

(No Model.)

R. QUATERMASS.
SIGNALING APPARATUS.

No. 370,558.

Patented Sept. 27, 1887.

Fig. 1.

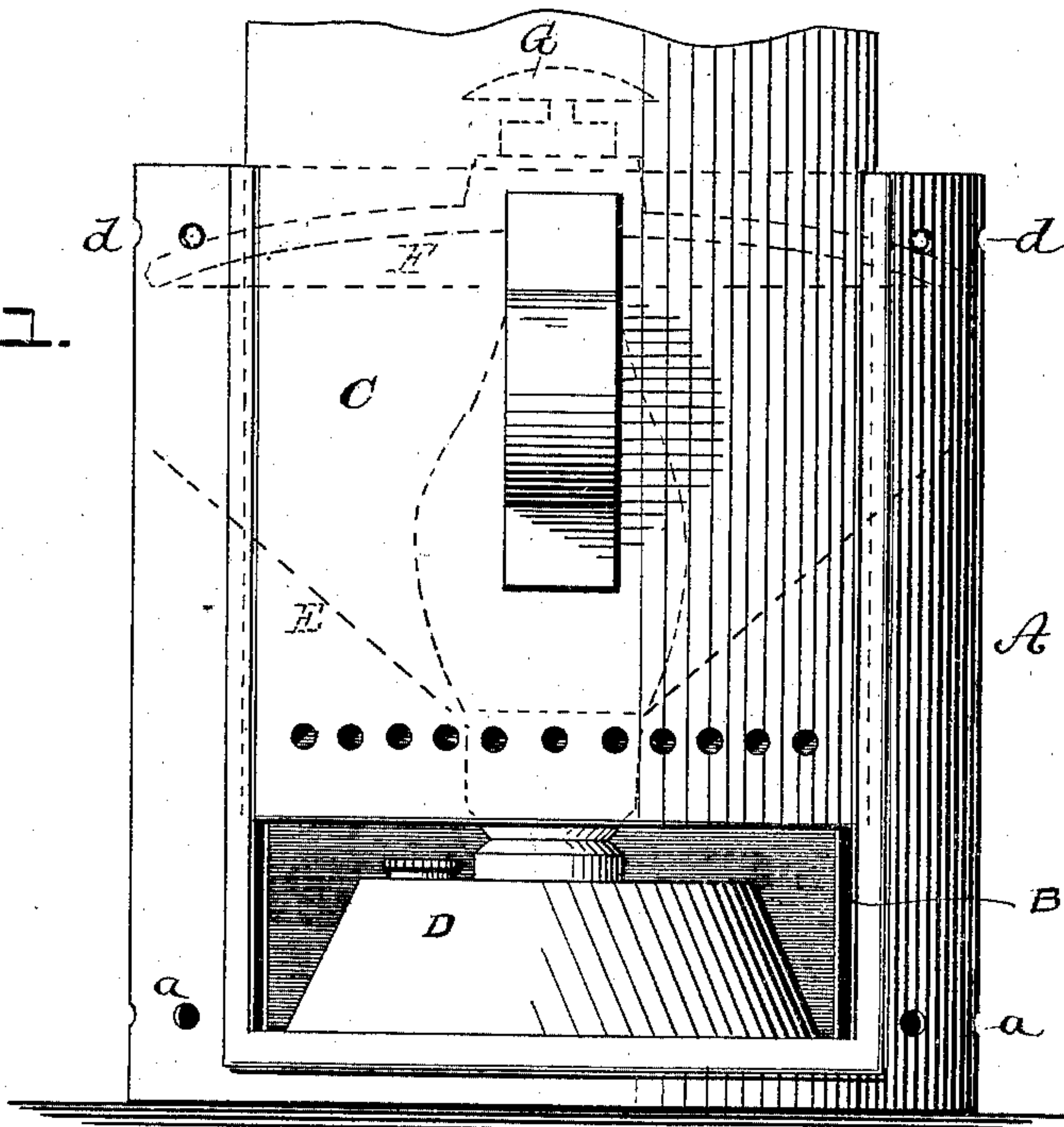
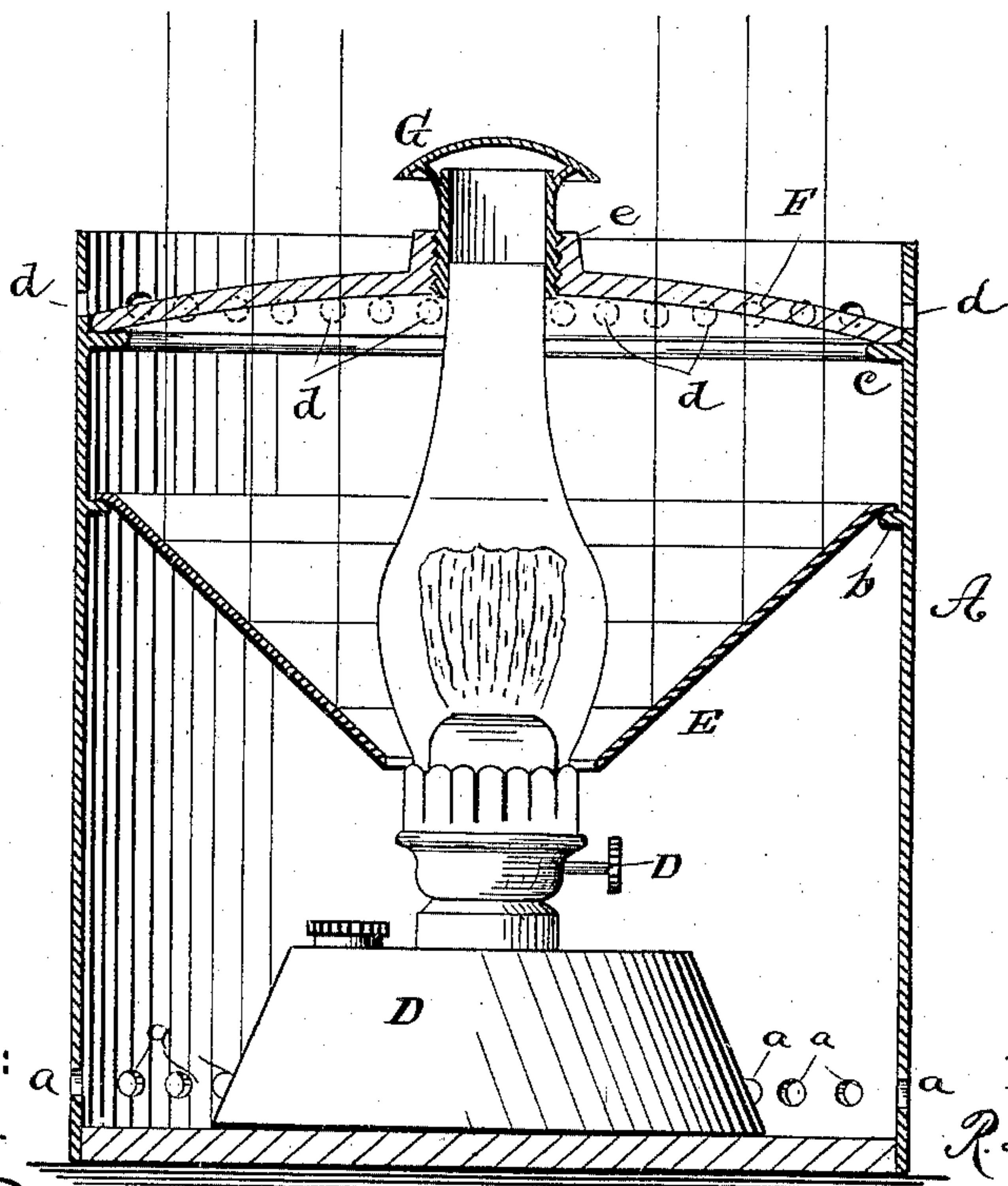


Fig. 2.



WITNESSES:
D. D. Mott
W. Sedgwick

INVENTOR:
R. Quatremass
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

REUBEN QUATERMAS, OF MOLINE, KANSAS.

SIGNALING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 370,558, dated September 27, 1887.

Application filed March 10, 1887. Serial No. 230,396. (No model.)

To all whom it may concern:

Be it known that I, REUBEN QUATERMAS, of Moline, in the county of Elk and State of Kansas, have invented new and useful Improvements in Signaling Apparatus, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation of my improved signaling apparatus, and Fig. 2 is a vertical transverse section.

Similar letters of reference indicate corresponding parts in both views.

The object of my invention is to provide signaling apparatus for use on railroad-trains, on shipboard for illuminating the rigging and signaling, and for use in stationary signaling-stations, also for store-windows and for other purposes requiring an upwardly-projected light.

The invention consists of the combination, with the casing provided with flanges and openings, of an inverted conical reflector provided with an opening in its center, a transparent cover, and a lamp, substantially as hereinafter set forth, and pointed out in the claim.

The casing A, which is preferably cylindrical in form, is provided with a series of draft-holes, *a*, near the bottom thereof, and with an opening, B, in one side, having a sliding door, C, the edges of the walls of the casing being furnished with grooves for receiving the said door.*

Within the casing is placed a lamp, which in the present case is an oil-lamp; but I do not limit myself to the use of any particular illuminating device. A conical reflector, E, surrounds the lamp and rests upon ledges *b*, formed upon the inner surface of the walls of the casing, and is adapted to receive the light emanating from the lamp and reflect it upward.

It is obvious that instead of employing a

conical reflector I may with advantage use a parabolical reflector, which is better adapted to project a parallel beam than the conical reflector.

A ledge, *c*, projects inwardly from the walls of the casing A, near the top thereof, and in the wall a short distance above the edge is formed a series of holes, *d*. A glass concavo-convex shield or lens, F, rests upon the ledge *c*, and is centrally apertured and provided with a threaded collar, *e*, to which is fitted a cowl, G, for receiving the products of combustion from the chimney of the lamp and allowing them to escape without permitting rain or snow to enter. Any water or snow deposited upon the glass shield F runs out through the holes *d*.

My improved signaling-lantern is adapted for illuminating the smoke and steam issuing from the locomotive smoke-stack or whistle or safety-valve, and produces a column of light which is visible over a much longer distance than the ordinary head-light, and can readily be seen above the tops of embankments, trees, &c. It may also be employed for illuminating the atmosphere in its normal condition, producing a halo which may be readily seen and distinguished.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

In an illumination device, the combination, with the casing A, provided with the flanges *b c* and the openings *d d*, of the inverted conical reflector provided with an opening in its center, the transparent cover, and the lamp, substantially as and for the purpose set forth.

REUBEN QUATERMAS.

Witnesses:

W. H. DOWNING,
J. W. HANSON.