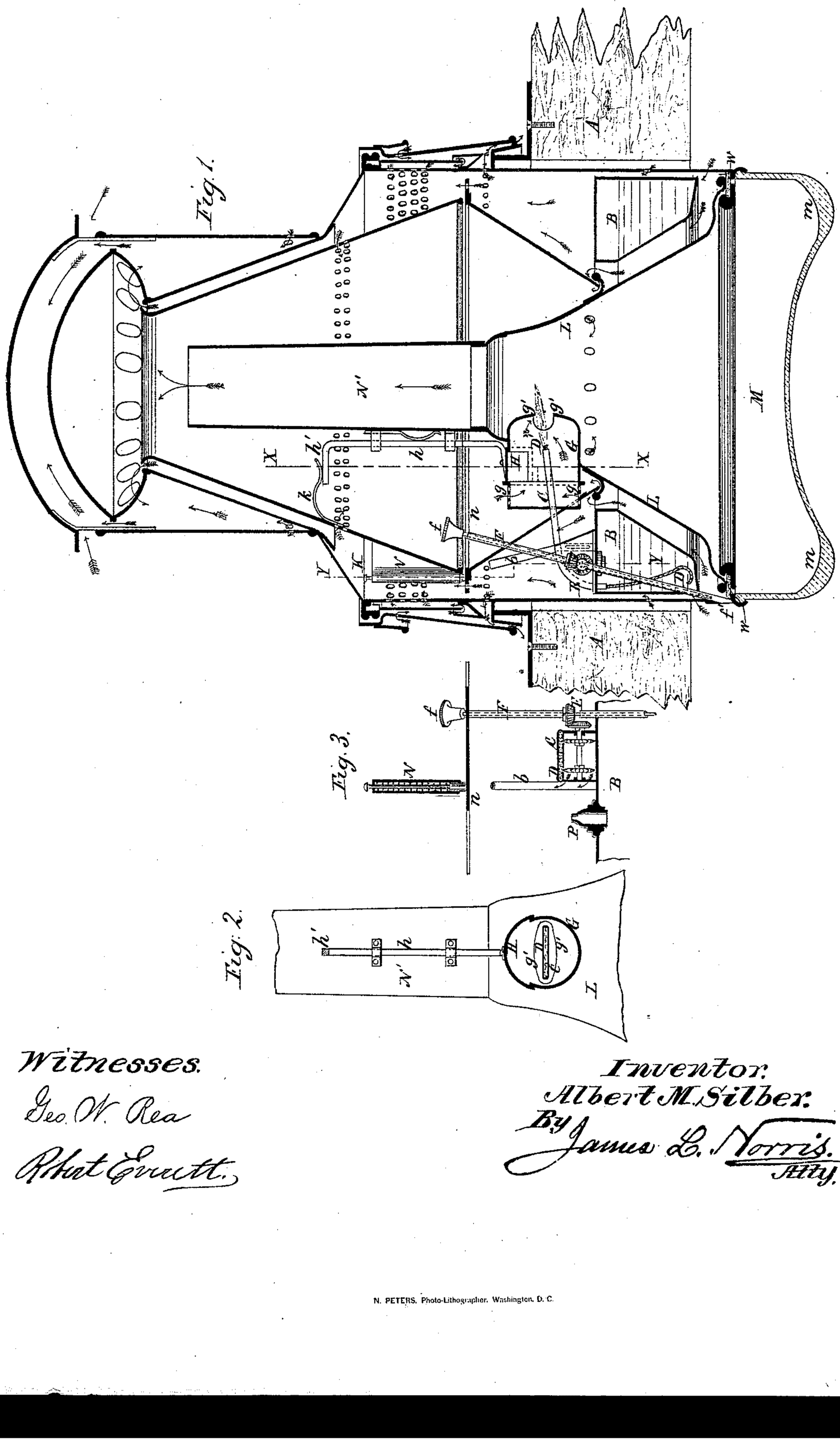
(No Model.)

A. M. SILBER.

OVERHEAD OR CEILING LAMP.

No. 359,364. Patented Mar. 15, 1887.



Witnesses.

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UNITED STATES PATENT OFFICE.

ALBERT M. SILBER, OF LONDON, ENGLAND.

OVERHEAD OR CEILING LAMP.

SPECIFICATION forming part of Letters Patent No. 359,364, dated March 15, 1887.

Application filed November 10, 1886. Serial No. 218,481. (No model.) Patented in England June 13, 1885, No. 7,236; in France March 12, 1886, No. 174,729; in Belgium March 18, 1886, No. 72,409; in Germany April 4, 1886, No. 37,082; in India November 25, 1886, No. 204/1,470, and in Italy November 30, 1886, XLI, 129.

To all whom it may concern:

Be it known that I, ALBERT MARCIUS SILBER, a citizen of Great Britain, residing at Wood street, Cheapside, in the city of London, England, have invented a new and useful Improvement in Overhead or Ceiling Lamps, (for which I have obtained patents in Great Britain, dated June 13, 1885, No. 7,236; France, dated March 12, 1886, No. 174,729; Belgium, dated March 18, 1886, No. 72,409; Germany, dated April 4, 1886, No. 37,082; India, dated November 25, 1886, No. 204/1,470, and Italy, dated November 30, 1886, No. 129, Vol. XLI,) of which the following is a specification.

My invention relates to lamps suitable for roofs of railway-carriages, or for ceilings of apartments, or for other positions where the light has to be directed mostly downward, these lamps being of a known kind in which a flat wick-tube projecting nearly horizontally toward the center of a conoidal reflector is situated above the level of an annular oil-reservoir arranged in a cool position around the outside of the reflector. In such lamps the horizontally-projecting wick-tube is inclosed within an air-tube, which communicates in inwardly-turned lips that deflect the air against the flame, and as these lips are beyond the end of the wick-tube it is difficult to adjust the wick and to kindle the lamp.

The main object of my invention is to provide for ready access to the wick-tube, and to such other parts of the lamp as require cleaning and adjustment. For this purpose I make the air-tube which surrounds the wick-tube in two parts, the lower part fixed to and projecting inwardly from the reflector, the upper part movable as a door, giving access to the wick-tube, which projects upward and inward from the reservoir in the lower part of the casing which contains the reservoir at its lower angle. Above this lower part of the casing there is a removable upper part, and on removing this upper part access can be got to open the upper part of the air-tube, and when this is opened the wick-tube is exposed, so that the wick can be adjusted and the lamp can be kindled.

Figure 1 of the accompanying drawings is a vertical section of the lamp as placed in the roof of a railway-carriage. Figs. 2 and 3 are part transverse sections on the lines *x x* and *y y*, respectively.

The lamp is passed in the usual way from outside through the circular hole in the roof A.

B is the oil-reservoir, of annular form.

P is the plug, which is unscrewed for filling the reservoir. It has a small opening at the top to admit air and allow escape of gas or vapor.

C is a flat tube, through which the wick D D′ is led from the reservoir B, and from which it projects nearly horizontally at D′, the oil rising in the wick by capillary attraction. In the bend of the wick-tube at E there is arranged in the usual way a star-wheel, by turning which the wick D can be advanced or retreated. This star-wheel is worked by bevel-gear at E from a spindle, F, that can be turned by the fingers applied to a knob at *f* when the casing of the lamp is open, or can be turned by inserting a key like a watch-key into a tubular aperture in the lower part of the casing at *f′*. At the side of E there is a small tube, *b*, open at the top to allow escape of vapor.

The upper part of the wick-tube C is inclosed within a tubular casing, G, into which air enters by perforations at *g*, for supplying the flame, this air being deflected against the flame by inwardly-turned lips *g′ g′*. The upper part, H, of the casing G is made to open outward, as a door, to give access for trimming the wick and kindling the flame.

When the casing of the lamp is opened, an attendant can, by applying his fingers to *h′*, the upper end of a rod, *h*, raise the door H, which is attached to *h*. Should he, after kindling the flame, omit to push *h* down, then on closing down the upper part of the lamp-casing, which fits the lower part along the line K, a spring, *k*, projecting from the internal cone of the upper casing, pushes down the rod *h*, and thus the closing of the lamp-casing insures the closing of the door H. To the upper part of the lamp are attached three or more tubes, N, only one of which is shown in Fig. 1, containing plungers pressed down by helical springs. When the lamp is closed, these plungers bear on the flange *n* and press down

the lower part of the lamp containing the reservoir upon a felt washer at *w*, thus making a tight joint and preventing shake. The flame from D′ projects to about the center of the space within the conical reflector *l*, to the lower edge of which is attached the glass basin M, which is preferably thickened at *m*, this thickening giving this part of the glass the effect of a lens. Above the flame is the chimney N′.

The casing of the lamp is, as usual, arranged with air-passages for the escape of products of combustion and for ventilation, as indicated by the arrows, the apertures for admission and emission being shielded against the effects of external currents.

Having thus described the nature of my invention and the best means I know for carrying the same into practical effect, I claim—

The combination, with a lamp-casing having an upper removable portion and provided with air inlets and exits, of the central conical reflector, L, and annular oil-reservoir B, surrounding the lower part of said reflector, an air-tube, G, projecting through the side of the reflector and provided with a movable door, H, the hooked rod *h h′*, attached to said door and projecting vertically above the same, a spring, *k*, attached internally to the upper movable part of the lamp-casing to bear on said rod, and a wick-tube, C, substantially as shown and described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 28th day of October, A. D. 1886.

A. M. SILBER.

Witnesses:

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