

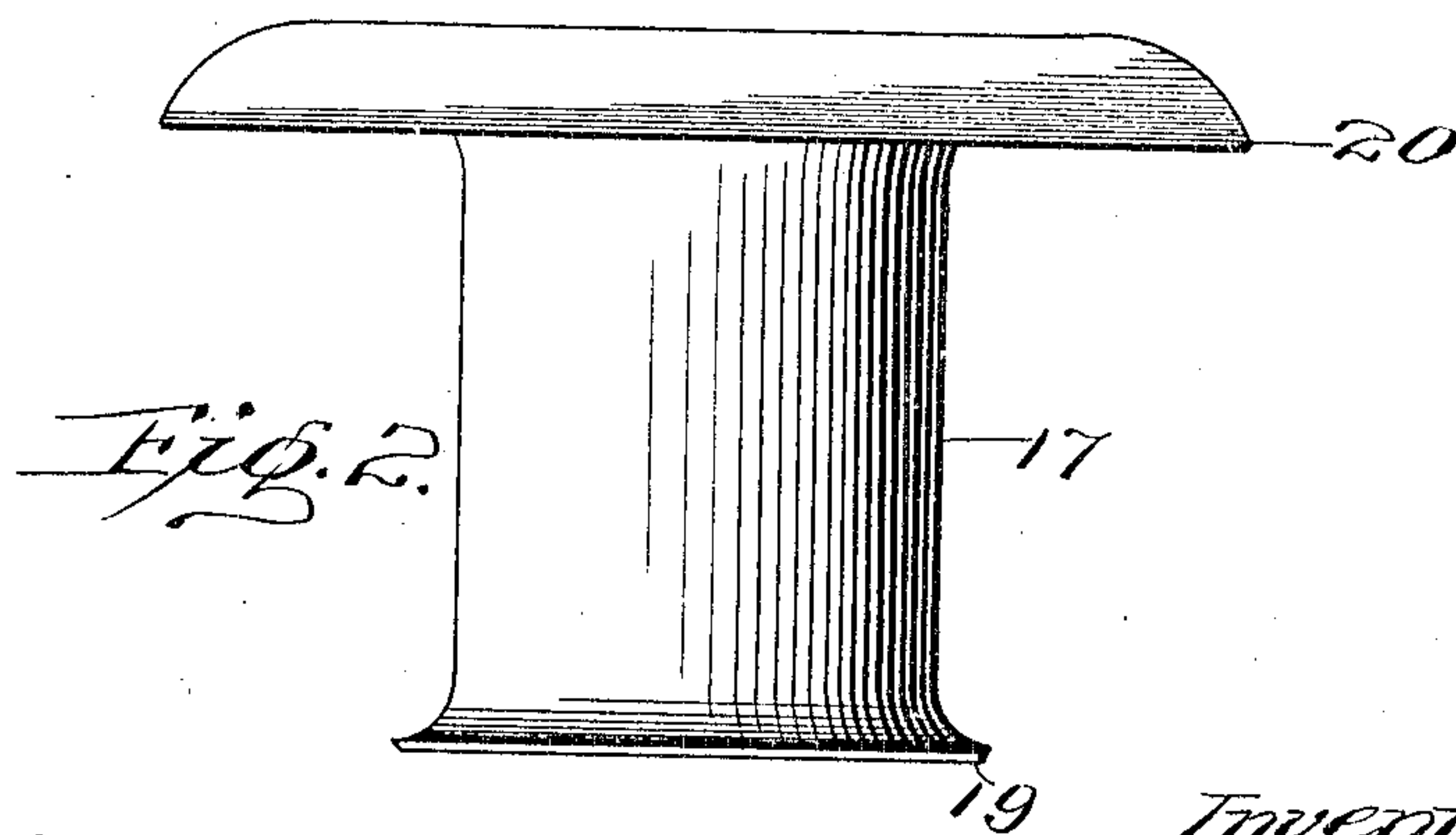
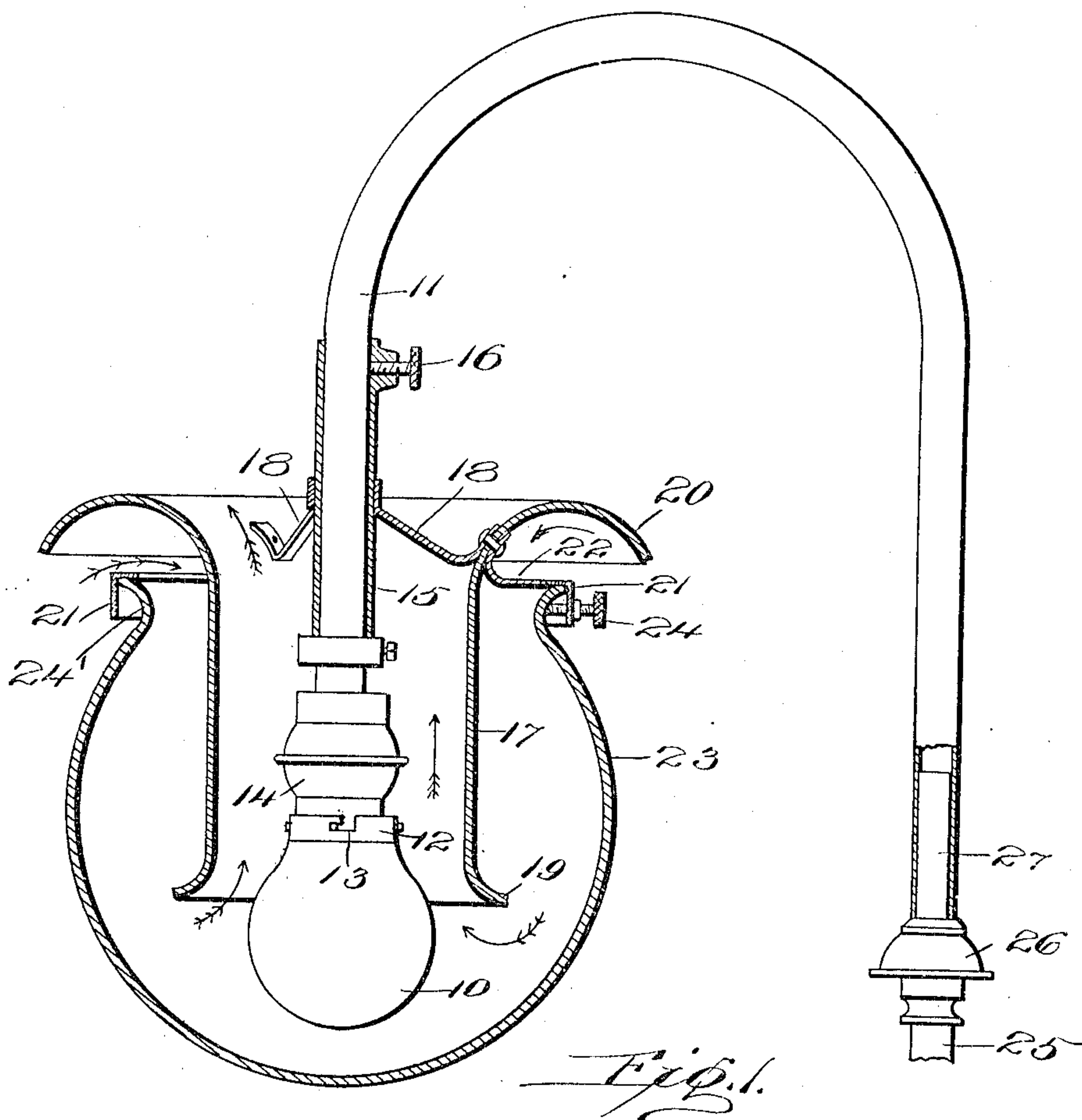
No. 843,474.

PATENTED FEB. 5, 1907.

H. W. MANNING.
GAS LIGHT.

APPLICATION FILED MAR. 23, 1906.

2 SHEETS—SHEET 1.



Witnesses
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L. Merrill

Inventor
By Harry W. Manning
Mason, Fowler & Lawrence, Attys.

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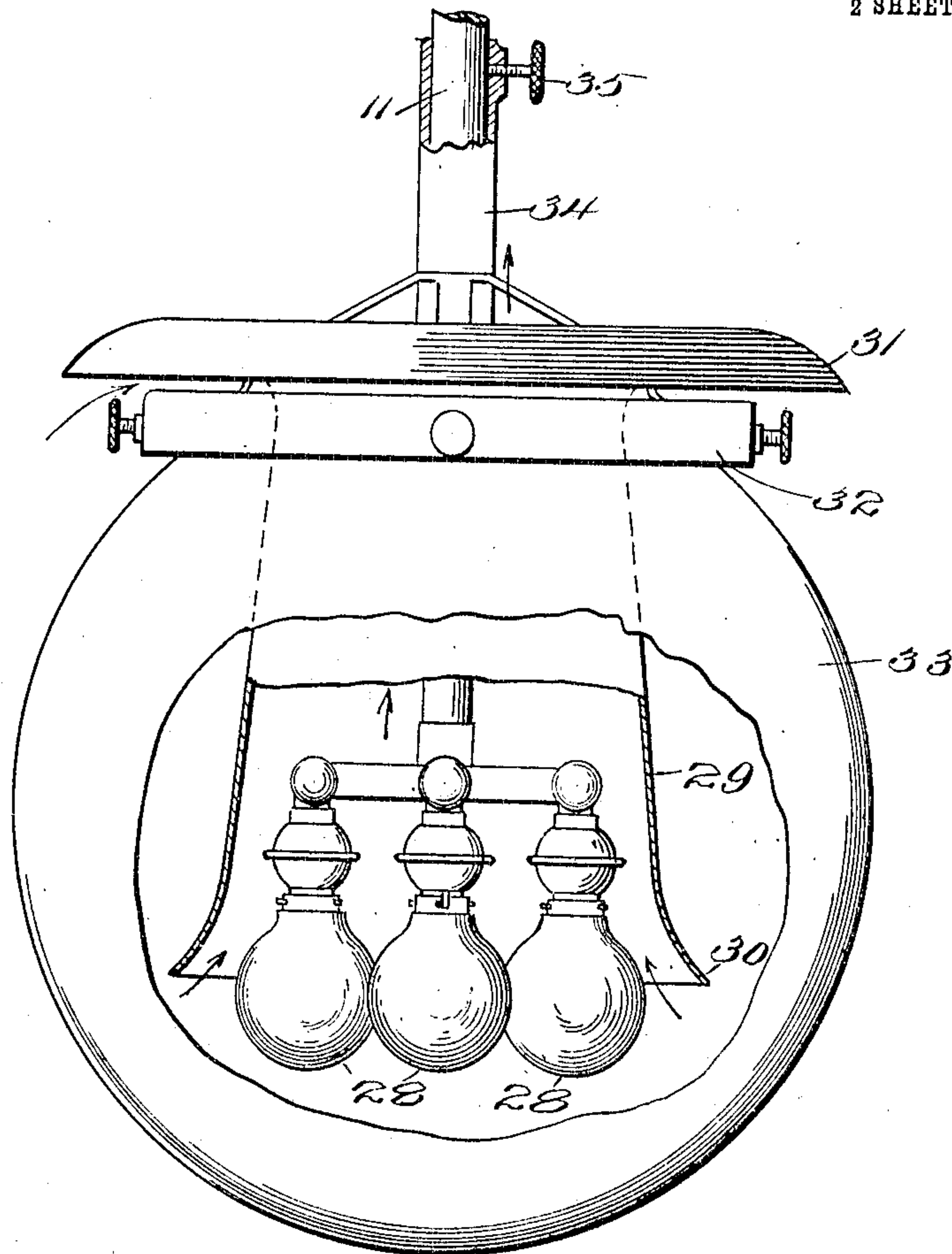


Fig. 3.

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UNITED STATES PATENT OFFICE.

HARRY W. MANNING, OF PORTLAND, OREGON.

GAS-LIGHT.

No. 843,474.

Specification of Letters Patent.

Patented Feb. 5, 1907.

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To all whom it may concern:

Be it known that I, HARRY W. MANNING, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Gas-Lights; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to gas-lights, and especially to that class of gas-lights employing incandescent mantle depending from the gas-supplying pipe.

The object of the invention is to provide a gas-light employing a depending mantle and embodying means whereby the said mantle may be surrounded by a globe opened only at the upper side.

A further object of the invention is to provide means in association with a gas-light employing a depending mantle and a surrounding globe for introducing air to the said globe in such manner that the currents of air move along the entire surface of and to maintain the said globe in a cooled condition.

A further object of the invention is to provide a gas-light embodying means for employing a plurality or cluster of depending mantles surrounded by a globe opened only at its upper side and arranged for the admission of air upon the inner surface of the said globe for cooling the same.

With these and other objects in view the invention comprises certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings, Figure 1 represents a diametric sectional view of the improved gas-light. Fig. 2 is a view in side elevation of the sleeve and deflector-plate for guiding the air-currents. Fig. 3 is a view in side elevation of the cluster-light arranged in accordance with this invention and with a portion of the globe and sleeve broken away to exhibit the cluster of mantles.

Like characters of reference indicate corresponding parts throughout the several views.

In its preferred embodiment the gas-light forming the subject-matter of this application comprises a mantle 10 of substantially the usual form and pattern used as a depending mantle and secured upon the gooseneck 11 in any approved manner, as by the collar

12, provided with a bayonet-joint 13, engaging a bulb or similar device, (shown at 14,) which said bulb is connected with the tubular portion 15, adjustably held upon the gooseneck 11, as by a thumb-screw 16.

About the tube 15 is secured a sleeve 17 in any approved manner, as by means of the spider 18, the said sleeve being belled, as at 19, at the lower end and with its upper end widely flanged and curved, as at 20, with the annular concaved portion of the said flange opened downwardly. About the sleeve 17 is secured a hoop 21 in any approved manner, as by the spider 22, the said hoop being proportioned to receive the upper opened side of the globe 23 and provided with any approved means, as the thumb-screw 24, for engaging the common and usual groove 24', formed in the said globe. The gooseneck 11 is secured to the gas-conducting pipe, as 25, by means of the usual air admitting and regulating device (shown in elevation at 26) and carrying an upwardly-extending shank 47, upon which the gooseneck is removably placed.

For using a cluster of mantles, as at 28, the sleeve 29 is tapered so that the lower belled end 30 is larger in proportion than the belled end 19. (Shown in Fig. 1.) The sleeve 29 is provided with a curved flange similar to the flange 20 and similarly located relative to the hoop 32, within which is secured the globe 33 in the manner described for the globe 23, and the device is adjustable by means of the tube 34 and thumb-screw 35 upon the gooseneck 11.

It will be noted that in either of the forms shown at Fig. 1 or Fig. 3 the globe is secured with its upper open end immediately below the curved flanges 20 and 31, which extends outwardly beyond the said open end of the globe and whereby the air-current entering the said globe is given a curved movement to throw the said current against the curved inner side of the globe, which said inner side the said air-currents follow until subjected to the upward current between the mantle and the sleeve. It is obvious that the air-currents following the said flange with the curved movement, as indicated by the arrows, will substantially follow the curvature of the globe, so that the said globe is at all times maintained in a cooled condition and not liable to breakage by external air-current.

Particular stress is laid upon the formation

of the curved flange 20, extending outwardly beyond the globe-supporting hoop 21 and being curved, as shown, to produce the necessary curvature of air-currents to throw the
5 said air-currents against the surface of the interior of the globe and to the lower belled end of the sleeve, whereby practically all of the heat generated at the mantle is retained within the sleeve, causing the air-current to
10 move upwardly through the interior of the said sleeve and not externally thereof, as would be the case if the said lower end were not belled.

What I claim is—

15 1. In a light of the class described, a sleeve belled at its lower end and provided with an outturned curved flange at its upper end, a gas-mantle disposed partially within the lower belled end of the said sleeve, and a
20 globe surrounding the said sleeve and mantle and open at its upper side, and with the periphery of its open side disposed beneath the center of curvature of the flange.

25 2. In a gas-light of the character described, a sleeve provided with a belled lower end, and with an outturned flange at its upper end, curved to form a downwardly-opening

annular concavity, a gas-mantle disposed partially within the lower belled end of the sleeve, and a globe surrounding the said man- 30 tle and sleeve, and having an open upper side with the periphery of its open side disposed substantially beneath the center of curvature of the flange.

3. In a gas-light of the class described, a 35 sleeve arranged in a substantially vertical position and having a belled lower end, and with an outturned flange at its upper end, curved to form a downwardly-open annular concavity, a pipe extending axially within 40 the said sleeve and provided with a mantle at its lower end disposed partially within the belled end of the said sleeve, and a globe surrounding the said mantle and sleeve and open 45 at its upper side, and with the periphery of its open side disposed substantially at the center of curvature of the said flange.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY W. MANNING.

Witnesses:

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W. M. DAVIS.