as shown in Figures 3 and 4, in order to rest above and in frictional contact with the said lugs 12 so that while there is no liability of the bottom member being casually displaced, yet it may be expeditiously and easily removed from the cylindrical body 9 when desired. It will also be understood that the bottom member being detachably secured through the medium of the tongues 16 in engagement with the annulus 11, the bottom member may be quickly and easily, and at the same time strongly connected to the cylindrical body 9.

The frame of the bottom member 13 is also provided with flanges 17 at opposite sides of the before mentioned opening 15, and slidably engaged with the said flanges 17 and supported thereon is a door 18 which serves

when closed to bar insects at the lower end of the protective screen and also serves when opened to permit the ready ignition of the lamp.

Incident to the removal of the protective screen, the sliding door 18 is removed first, after which the bottom member is disassociated from the wire screen body 9 and is removed edgewise, after which the body 9 may be moved upwardly from and out of engagement with the lamp. In the placing of my improvement the operation described is reversed.

It will be appreciated from the foregoing that my improved screen is susceptible of ready application and removal, is not calculated to interfere in any measure with the proper operation of a gasoline lamp, and is well adapted to exclude insects from the lamp with the result that liability of injury by insects to the mantles or other parts of the lamp is reduced to a minimum.

It will also be appreciated that generally considered, my novel screen is simple and inexpensive in construction, and that as a whole the screen is well adapted to withstand the usage to which gasoline lamp appurtenances are ordinarily subjected.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of said preferred embodiment. I do not desire, however, to be understood as limiting myself to the precise construction disclosed, my invention being defined by my appended claims, within the scope of which modifications or changes in structure may be made without departure from my invention.

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

1. In an insect proof screen for gasoline lamps, and in combination, a cylindrical body of reticulated material adapted to be supported in position about a gasoline lamp and having an annular portion at its lower end, a bottom member made up of a frame and wire screen or reticulated material carried by said frame, said frame having a radial opening to receive the stem of a lamp and also having tongues to engage portions of the said annulus at the lower end of the body and further having means for engaging and supporting a radially movable slidable door, and a door engaged with and supported by the bottom member and removable radially to expose the said opening of the body member.

2. In an insect proof screen for gasoline lamps, and in combination, a cylindrical body of reticulated material adapted to be supported in position about a gasoline lamp and having an annular portion at its lower end, a bottom member made up of a frame and wire screen or reticulated material carried by said frame, said frame having a radial opening to receive the stem of a lamp and also having tongues to engage portions of said annulus at the lower end of the body and further having means for engaging and supporting a radially movable slidable door, a door engaged with and supported by the bottom member and removable radially to expose the said opening of the body member; the said tongues of the frame in the bottom member being struck up from said frame and being possessed of resiliency, and the said annulus at the lower end of the wire screen body being provided with inwardly directed spaced lugs for the engagement of the said tongues.

3. An insect proof screen for gasoline lamps, comprising a cylindrical body of reticulated material, a dome portion connected to said body and adapted to be supported on the spring of a lamp, a central top member having a central apertured portion, an annulus, and wire screen interposed between and connected to the central portion and the annulus, and means for closing the lower end of the cylindrical body, said means detachably connected with the body and having a wire screen portion and an opening to receive the stem of a lamp, and also having a removable door adapted when closed to bar insects, and when open to permit of ready ignition of a lamp.

4. In an insect proof screen for gasoline lamps, in combination, a body of reticulated material adapted to be maintained about the mantle portion of a gasoline lamp, a bottom member detachably connected with said body and having a radial opening whereby it may be made to straddle the stem of a gasoline lamp, and a removable door associated with said opening for the barring of insects when the door is closed and for permitting of ready ignition of the lamp when the door is opened.

In testimony whereof I affix my signature.

JOHN WILLIAM RUCKER.