No. 776,360.

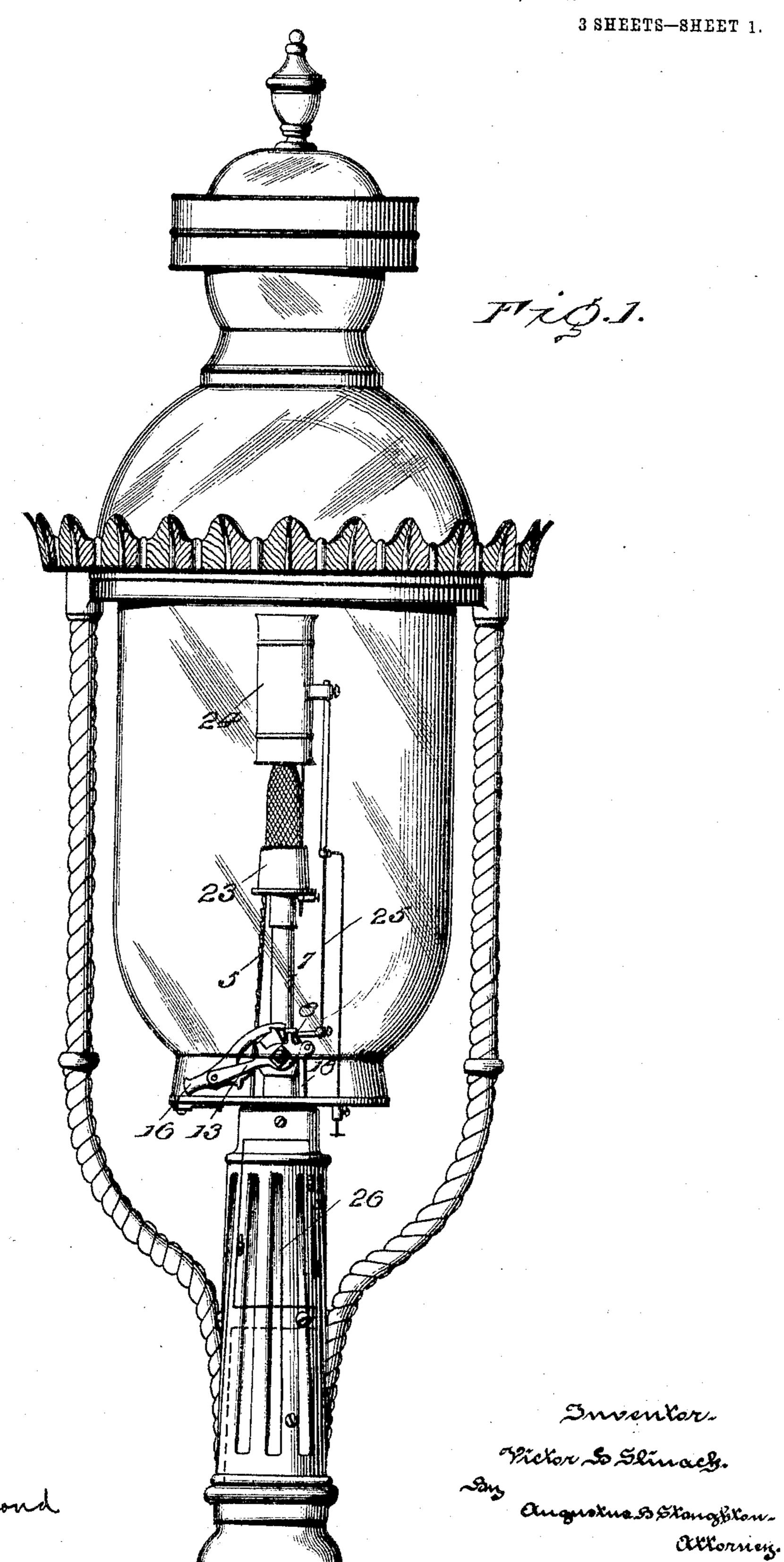
PATENTED NOV. 29, 1904.

## V. H. SLINACK.

# INCANDESCENT STREET LIGHT.

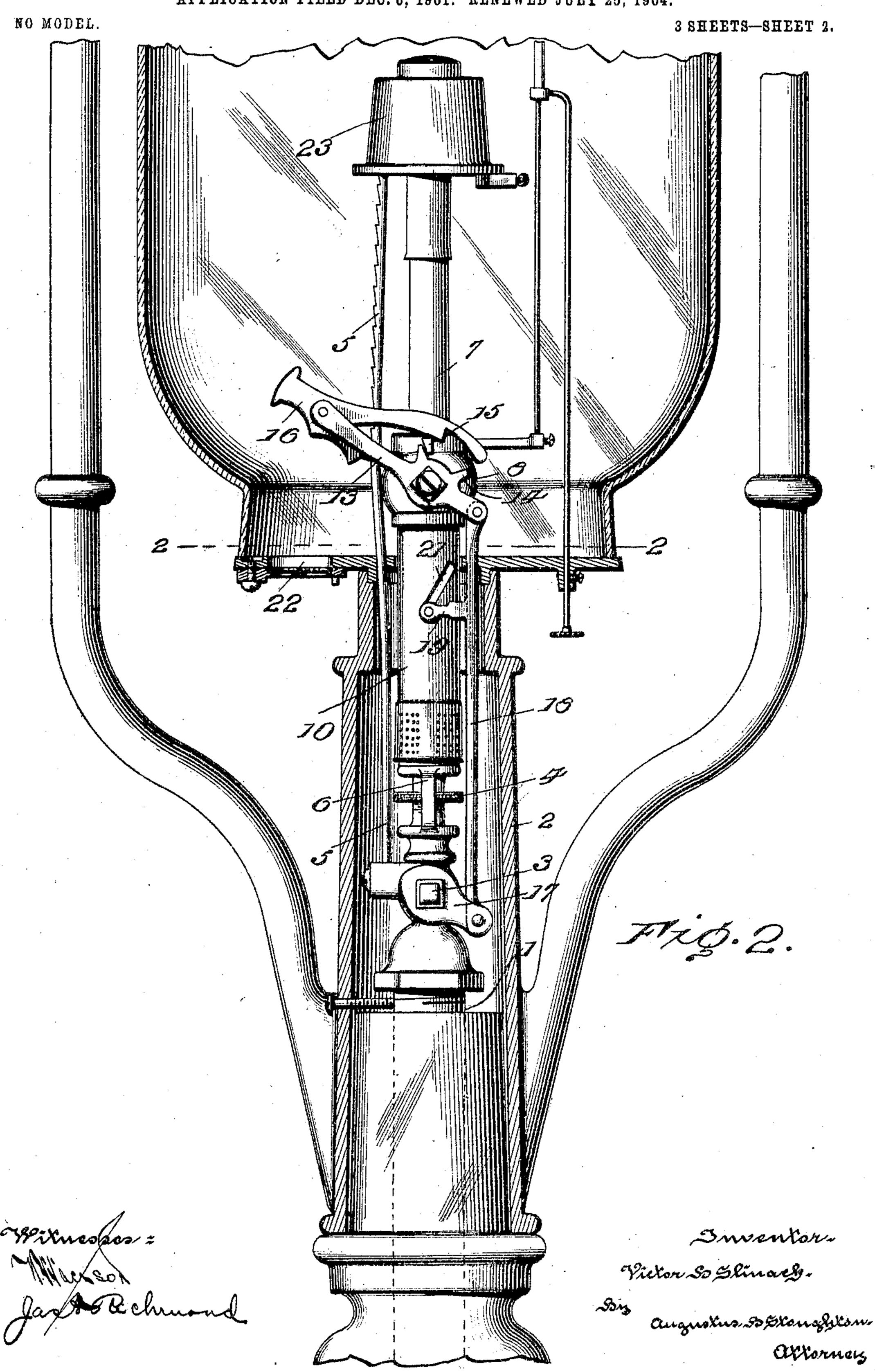
APPLICATION FILED DEC. 6, 1901. RENEWED JULY 25, 1904.

NO MODEL.



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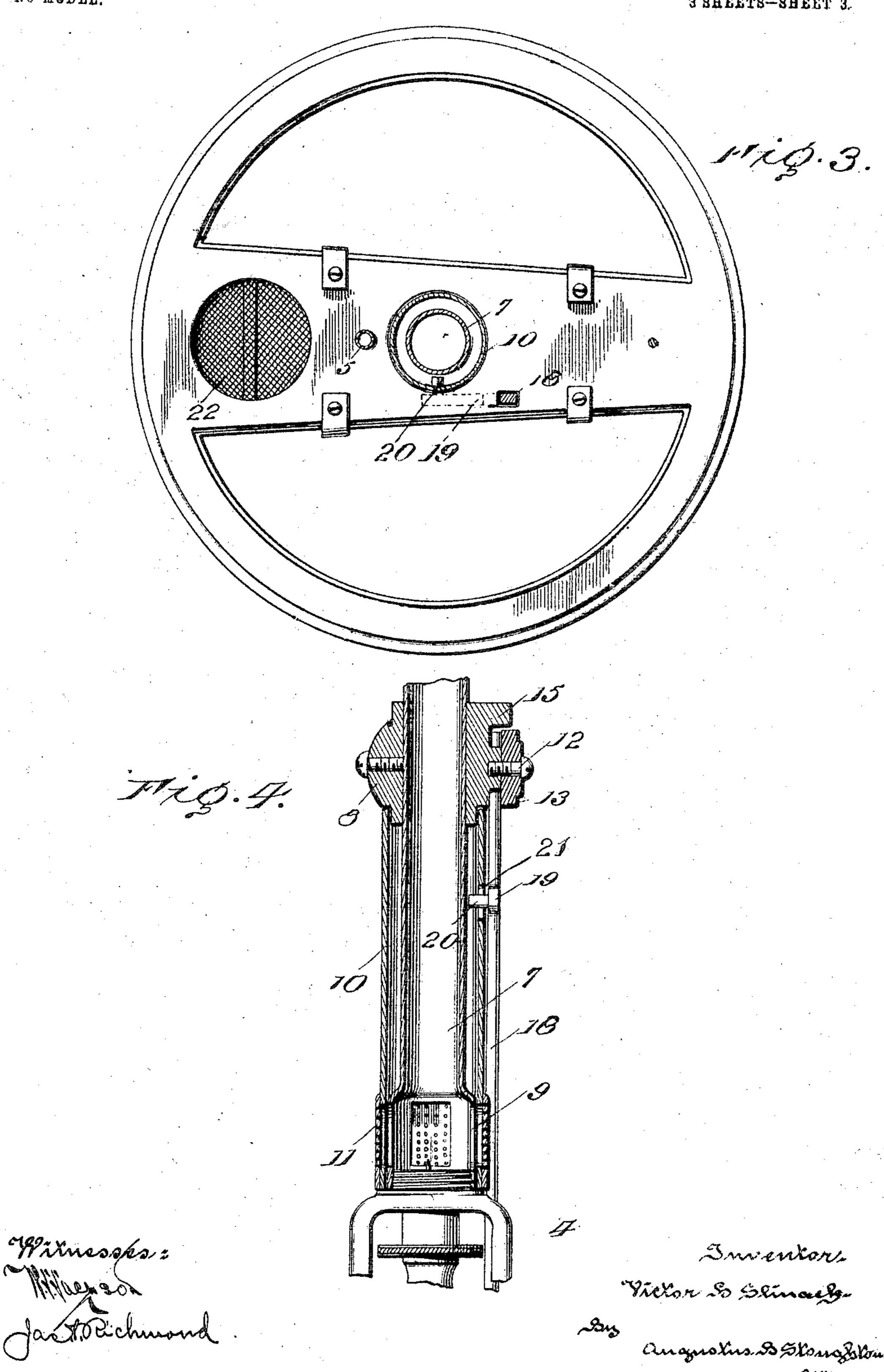
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## INCANDESCENT STREET LIGHT.

APPLICATION FILED DEC. 6, 1901. RENEWED JULY 25, 1904.

NO MODEL.

3 SHEETS-SHEET 3.



# United States Patent Office.

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#### INCANDESCENT STREET-LIGHT.

SPECIFICATION forming part of Letters Patent No. 776,360, dated November 29, 1904.

Application filed December 6, 1901. Renewed July 25, 1904. Serial No. 217,939. (No model.)

To all whom it may concern:

Be it known that I, Victor H. Slinack, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Welsbach and other Incandescent Street-Lights, of which the following is a specification.

The principal object of the invention is to provide a Welsbach or other incandescent street-light in which dust, bugs, insects, and the like will be excluded from entering the Bunsen tube, and thus interfering with the proper working of the burner.

Other objects are to provide for simultaneously controlling the admission of gas and air to the Bunsen tube and for effecting such operations from a single point easily accessible to the operator.

To the ends stated the invention consists in the improvements hereinafter described, and pointed out in the claims.

The nature, characteristic features, and scope of the invention will be more clearly understood from the following description, taken in connection with the accompanying drawings, forming a part hereof, in which—

Figure 1 is an elevational view of the upper or head portion of a Welsbach street-light embodying features of the invention. Fig. 2 is a sectional view of the same, drawn to a larger scale, showing the general arrangement of the parts. Fig. 3 is a plan view of the lantern-base, and Fig. 4 is a sectional view of the Bunsen tube and its air shutter or casing.

In the practice of the invention the Bunsen tube is extended into the socket of the lantern-frame or the head of the lamp-post and made to take its supply of air from that which enters the post through the joints and crevices thereof—for instance, through the head or socket of the post. The general construction, arrangement, and operations of the parts may be stated as follows.

Referring to the drawings, 1 indicates the gas-supply pipe, which for purposes of the invention terminates inside the socket 2 of the lantern-frame, where it is provided with a gas-valve 3, which usually occupies a position

above the lantern-base. The lantern-socket 50 2 is in effect a continuation of the lamp-post. The valve 3 is of the common plug type, and is arranged to communicate with the needlevalve 4 and with the pilot or climbing lighter 5 in the well-known manner. The yoke 6, 55 which supports the needle-valve, also serves as a bottom support for the Bunsen tube 7, the connecting parts being threaded for ready detachment. The Bunsen tube passes through a ring or collar 8, which it supports, 60 and which occupies the position above the lantern-base that is ordinarily assumed by the gas-valve. The Bunsen tube is extended at its base, where it is provided with openings 9, through which more or less air is admitted 65 to the tube, the supply being governed by an air-shutter consisting of a loosely-mounted shell or tubular casing 10, which closes that portion of the Bunsen tube between the yoke 6 and the collar 8. The tubular shutter or 7° casing 10 is provided with a number of series of orifices 11, which can be made to register with the openings 9 of the Bunsen tube by imparting a slight rotary movement to the shutter.

The collar or member 8 is provided with a projecting pin or screw 12, which acts as a fulcrum for an operating-lever 13, having a circumscribed arc of movement that is defined by fingers 14, movable against a stop or de- 80 tent 15. The lever 13 carries a pawl 16, which has pivotal connection therewith and can be made to engage the stop 15 to hold the lever in a depressed position. The lever 13 is operatively connected with a crank or arm 17 of 85 the gas-valve by means of a link 18. The latter is provided with a projection 19, carrying a pin 20, which is arranged to work in an angular slot 21 of the air shutter or casing 10. Thus the lever 13 constitutes a common actua- 90 tor for the means for controlling the supply of air and the means for controlling the supply of gas.

In practice the operator thrusts his torch through the opening 22 of the lantern-base 95 and pulls down the lever 13, in which lowered or depressed position the lever 13 is held by the pawl 16, engaging the detent 15. Thus

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operated, the lever 13, through the instrumentality of the link 18, actuates the gas-valve to permit gas to flow to the pilot 5 and to the burner 23. At the same time the link 18, by 5 reason of its pin-and-slot connection with the tubular shell or air-shutter 10, serves to rotate the same sufficiently to cause the openings 11 therein to register with the openings 9 of the Bunsen tube and air is admitted to to the latter from the post. Manifestly the gassupply is cut off and the air-shutter adjusted to close the openings in the Bunsen tube when the position of the lever 13 is reversed by tripping the pawl 16. The air shutter or cas-15 ing 10 is a valuable adjunct, as it operates to effectually keep out dust and also bugs and insects, which during the day congregate inside the post. At night of course they are attracted by the light of the burner and make 20 their way toward the same, so that there is little or no danger of their trying to enter the Bunsen tube.

The needle-valve 4 can be adjusted manually through an opening in the post that may 25 be closed in any convenient manner—for instance, by the door 26. (Shown in Fig. 1.)

The lantern-base is provided with means for adjustably supporting the draft-tube 24, the latter being guided on a rod 25, adjustably

30 supported by the collar 8.

It will be obvious to those skilled in the art to which the invention appertains that modifications may be made in details without departing from the spirit and scope of the same. 35 Hence I do not limit myself to the precise construction and arrangement of parts hereinabove described and illustrated in the accompanying drawings; but,

Having described the nature and objects of 40 the invention, what I claim as new, and desire

to secure by Letters Patent, is—

1. In a street-light, the combination of a lamp-post having a lantern the socket of which constitutes a continuation of the post, a Bunsen 45 tube having its air-inlet arranged interior of the lantern-socket, gas-supply connections, and means for controlling the supply of gas and air from a point outside the post, substantially as described.

2. In a street-light, the combination of a lamp-post having a lantern the socket of which constitutes a continuation of the post, a Bunsen tube having its air-inlet arranged interior of the lantern-socket, gas-supply connections, 55 and means for simultaneously controlling the supply of gas and air from a point outside the

post, substantially as described.

3. In a street-light, the combination of a lamp-post having a lantern, a Bunsen tube ex-60 tending into the socket of the lantern and arranged to take air therefrom, gas-supply connections, means for controlling the supply of gas and air, and an actuator for said means, substantially as described.

4. In a street-light, the combination of a

lamp-post having a lantern the socket of which constitutes a continuation of the post, an incandescent burner within the lantern, a Bunsen tube extending into said socket and arranged to take air therefrom, an air-shutter 70 for said Bunsen tube, gas-supply connections, means for adjusting said shutter, means for controlling the supply of gas, and a common actuator for both of said means, located above the lantern-base, substantially as described.

5. In a street-light, the combination of a lamp-post having a lantern the socket of which constitutes a continuation of the post, a Bunsen tube extending into said socket and taking air therefrom, an air-shutter, gas-supply con- 80 nections, means for adjusting said shutter, means for controlling the supply of gas, a common actuator for both of said means, located exterior of the post, and an opening in said lantern-socket closed by a door to afford 85 access to the interior of the post, substantially as described.

6. In a street-light, the combination of a lamp-post having a lantern the socket of which constitutes a continuation of the post, a Bun- 90 sen tube extending into said socket and arranged to take air therefrom, a tubular shutter for the Bunsen tube, gas-supply connections, and means for operating said shutter to open or close the Bunsen tube, and for simul- 95 taneously controlling the flow of gas, substan-

tially as described.

7. In a street-light, the combination of a lamp-post having a lantern the socket of which constitutes a continuation of the post, a Bun- 100 sen tube extending into said socket and arranged to take air therefrom, an air-shutter for the Bunsen tube, gas-supply connections, an actuator located above the lantern-base, and means operated thereby for adjusting the 105 shutter and for controlling the supply of gas, substantially as described.

8. In a street-light, the combination of a lamp-post having a lantern the socket of which constitutes a continuation of the post, a burner 110 within the lantern, a Bunsen tube extending into said socket and arranged to take air therefrom, a tubular shell or casing surrounding said Bunsen tube and operating to control the admission of air to said tube, gas-supply con- 115 nections located interior of the post, a pilot extending from said connections to the burner, a lever pivotally supported above the lanternbase, and means operated thereby for adjusting said casing to open or close the Bunsen 120 tube and for simultaneously controlling the admission of gas, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

#### VICTOR H. SLINACK.

Witnesses:

W. J. Jackson, K. M. GILLIGAN.