(No Model.)

D. J. PRENDERGAST & V. H. SLINACK.

STREET LAMP.

No. 583,547. Patented June 1, 1897.

Fig. 1.

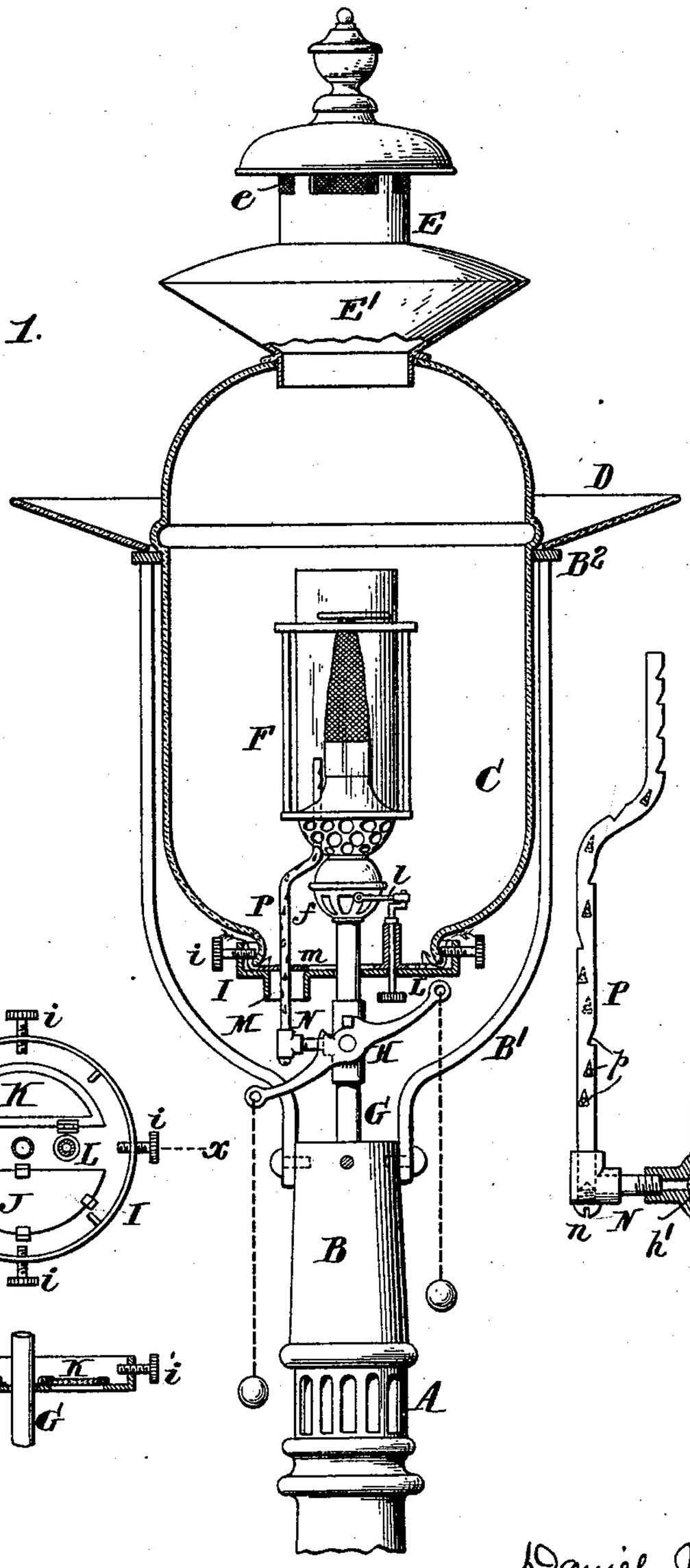

Fig. 2.

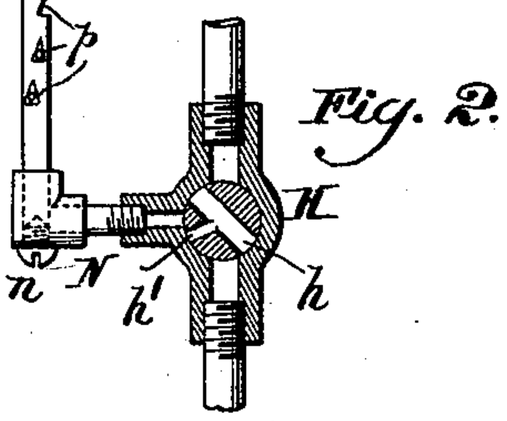

Fig. 3.

Fig. 4.

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STREET-LAMP.

SPECIFICATION forming part of Letters Patent No. 583,547, dated June 1, 1897.

Application filed July 9, 1896. Serial No. 598,526. (No model.)

To all whom it may concern:

Be it known that we, DANIEL J. PRENDERGAST, of the city and county of New York, State of New York, and VICTOR H. SLINACK, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improvement in Street-Lamps, of which the following is a specification.

Our invention has reference to street-lamps; and it consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

Our invention has particular reference to the construction of a street-lamp post and lamp structure especially designed for use in connection with an incandescing burner, though it is not strictly confined thereto, and comprehend certain features of construction which will permit the globe of the lamp being thoroughly sealed against the entrance of insects and dirt, while at the same time permitting the burner to be readily ignited without having to open the globe.

In carrying out our invention we provide the bottom of the globe with a closed cap through which the gas-pipe passes to connect with the burner proper. Below the cap is arranged the gas-valve, and leading from the gas-valve through the cap and upwardly to the burner is an igniting-tube provided with means for conveying a flame from below the cap upward to the burner for igniting it. In the construction the apparatus is made automatic, so as to cut off the gas from the auxiliary lighting device when the full pressure of the gas is turned onto the main burner.

Our invention will be better understood by reference to the accompanying drawings, in which—

Figure 1 is a sectional elevation of a street-lamp embodying our improvements. Fig. 2 is an elevation of a detail thereof, showing more particularly the control-valve and igniting device. Fig. 3 is a plan view of the lower or base cap, and Fig. 4 is a sectional elevation of same on line $x\,x$.

A is the lamp-post proper.

B is a sleeve or screw detachably fitted to the top of the post and supporting a series of arms B′, connected at the top to an annular ring B^2, constituting a frame for supporting the globe.

C is a glass globe and is suspended within the frame B^2. The upper part of the globe is open and is fitted with the ventilator E, having the ventilating-apertures closed by a screen *e*. The cap is also provided with a reflecting-surface E′. Surrounding the globe and resting upon the annular frame B^2 is a reflecting-hood D.

G is the gas-pipe, which extends up into the globe C and supports the incandescent burner F, which may be of any suitable construction. The construction which we prefer is that known as the "Welsbach burner," but we do not confine ourselves to an incandescent burner, though our invention is especially adapted for that purpose.

I is a base-cap which is arranged to close the bottom of the globe C. It is supported from the globe by means of a curved flange at the lower end thereof and the screws *i* upon the cap, and the construction is such as to permit the ready passage of air around the bottom of the globe, as indicated by the arrow, to support the proper combustion. The cap is made with a glass window J on one side and a hinged glass door upon the other side of the gas-pipe G, the object of which is, primarily, to allow the light to pass downward close to the lamp-post proper and prevent heavy shadows being cast adjacent thereto. Furthermore, the employment of the door K permits, in case of necessity, the passage of the hand into the interior of the globe C for adjustment of the parts. The interior may also be accessible by simply removing the ventilator-cap E.

By the employment of the closed cap I at

the base of the globe C bugs and insects, as well as dirt, cannot find entrance to the globe. Supported by the cap is a small crank which, by means of the link *l* inside of the globe, operates the air-valve *f* of the burner F. This permits the adjustment of the air-valve without dismantling any of the parts.

H is the main valve of the gas-pipe G, and is operated by a suitable lever in any convenient manner. Opening from the side of the valve H is a pipe N, from which extends upwardly a gas-pipe P, leading through the flanged aperture M in the cap upward to the burner F. A washer *m*, resting above the aperture M and encircling the pipe P, prevents the entrance of bugs, dirt, &c., and at the same time facilitates the adjustment of the cap in position. The pipe P is provided with a series of small apertures *p*, which begin at a point below the cap I and extend upward to the burner. The object of this pipe and apertures is to enable the operator to light the gas escaping from the lowermost aperture and cause the same to ignite successive apertures above until it reaches through the cap and extends upward within the globe C to the burner. This obviates any necessity of opening the lamp structure. The amount of gas that escapes from the pipe N into the pipe P may be controlled by the screw *n*, which acts as a valve, though this is not essential. The main valve is shown in Fig. 2 and has two passage-ways *h* and *h'*, the arrangement of this being such that as the valve is turned to the right the gas will be permitted to flow to the burner and at the same time to the pipe P. Upon igniting the burner through the agency of the pipe P the valve is further turned, which has the effect of cutting off the supply of gas to the pipe P, but leaving it on to the burner F. By this manner it is easy to light the burner without having to open the globe. Prior to the burner F becoming ignited too much gas should not be supplied to it for fear of excessive concussion upon igniting, which would destroy the incandescing mantle.

We do not confine ourselves to the details of construction of the lamp, as these may be modified without departing from the spirit of the invention. Our improvements also comprehend, broadly, means for conveying a flame from without the globe to within the globe and to the burner arranged therein without the necessity of opening an entrance to the globe.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a street-lamp the combination of a closed glass globe having a ventilating-cap at the top, detachable base-cap consisting of a metal frame having a transverse metal bar and glass windows located upon each side thereof supported at the bottom of the globe to close it, a gas-burner extending up through the base-cap into the globe, an auxiliary igniting gas-pipe extending from below the base-cap up through a hole in the transverse metal bar of same to or near the burner, and a valve device below the base-cap for controlling the flow of gas to either the main burner or igniting-pipe or both.

2. In a street-lamp the combination of a closed glass globe having a ventilating-cap at the top, a detachable base-cap consisting of a metal frame having a transverse metal bar and glass windows located upon each side thereof supported at the bottom of the globe to close it, a gas-burner extending up through the base-cap into the globe and provided with an air-valve, means for adjusting the air-valve from below the base-cap extending through said cap and supported by the transverse metallic bar of same, an auxiliary igniting gas-pipe extending from below the base-cap up through a hole in the transverse metal bar of same to or near the burner, and a valve device below the base-cap for controlling the flow of gas to either the main burner or igniting-pipe or both.

3. In a street-lamp the combination of a closed glass globe having a ventilating-cap at the top, a detachable base-cap consisting of a metal frame having a transverse metal bar having a radial slot or aperture and glass windows located upon each side thereof supported at the bottom of the globe to close it, a gas-burner extending up through the base-cap into the globe, an auxiliary igniting gas-pipe extending from below the base-cap up through the slotted aperture in the transverse metal bar of same to or near the burner, a loose plate *m* resting upon the transverse bar of the base-cap and fitting around the igniting-pipe and a valve device below the base-cap for controlling the flow of gas to either the main burner or igniting-pipe or both.

4. The combination of a glass globe having ventilating-apertures at the upper part and small air-supplying apertures at the lowest part, with a gas-burner arranged within the globe, a gas-pipe leading to the burner from without the globe, a main gas-controlling valve in the gas-pipe, an auxiliary burner for lighting the main burner consisting of a pipe for gas only opening from the main gas-pipe between the main valve and burner and extending to the burner within the globe and provided with perforations for escape of gas, and means independent of the main valve to vary the flow of gas through the auxiliary burner-pipe for controlling the amount of gas permitted to flow to the auxiliary burner upon opening the main valve.

5. In a street-lamp, the combination of the glass globe, a burner arranged within the

globe, a base-cap to close the lower part of the globe and detachably supported thereby provided with glazed apertures to permit the light to descend, a gas-supply pipe extending through the base-cap, a valve for controlling the supply of gas to the burner arranged below the base-cap, an air-valve arranged within the globe adjacent to the burner, and means journaled in the base-cap for operating the air-valve from a point below the base-cap.

In testimony of which invention we have hereunto set our hands.

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