H. D. PENNEY.

GAS BURNER FOR LAMPS.

APPLICATION FILED APR. 18, 1910.

968,260. Patented Aug. 23, 1910.

Fig. 1

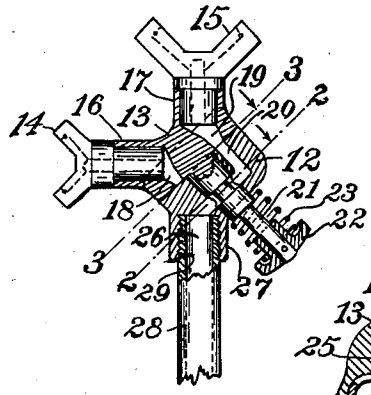


Fig. 2.

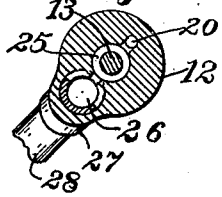


Fig. 6.

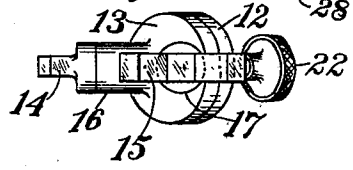


Fig. 3.

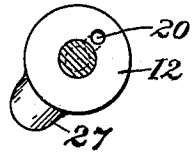


Fig. 4.

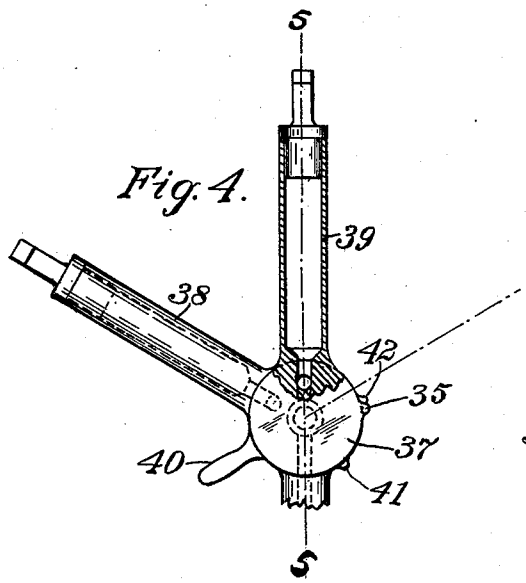
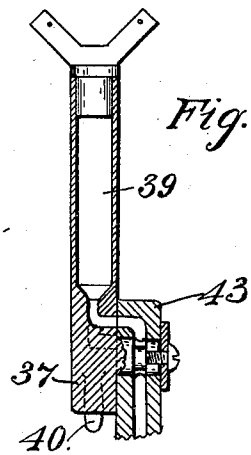


Fig. 5.



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UNITED STATES PATENT OFFICE.

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GAS-BURNER FOR LAMPS.

968,260. Specification of Letters Patent. Patented Aug. 23, 1910.

Application filed April 18, 1910. Serial No. 556,217.

To all whom it may concern:

Be it known that I, HAROLD D. PENNEY, a citizen of the United States, residing at Pelham, Westchester county, New York, have invented new and useful Improvements in Gas-Burners for Lamps, of which the following is a specification.

The object of this invention is to provide a gas lamp with a pair of burners supported on a movable member, whereby the shifting of the member will cause either burner to be brought adjacent the focus of the lamp, and by such movement the burner in focus will be connected with the gas supplying pipe of the lamp, while the other burner will be cut off from such supply.

A further object is to provide in such an arrangement, burners of different capacity, whereby the candle power of the lamp can be changed by the mere operation of swinging the member, and relighting.

Another object is to arrange one of the two burners so that when in operative position, it will be located a short distance above the focal position, whereby to cause the greater part of the rays to be reflected downwardly, instead of horizontally.

In the accompanying drawings, showing embodiments of my invention, Figure 1 is an axial section of one form. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is an elevation, partly in section, of a modification. Fig. 5 is a section on line 5—5 of Fig. 4; and Fig. 6 is a plan of the form shown in Fig. 1.

The form shown in Fig. 1 comprises a valve body or casing 12, in which swings a valve member 13, from which are supported burners or burner tips 14 and 15, of the same, or of different candle power, as may be desired. The valve member 13 preferably has two tubular arms 16 and 17, extending in different directions; in this form extending substantially at a right angle. On the ends of these arms are mounted the said burners. The valve body 12 is provided with a port 20, that will register with the ports 18 and 19 of the arms, alternately upon swinging the valve member. As shown, the burner 15 is located in the focal center of the lamp, and this burner will be in communication with the port 20 in the valve body, through the port 19 in the arm 17. But when the valve member is swung, the other burner 15 will be in the focal position; and it will be understood that the port 18 will cause this burner to be in communication with the port 20 in the valve body.

The valve member 13 may have an extension 21, beyond the valve body, carrying a head or handle 22, by which the valve member can be swung to bring either burner to focal position. A coil spring 23 may be placed between the valve body 12 and a washer fast on the extension, to keep the valve member tightly seated and prevent leakage. An annular channel 25 in the valve member connects the port 20 in the valve body with the bore 26 of the tubular extension 27 of the valve body. The latter is adapted to be secured to the usual supply pipe 28 of the lamp, by a coupling 29.

To apply this invention to gas lamps it is only necessary to unscrew the usual burner pipe, and attach the extension 27 to the pipe 28 of the lamp, by the coupling 29, or other suitable securing means; and as the removable part of the burner is standard in gas lamps, no adjustment is required, but the burners of my device will be in correct focal position when swung.

In the modification shown in Fig. 4 the valve body 35 is somewhat similar to the valve body 12 described, but arranged with the axis horizontal. The valve member 37 corresponds to the valve member 13, but has its arms 38 and 39, extended to swing in a vertical plane. The arrangement of parts is similar to that shown in Fig. 1. The valve member 37 is swung by the handle 40, to bring the burners alternately to focal position, and the burner out of focus to one side of the lamp.

In the use of my invention, where the two burners are of the same candle power, when the burner in use becomes clogged, as quite frequently occurs by small particles lodging in the fine passages of the tip, the valve member is simply turned by the handle to bring the other burner in the focal position, and through the ports into communication with the supply pipe and the defective burner cut out of connection. To simply turn the valve member and apply a match, will occupy but an instant, and the lamp is again in commission, as if the damaged burner had been unscrewed and a new

one put in its place. The burner that is inoperative is not discarded, and will not be lost or mislaid; but can be cleaned out at a later time, and often restored to full duty.

In certain localities it is required to restrict the illumination of lamps on vehicles to a small amount, such as of sixteen candle power. This is generally in towns with well lighted streets; but when the occupants of the car drive out of such restricted districts at night, it is desirable to be able to have the maximum illumination, such as a candle power of a hundred. This is easily accomplished with my invention, by having one of the two burners of the low power, as sixteen, while the other burner is of the larger capacity, as one hundred candle power. When the car is operated in the restricted area the low power burner is brought to the focal position; and when the car leaves the restricted territory, it is only necessary to swing the handle to bring the other larger burner to focal position, and relight; which is a very simple matter. Heretofore it has been necessary to provide means for obstructing a large portion of the light rays, to reduce the large power to the smaller illumination, such as screens, or ground glass; which devices must be removed to restore the lamp to full capacity and give the desired illumination.

With the use of the burners of different capacity, it is sometimes desirable to cause the rays to be deflected downwardly instead of directed horizontally forward. This can be effected by arranging one of the burners a short distance removed above the focal position, that will cause the reflector to send the rays downwardly. This can be done with the burners of the same capacity; or with the low power burner when such are used; as this will cause even less trouble from too brilliant light dazzling persons on the street from lamps on cars.

In this application the burners are stated to be brought to or adjacent the focal position of the lamp; but it is to be understood that the burners are positioned just below such point whereby the central point of the flame resulting from the action of the burner orifices will be coincident with the focus, or adjacent the same, as the case may be. With the usual bifurcated lava tips used on acetylene lamps, the forks are placed fore-and-aft of the lamp. Consequently, when the burner is swung out of focal position, it will be swung to the rear and just back of the body portion, so that practically none of the light rays are obstructed, that would be utilized if but the single burner were employed.

Lugs may be used to limit the swing of the valve member; lug 35 on valve member 37 will engage lugs 41 and 42 on the body member to limit the swing of the member and position the burner in the active position.

Having thus described my invention, what I claim is:—

1. In combination, a valve body provided with a port, a valve member mounted to swing in the body, a pair of gas burners supported from the valve member that are alternately brought to a certain predetermined position relative to the body, upon swinging the valve member in the body, the valve member having ports leading from the burners respectively that will each register with the port in the body when its burner is brought to said certain position and the other burner port thereby cut out of communication with the port in the body.

2. In combination, a valve body provided with a port, a valve member mounted to swing in the body, a pair of gas burners of different capacity supported from the valve member that are alternately brought adjacent a certain position relative to the body upon swinging the valve member in the body, the valve member having ports leading from the burners respectively that will each register with the port in the body when its burner is brought adjacent the said certain position and the other burner port thereby cut out of communication with the said port in the body.

3. In combination, a valve body provided with a port, a valve member mounted to swing in the body, a pair of burners supported from the valve member that are alternately brought adjacent a certain position relative to the body upon swinging the valve member in the body, the valve member having ports leading from the burners respectively that will each register with the port in the valve body when the burner is brought adjacent the said certain position and the other arm port thereby cut out of communication with the port in the body, the valve member projecting through the body and provided with an extension forming a handle for swinging the valve member.

4. In combination, a valve body provided with a port, a valve member mounted to swing in the body, a pair of burners supported from the valve member that are alternately brought adjacent a certain position relative to the body upon swinging of the valve member in the body, the valve member having ports leading from the burners respectively that will each register with the port in the valve body when the burner is brought adjacent the said certain position and the other arm port thereby cut out of communication with the port in the body, the two burners being positioned on the valve member whereby one burner will be brought to said certain position when swung to registering position, while the other

burner will be brought to a position a short distance removed vertically from said certain position when in registering position.

5. In combination, a valve body provided with a port, a valve member mounted to swing in the body, a pair of burners supported from the valve member that are alternately brought adjacent a certain position relative to the body upon swinging of the valve member in the body, the valve member having ports leading from the burners respectively that will each register with the port in the valve body when the burner is brought adjacent the said certain position and the other arm port thereby cut out of communication with the port in the body, the two burners being of different capacity and positioned on the valve member whereby the burner of larger capacity will be brought to said certain position when swung to registering position, while the smaller burner will be brought to a position vertically removed from the said certain position a short distance when in registering position.

6. In combination, a body, a member mounted to swing in the body, means for supplying illuminant, a pair of lighting elements supported from said member that are alternately brought adjacent a certain predetermined position upon swinging the said member in the body, the said member having means connected with the said lighting elements respectively that will each connect with the said supplying means when the element is brought adjacent said predetermined position and the other lighting element disconnected from the supplying means.

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