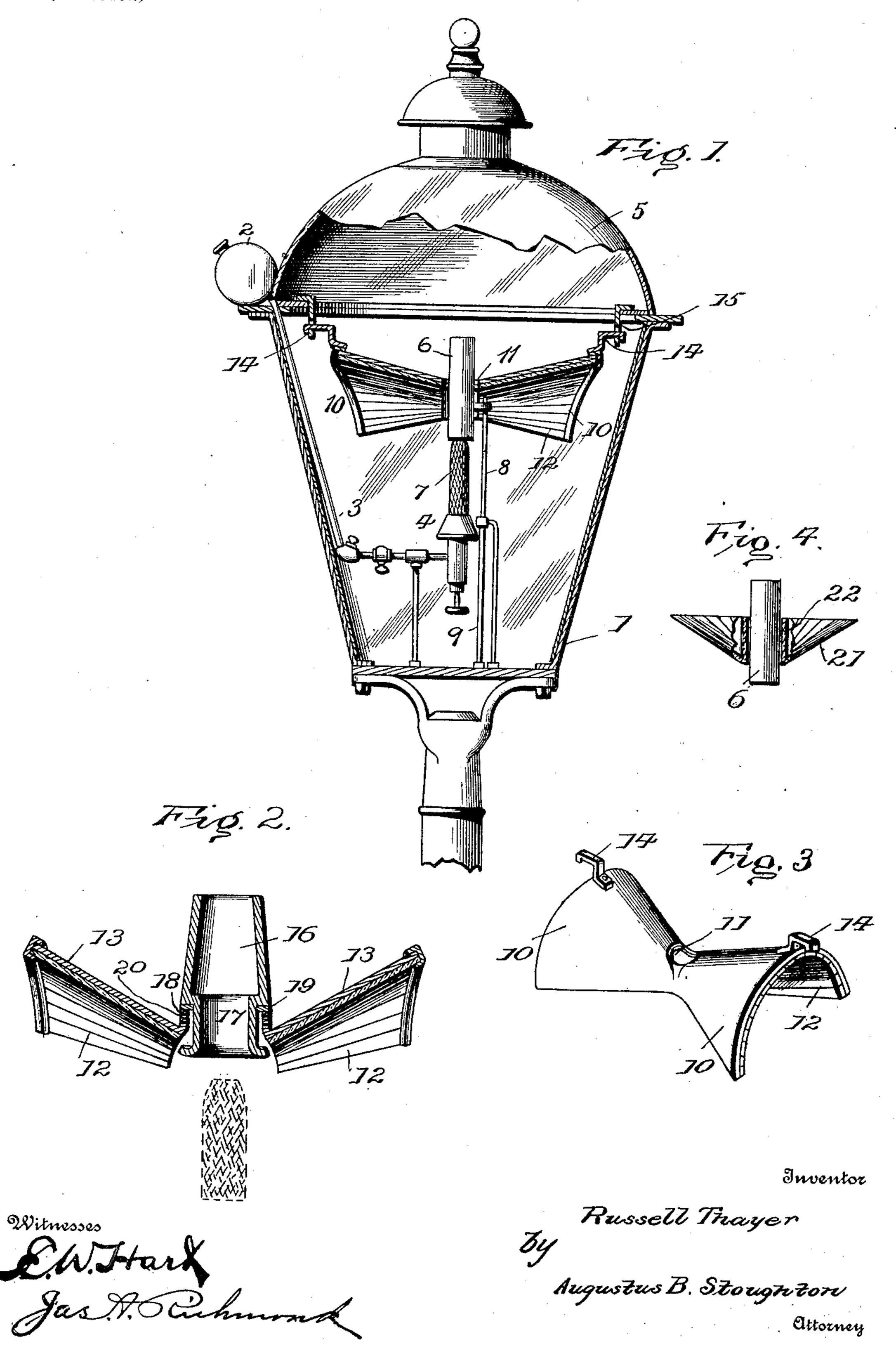
R. THAYER. LIGHTING.

(Application filed Feb. 8, 1901.)

(No Model.)



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

United States Patent Office.

RUSSELL THAYER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO CARBON LIGHT AND POWER COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

LIGHTING.

SPECIFICATION forming part of Letters Patent No. 697,292, dated April 8, 1902.

Application filed February 8, 1901. Serial No. 46,505. (No model.)

To all whom it may concern:

Beitknown that I, RUSSELL THAYER, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Lighting, of which the following is a specification.

The object of the invention is to provide means particularly adapted to hydrocarbon and gas incandescent street-lamps for enhancing the illuminating powers thereof. This object is attained by using a reflecting medium of peculiar shape and arrangement in order to obtain a maximum illuminating effect.

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

Figure 1 is a sectional view of a street-lamp, illustrating features of the invention. Fig. 2 is a sectional detail showing a slight modification. Fig. 3 is a perspective view of the reflector, and Fig. 4 is a sectional view illustrating a modification.

1 is the lamp, which represents the well-known type commonly in use on streets, and which is provided with oil-reservoir 2, supply-30 pipe 3, and burner 4.

5 is the dome, provided with a ventilator as usual.

6 denotes a thimble or tubular member adapted to be let down over the mantle 7 by means of a rod 8 made to slide in the tube or standard 9.

The reflector comprises two arched or bonnet-shaped members 1010, which converge at their point of union, where an opening 11 is 40 provided for the passage of the member 6. The two portions 10 10 are made up of segments of mirror-glass 12, arranged in parallelism upon the metal backing 13, which may be sheet metal, as tin, for example. It will 45 be seen that these two reflecting-surfaces though in the same axial plane are at angles to one another, and substantially at right angles to the incandescent 7, and it will be understood that the peculiar shape and angle of 50 the reflector tend to concentrate the light in two directions or diametrically instead of radially in respect to the illuminating source.

Such a reflector will be used principally for street-lighting. It may be secured to place in any suitable manner. I have shown it as being suspended from two opposite sides of the lamp by spring-fingers 14, adapted to engage the slotted arms 15, attached to the upper part of the lamp, as shown in Fig. 1. It will be observed that the tubular member 6 is of 60 less diameter than the opening in the reflector, so that an intervening air-space is provided which will serve to protect the mirror-glass from damage by heat.

In the adaptation, Fig. 2, 16 indicates the 65 flue or passage to the chimney, having its lower portion contracted, as at 17. The opening 11 of the reflector is here provided with an upturned flange 18, separated from the flue by an asbestos or other insulating-ring 70 19. The flange 18 is perforated, as at 20, to provide air-inlets.

In the modified form, Fig. 4, 21 indicates a circular reflector provided with a tubular extension 22, adapted to receive the tubular 75 member 6, and having an intervening airspace formed between it and said member to prevent radiation of heat.

It will be obvious to those skilled in the art to which the invention appertains that modi- 80 fications may be made in detail without departing from the spirit and scope of the invention. Hence I do not limit myself to the precise construction and arrangement of parts hereinabove described, and illustrated 85 in the accompanying drawings; but,

Having now ascertained the nature and objects of the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination, a lantern, an incandes- 90 cent burner supported above the lantern-base, a reflector detachably fitted in the top of the lantern and having a central opening provided with a marginal seat or flange, and a tubular member supported above the burner 95 and having a shoulder, which coöperates with said seat or flange, substantially as described.

2. In combination, a lantern, an incandescent burner supported above the lantern-base, a reflector mounted in the lantern above 100 the burner and having a central opening provided with a marginal seat or flange, and a tubular member supported above the burner and having a shoulder which coöperates with

said seat or flange, said flange being perforated to provide air-passages, substantially as described.

3. In combination, a lantern, an incandes5 cent burner supported above the lanternbase, a reflector mounted in the lantern above
the burner and having a central opening provided with a marginal seat or flange, perforated for the passage of air, a tubular mem10 ber supported above the burner and having a
shoulder which coöperates with said seat or

flange, and a non-conductor located between the shoulder and the seat, substantially as described.

In testimony whereof I have hereunto 15 signed my name in the presence of two subscribing witnesses.

RUSSELL THAYER.

Witnesses:

697,292

W. J. Jackson, Jas. A. Richmond.